

17. FENDALTON ROAD

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Corporate Plan Output: Transport Planning	

The purpose of this report is to inform the Committee of the results of the review of the options for the proposed improvements to Fendalton Road and to recommend an agreed design to the Council for the basis of the required resource consent application.

BACKGROUND

The length of Fendalton Road from Heathfield Avenue to Clyde Road has been identified by the Asset Management section of City Streets Unit as needing upgrading due to the deterioration in the asset. If the work is not carried out the asset will continue to deteriorate and create problems with respect to drainage, vibration and general maintenance. The required upgrading includes the reconstruction of the carriageway and the replacement of the existing deep kerb and channel and reconstruction of the footpaths. The reconstruction also provides the opportunity to underground the services (including Saturn), upgrade the standard of lighting and also upgrade the intersection of Fendalton Road at Glandovey Road.

Fendalton Road is classified in the Transitional and Proposed City Plans as a major arterial road in the city wide roading network. A road widening designation is included in both plans to enable the road to be upgraded to major arterial standard. The majority of the designated land has been purchased by the Council with financial assistance from Transfund. The funding has been provided anticipating that the reconstruction of Fendalton Road will include widening to full major arterial standards with the attendant improvement in efficiency and safety providing a B/C over the cut off mark, which currently stands at 3.0.

The section of Fendalton Road from the railway to Heathfield Road was reconstructed with two lanes in 1993 recognising the future need for four lanes. The opportunity has therefore being taken at this time to review the widening of this section of road in conjunction with the section from Heathfield Avenue to Clyde Road.

PROCESS TO DATE

The proposed design for Fendalton Road has been developed over a period of time (see below) in conjunction with the Fendalton/Waimairi Community Board and the City Services Committee.

Development of issues and objectives
Fendalton/Waimairi Community Board September 1999
City Services September 1999

Design options considered
Combined Workshop November 1999
Walk along road November 1999
Fendalton/Waimairi Community Board February 2000
City Services February 2000
Council February 2000

Design for consultation considered
Fendalton/Waimairi Community Board April 2000
Combined Workshop August 2000

Public Consultation meetings
18 meetings held in August

Proposed changes to plan considered
Combined workshop October 2000
City Services October 2000
Council October 2000

OBJECTIVES

The initial driver for the project is the replacement of the deteriorating asset, recognising that the design needs to take account of the minimum asset life for the roadway of 20 years and 80 years for the kerb and channel. It is conservatively estimated that traffic volumes will continue to grow at approximately 2% per year due to the underlying network growth and the continued growth of the airport. To put this in perspective, the peak hour congestion presently experienced on the road will be the normal volume on the road during the day in the year 2021.

As with any complex design there are a number of competing objectives for which a balance needs to be decided. The balance needs to take account of both the local and city wide issues. The following are objectives were developed in conjunction with the Fendalton/Waimairi Community Board and the City Services Committee and subsequently used to develop the road design issued for public consultation.

Asset Management

Upgrading and reconstruction of the road to maintain and improve the asset.

City Plan Status

Network improvement by upgrading of the route to major arterial standards.

Planning certainty/expectations of City Plan requirements for major arterial roads.

Commercial transport

Ease of access for heavy vehicles along road/route with minimal conflict with other users and adjacent land uses.

Cycle facilities

Provision of cycle facilities to make cycling along the road feel safe and be safe.

Gateway to Christchurch

To retain and improve the aesthetic character of the road as the Gateway to Christchurch for many visitors.

Historic sites

Protection and enhancement of historic sites and buildings.

Landscape

The retention of important trees and planting, particularly protected and very high value trees.

Increased opportunities for landscaping.

Local property access

Safe access to individual properties.

On-street parking

The provision of car parking for adjacent land uses where practicable.

Pedestrian facilities

Provision of safe and secure footpaths and facilities to make crossing the road safe and easy.

