

### 3. KIRKWOOD AVENUE KERB AND CHANNEL RENEWAL

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#### PURPOSE OF REPORT

1. The purpose of this report is to:
  - (a) Seek the Board's approval for the Kirkwood Avenue Kerb and Channel Renewal to progress to final design, tender and construction; and
  - (b) Seek the Board's approval for resolutions for new traffic restrictions associated with the Kirkwood Avenue Kerb and Channel Renewal

#### EXECUTIVE SUMMARY

2. Kirkwood Avenue is a 14m wide local road, which runs between Ilam Road and Clyde Road for a length of approximately 640 metres. It has a traffic volume of approximately 1,735 vehicles per day. The land use on Kirkwood Avenue is a mix of residential properties, educational facilities and a healthcare facility. The grounds of Ilam School and University of Canterbury front the northern side of Kirkwood Ave and Kirkwood Intermediate is located on the southern side. There are currently grass berms and a small amount of landscaping on Kirkwood Avenue.
3. Initial consultation was undertaken with residents and businesses in the vicinity of the Kirkwood Avenue in August 2004 to determine the issues in the street. The consultation responses indicated a clear concern about the lack of available parking on Kirkwood Avenue. Concerns were also raised with regard to landscaping, personal security (while walking on the street after dark), traffic speed, traffic volume, safety at intersections, cycle and pedestrian safety, and congestion at the Kirkwood/Ilam Road intersection.
4. The Terms of Reference and objectives for the project were based on the initial issues identified above and the Council's own rationale for placing the project on the programme. The principal aim of the project is to replace the kerb and dish channel with kerb and flat channel in Kirkwood Avenue. Other project objectives relate to safety, speed, lighting and particular consideration of issues related to the variety of landuse on the street.
5. An Open Street Meeting was held from 3.30pm to 6.30pm on 1 September 2005 to provide an opportunity for members of the public to meet with council officers to discuss the project. There was a moderate attendance at this meeting and it aided the Project Team's understanding of the community's concerns with regard to the proposed upgrade.
6. The consultation responses received for the Kirkwood Avenue project had a majority expressing a preference for the parallel parking option. The key issues identified relate to parking, cycle safety, pedestrian safety, intersections, manoeuvrability and landscaping.
7. The project team considered the consultation feedback, and in conjunction with comments from Council staff, chose one of the two options and revised the concept plan with regard to pedestrian safety, intersections, manoeuvrability, and landscaping.
8. The final concept plan included as **Attachment 4** is the preferred option as it best satisfies the aims and objectives of the project and has a good degree of community support. It is estimated that construction of the project would take approximately six months to complete. Construction is scheduled to begin in April 2006.

#### FINANCIAL AND LEGAL CONSIDERATIONS

9. The estimated total costs for the Kirkwood Avenue upgrade is \$1,086,000 inclusive of all consultation, design, construction and project management.
10. Kirkwood Avenue Kerb and Channel Renewal is part of the Street Renewal Programme. Construction of this project is intended to commence in the 2005/2006 year, and is programmed to continue into 06/07.
11. Without the approval of the resolutions for traffic restrictions, the restrictions will not be enforceable upon implementation.

## BACKGROUND ON KIRKWOOD AVENUE KERB AND CHANNEL RENEWAL

### Description of the Road

12. Kirkwood Avenue is a 14m wide local road, which runs between Ilam Road and Clyde Road for a length of approximately 640 metres. It has a traffic volume of approximately 1,735 vehicles per day. The landuse on Kirkwood Avenue is a mix of residential properties, educational facilities and a healthcare facility. The grounds of Ilam School and University of Canterbury front the northern side of Kirkwood Ave and Kirkwood Intermediate is located on the southern side. There are currently grass berms and a small amount of landscaping on Kirkwood Avenue.
13. There have been three crashes recorded on Kirkwood Avenue for the period 2000 to 2004. All of the crashes occurred at the Ilam Road/ Kirkwood Avenue intersection. Two of the crashes involved cyclists where a vehicle exiting Kirkwood Avenue failed to give way. The other crash was a loss of control on a straight, which involved alcohol.

