



## Christchurch City Council

# FENDALTON/WAIMAIRI COMMUNITY BOARD WORKS, TRAFFIC AND ENVIRONMENT COMMITTEE AGENDA

**MONDAY 3 NOVEMBER 2008**

**8.00AM**

**IN THE BOARDROOM  
FENDALTON SERVICE CENTRE  
CORNER JEFFREYS AND CLYDE ROADS**

**Committee:** Cheryl Colley (Chairperson), Sally Buck, Faimeh Burke, Val Carter, Jamie Gough, Mike Wall and Andrew Yoon

**Community Board Adviser**  
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Email: [graham.sutherland@ccc.govt.nz](mailto:graham.sutherland@ccc.govt.nz)

- PART A - MATTERS REQUIRING A COUNCIL DECISION**
- PART B - REPORTS FOR INFORMATION**
- PART C - DELEGATED DECISIONS**

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## 1. APOLOGIES

## 2. ARUNDEL GATE - PROPOSED NO STOPPING RESTRICTION

<b>General Manager responsible:</b>	General Manager City Environment, DDI 941-8656
<b>Officer responsible:</b>	Transport and Greenspace Manager
<b>Author:</b>	Alistair Ferguson/Viastrada and Michael Thomson, Network Operations and Transport Systems

**PURPOSE OF REPORT**

1. The purpose of this report is to seek the Works, Traffic and Environment Committee's recommendation to the Board, to approve the installation of a no stopping restriction in Arundel Gate, Hyde Park, Avonhead.

**EXECUTIVE SUMMARY**

2. The Council has received a request from some of the residents of Arundel Gate, Hyde Park, Avonhead, that no stopping restrictions be installed in their cul-de-sac, because access to their properties is often blocked due to inconsiderate parking of people using Avonhead Park.
3. An investigation by staff confirmed their concerns. Located at the end of the cul-de-sac is a pedestrian access way into Avonhead Park which is a popular point of entry into the park especially at the weekends for those people attending sporting events. The result has been that motor vehicles park on both sides of the road, on reserve areas, over driveways and on private property. On occasions residents of Arundel Gate have not been able to exit their properties.
4. Arundel Gate has a road width of 5.9 metres and with vehicles parked on both sides of the road movement becomes extremely difficult. The street contains eight inset parking spaces which are often used by residents. This level of available on-street parking is inadequate for the demand especially at the weekend.
5. The installation of the proposed no stopping restriction will provide greater safety for vehicles entering or exiting the residential properties in Arundel Gate, especially at the weekends, and will also assist to guarantee access for residents at all times. It would also force persons attending sporting events at the park to seek alternate legal parking in the area, or use the car park off Hawthornden Road.
6. The residents of Arundel Gate were consulted with a plan of the proposal being delivered to each letter box with a letter requesting feedback. All those residents who responded were in support of the proposal for the installation of the proposed no stopping restriction.

**FINANCIAL IMPLICATIONS**

7. The cost of this proposal is estimated to be \$200.

**Do the Recommendations of this Report Align with 2006-16 LTCCP budgets?**

8. The installation and removal of road markings and signs is within the LTCCP Street and Transport Operational Budgets.

**LEGAL CONSIDERATIONS**

9. Clause 5 of the Christchurch Traffic and Parking Bylaw provides the Council the authority to install parking restriction by resolution
10. The Community Boards have delegated authority from the Council to exercise the delegations as set out in the Register of Delegations as at April 2008. The list of delegations for the Community Boards includes parking restrictions.

## 2. Cont'd

11. The installation of any associated signs and markings must comply with the Land Transport Rule: Traffic Control Devices 2004.

### **Have you considered the legal implications of the issue under consideration?**

12. As above.

### **ALIGNMENT WITH LTCCP AND ACTIVITY MANAGEMENT PLANS**

13. Aligns with the Streets and Transport activities by contributing to the Council's Community outcomes - Community and Safety.

### **Do the recommendations of this report support a level of service or project in the 2006-16 LTCCP?**

14. This contributes to the improvement in the level of service for safety.

### **ALIGNMENT WITH STRATEGIES**

15. The recommendations align with the Council's Parking Strategy 2003.

### **Do the recommendations align with the Council's strategies?**

16. As above.

### **CONSULTATION FULFILMENT**

17. The residents of Arundel Gate were consulted; a plan of the proposal was delivered to each of the 11 letter boxes in the cul de sac, with a letter requesting feedback. This initial plan included a 60 minute parking restriction and no stopping lines. All six residents that responded were in support of the no stopping restriction; but requested that it be extended in front of numbers 1 and 5. None of the residents that responded supported the installation of the P60; therefore it was removed from the proposal.

### **STAFF RECOMMENDATION**

It is recommended that the Committee recommend to the Board:

- (a) That the stopping of vehicles be prohibited at any time on the north-west side of Arundel Gate commencing at a point 29 metres north from its intersection with Hatfield Place and extending in a northerly direction for a distance of 13 metres.
- (b) That the stopping of vehicles be prohibited at any time on the north-west side of Arundel Gate commencing at the Northern end of the Cul-de-sac and extending in southerly direction for a distance of 20 metres.
- (c) That the stopping of vehicles be prohibited at any time on the north-east side of Arundel Gate commencing at the northern end of the Cul-de-sac and extending in a southerly direction for a distance of 4 metres.
- (d) That the stopping of vehicles be prohibited at any time on the eastern side of Arundel Gate commencing at its intersection with Hatfield Place and extending in a northerly direction for a distance of 53 metres.