Public transport facilities

Provision of infrastructure to make public transport use more attractive.

Regional Land Transport Strategy

Need to be compatible with the Canterbury Regional Land Transport Strategy.

Road Safety

Improve safety of the road/route.

Route Continuity

Standardisation of road cross-sections, marking and lighting.

Side street access

Safe access to side streets along Fendalton Road.

Strategic Road Network Link

Provide a roading environment suitable for a regionally strategic road network link to Christchurch International Airport.

Traffic Efficiency

Improve the efficiency of the road and provide for future requirements.

Within the context of this project it was agreed by the Fendalton/Waimairi Board and City Services members that the **Gateway to the City and the landscaping were the most important objectives**, taking priority over the provision of on-street parking. As a result the Board, City Services and Council agreed that the basis of the road design should be a 3.4 metre solid median with a high level of landscaping as reflected in the Council resolutions:

1. *That subject to the design and engineering requirements and provision for cyclists, the Council endorse the proposal for the construction of the 3.4 metre solid median for Fendalton Road.*
2. *That the design ensure the maximum retention of significant trees.*

The design which was subsequently developed was distributed for public consultation and at the October meeting of City Services the following recommendations were individually adopted.

1. That in view of the results of the consultation process the proposed scheme plan for Fendalton Road be adopted and amended as follows:
 - (a) The left turn lane into Glandovey Road be extended to provide extra capacity for this movement.
 - (b) The current lane layout be retained on the eastern approach to the Fendalton/Straven intersection.
 - (c) The proposed landscape design developed in the consultation be reaffirmed subject to any changes consequential to the amendments adopted.
 - (d) The installation of right turn phases at the Fendalton/Idris/Straven signals be reviewed six months after the completion of the reconstruction of Fendalton Road.
 - (e) The installation of pedestrian signals outside Holly Lea being installed and that the crossing point shown be moved east to allow for the installation of signals in the future.
 - (f) The bus stop presently shown outside 163/165 Fendalton Road is shifted to the east by approximately 60 metres subject to consultation with affected parties.
 - (g) All driveways be widened by an extra 0.5 metres on the approach side of the crossing.
 - (h) The on-street cycle lanes be retained as proposed with red surfacing for the whole length.
 - (i) The u-turn bays as provided for in the consultation plan being reaffirmed as the final positions for these facilities.
 - (j) The Council decision to reconstruct the road with a 3.4 metre median being reaffirmed.
 - (k) The Council continuing discussions with representatives of St Barnabas Church regarding areas where parking could be provided including the provision of 15 public car parks at 2 Glandovey Road.
 - (l) Further parking spaces be provided along Fendalton Road in the positions indicated in Table 5.
2. That the Committee support the application for the Resource Consents required to undertake the physical works.

Whilst the above recommendations were individually adopted by the Committee the report as a whole was not adopted and was referred to the full Council for a decision.

The recommendations from the October meeting of the Council were:

That the matter be referred back to the City Services Committee for the examination of options relating to:

- (a) A median of less than 3.4 metres in part or whole.*
- (b) Off-road rather than on-road cycleways.*
- (c) Increased provision for parking.*
- (d) The possible installation of clearways on both sides of Fendalton Road between the hours of 7am & 9am and 4pm & 6pm.*

DESIGN ISSUES

Median Width

The basis of the design used for consultation was the use of a 3.4 metre median to adequately provide for turning facilities, protected pedestrian and cycle crossing points and to maximise the central landscaping. The proposed median already varies in width to provide for the retention of high quality trees along the sides of the road, particularly in the area around St Barnabas Church.

A median width of 1.4 metres has been suggested which would provide enough road space to enable a continuous lane of on-street parking on one side of the road. This width of median does not provide adequately for turning areas (3.4 metres minimum) or safe pedestrian/cycle crossing facilities (2.0 metres minimum). . The 2.0 minimum width is required to adequately provide for parents with prams, people pushing wheelchairs and cyclists who may need to stop on the median to wait for passing traffic. Where these facilities are required the median would need to be widened to accommodate them which would not provide adequate space for on-street parking without also widening the carriageway which will again have an impact on landscaping.

