

## 7. HAY STREET/RURU ROAD INTERSECTION – NEIGHBOURHOOD IMPROVEMENT PROJECT

<b>General Manager responsible:</b>	General Manager City Environment, DDI 941-8656
<b>Officer responsible:</b>	Transport and Greenspace Manager
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### PURPOSE OF REPORT

1. The purpose of this report is to seek the Board's approval to proceed to final design, tender and construction of the neighbourhood improvement works at the intersection of Hay Street and Ruru Road, as shown in the plan attached (**Attachment 1**).

### EXECUTIVE SUMMARY

2. This project was initiated in response to concerns raised during the development of the Bromley LATMS (Local Area Traffic Management Scheme). An accident occurred at this intersection in 2003, where a car lost control and drove into a property barely missing some children. A crash reduction study was carried out following this accident, which recommended physical remedial works be undertaken.
3. Following completion of the crash reduction study interim works were carried out at the intersection which involved installing a give way sign and painted island on the Hay Street approach to the intersection. The works proposed in this report will further improve safety at the intersection by reducing the wide open nature of the intersection, channelising traffic through the intersection, providing safer pedestrian crossing points, and should assist in reducing vehicle speeds. There have been no reported accidents at the intersection since the interim works were carried out.

### FINANCIAL AND LEGAL CONSIDERATIONS

4. The neighbourhood improvement works at the intersection of Hay Street and Ruru Road is programmed in the Transport and Greenspace Unit's capital programme, for implementation in the 2006/2007 financial year. The cost estimate for this project is \$112,000.
5. There are no notable trees, or historic or heritage buildings, places or objects identified in the City Plan or on Webmap2 in the area of the proposed works. There are no legal implications for this project.
6. Resolutions are required from the Board to approve the "No Parking" restrictions.

## **STAFF RECOMMENDATIONS**

It is recommended that the Board:

1. Approve the Hay Street/Ruru Road intersection neighbourhood improvement project to proceed to final design, tender and construction, as shown in Attachment 1.
2. Approve the following traffic restrictions:

### **New no stopping:**

- (a) That the stopping of vehicles be prohibited at any time on the western side of Hay Street commencing at its intersection with Ruru Road and extending 29 metres in a southerly direction.
- (b) That the stopping of vehicles be prohibited at any time on the southern side of Ruru Road commencing at its intersection with Hay Street and extending 36 metres in a westerly direction.
- (c) That the stopping of vehicles be prohibited at any time on the eastern side of Hay Street commencing at its intersection with Ruru Road and extending 14 metres in a southerly direction.
- (d) That the stopping of vehicles be prohibited at any time on the southern side of Ruru Road commencing at its intersection with Hay Street and extending 34 metres in an easterly direction.
- (e) That the stopping of vehicles be prohibited at any time on the northern side of Ruru Road commencing at a point 28 metres from its intersection with Hay Street (western side) and extending 22 metres in a westerly direction.
- (f) That the stopping of vehicles be prohibited at any time on the northern side of Ruru Road commencing at a point 8 metres from its intersection with Hay Street (eastern side) and extending 27 metres in an easterly direction.

## **CHAIRPERSON'S RECOMMENDATION**

That the staff recommendation be adopted.

## BACKGROUND

7. The intersection of Hay Street and Ruru Road is located in the Hagley Ward, which falls within the jurisdiction of the Hagley/Ferrymead Community Board. The surrounding area is residential in nature, with the Memorial and Ruru cemeteries located nearby.
8. Hay Street and Ruru Road are both classified as collector roads in the roading hierarchy defined in the City Plan.
9. This project was initiated in response to concerns raised during the development of the Bromley LATMS (Local Area Traffic Management Scheme). An accident occurred at this intersection in 2003, where a car lost control and drove into a property barely missing some children. A crash reduction study was carried out following this accident.
10. The initiating aim of the project was to improve road safety and amenity values for road users, pedestrians and residents.
11. The Land Transport New Zealand crash analysis system does not show any crashes as being recorded for the five-year period between 2001 and 2005. However, the crash reduction study reported on the crash that occurred in January 2003, which involved a vehicle failing to stop at the intersection. The vehicle collided with a building on the opposite side of the intersection, narrowly missing children playing at the front of the property. The police report suggested that excessive speed was involved.
12. An initial survey was carried out with the local community in January 2006, and the main issues raised related to:
  - Speed.
  - Pedestrian safety.
  - Corner cutting.
  - Intersection control.
13. The objectives of the project were thus defined as:
  - To improve safety for pedestrians.
  - To maintain or improve safety for road users.
  - To reduce the speeds at the intersection.
  - To restrict the opportunity for corner-cutting at the intersection.
  - To improve safety for adjoining residents and their properties.
14. Four options were developed during the concept design phase, and the preferred option was released for comment in a consultation newsletter to landowners and occupiers within the vicinity of the intersection, as well as key stakeholders. Five responses were received, of which three were in support of the proposed concept plan, and two specified no preference. A summary of the submissions received and an evaluation of the issues raised is shown in **Attachment 2**.
15. The key issues raised from this consultation phase were:
  - Residents suggested that speed humps be included in the scheme. However, as Hay Street and Ruru Road are collector roads, speeding was perceived as a problem rather than there being an actual speed problem. However, the proposed intersection improvements are expected to reduce the speed through the intersection.
  - One respondent was concerned with the layout of the intersection and thought it may bring the cars in line with their house. However, the line of vehicles turning right at the intersection is unchanged so this problem has not been increased. The likely reduction in speed through the intersection should reduce the likelihood of vehicles colliding with this property.
  - The other issue raised was relating to whether the tree proposed on the southeastern corner of the intersection would limit visibility for when they are exiting their driveway just south of the intersection.
  - The Royal New Zealand Blind Foundation recommended that tactile pavers be installed where the crossing points were not obvious.
  - Spokes questioned whether no stopping lines should be added adjacent to the pedestrian refuge islands on Ruru Road.