3. 11. 2008

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ATTACHMENT TO CLAUSE 2

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**ARUNDEL GATE**  
Proposed P60 Parking  
For Board Approval

Original Plan Size: A4  
ISSUE: 07.08  
TP RAH

File location - W:\PROJECTS\001 TO 200\001 TO 020\01 CSR CONTRACTED WARD\ARUNDEL GATE - P60 PARKING\ARUNDEL GATE.DWG

**3. BRISTOL STREET NEIGHBOURHOOD IMPROVEMENT PROJECT**

<b>General Manager responsible:</b>	General Manager City Environment, DDI 9418608
<b>Officer responsible:</b>	Transport and Greenspace Manager
<b>Author:</b>	Anne Cosson Consultation Leader Transport

**PURPOSE OF REPORT**

1. The purpose of this report is to seek the approval of the Committee and Board for that part of the Bristol Street neighbourhood improvement project which is within the Fendalton/Waimairi ward, to proceed to detailed design, tender and construction.

**EXECUTIVE SUMMARY**

2. The safety improvement works were initiated after complaints from the residents, which include the Foundation of the Blind, who are located on Bristol Street. This project is on the boundary between the Papanui ward area and the Fendalton ward area.
3. The primary objectives for the project were set out as follows:
  - To reduce the speed of vehicles in the street.
  - To maintain or improve safety for all road users.
  - To discourage the use of this street by through traffic.
  - To complete the project within the allocated budget.
  - To complete the project with in the 2008/09 financial year.

**FINANCIAL IMPLICATIONS**

4. The proposed neighbourhood improvement works are recommended in the Transport and Greenspace Unit's capital programme for implementation in the 2008/2009 financial year. New Zealand Transport Association (NZTA) funding is not available for this project.

5. Full financial breakdown as below

2007/2008 Budget	7,500
2008/2009 Budget	62,880
Total Budget	\$70,380

6. Construction Estimate – The construction estimate is \$94,100. The Capital Programme Transport Programme Control Group has granted an additional \$33,720 to complete the construction works, which gives a new budget of \$104,100 to complete the whole project.

**Do the Recommendations of this Report Align with 2006-16 LTCCP budgets?**

7. Aligns with the Long Term Council Community Plan (LTCCP) Community Outcome – A Safe City and the Capital Works Programme – Safety Improvement Projects.

**LEGAL CONSIDERATIONS**

8. Community Board resolutions are required to approve the new traffic restrictions and parking restrictions. The Land Transport Rules provide for the installation of traffic and parking restrictions. There are no other legal implications for this project.

**Have you considered the legal implications of the issue under consideration?**

9. As above.

### 3. Cont'd

#### ALIGNMENT WITH LTCCP AND ACTIVITY MANAGEMENT PLANS

10. Aligns with the LTCCP Community Outcome – Safe City and the Capital Works Programme – Safety Improvement Projects. Aligns with the Transport and Greenspace Unit's Safety Improvements and School Road Safety Projects of the Capital Works Programme, pg 85, Our Community Plan 2006-20016.

#### Do the recommendations of this report support a level of service or project in the 2006-16 LTCCP?

11. Contributes to providing a safe transport system LTCCP Safety Outcome, page 151.

#### ALIGNMENT WITH STRATEGIES

12. This project is consistent with key Council strategies including the Parking Strategy, Road Safety Strategy, Pedestrian Strategy and Cycling Strategy.

#### Do the recommendations align with the Council's strategies?

13. As above.

#### CONSULTATION FULFILMENT

14. The Fendalton/Waimairi and Shirley/Papanui Community Boards were informed by seminar of the project's consultation programme in April 2008. An initial survey was then carried out with the residents of Bristol Street in April 2008. Fifty-seven responses were received which identified concerns about speed, curve in the road, Bristol/St Albans Street intersection, on-street parking, road surfacing, landscaping and cars cutting through Bristol Street.
15. Seminars were held with the Fendalton/Waimairi and Shirley/Papanui Community Boards on 28 July 2008 and 14 July 2008 respectively, prior to the preferred concept plan for Bristol Street being presented to the public for consultation. Community consultation was undertaken in August and September 2008. A total of 270 pamphlets were distributed in Bristol Street and the surrounding area plus other interest groups. Sixty-five responses were received. The majority of respondents (78%) were in general support of the proposal, 11% opposed the proposal and 11% didn't indicate support or non support.
16. The key issues raised related to the desire for extra no stopping lines; requests for additional landscaping; inclusion of a stop sign; carriageway resealing; speed and traffic volume; and the Bristol Street and Holly Road round-about.
17. From the community feedback received, changes have been made to the original concept plan. These changes include a no stopping sign being placed at the Clare Road and Bristol Street intersection, the marking of 6 metres of no parking lines on the west corner of Clare Road and Bristol Street intersection, and the marking of 6 metres of no parking lines on Bristol Street and Ranfurly Street corners. It is law that you cannot park within 6 metres of any intersection, therefore no scheduling in the local bylaw is required. The marking of these lines will help residents with visibility.