It is anticipated that with the residential nature of the adjacent land use there will be people walking and wanting to cross the road along its length and therefore the safest option would be to have a minimum width of 2.0 metres

The proposed wide central median with large specimen trees continues the effect of Memorial Avenue making the trip to and from the airport a cohesive Garden City experience. It also reflects the use of wide medians on other significant arterial roads around the city such as Memorial Avenue, Fitzgerald Avenue, Bealey Avenue, Linwood Avenue, Deans Avenue, etc.

The desired effect of driving down Fendalton Road is to highlight the city's national and international reputation of being a garden city with a bold, striking large scale landscape (see Attachment 1). A wider median with large specimen trees gives the road large scale impact which cannot be achieved by using a narrow median.

A narrow median is not preferable for planting trees as they would need to be smaller varieties and would need to be lifted to 4.5m to allow trucks to pass. With small specimen trees this would have a significant impact on the health and appearance of the tree and would have a negative impact because of their weak appearance and be out of context with Memorial Ave and other arterial roads around Christchurch.

There has also been some concern regarding the potential for higher speeds of vehicles when the road has been reconstructed as a four lane road. An effect of the lack of central planting will be to visually widen the road particularly in areas where there isn't a high level of substantial planting along the sides of the road exacerbating any speeding issues which may occur.

Off-Road Cycle Paths

The concept of an off-road cycle path is attractive to many submitters to provide some separation between vehicles and cyclists. This is seen by some as a safer option due to the physical separation between the cyclists and the traffic and others see the advantage being not in the actual safety of the path but rather in its perceived safety, particularly for children and less confident cyclists.

There have been two suggestions for the provision of an off-road path. The first of these is to provide a shared path which would follow the road boundary (fenceline) where possible and meander around the trees in other areas. The second option is to move the kerbs out by 1.5 metres to shift the proposed cycle lane to a position behind the kerb.

A shared path would need to be constructed to a minimum width of 2.5 metres to safely cater for cyclists and pedestrians. To provide for the commuter cyclists it will also need to follow a reasonably straight alignment. The present design provides for a 1.65 metre footpath which meanders significantly to minimise the impact on the existing trees and their root systems. The redesign could therefore have a significant impact on the existing planting.

The suggestion of siting the facility adjacent to the boundary fences does promote a safety concern in that the majority are six foot high solid fences which create visibility problems, particularly for motorists backing out of their driveways.

Whilst there are certain psychological advantages for less confident/competent cyclists there is little evidence that off-road paths are safer than on-road facilities. Due to the physical difficulties in providing a wide level and reasonably straight path it could in fact result in a disincentive for the commuting cyclist who currently uses the roadway. Therefore the off-road path needs to be designed to provide a similar, or higher, level of service for all users.

If a cycle path is not attractive to experienced cyclists then they will remain on the road, which they are legally entitled to do. This requires that space is made available for the cyclist to ride safely and would result in the carriageway being widened to accommodate them.

The second option involves moving the 1.5 metre cycle lane to a position immediately behind the kerb. Whilst this does not result in a reduced sealed width it does reduce the construction cost of the road due to the reduction in the actual carriageway widths. This is, however off-set by the need to move the northern kerb (Straven Road to the railway), which was proposed to remain in its present position and has been estimated would result in a cost neutral proposal. The off-road path does have the attraction of moving the kerb construction further from the existing high quality trees thereby reducing the impact of any excavation for kerb and channel on the root system and may offer the opportunity to retain some existing trees.

There are, however disadvantages with the paths in this location, the major ones being the difficulty of providing safe crossings at side streets and the limited space to pass and manoeuvre within.