16. The main features of the plan for Board approval include:

- Two pedestrian refuge islands will be located on Ruru Road on either side of the intersection to improve pedestrian safety. One island will be located outside 53 Ruru Road and the other island will be located outside 46 Ruru Road. Handrails will be provided on the pedestrian refuge islands.
- No stopping lines will be provided on the two corners of the intersection and adjacent to the two pedestrian refuge islands.
- Tactile pavers will be installed at all three crossing locations.
- A grass berm will be provided adjacent to the kerb on the western side of Hay Street and will follow the kerb extension. The footpath will follow this grass berm and will be 1.65m wide. The area between the boundary line and footpath on this corner will be grass berm.
- The footpath on the eastern side of Hay Street will generally follow the existing path on the corner running along the boundary line with a new section of path leading to the kerblines where pedestrians can cross over Hay Street. The path will be 1.65m wide. The area within the kerb extension will be grass berm.
- The street lighting will be upgraded as part of the proposal.

#### **OPTIONS**

17. Four options were developed for comparison during the concept design process, and the preferred option was released for feedback from the local community and key stakeholders in June 2006. None of the options provide for cycle facilities. A street lighting upgrade was investigated as part of the design of the preferred option.

#### **Option 1**

18. Option 1 will involve shoulder reconstruction in locations where new kerb and channel will be constructed. This option will reduce the existing carriageway width on Hay Street at the intersection using kerb extensions on both sides of the carriageway. The width will be reduced from 45 metres to 25 metres at the limit lines. Sufficient kerb radii will still be provided so large trucks can still track through the intersection without running across any kerbs.
19. A raised central island will be installed on Hay Street at the intersection, to provide a refuge for pedestrians crossing Hay Street.
20. A right turn bay will be provided on Ruru Road so vehicles can turn right onto Hay Street without blocking through traffic. The right turn bay also highlights the intersection to oncoming traffic. No stopping lines will be installed on Ruru Road from No. 45 to 53, so parked vehicles will not block the straight through traffic. No stopping will also be provided on the two corners of the intersection.
21. The footpath on the western side of Hay Street will follow the kerb line of the proposed kerb extension and will be 1.65 metres wide.
22. The footpath on the eastern side of Hay Street will generally follow the existing path on the corner running along the boundary line with a new section of path leading to the kerb line where pedestrians can cross over Hay Street. The path will be 1.65 metres wide.

#### **Option 2**

23. Option 2 is similar to Option 1, except that the kerb extension on Hay Street will continue onto Ruru Road with an extension that is two metres wide. This kerb extension will add a traffic calming measure onto Ruru Road, highlighting the intersection and reducing speeds through the area.

#### **Option 3**

24. Option 3 is also similar to Option 1, except that two pedestrian refuge islands will be located on either side of the intersection to improve pedestrian safety. These islands will act as a traffic calming device and highlight the intersection to oncoming traffic. There will be no landscaping in this option.

#### **Option 4**

25. Option 4 will involve the construction of a roundabout at the intersection in accordance with design standards. Landscaping and tree planting is to be provided as part of the new intersection priority to enhance and highlight the area.