#### STAFF RECOMMENDATION

It is recommended that the committee recommend that the Fendalton/Waimairi Community Board:

- (a) Approve the Bristol Street project to proceed to detailed design, tender and construction as shown on the plans for Board approval at **attachment 1**.

**3. Cont'd**

- (b) Approve the following traffic and parking restrictions:

**New "No Stopping":**

- (i) That the stopping of vehicles be prohibited at any time on the southern side of St Albans Street commencing at the extension of the Bristol Street kerb line, on the west side, and extending 12 metres in a westerly direction.
- (ii) That the stopping of vehicles be prohibited at any time on the northern side of St Albans Street commencing at a point 7 metres west from the extension of the Bristol Street kerb line, on the west side and extending 18 metres in an easterly direction.
- (iii) That the stopping of vehicles be prohibited at any time on the west side of Bristol Street commencing at the extension of the Webb Street kerb line, on the north side, and extending in a northerly direction for a distance of 11 metres.
- (iv) That the stopping of vehicles be prohibited at any time on the west side of Bristol Street commencing at the extension of the Webb Street kerb line, on the south side, and extending in a southerly direction for a distance of 11 metres.

**Existing bus stop to be revoked:**

- (v) That the existing bus stop in St Albans Street be revoked on the south side of St Albans Street commencing at a point 6 metres west from its intersection with the west side of Bristol Street and extending in a westerly direction for a distance of 19 metres be revoked.

**New bus stop:**

- (vi) That a bus stop be installed on the south side of St Albans Street commencing at a point 12 metres west from the extension of the Bristol Street kerb line, on the west side and extending in a westerly direction for a distance of 14 metres.

### 3. Cont'd

#### BACKGROUND

18. This project was initiated by the network operations team in February 2005 after complaints from the residents, which include the Foundation of the Blind, who are located on Bristol Street. The complaints mainly concerned the speed and volume of traffic in Bristol Street and its affect on pedestrian's movements.
19. Bristol Street is a local road that runs parallel to Papanui Road (minor arterial road). Bristol Street starts at St Albans Street (collector road) through to Clare Road. Papanui Road is linked to Bristol Street via Clare Road, Holly Road and Webb Street. Bristol Street carries on average 1,181 vehicles per day. The 85% percentile is 53.3 km/hour, 95% percentile 58 km/hour and the median speed is 45.7 km/hour. This count was taken outside 93 Bristol Street which is located outside The Foundation of the Blind. Another count was taken at 29 Bristol Street which is just before the Holly Road intersection. The count at this location was 735 vehicles per day. The 85% percentile is 50 km/hour, 95% percentile is 54.7 km/hour and the mean was 42.5 km/ hour. The peak traffic periods being 8-9 am and 4-6 pm. The volumes are higher northbound than southbound. This is probably due to access to the north from Bristol Street being restricted by the traffic management on Papanui Road with right turn facilities only available at Clare Road and St Albans Street.

#### THE OBJECTIVES

20. The primary objectivises for the project are as follows:
  - (a) To reduce the speed of vehicles in the street.
  - (b) To maintain or improve safety for all road users.
  - © To discourage the use of this street by through traffic.
  - (d) To complete the project within the allocated budget.
  - (e) To complete the project within the 2008/09 financial year.

#### THE OPTIONS

21. There were four options considered for Bristol Street. Option one has been selected as the preferred option and was the option taken to the community for consultation.
  - (a) **Option One** involves better pedestrian facilities at the crossing points between Bristol Street and St Albans Street, with the inclusion of tactile pavers and the realigning of kerb cut downs; repositioning of the Bus Stop on St Albans Street; no stopping lines on the south side of St Albans Street, commencing at its intersection with the west of Bristol Street extending 22 metres south side; and the marking of no stopping lines on the north side of St Albans Street at the Bristol Street intersection, which help to improve visibility for vehicles entering and exiting Bristol St, repositioning of the sump at the point of pedestrian access to the Foundation for the Blind; and the installation of a raised platform at the Webb Street and Bristol Street intersection.
  - (b) **Option Two** involves a kerb built out on the eastern side of Bristol Street from Webb Street to Ranfurly Street. The kerb build out would reduce the width of carriageway that pedestrians need to cross. This is also a crossing facility for vision impaired and mobility users. The build out will give better visibility for motorists and pedestrians crossing at this location.
  - © Option Two has not been selected as the preferred option because the amount of through traffic is unlikely to be reduced with this option due to its mid block location and the traffic management on Papanui Road. There would also be a reduction in the amount of parking available on Bristol Street adjacent to the build out. A no stopping restriction would be required for 35 metres to allow safe access in and out of the intersection. There is a high demand for parking in this vicinity due to the preschool/drama school.



