

### 3. HEATON STREET TRAFFIC MANAGEMENT

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#### PURPOSE OF REPORT

1. The purpose of this report is to:
  - (i) Advise and seek endorsement from the Board of the traffic management plan for Heaton Street in the vicinity of Heaton Intermediate.
  - (ii) Obtain formal resolution of traffic and parking (bus stops etc) management in association with this plan.

#### EXECUTIVE SUMMARY

2. Heaton Street is subject to increasing demands by all road user modes. An illegal and unsafe manoeuvre is occurring wherein vehicles are travelling considerable distances along the Heaton Street flush median (including through the zebra pedestrian crossing) to join the right turn lane at the Papanui Road traffic signals. The newly introduced bus route requires conveniently placed bus stops to service public transport users. There are competing demands on the limited kerbside parking by the adjacent land users. A crash records analysis reveals that the overall crash rate for this arterial is not unduly high for this traffic volume. The only recurring types of crash are associated with the existing pedestrian crossing facility. The attached traffic management plan addresses the safety issues that are currently of concern.

#### FINANCIAL AND LEGAL CONSIDERATIONS

3. To be funded from the Transport & City Streets Pedestrian Safety Initiatives and Local Area Traffic Management budgets. It is estimated to cost \$14,000. The only legal considerations are the resolutions required to empower the traffic management restrictions, as delegated to the Community Boards.

#### STAFF RECOMMENDATIONS

It is recommended that the Community Board approve:

- (a) The proposed traffic management for Heaton Street, as illustrated on the **attached** plan.
- (b) That the zebra pedestrian crossing be removed on Heaton Street at the Heaton Intermediate entrance.
- (c) That a kea crossing school patrol be established on Heaton Street, located at a point more or less, 104 metres southwest of Circuit Street.
- (d) That a bus stop be installed on the north side of Heaton Street commencing at a point 22 metres from its intersection with Circuit Street and extending in a westerly direction for a distance of 17 metres (139 Heaton Street – 1 Circuit Street).
- (e) That a bus stop be installed on the north side of Heaton Street commencing at a point 67 metres from its intersection with Circuit Street and extending in a westerly direction for a distance of 17 metres (138 Heaton Street).

## **BACKGROUND ON HEATON STREET TRAFFIC MANAGEMENT**

4. The following outlines recent reports to the Board in relation to this site:
5. 29 April 2004: During the F/W Board meeting, approval for the installation of "No Stopping" areas adjacent to the new St Georges Hospital entrance was obtained.
6. 22 May 2004: F/W Board meeting received submissions from the Heaton Street Residents Association concerned about the intended parking ban. It was concluded that the expected levels of communication and dialogue on traffic issues since the completion of the hospital's resource consent related processes had not materialised to the levels envisaged by the residents. The installation of the recommended "No Stopping" was endorsed.
7. The Board decided that a long term traffic management plan for Heaton Street be developed for initial consideration by the F/W Community Board and STU Committee as soon as possible, to be followed by appropriate community consultation.
8. 5 August 2003: During a F/W meeting information was presented which advised that issues with the local residents over the construction of the new St Georges Hospital entrance had largely been resolved. The meeting was also informed that monitoring of traffic in the area had also commenced with a view to preparing a traffic management plan for the section of Heaton Street between Papanui Road and Elmwood Park. The plan would take into account vehicle and pedestrian movements associated with St Georges Hospital and Heaton Intermediate School.
9. Heaton Intermediate staff and the Police Education Officer (Papanui) have raised concerns about the safety of students crossing Heaton Street at the school crossing point.
10. A review of public transport has seen the recent establishment of a scheduled bus route (the Metro Star) along Heaton Street.

### **Site Description and Objectives**

11. Heaton Street is a 921 metres long Minor Arterial Road carrying 14,600 vehicles per day (count

Vehicles entering between 7.30 am – 4.30 pm = 384  
Vehicles leaving between 7.30 am – 4.30 pm = 501  
Total using entrance between 7.30 am – 4.30 pm = 885

Note that the exit onto Papanui Road has now been closed which could explain the differential between entry and exit numbers.

#### *Zebra Crossing*

16. This crossing is located adjacent to the eastern entrance to Heaton Intermediate School. This entrance is marked as entry only for vehicles, but is also a main entry/exit point of pedestrians and cyclists. An upgrade to the crossing was made in January 1996 which incorporated an extended kerb buildout on the northern side and larger swing out signs for the kea crossing.

A total of 227 pedestrians were recorded during the 9 hour period 7.30 – 4.30 pm.  
115 pedestrian crossed between 8.00 – 9.00 am  
77 pedestrians crossed between 3.00 – 4.00 pm  
35 pedestrian crossed outside these times or an average of 5 persons per hour.

17. The school patrol was operational for 15 minutes in the morning and 13 minutes in the afternoon.
18. 51 and 54 persons respectively crossed during these times. During the morning peak 64 pedestrians crossed the zebra unassisted by the school patrol.
19. In May 2004 a further proposal was discussed with the school and adjoining residents to construct a median island in the vicinity of the zebra crossing. This was to address a safety concern linked to vehicles driving up the flush median as if it were a third lane. This proposal has not been implemented at this stage.