It has been noted in a submission from LTSA that if a cycle path is constructed behind a kerb cyclists do not legally have 'right of way' when crossing a side street and the situation at driveways is undefined. Therefore the cycle path would need to be brought back on to the road in areas where conflict is the highest, or the cyclist made to give way to traffic entering and leaving the side road. This may only be an interim situation as the LTSA is proposing to review the 'Give Way' rules and the situation with cycle paths could be reviewed at the same time.

The 1.5 metre width of the path does not provide space to pass a slower cyclist without either riding onto the carriageway or providing areas of widened seal as passing lanes. If a cyclist needs to swerve around an object it may necessitate riding off the kerb and potentially losing control of the bike. In either of these situations there is no buffer between a cyclist and the traffic without widening the kerb-side lane or the cycle path, again impacting on the space available for landscaping.

Parking

Parking Bays

The consultation plan made provision for eleven spaces in parking bays, and maximised the landscaping. This approach has not found favour with local residents or members of the St Barnabas congregation who see the provision of on-street parking as a necessity to carry out normal every day activities. Extending the use of parking bays along the length of Fendalton Road has, however been suggested as an acceptable compromise by a number of submitters. As a result of the consultation staff proposed that a further 30¹ spaces be provided in addition to the original 11 parking bays proposed along the length of Fendalton Road. The parking was proposed in areas which did not compromise the existing significant trees and gave a reasonably even spacing of parking along the road.

¹ Whilst only 28 spaces were listed in the report there were 30 spaces shown on the proposed plan.

There is space along Fendalton Road to provide further parking bays without compromising the health of existing significant trees. This does of course reduce the amount of new planting which can be undertaken to further enhance the landscape and will be at the cost of some existing smaller planting. It is still considered by staff that the provision of further parking over and above that recommended will compromise the integrity of the landscape plan. If, however the decision is made to provide further parking then its provision in parking bays is seen to be preferable to reducing the width of the central median.

Roadside Parking

Roadside parking can be accommodated in some sections of the road through the reduction of the width of the median from 3.4 metres to 1.4 metres. This would provide the minimum extra width of 2.0 metres required to provide parking on one side of the road. Whilst this would provide some extra parking it does prohibit the provision of turning bays, pedestrian facilities and the planting of trees to provide the landscape effect as described above.

If it is assumed that any on-street parking was provided on the south side of the road and the parking bays were retained on the north side, as originally proposed, then the following would be possible.

In the block from Clyde Road to Glandovey Road it is not possible to reduce the median width and hence provide more parking than is proposed due to the short length of the block and the proximity of the turning bays.

The block from Glandovey Road to Straven Road includes the area outside St Barnabas Church where the median is already narrowed to 2.0 metres due to the proximity of the protected trees on either side of the road. The proposed installation of a signalised pedestrian crossing outside Holly Lea will require the wider median to provide an off-set crossing due to the need to break the crossing of the road into two phases. There is therefore limited opportunity to narrow the median other than between Snowdon Road and Tui Street, which would provide for a total of 11 on-street parking spaces. There are currently 5 spaces proposed to be provided in parking bays along this section of road.

The block from Straven Road to the railway line has few physical limitations to the narrowing of the median to 1.4 metres other than to provide for pedestrian crossing facilities which require a minimum width of 2.0 metres. There is a need for at least one crossing point where the walkway from Harakeke Street intersects with Fendalton Road resulting in a demand for crossing facilities. The remainder of this length of road would provide for about 30 on-street spaces compared with 7 spaces currently proposed to be provided in parking bays.

Clearways

The option of using clearways has been suggested by a number of submitters as a means to provide parking, particularly for St Barnabas. A clearway is a section of road along which people can park during off-peak times, but during peak hours parking is banned and the area of road is used as an extra traffic lane. Normally it would be a two lane section of road with on-street parking which is banned at certain times of the day rather than a four lane road where parking is allowed at certain times.