## 3. Cont'd

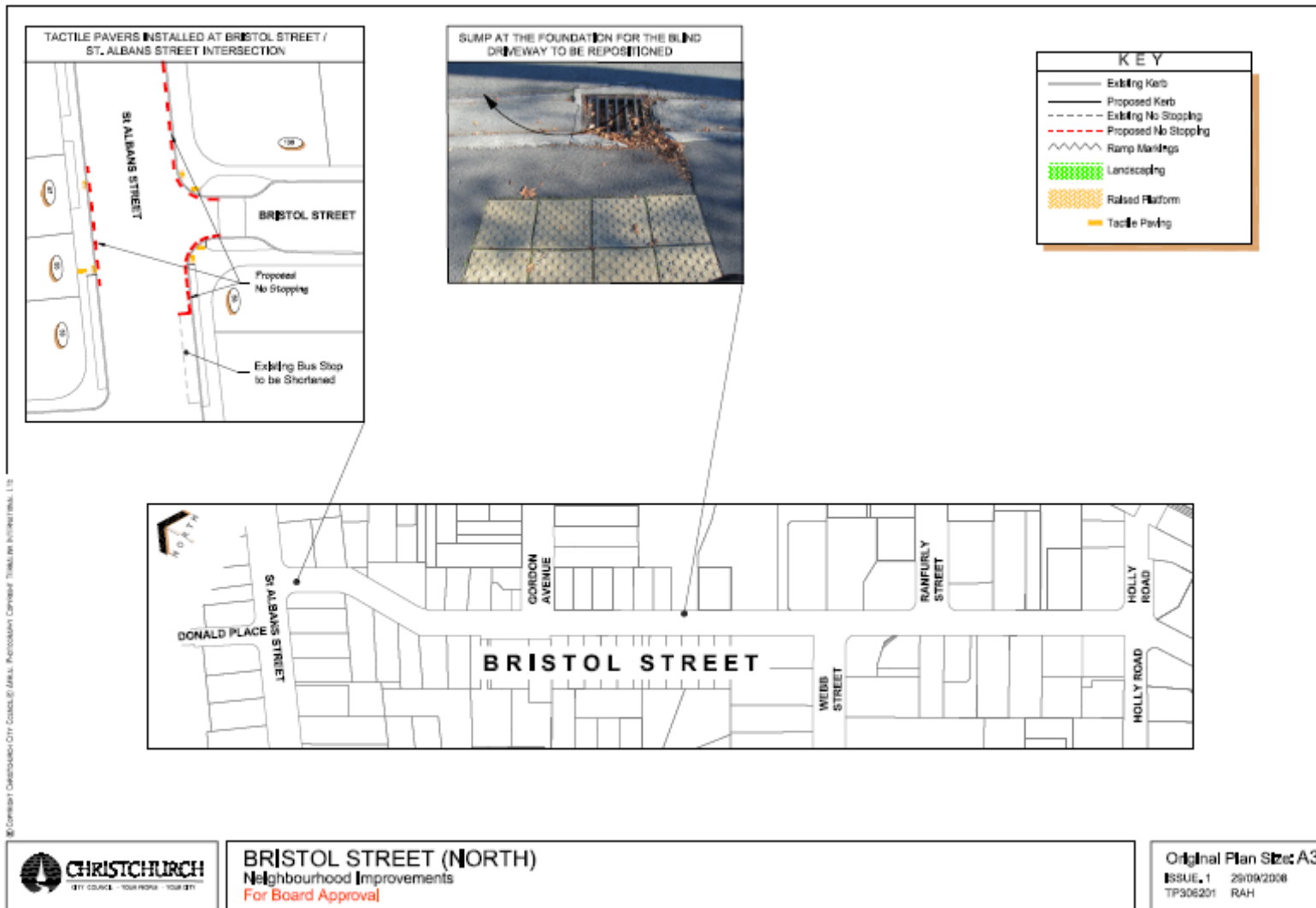
- (d) **Option Three** involves building out the kerb in both Bristol Street and Ranfurly Street at the intersection to daylight St Albans Creek. St Albans Creek crosses Bristol Street 10-12 metres north of Ranfurly Street. To highlight the creek and create a public space, the kerb would be built out 4 metres on the eastern side of Bristol Street and 7 metres on the northern side of Ranfurly Street. This would reduce the carriageway to 6 metres in both streets. The creek could be diverted from the culvert in Bristol Street, out into the present footpath and then back into the open waterway in Ranfurly Street. The footpaths would be realigned with a pedestrian footbridge over the creek.
- (e) Option Three has not been selected as the preferred option because the amount of through traffic is unlikely to be reduced due to its mid block location and the traffic management on Papanui Road. This option would be considered a high cost project. There would be a reduction in the amount of parking available in both streets and directly outside the preschool/drama school. A no stopping restriction would be required on both sides of Bristol Street for a distance of 25 metres and both sides of Ranfurly Street for a distance of 30 metres, to allow safe access in and out of the intersection. It was decided that this work would be better included as part of the kerb renewal of the Ranfurly Street in the future.
- (f) **Option Four** involves building out the kerb in Bristol Street approximately 40 metres north of Berry Street. Frees Creek crosses Bristol Street north of Berry Street. To highlight the creek and create a public space the kerb could be built out 6 metres on the eastern side of Bristol Street reducing the carriageway to 6 metres. The culvert and waterway would be opened up on the street and in private property. The footpath would be realigned with a pedestrian footbridge over the creek.
- (g) Option Four has not been selected as the preferred option because the amount of through traffic is unlikely to be reduced due to the number of facilities in the street and the traffic management on Papanui Road. This option would be considered a high cost project. There will be a reduction in the amount of parking available. A no stopping restriction will be required on both sides of Bristol Street for a distance of 25 metres. The benefits to the street as a whole in this location would be considered low compared to other options. The day lighting of Frees Creek can be handled as a standalone Greenspace Unit capital work at a later date.