#### *Circuit Street*

20. Circuit Street is a cul-de-sac 14.0 m wide and 190 m long, giving access to 16 residential properties and the St Andrews College playing fields.
21. During the 9 hour survey period 72 vehicles were recorded leaving the street and 49 entering. No significant access difficulties were observed, with vehicles able to make use of the flush median for right turning manoeuvres.
22. A significant finding was the strong desireline for pedestrians crossing Heaton Street adjacent to Circuit Street.
23. 195 pedestrians were recorded crossing during the 9 hour period, or 22 per hour. This compared with only 5 pedestrians per hour using the zebra crossing outside the school peak.

#### *Flush Median*

24. A feature of this street is the 2.0 m wide flush median.
25. Flush medians are there to:
- Provide a wider separation between traffic streams on either side of the road.
  - Provide pedestrians with a place to pause while crossing two traffic streams.
  - Provide a refuge for vehicles turning into or out of side roads or driveways.
26. In NZ there has been a 19% overall reduction in crashes on streets where flush medians have been installed. Rear end crashes have been reduced by 66% and pedestrian crashes by 30%.
27. In Heaton Street no rear end crashes have been recorded for vehicles turning into side streets or driveways. Only one mid block crash with a pedestrian occurred and that was on the zebra crossing.
28. It was observed that some drivers were still not making proper use of the flush median when preparing to turn right especially into St Georges Hospital.

29. It has also been reported that some drivers are using the flush median as an overtaking lane when travelling towards Papanui Road. In some cases they have travelled a distance of over 250 metres towards Papanui Road from south of the zebra crossing. This is a potential safety concern for users of the zebra crossing.
30. It is however, contended that a full width flush median is required in the section of Heaton Street between the school and Papanui Road to facilitate turning movements into and out of Circuit Street, St Georges Hospital, Heaton Intermediate School and Papanui Road.

#### *Cyclists*

31. During the survey period 174 cyclists travelled south down Heaton Street from Papanui Road and 135 travelled north towards Papanui Road.
32. The peak periods were 7.30 – 8.30 am and 3.00 – 3.30 pm when 119 and 74 were recorded respectively.
33. No cycle crashes have been recorded in this street, and Heaton Intermediate has issued guidelines to its cyclists with respect to cycle safety.
34. The installation of cycle lanes in Heaton Street has **not** been programmed in the Transport and City Streets Capital Plan. The “NZ Supplement to the Austroads Guide to Traffic Engineering Practice Part 14: Bicycles” recommends a cycle lane width of 1.8 m next to parked vehicles (see Table 4.2).
35. There is insufficient roadway width to enable the placement of cycle lanes (excepting considerable parking be removed) from the Heaton Intermediate School entrance to Papanui Road, as a continuous flush median is required over this length. The existing 14.0 m carriageway is marked as follows.

Kerbside parking 2 x 2.0 m = 4.0 m

Flush median 1 x 2.0 m = 2.0 m

Traffic lanes 2 x 4.0 = 8.0 m

Total = 14.0 m

36. It is also noted that buses parked adjacent to the school boundary intrude into the traffic lane by a minimum of an extra 0.5 m. This would reduce the effective traffic lane width to 3.5 m.

#### *Crash Analysis*

37. The LTSA Crash Analysis Report for the period 1999 – 2004 details 16 midblock crashes. Three of these crashes resulted in four minor injuries. On 2 March 2004 a pedestrian suffered a minor injury when hit by a vehicle on the zebra crossing at 9.20 am. The other crashes were all of a random nature. The only site with more than one crash was at the zebra crossing. The one common factor reported in four of the crashes was fatigue or alcohol suspected. (Crash Summary:1999(3 crashes), 2000(4), 2001(4), 2002(2), 2003(2), 2004(1))

#### *Parking Survey*

38. There are 78 unrestricted carparking spaces available on Heaton Street between Papanui Road and Alister Avenue, plus 2 short lengths of P5 Loading Zone. Generally this section of street is only 30% parked. Response from a recent residents parking survey was relatively poor with only 6 of 38 residents replying. Five of the residents indicated that commuter parking was sometimes of concern, and stated that major developments should provide more parking for staff or customers.

#### *Bus Services*

39. A MetroStar Passenger Bus Service was established on 29 November 2004 between New Brighton and Halswell. It travels along Heaton Street for part of its route, but no bus stops have been established on Heaton Street in this vicinity at this stage to allow an integrated solution to be achieved. Buses are scheduled every 15 minutes in each direction during the daytime and every 30 mins in the evening. There is an expectation that stops will ultimately be installed at appropriate locations to meet local demand.

### *Loading Zone*

40. Two loading zones are installed adjacent to the school as follows:
41. They are both signed as P5 Loading Zone 8.00 am – 9.00 am, 2.30 – 4.00 pm Mon-Fri, and are 17.0 and 22.0 m long respectively.