### Initial Consultation

14. Initial consultation was undertaken with residents and businesses in the vicinity of the Kirkwood Avenue in August 2004 to determine the issues in the street. The consultation responses indicated a clear concern about the lack of available parking on Kirkwood Avenue. Concerns were also raised with regard to landscaping, personal security (while walking on the street after dark), traffic speed, traffic volume, safety at intersections, cycle safety and pedestrian safety in terms of crossing Kirkwood Avenue, congestion at the Kirkwood/Ilam Road intersection.
15. The Terms of Reference and objectives for the project were based on the initial issues identified above and the Council's own rationale for placing the project on the programme. The principal aim of the project is to replace the kerb and dish channel with kerb and flat channel in Kirkwood Avenue. The objectives of the project are to:
  - Enhance the safety for alternative transport modes
  - Ensure the current speed environment is maintained
  - Ensure adequate street lighting is provided considering the high pedestrian usage
  - Enhance parking capacity and arrangement
  - Maintain existing level of service
  - To deliver a project that considers the needs of the community, including the educational facilities in the community

### CONSULTATION FOR KIRKWOOD AVENUE KERB AND CHANNEL RENEWAL

16. Due to the fact that initial consultation identified such a clear concern about parking, the Project Team developed two options. The first option increased the amount of available parking, with the inclusion of 90 degree angle parking outside the University Park. The second option maintained the existing parallel parking and, as such, did not result in an overall increase in parking. It was decided that both of these options would be presented to the community for feedback (refer **Attachments 1 and 2**). Apart from the different parking treatments and slight differences in the degree of road narrowing, both options were the same.
17. These initial concept plans narrowed the Kirkwood Ave/Clyde Road intersection and retained the existing narrowed Kirkwood Ave/Ilam Road intersection. The intersections included the installation of paved thresholds. The existing midblock thresholds were proposed to be reinstalled in approximately the same location, with off-road cycle facilities provided. The purpose of these treatments was to slow traffic and improve pedestrian and cycle safety.
18. Landscaping was incorporated into the intersection build outs and along the length of the street. The plan included footpaths on both sides of the street with a landscaped berm and street trees installed on the both sides of the street.

## Full Consultation

19. Consultation began in September 2005 and consisted of:
- A publicity pamphlet, which was distributed to approximately 100 properties in the vicinity of Kirkwood Avenue. This pamphlet included a summary of the project, an initial concept plan of the two options (refer **Attachments 1 and 2**), a feedback form and an invitation to an Open Street Meeting.
  - A phone call/visit to the identified key stakeholders (St Nicholas Hospital, Kirkwood Intermediate School, Canterbury University and Ilam School) to encourage them to attend the Open Street Meeting.
  - An Open Street Meeting was held from 3.30pm to 6.30pm on 1 September 2005 to provide an opportunity for members of the public to meet with council officers to discuss the project. There was a moderate attendance at this meeting and it aided the Project Team's understanding of the community's concerns with regard to the proposed upgrade.

## Consultation Feedback

20. There were 59 responses received for the Kirkwood Avenue project with the majority of respondents (54%) expressing a preference for the parallel parking option (Note: Of the residents of Kirkwood Avenue, there was a 64% preference for the parallel parking option).
21. The consultation feedback and project team responses are summarised in **Attachment 3** (Kirkwood Ave –Summary of Issues Raised in Consultation (September 2005)). The key issues identified relate to:
- Parking – expression of preferences for either option, comment on parking restrictions
  - Cycle Safety – concern about 90 degree angle parking, support for cycling off road
  - Pedestrian Safety – concern about conflict between pedestrians, cyclists and cars on footpaths, concern about the safety of Ilam Junior School students as they cross Kirkwood Avenue
  - Intersections – mixed feedback about narrow intersections (congestion versus safety issues)
  - Manoeuvrability – mixed feedback to narrowing of street and to the narrow thresholds
  - Landscaping – support for trees and increased landscaping, concern about grass outside Ilam Junior School (which gets muddy), concern about University hedge
  - Services – under grounding sought
22. The project team considered the consultation feedback in conjunction with comments from Council staff. The rationale for these responses by the Project Team are summarised in **Attachment 3**.
23. In terms of the choice between the two options, and despite that fact that initial consultation indicated there is insufficient parking in Kirkwood Ave, the majority of the community were generally supportive of the Parallel Parking Option, which does not increase the amount of parking. The community expressed a view that 90 degree angle parking would reduce visibility and increase traffic congestion and would result in reduced safety for pedestrians and cyclists, particularly since there are many vulnerable young cyclists using this street. In response to the community's views, the Project Team decided to further develop the Parallel Parking Option, which it revised in response to consultation in the following way:
- (a) Pedestrian Safety
- Cobbles have been removed from the thresholds outside schools to differentiate crossings from traffic calming devices and make it clear that cars have right of way
- (b) Intersections
- As there is no history of accidents at the Clyde/Kirkwood intersection, the plan was amended so that it was not narrowed. It will remain 9 metres wide with a threshold set back from the intersection
  - No Stopping parking restrictions will be installed on north east corner of the Ilam Rd/ Kirkwood Ave intersection to improve visibility at this intersection