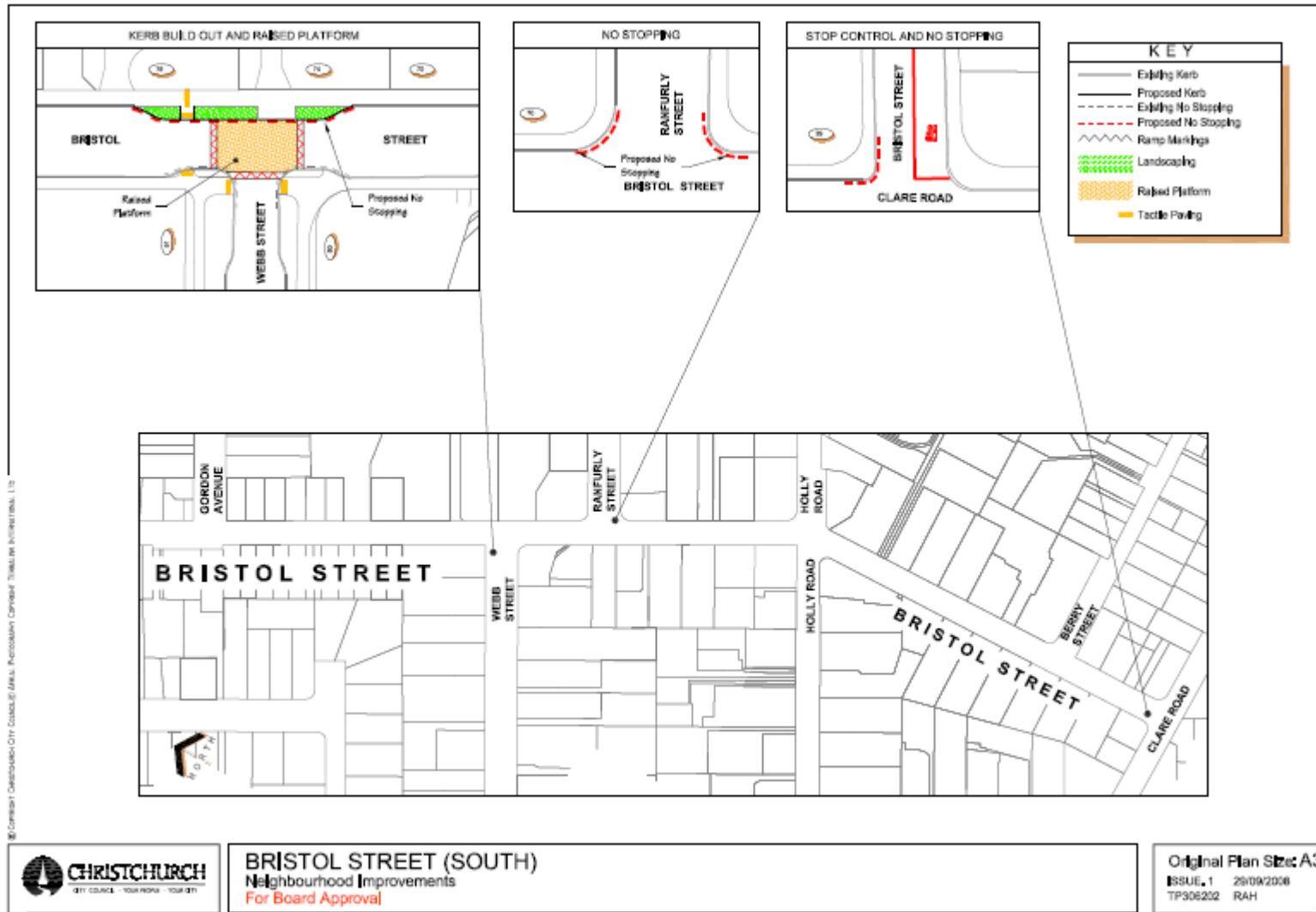
**THE PREFERRED OPTION**

22. Will provide pedestrian facilities for people with disabilities at the St Albans Street, Bristol Street intersection. The existing path alignments and pedestrian cut downs do not give any guidance for sight impaired pedestrians.
23. Provided tactile pavers at St Albans Street, Bristol Street intersection which will provide guidance for sight impaired pedestrians.
24. To the west of the St Albans Street, Bristol Street intersection it will reduce a 17 metres long bus stop by 3 metres, to 14 metres, and to implement a no stopping restriction 12 metres to the west. The new no stopping lines will improve sight lines for vehicles exiting from Bristol Street.
25. Reposition a sump at the pedestrian access to the Foundation of the Blind on the east side of Bristol Street and provide tactile pavers. At present if a vision-impaired person chooses to cross the street at this location they are faced with stepping on to the sump grate in the channel. This is also an issue for someone pushing a pram, walker or any wheeled device. The sump grate is considered a hazard in its current location.

**3. Cont'd**

26. The Webb Street and Bristol Street intersection raised platform includes providing a 2 metre kerb build out on the eastern side of Bristol Street for 26.5 metres across the head of the Webb Street Intersection. The raised platform extends 11.5 metres across the Webb Street intersection. The kerb build out and platform will reduce the width of the carriageway for pedestrians and the platform will slow traffic through the intersection. The proposal will maintain safety for other road users throughout the street. The build out with platform is likely to reduce through traffic due to the mid block location. However, once drivers do experience the local narrowing and the vertical displacement they may choose not to use this as a through route. It is also considered that the traffic management on Papanui Road is a significant factor in route choice along Bristol Street.