Clearways do have the benefit of maximising the utilisation of road space available throughout the day by using the kerbside lanes for parking at off-peak times. The obvious disadvantage of these types of facilities is that the spaces are not permanently available and as traffic increases the clearways slowly become phased out for permanent traffic lanes. The submitters have quoted their successful use in such cities as Auckland and Sydney, but there are several issues which need to be addressed particularly with regard to their safety for cyclists.

Clearways have been used around Christchurch on some two lane roads previously but usually unsuccessfully due to drivers leaving cars parked on the clearway during the peak times. It only takes one car parked in this lane to make it unusable and therefore a clearway needs to be policed extremely vigorously, with cars being towed away (normally to adjacent side streets) immediately the clearway comes into effect. The Council has avoided this in the past.

A feature of clearways is also that they need to be sign posted clearly and regularly to ensure that drivers are aware of the parking restrictions which may apply to them. This does have connotations with respect to the amenity of the area.

Cycle lanes along the side of the road are something which do not normally need to be contended with in other cities where clearways are used. Whether the cycle lane (1.5 metres) is marked, or a wide (4.2 metre) inner lane is used, when the clearway is not in force too much road space remains to the right of the parked cars. This leads to drivers still using this space (2.2 to 2.4 metres) as a pseudo traffic lane leaving no space for cyclists. Ideally, there should be a maximum width of 1.8 metres remaining to the right of the parked cars which provides enough space for cyclists but is too narrow to be used as a traffic lane. This issue has also been discussed with the LTSA who are against the use of clearways in this situation.

The clearway lane could be the lane to the right of a marked cycle lane but it is highly unlikely that drivers would be comfortable with the concept of parking in what would feel like the middle of the road and in all likelihood would park over the cycle lane. This could be resolved by physically separating the cycle lane from the roadway and placing the cycle path behind the kerb. The section on cycle facilities above outlines the legal problems with the provision of off-road cycle paths outside the kerb-line, but the physical separation could be in the form of a discontinuous separating strip on the roadway between the traffic lane and the cycle lane. This however introduces safety issues for cyclists travelling to the left of parked cars hidden from the view of motorists turning left into side roads or driveways.

The safety of all road users is important and to make road space available for cyclists when clearways are used seems to be an irresolvable problem with the present laws regarding the status of off-road cycle paths.

CONSULTATION

Staff have been contacted by three of the residents who made submissions to the City Services Committee (including the representative for St Barnabas Church) who would like to see the outstanding design issues resolved. They did not support the concept of clearways as they did not consider they would safely provide a long term resolution to the issue of the provision of parking. Their preference was for a reduced median width which provided for on-street parking on the south side of the road. In the case of St Barnabas there was a clear indication that any increase in parking would be seen as appropriate to assist at times of peak demand.

CONCLUSIONS

Having reviewed each of the issues raised through the recommendations at the last Council meeting it is still recommended that the most appropriate design solution is the proposal for the 3.4 metre median with parking bays as shown on the plans included in this report as Attachment 2.

With regard to the provision of extra parking it is recommended that parking bays still be utilised to provide parking to enable the wider 3.4 metre median to be retained with the consequent retention of the substantial landscaping along the central median.

The cycle facilities could equally be provided as either on-road lanes, or off-road paths immediately behind the kerb. The legal issue with regard to the right of way of cyclists versus car drivers at intersections does need to be addressed otherwise this could potentially generate liability issues for the Council with respect to any future injuries which could occur as a result. For this reason the cycle facilities have been retained as on-road cycle lanes on the proposed plan.

Clearways are not seen to provide a safe, long term resolution to the issue of parking along the road and there also does not appear to be widespread support for them by the residents.

- Recommendation:**
1. That the Committee endorse the attached plan.
 2. That the Committee support the application for the Resource Consents required to undertake the physical works.

Chairman's

Recommendation: That the above recommendation be adopted.