(c) Manoeuvrability

- The width of the road way was increased from 9m to 10m, to accommodate school buses
- Parking ticks are to be moved 2 metres away from the University entrance in order to provide for a safer turning radius for commercial vehicles entering and exiting the University grounds
- The Kirkwood School entrance is widened to 5 metres and relocated to the property boundary. The proposed threshold is moved eastwards to accommodate this and two proposed trees from the threshold removed to increase visibility

(d) Landscaping

- In the area near the Ilam Junior School access, the footpath will be adjacent to the kerb so that the issue of the muddy berm is avoided

24. Some of the issues raised in consultation did not result in changes to the recommended design of the project. The rationale for these responses by the Project Team are summarised in **Attachment 3**. In general they were as follows:

(a) Parking

- Due to a general residents preference, and considering cycle safety concerns, additional parking could not be provided.
- A range of suggestions concerned the duration of the time restrictions on Kirkwood Ave, including that the current time restrictions are working well. It is noted that there is a need to manage the short term parking associated with Ilam School, however this will not be achieved with the provision of more time restricted parking – it is an enforcement issue and will be managed as such. Accordingly, current parking restrictions will be reinstated

(b) Cycle Safety

- It is not common practice to provide a cycle lane on slow speed residential streets – further, to do so would widen the street and change the speed environment.

(c) Pedestrian Safety

- It is noted that it is current practise in Kirkwood Avenue that the footpath is used by multiple users (pedestrians, cyclists, prams, scooters, prams and pets). The footpath can be widened outside the University in response to concerns about the large hedge. However it is considered unnecessary, and cost prohibitive to widen the entire length of the footpath of Kirkwood Ave.
- The footpath could not be put against the kerb for the length of the street as the driveway cutdowns would create an undulating footpath. Further, it is generally Council policy to have the berm against the verge unless other conditions dictate otherwise.

(d) Intersections

- There was mixed feedback about narrow intersections. Some felt that the narrow intersections would exacerbate congestion, while others felt that they were good because of the safety benefits. (Note: the width of Ilam road intersection will remain the same, and not been narrowed as was suggested in the publicity). Clyde Road intersection will now not be narrowed. Splitter islands will not be installed at these intersections – there is no particular need at this time.
- A threshold is not necessary at the Balgay Street intersection as the traffic on Kirkwood Avenue will be slowed due to the narrowing of the carriageway

(e) Landscaping

- The University hedge could not be moved as it is not a Council asset. The issue of thorns was discussed with the University staff and they will ensure that it is maintained regularly. They do not wish to remove the hedge as it serves a useful privacy function

(f) Manoeuvrability

- There was mixed feedback about the narrowing of road and narrow thresholds. It was considered important that the carriageway be narrowed to maintain speeds that are appropriate for a local road. The narrow thresholds were necessary because the proposed new thresholds are lower than the current thresholds. This will ensure that the thresholds are quieter and easier to maintain.

(g) Services

- Undergrounding could not be included as part of this project
- Lighting will be assessed at the design stage of the project and provided appropriately

## OPTIONS – KIRKWOOD AVENUE KERB AND CHANNEL RENEWAL

### 25. Options

Three options were assessed as part of Kirkwood Avenue kerb and channel renewal as follows:

Option (a) Maintenance of the status quo

Option (b) Renew the kerb and channel as per **Attachment 1** (Parallel Parking Option)

Option (c) Renew the kerb and channel as per **Attachment 2** (90 Degree Parking Option)

### 26. Preferred Option

The preferred option is a modified version of Option (b), after consideration of consultation inputs (see below for detailed description of options)

### 26. Assessment of Options

Option (a) Maintenance of the status quo

- Will not result in any social or cultural benefits. The existing streetscape would not be enhanced and an infrastructural asset not renewed, which would result in ongoing maintenance expenditure. Maintaining the status quo is not consistent with the CCC planning or programming, and conflicts with the objectives of the Asset Management Plan, and fails to meet any of the transport management objectives.

Option (b) Renew the kerb and channel as per **Attachment 1** (Parallel Parking Option). This involved a road narrowed to 9m kerb-to-kerb, with narrowings both mid-block and at the main bends on Kirkwood Ave.

- Results in the following social, cultural, environmental and economic benefits:
  - Social - Reduction in speed of traffic resulting in improved safety. Improved amenity of the streetscape due to landscaping. Safer facilities for cyclists. Improved safety at intersections.
  - Environmental – The street and its intersections are enhanced with the provision of landscaping
  - Economic - Improvement of a Council infrastructure asset\
- This option received the most positive feedback from consultation, with comments suggesting modifications. Consideration of the consultation feedback has resulted in changes, making a modified Option (b) the preferred option.