#### 4. HAMILTON AVENUE/CHILCOMBE STREET - UPDATE

The following memorandum from Ron Clarke, Resource Manager Capital Delivery gives an update on the Hamilton Avenue/Chilcombe Street.

## Christchurch City Council City Environment Group

### Memorandum

**Date:** Wednesday 22 October 2008

**From:** Ron Clarke (Resource Manager Capital Delivery)

**To:** Fendalton/Waimairi Community Board – Works, Traffic and Environment Committee

**FENDALTON/WAIMAIRI WORKS, TRAFFIC AND ENVIRONMENT COMMITTEE - HAMILTON AVENUE/  
CHILCOMBE STREET - UPDATE.**

#### Background

At the Fendalton/Waimairi Works, Traffic and Environment meeting of 25 March 2008, staff were requested to *“give a list of maintenance items to the contractor, inspect the street with residents prior to it being signed over to the Council and complete a safety audit.”* The safety audit was to be provided to the Committee.

The Committee also asked regarding the Chilcombe Street driveway issue for; *“staff to reassess the options, consult with the residents to ascertain their satisfaction with the results and provide the information back to the Committee.* (Note this work was put on hold due the death of one of the residents concerned.)

#### Update

On Friday 13 June representatives from the Contractor, Consultant and Council arranged to walk over the site with residents. Terry Donaldson represented the residents for the walk over.

The outcome from this walk over was there was a list of items that still needed attending to and the contractor was given until 23 June to complete these works. Unfortunately there were some issues around the supply of some materials due to the time of year so the remedial works were not completed until 11 July. There were also some items that were identified as damage caused by developers, these have been passed onto the Council's consents team to ensure they are rectified by the developers prior to them receiving code compliance.

The replacement tree and landscaping work has also now been completed and these and the grassed berms have been taken over by the Transport and Greenspace Unit.

So as of 11 July, the maintenance of the streets are now in the hands of Council. A final drainage inspection carried out in early September identified some issues which the Contractor has now rectified.

#### Safety Audit

Copies of the safety audits for both streets are **attached**.

Of the items raised, five were of minor concern and there were two other comments made.

**Hamilton Avenue (Attachment 1)**

- 2.1 No Stopping Lines; these were part of the defects list and have been rectified.
- 2.2 Limit Lines; these were part of the defects list and have been rectified.
- 2.3 Incorrect Street direction signs; rectified.
- 2.4 Orientation of crossing point: will be monitored and rectified if required.
- 2.5 Zig-zag on AC ramps; the threshold treatments and platform paved areas were not raised as is standard practise around the city. This was a specific request from the residents. Therefore the paint markings are not required. Note speed counts have been taken in Hamilton before and after construction. These speed counts show no practical change in traffic speed. Counts have been done in similar residential streets before and after construction where there has been a reduction in speed. The only difference between these streets and Hamilton Avenue is that the thresholds and platforms were raised.
- 2.6 On-Street Parking: Issue being discussed in another forum.

**Chilcombe Street (Attachment 2)**

- 2.1 Steep Crossfall on Paths and Driveway; we have agreement with the affected residents to carry out alterations to their driveways to alleviate the steep crossfalls. This will allow us to remove the steel plates. We are presently carrying out detailed design and are liaising with John Wanty and the residents regarding the final detail. We have also agreed to remove the grassed area outside 1A and replace with landscaping.

3. 11. 2008

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ATTACHMENT TO CLAUSE 4  
Attachment 1

report

## Stage 4 Post Construction Safety Audit Hamilton Ave

Prepared for Christchurch City Council (Client)

By Beca Infrastructure Ltd (Beca)

May 2008


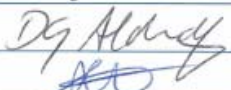

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which Beca has not given its prior written consent, is at that person's own risk.



**Revision History**

Revision N°	Prepared By	Description	Date
A	Martin Kim		7 <sup>th</sup> May 2008

**Document Acceptance**

Action	Name	Signed	Date
Prepared by	Martin Kim		7 / May / 08
Reviewed by	Dave Aldridge		7/5/08
Approved by	Shane Turner		7/5/08
on behalf of	Beca Infrastructure Ltd		



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**Appendices**

**Appendix A – Documents Examined During the Audit**

## 1 Introduction

Christchurch City Council commissioned Beca Infrastructure Ltd in April 2008 to undertake a Stage 4 'Post Construction' Road Safety Audit of the Hamilton Ave renewal project.

### 1.1 Project Background

Kerbs and dish channel along Hamilton Ave of approximately 1.14km long have been replaced with kerbs and flat channel including build out kerbs, threshold treatments and a new roundabout at the intersection of Hamilton Ave and Chilcombe St. The carriageway has a width of 9m providing a 1.65m footpath with 2m – 3m wide grass berms on both sides of Hamilton Ave.

### 1.2 Safety Audit

#### 1.2.1 Safety Audit Team

The Safety Audit Team consisted of:

- Dave Aldridge , Beca Infrastructure Ltd (Team Leader)
- Martin Kim, Beca Infrastructure Ltd

A site visit was carried out on 30<sup>th</sup> April 2008 and was undertaken in accordance with the Land Transport NZ "New Zealand Road Safety Audit Procedures for Projects guideline, November 2004".