#### **PREFERRED OPTION**

26. Option 3 was recommended as the preferred option, with the following changes to the original concept design:
- Shift the footpath on the west corner of the intersection away from the kerb.
  - Install a painted median on Ruru Road with a right turn bay and include two pedestrian islands on Ruru Road within the median.
27. The advantages of Option 3 over the other options developed during the concept design phase included:
- Slowing traffic on Ruru Road;
  - Restricting corner-cutting;
  - Assisting pedestrians to cross both roads; and
  - Slowing traffic approaching from Hay Street.
28. The preferred option involves shoulder reconstruction in locations where new kerb and channel will be constructed. The proposal reduces the existing carriageway width on Hay Street at the intersection using kerb extensions on both sides of the carriageway. The width reduces from 45 metres to 25 metres at the limit lines. Sufficient kerb radii are still provided so large trucks can still track through the intersection without running across any kerbs.
29. A raised central island will be installed on Hay Street at the intersection, which will provide a refuge for pedestrians crossing Hay Street. A painted median will be installed on Ruru Road with a right turn bay provided as part of the median so vehicles can turn right onto Hay Street without blocking through traffic. The median will extend for approximately 75 metres west and 65 metres east of the intersection.
30. Two pedestrian refuge islands will be located on Ruru Road on either side of the intersection to improve pedestrian safety. One island will be located outside No. 53 Ruru Road and the other island will be located outside 46 Ruru Road. These islands, combined with the right turn bay, will act as a traffic calming device and will highlight the intersection to oncoming traffic.
31. No stopping lines will be installed on Ruru Road from No. 45 to 53, so parked vehicles will not block the straight through traffic. No stopping lines will also be provided on the two corners of the intersection.
32. A grass berm will be provided adjacent to the kerb on the western side of Hay Street. The footpath will follow the line of the proposed kerb extension, and will be 1.65 metres wide.
33. The footpath on the eastern side of Hay Street will generally follow the existing footpath on the corner running along the boundary line, with a new section of footpath leading to the kerb line where pedestrians can cross over Hay Street. The footpath will be 1.65 metres wide.

#### **ASSESSMENT OF OPTIONS**

##### **Maintain The Status Quo (If Not Preferred Option)**

34. The option to maintain the status quo essentially means to undertake no capital works at the intersection of Hay Street and Ruru Road. This would retain the intersection and road environment in its existing condition.
35. This option would be inconsistent with the Community Outcomes outlined in the LTCCP, and would be inconsistent with Council strategies, particularly the Pedestrian Strategy, and Road Safety Strategy.

36. It is considered therefore that it would not be appropriate to maintain the status quo because of the opportunity to ensure an efficient, safe and sustainable transport system within this area of the City, whilst providing for all modes of transportation.

### **Alternative Options**

37. Options 1, 2 and 3 all involve the removal of 12 parking spaces on Ruru Road and Hay Street, as a result of the proposed improvements. Option 4 would result in the removal of a significant amount of on-street parking, especially on Ruru Road.
38. Options 2 and 3 will both increase the visibility of the intersection to oncoming traffic and reduce speeds through the intersection. Option 2 will achieve this with the introduction of kerb extensions on Ruru Road, while Option 3 will achieve this with the introduction of two pedestrian islands on Ruru Road.
39. The pedestrian islands in Option 3 will provide a safer environment on Ruru Road for pedestrians.
40. Option 4 will result in an increase in traffic noise for residents with the extra slowing and accelerating through a roundabout, and the roundabout will cause delays to the main flow on Ruru Road. An increase in accidents is likely to occur with the inclusion of a roundabout. This option is also significantly more expensive than the other three options.

### **The Preferred Option**

41. The objectives for this project are met by the preferred option, as follows. The safety of pedestrians will be enhanced by the inclusion of a new central island on Hay Street at the intersection with Ruru Road, and a reduction in the carriageway width on Hay Street at the intersection. In addition, pedestrian safety on Ruru Road will be enhanced by the inclusion of two new pedestrian islands on either side of the intersection. Street lighting will also be improved.
42. A number of measures have been proposed to reduce the speed of vehicles at the intersection, which will reduce the likelihood and severity of future accidents, thereby improving safety for road users. The inclusion of the painted median and right turn bay on Ruru Road provides a defined area for right turning vehicles, which should improve the safety for right turning vehicles as through vehicles on Ruru Road will not be blocked by vehicles turning right.
43. The proposal will reduce speeds at the intersection with a reduction in carriageway width on Hay Street, which will make vehicles slow down when cornering. The new painted median on Ruru Road and inclusion of a right turn bay will highlight the intersection, while the two pedestrian islands will act as a traffic calming measure for vehicles travelling along Ruru Road.
44. Corner cutting will be restricted by the reduction in width on Hay Street and the inclusion of a raised central island on Hay Street. The right turn bay will also highlight the path for turning vehicles.
45. The introduction of new pedestrian facilities at the intersection and improved street lighting will provide safer crossing facilities for adjoining residents. The reduction in speed at the intersection will improve safety for the residents and their properties, as the likelihood of accidents occurring will decrease.
46. There are no land ownership issues associated with this option, as the works are all contained on Council road reserve.
47. There are no consent or legal issues associated with this option.