Option (c) Renew the kerb and channel as per **Attachment 2** (90 Degree Parking Option). This involved a 9m carriageway where parallel parking is retained, and 14m kerb-to-kerb where angle parking was proposed. Narrowings proposed both mid-block and at the main bends on the road.

- Results in the following social, cultural, environmental and economic benefits:
  - Social - Reduction in speed of traffic resulting in improved safety. Improved amenity of the streetscape due to landscaping. Safer facilities for cyclists. Improved safety at intersections. Increase in amount of parking.
  - Environmental – The street and its intersections are enhanced with the provision of landscaping
  - Economic - Improvement of a Council infrastructure asset
- This option, despite providing more parking, received the least support from the consultation process, and raised issues which were not resolvable, or not adequately resolvable by the retention of parallel parking. This option is not preferred.

## 27. Option Selection

Option (b), as per **Attachment 1** (Parallel Parking Option), was selected as the preferred option and was amended in accordance with consultation feedback, where practical. In general, the proposed narrowing of the carriageway to a width of 10 metres is expected to slow traffic speed. This narrowing will also reflect Kirkwood Avenue's local road status. The intersection of Ilam Road/ Kirkwood Avenue will have improved visibility due to the new No Stopping lines on Ilam Road and the new threshold. The intersection of Clyde Road/ Kirkwood Avenue will remain the same with sufficient width for two cars to exit at one time. The existing on-street parallel parking will remain and adequate access to properties has been ensured. Pedestrian safety will be enhanced by narrowing the street and providing narrowed crossing points, which also have off-road cycle facilities. Landscaping at the intersections and along the length of the street will be enhanced.

## 28. The final concept plan (refer **Attachment 4** - Kirkwood Avenue – Final Concept Plan, dated 20/01/06) consists of the following elements:

- New kerb and channel will extend along both sides of Kirkwood Avenue
- Narrowing of the carriageway to a width of 10 metres
- Installation of a new threshold at the intersection of Ilam Road/ Kirkwood Avenue and the installation of No Stopping lines on Ilam Road extending northwards of the intersection extending for a distance of 32m (on the east side of the road)
- Replacement of the existing thresholds on Kirkwood Avenue
- Off-road cycle facilities at the mid block thresholds
- On-street parallel parking
- Reinstatement of existing parking restrictions
- Landscaping and street trees along the length of Kirkwood Avenue and at its intersections
- Footpaths on both sides of the street (against the kerb between No.60 and No.26 Kirkwood Avenue on the northern side)

## 29. The preferred option (refer **Attachment 4**) satisfies the project aim and objectives as follows:

- **Replace the kerb and dish channel with flat channel** – The existing kerb and dish channel will be replaced for the full length of Kirkwood Avenue.
- **Enhance safety for alternative transport modes** - Safety is enhanced for alternative transport modes with the design enhancements to the mid block thresholds, which have improved crossing facilities for pedestrians and off road cycle facilities. There is adequate width for the school bus.
- **Maintain current speed environment** - The proposal retains the existing midblock thresholds but as these are lower than the existing thresholds the street is also narrowed to achieve the same traffic calming result.
- **Provide adequate street lighting (considering high pedestrian usage)** – This will be addressed at the design stage of the project.
- **Enhance parking capacity and arrangement** – This objective is not met as the community preferred the concept with the same degree of parking as currently exists.
- **Maintain existing level of service** - The level of service will be maintained along Kirkwood Avenue. There will be some reduction in traffic speeds along Kirkwood Avenue due to the narrow 10m wide carriageway.
- **To deliver a project that considers the needs of the community, including the educational facilities in the community** – Consultation has been undertaken with the affected community and, where practical, their views have been incorporated into the preferred option

30. The preferred option has been selected because it best satisfies project aims and objectives from the options considered and it has a good degree of community support and includes community suggested items.

#### **STAFF RECOMMENDATIONS**

It is recommended that the Board:

- (a) Approve the Kirkwood Avenue Kerb and Channel Renewal, as described in plan TP174002, dated 20/01/06 (**Attachment 4**), for final design, tender and construction.
- (b) Approve the following new traffic restrictions:

##### **New no stopping: Ilam Road**

That the stopping of vehicles be prohibited at any time on the east side of Ilam Road commencing at its intersection with Kirkwood Ave and extending 34 metres in a northerly direction.

#### **CHAIRPERSON'S RECOMMENDATIONS**

That the staff recommendation be adopted.