#### 1.2.2 Documents Reviewed

The Road Safety Audit considered the Construction Drawings (as supplied by City Solutions) that had been issued for tendering purposes. Hard copy drawings of the as-builts were unavailable at the time of the audit. The list of Construction Drawings reviewed as part of the Road Safety Audit is included in Appendix A.

#### 1.2.3 Report

The report outlines the findings of the Stage 4 Road Safety Audit.

Problems identified with the proposal are outlined in Section 2 of the report. Although all these issues identified are considered to be of sufficient importance to require action, the following ranking system has been adopted.

Serious Concern	A major safety concern that should be addressed and require changes to avoid serious safety problems.
Significant Concern	A significant concern that requires consideration of changes to improve safety.
Minor Concern	A safety concern of lesser significant, but which should be addressed as it may improve overall safety.
Comment	A concern or an action that may be outside the scope of the Road Safety Audit, but which may improve overall design or is of wider significance.

### 1.3 Disclaimer

The findings and recommendations in this report are based on an examination of available relevant plans, the adjoining roads and its environs, and the opinions of the audit team. However, it must be recognised that safety cannot be guaranteed since no road can be regarded as absolutely safe. Readers are urged to seek specific technical advice on matters raised and not rely solely on the report.

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ATTACHMENT TO CLAUSE 4  
Attachment 1

While every effort has been made to ensure the accuracy of the report, it is made available strictly on the basis that anyone relying on it does so at their own risk without any liability to members of the audit team or their respective organisations.

## 2 Audit Findings and Recommendations

### 2.1 No stopping areas – Minor Concern

"No stopping" areas are placed at the vicinity of intersections and at which the carriageway is reduced to 6m wide. However, it is necessary to extend yellow "No stopping" lines in some of the areas. This will improve the sight distance for vehicles exiting the driveways, and reduce the likelihood of through traffic being blocked when vehicles are parked on the carriageway. The following areas are identified to extend the yellow no stopping lines:

- 7m in westerly direction on the southern side of Hamilton Ave from the existing yellow no stopping line outside No 81 Hamilton Ave;
- 3m in westerly direction on the northern side of Hamilton Ave from the existing yellow no stopping line outside No 126 Hamilton Ave; and
- 6m in easterly direction on the northern side of Hamilton Ave from the existing yellow no stopping line outside No 124 Hamilton Ave.

#### Recommendation

Extend yellow "No Stopping" lines at the above areas, and consider other similar locations that may require adjustments, especially during University hours when parking demand is heavy.

### 2.2 Limit line – Minor Concern

The limit line at the intersection of Hamilton Ave and Clyde Road has not been maintained and is fading.



Photo 1 - Faded limited line at the intersection of Hamilton Ave and Clyde Road

#### Recommendation

Remark the limit line at the intersection of Hamilton Ave and Clyde Rd on a more regular basis.

**2.3 Incorrect street direction signs at roundabout – Minor Concern**

The street direction signs "Chilcombe St" and "Coldstream Court" in the central island of the roundabout on Hamilton Ave are indicating the wrong direction. This will confuse drivers who are not familiar to this area.



Photo 2 - Incorrect direction of street name sign

**Recommendation**

Correct the street direction signs "Chilcombe St" and "Coldstream Court" in the central island of the roundabout on Hamilton Ave.



**2.4 Orientation of crossing point – Minor Concern**

Pedestrian crossing points by the roundabout are not aligned with the crossing direction, particularly on Coldstream Court. Wheelchair users and the visually impaired may experience difficulty when crossing or negotiating the road.



Photo 3 - Incorrect alignment with the crossing direction on Coldstream court

**Recommendation**

Monitor and if the public raise this as a safety concern, consider widening the kerb cut downs to align with the splitter island cut downs.

### 2.5 Zig- Zag pavement markings on AC Ramps at thresholds - Comment

The paved threshold treatments on Hamilton Ave have not been raised. It was observed during the site visit that traffics approaching the thresholds were not reducing their speed.



Photo 4 - Threshold treatment at the Lothian St and Hamilton Ave intersection

#### Recommendation

If these thresholds were intended as speed treatments, consider raised platforms or alternative speed control treatment.

### 2.6 On-street Parking - Comment

A local resident commented on the high parking demand along Hamilton Ave due to the university students. Unfortunately the audit was carried out between semesters so it was difficult to assess if there were safety issues associated with this.

#### Recommendation

Monitor the parking and possibly undertake a parking survey. It may be necessary to install P120 signs similar to Chilcombe St and Karo Place.

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**Appendix A**

Documents Examined  
During the Audit



Hamilton Avenue – Chilcombe Street Kerb and Channel Reconstruction		
Client Project No	Sheet Name	Sheet No
RD 1762	Hamilton Avenue Plan and Longitudinal Section – Sheet 1 of 9	R001
RD 1762	Hamilton Avenue Plan and Longitudinal Section – Sheet 2 of 9	R002
RD 1762	Hamilton Avenue Plan and Longitudinal Section – Sheet 3 of 9	R003
RD 1762	Hamilton Avenue Plan and Longitudinal Section – Sheet 4 of 9	R004
RD 1762	Hamilton Avenue Plan and Longitudinal Section – Sheet 5 of 9	R005
RD 1762	Hamilton Avenue Plan and Longitudinal Section – Sheet 6 of 9	R006
RD 1762	Hamilton Avenue Plan and Longitudinal Section – Sheet 7 of 9	R007
RD 1762	Hamilton Avenue Plan and Longitudinal Section – Sheet 8 of 9	R008
RD 1762	Hamilton Avenue Plan and Longitudinal Section – Sheet 9 of 9	R009