### *School Bus Services*

42. Heaton Intermediate School has a specific requirement for bus transport on sports day to transport its pupils to different sporting venues. Up to 5 buses can be required to leave the school at approximately 1.00 pm on Tuesdays. Three of the buses could be accommodated within the P5 Loading Zones if the space was not taken up by other vehicles.

### **Summary of Issues**

43. *St Georges Hospital Entrance*  
While some residents have raised concerns about this entrance, this recently upgraded entrance does not suffer from a higher collision rate than would be expected for this type of access on an equivalent busy arterial. Motorists are not using the painted median correctly, when right turning into St Georges.
44. *Zebra Crossing by School Entrance*  
While this meets the warrant for a school patrol and zebra crossing facility at school times, the zebra has very little use outside school travel times, compromising the safety of pedestrians who do use it at this time. Some motorists are using the painted median as a third lane to bypass queued vehicles when approaching Papanui Road. This compromises the safety of school children and other pedestrians using the zebra crossing.
45. *Pedestrians*  
In addition to the zebra crossing, pedestrians were surveyed in the vicinity of the school and hospital. During the survey period, 195 pedestrians crossed adjacent to the Circuit Street intersection. This location has far more activity over an extended period compared to the zebra crossing location.
46. *Cyclists*  
Given the strong cycle demand on the street, sufficient road space is required for cyclists between parked vehicles (particularly buses) and vehicles in the traffic lane.
47. *Parking*  
While there is concern expressed about parking, the survey indicated that there is a 30% occupancy of the available parking, on average.
48. *Bus Services*  
Both Heaton Intermediate and the newly scheduled bus services require bus stops. Bus stops have been situated between the Heaton Street bend, outside the park frontage, and the intersection of Heaton/Glandovey/Strowan. Another pair of bus stops is required along Heaton Street. The most appropriate place to optimise convenience for public transport users, is the location shown on the attached plan. The northeast bound stop has been positioned following discussions with school staff. The position of the stops is ideal for St Georges Hospital, the two schools, proximity to road crossing points, and proximity to side streets, ie Circuit Street to maximise catchment. The stops are also required to comply with spacing guidelines. The school is concerned about the loss of two parking spaces per bus stop, for parents wishing to drop off/pick up children. The school has another entrance to the west, where children could access the school, from parked cars.

### **OPTIONS**

#### **Road Crossing Facilities**

49. The following options have been considered:
  - (i). Do nothing. This option would result in the continuing risk to pedestrians (particularly Heaton Intermediate students) with motorists illegally using the painted median to bypass stationary queues.

- (ii) Install traffic signals. While this would provide a high level of safety/level of service for pedestrians at the school gate, it does not address the pedestrian desireline issues near the Circuit Street intersection. This option is a very high cost option (up to \$100,000 based on installation of signals in Peer Street) and could not be justified, relative to all other traffic safety projects.
- (iii) Install two pedestrian refuge islands, one at the current zebra pedestrian crossing location and the other just west of Circuit Street; remove the zebra pedestrian crossing but retain the kea crossing facility for school peak times. This would prevent queue bypassing along the flush median; allow high safety for principal school student crossing needs and provide a safe option for pedestrians at other times.
- (iv) Install same two island proposal, but retain the zebra crossing. This is considered to introduce some confusion for motorists, resulting in potential safety implications. The zebra and island combination may work well when the school patrol is operating, but outside this time, the combination of some motorists not giving way to pedestrians who have reached the island, combined with the pedestrian stepping out in front of the motorist, can have potentially serious ramifications in regard to traffic safety. A similar arrangement in Riccarton Road has not worked well and is under review.

### **Bus Stops**

- 50. Bus stops, positioned as a pair between the pedestrian refuges provides for optimum catchments and bus stop spacing needs.
- 51. Following consultation, people have asked if the stops could be positioned west of the Heaton Intermediate main entrance and crossing point location. Also, they queried whether the stops could be placed to the east of the Circuit Street intersection.
- 52. In regard to the further west option, this defeats the objective of serving the public transport users, in regard to bus stop spacing and the distance from Papanui Road. The position east of Circuit Street becomes operationally impractical for the eastbound bus, ie having to pull out and cross to the right hand lane at the Papanui Road traffic signals. In both these scenarios, technical issues arise, and does not solve the issue of a bus stop outside a residential property. It merely transfers the stops to outside other residential properties.

### **PREFERRED OPTION**

- 53. The attached plan illustrates the proposed traffic management to address the traffic issues on Heaton Street. Heaton Intermediate students will benefit from improvements to the crossing point in several ways:
  - Motorists sr, ie12.1(as)-c-(f)-13.3(o)fs, ieh(c-(f)-14.8(es)-8e slus)- im sine at t1(r)20benefacoi24.8(es)-

## **CONSULTATION**

59. Up until the writing of this report, a number of residents (but not all) have had contact with Council Officers (attempts to contact the remainder will continue and be reported verbally).