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report

## Stage 4 Post Construction Safety Audit Chilcombe Street

Prepared for Christchurch City Council (Client)

By Beca Infrastructure Ltd (Beca)

May 2008

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This report has been prepared by Beca on the specific instructions of our Client. It is  
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**Revision History**

Revision N°	Prepared By	Description	Date
A	Martin Kim		7 <sup>th</sup> May 2008

**Document Acceptance**

Action	Name	Signed	Date
Prepared by	Martin Kim		7 / May / 08
Reviewed by	Dave Aldridge		7/5/08
Approved by	Shane Turner		7/5/08
on behalf of	Beca Infrastructure Ltd		

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**Appendices**

**Appendix A – Documents Examined During the Audit**

## 1 Introduction

Christchurch City Council commissioned Beca Infrastructure Ltd in April 2008 to undertake a Stage 4 'Post Construction' Road Safety Audit of the Chilcombe Street renewal project.

### 1.1 Project Background

Kerbs and dish channel along Chilcombe St of approximately 220m long has been replaced with kerbs and flat channel including chicane, threshold treatments and a new roundabout at the intersection of Hamilton Ave and Chilcombe St. The carriageway has a width of 10m providing a 1.65m footpath with 2m ~ 6m wide grass berms on both sides of Chilcombe St.

### 1.2 Safety Audit

#### 1.2.1 Safety Audit Team

The Safety Audit Team consisted of:

- Dave Aldridge, Beca Infrastructure Ltd (Team Leader)
- Martin Kim, Beca Infrastructure Ltd

A site visit was carried out on 30<sup>th</sup> April 2008 and was undertaken in accordance with the Land Transport NZ "New Zealand Road Safety Audit Procedures for Projects guideline, November 2004".

#### 1.2.2 Documents Reviewed

The Road Safety Audit considered the Construction Drawings (as supplied by City Solutions) that had been issued for tendering purposes. Hard copy drawings of the as-builts were unavailable at the time of the audit. The list of Construction Drawings reviewed as part of the Road Safety Audit is included in Appendix A.

#### 1.2.3 Report

The report outlines the findings of the Stage 4 Road Safety Audit.

Problems identified with the proposal are outlined in Section 2 of the report. Although all these issues identified are considered to be of sufficient importance to require action, the following ranking system has been adopted.

Serious Concern	A major safety concern that should be addressed and require changes to avoid serious safety problems.
Significant Concern	A significant concern that requires consideration of changes to improve safety.
Minor Concern	A safety concern of lesser significant, but which should be addressed as it may improve overall safety.
Comment	A concern or an action that may be outside the scope of the Road Safety Audit, but which may improve overall design or is of wider significance.

### 1.3 Disclaimer

The findings and recommendations in this report are based on an examination of available relevant plans, the adjoining roads and its environs, and the opinions of the audit team. However, it must be recognised that

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safety cannot be guaranteed since no road can be regarded as absolutely safe. Readers are urged to seek specific technical advice on matters raised and not rely solely on the report.

While every effort has been made to ensure the accuracy of the report, it is made available strictly on the basis that anyone relying on it does so at their own risk without any liability to members of the audit team or their respective organisations.

## 2 Audit Findings and Recommendations

### 2.1 Steep crossfall on footpath and steel driveway plates – Minor Concern

The footpath on the western side of Chilcombe St shows excessive crossfall (See photo 1). From visual observations, the crossfall appears to be at least 10% presenting a safety issue to pedestrians, especially wheel chair users and the elderly. This steep crossfall also coincided with the steel plate vehicle crossings that are bolted to the kerb top. The number of potential risks associated with the combination of the steep grade footpath and steel plates are:

- Wheelchair users may experience difficulty to negotiate with steep downward crossfall at the time changing in footpath direction in the vicinity of No 3A driveway (refer Photo 2).
- The steel plate may become slippery in wet condition and may become icy in winter. This can be hazard to pedestrians and cyclists.
- The bolts exposed above the plate could be a tripping hazard to pedestrians.
- The extended AC ramp and steel plate is not consistent with the surrounding steel upgrade and is an unexpected feature for cyclists.
- Restriction of the flow of stormwater in the kerb and flat channel due to the steel plate. It may cause water ponding in vicinity of the driveway and hide the potential hazard to cyclists.

Note that Pedestrian Planning and Design Guide (Land Transport NZ, Section 14.5) recommends that a significant crossfall on footpaths should be avoided.



Photo 1- Excessive crossfall on the western side of Chilcombe St





Photo 2- Restricted flow of stormwater in the kerb and flat channel

#### Recommendation

Ideally the driveways/ footpaths should be re-adjusted to eliminate the need of the steel plates. As a minimum, extend AC around the end of ramp and paint with reflective white to minimise hazard to cyclists during darkness.



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**Appendix A**

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Client Project No	Sheet Name	Sheet No
RD 1762	Chilcombe Street Plan and Longitudinal Section – Sheet 1 of 2	R010
RD 1762	Chilcombe Street Plan and Longitudinal Section – Sheet 2 of 2	R011