
Decision Session
Executive Member for City Strategy

1 December 2009

Report of the Director of City Strategy

Wigginton : B1363 - Mill Lane junction improvements

Summary

- 1 This report advises the Executive Member of proposals to introduce traffic signals and a 40mph speed limit on the B1363 at the Mill Lane junction in Wigginton. The scheme is intended to make the junction safer and easier for turning traffic, whilst also providing improved pedestrian crossing facilities.

Recommendation

- 2 That the Executive Member approve for implementation the amended scheme shown at **Annex B** plus any other changes to the proposals that the Executive Member considers necessary.

Reason : To address road safety concerns and make turning manoeuvres easier for road users at the Mill Lane junction with the B1363 in Wigginton.

Background

- 3 The 2009/10 Transport Capital Programme included funding to carry out a 'village accessibility review' (VAR) in response to representation by members of the public and Members, concerning road safety and access issues at several locations linked to villages around the City.
- 4 Officers carried out investigations and feasibility studies at eight key junctions identified in the review, in order to establish a list of improvement schemes prioritised for delivery.
- 5 A report discussing the findings of the review was presented to the Executive Member at the Decision Session in July. This highlighted the main issues at each site, and recommended potential mitigation measures which could be taken forward for implementation.
- 6 That report included an evaluation of the Mill Lane junction with the B1363 in Wigginton. Here concerns have been expressed for a number of years, particularly in relation to high traffic flows and speeds combining to hamper traffic turning right, and drivers taking risks due to the delays. Since 2006 there have been four road accidents in the vicinity of the junction. These involved

seven casualties, mainly as a result of vehicles turning into or out of Mill Lane colliding with traffic travelling along the B1363.

- 7 To address these issues officers put forward outline proposals to signalise the junction and introduce a local 40mph speed limit on the B1363. This was one of three VAR schemes prioritised for implementation during 2009/10, subject to more detailed design work and consultation. The outcome of this further work is presented in the following paragraphs.

Scheme design for consultation

- 8 The outline scheme design developed for consultation, is explained and illustrated in the information leaflet shown at **Annex A**.

- 9 The main features are listed below :-

- **Traffic signals** to manage traffic flows more safely, particularly the right turns into and out of Mill Lane, and to reduce delays for side road traffic
- **Pedestrian phases at signals**, together with a new footway link path, to ease access to and from nearby bus stops,
- **Introduction of a 40mph speed limit** along the B1363, to make the approaches to the proposed signals safer.
- **Existing road lighting upgraded** and extended to cover the 40mph speed limit extents. This is intended to highlight the change in road environment and encourage drivers to observe the lower speed limit.

Consultation

- 10 The information leaflet was delivered to 75 properties in the vicinity of the proposed scheme. It was also sent to relevant Councillors, the local Parish Councils, the emergency services, plus other external organisations and groups, offering them the opportunity to comment or express their views on the proposals.
- 11 In addition, the consultation leaflet was put on the CYC web site, roadside signs were erected on Mill Lane for the attention of those using the B1363 junction, and an article about the scheme appeared in The Press on October 15, all inviting comment about the proposals by Friday 30 October 2009.
- 12 In conjunction with the above consultation period, a Traffic Regulation Order (TRO) was advertised for the associated 40mph speed limit element of the scheme, which required any formal objections to be submitted by Friday 30 October 2009.

Ward Member views

- 13 **Councillor Firth** fully supports the proposal, but considers that the 40mph speed limit could extend further north and south. In particular he thinks this could improve safety at the bend north of Corban Lane.

Officer response

Having a more extensive 40mph speed limit that includes the bends north of Corban Lane could diminish the localised effect of reduced vehicle speeds which needs to be achieved in the vicinity of the Mill Lane junction to ensure that approach speeds at the proposed signals are not too high.

The lengths of road beyond the proposed 40mph limit do not meet the criteria required by the relevant national guidance which is used when setting local speed limits and would not be supported by the Police. This is because they have a very rural characteristic and lack features such as frontage development, roadside footways, or street lighting. This would be likely to lead to poor driver compliance and higher vehicle speeds approaching the signals.

The bend in question will be reviewed with a view to introducing localised enhancement of warning signs and road markings, or additional measures to deal with the particular risks involved.

14 **Councillor Hogg** had not commented when this report was written.

15 **Councillor Watson** has commented that the proposals look fantastic.

Parish Council views

16 Haxby and Wigginton Parish Council support the scheme.

Other Member views

17 **Councillor D'Agorne** suggested that a 40mph speed limit on its own could be a sufficient and more cost effective measure.

He is also concerned that the proposed traffic signal installation should not have a detrimental impact on the existing historic finger post sign at the junction.

Officer response

The Police have previously stated that they could not support the introduction of a 40mph speed limit in this area, without any accompanying physical measures to encourage drivers to observe the reduced limit. However, they are happy to support a reduced speed limit as part of the signalisation scheme at the junction.

It is not intended to remove the old style finger post, sign although it may have to be moved slightly out of the way of the proposed traffic signals.

18 **Councillor Gilles** referred to comments made by Councillor Watt (Skelton) and stated that he had nothing more to add.

Namely; Councillor Watt acknowledged the problems at the Mill Lane junction, but queried the inclusion of cycle advance stop lines (ASL) at the proposed traffic signals.

Officer response

It is Council policy to provide advance stop lines (ASL) for cyclists at traffic

signals, which provides an area to wait in front of other traffic and enables them to move off first from the front of a queue. They can be especially helpful if the cyclist is turning in a different direction to following vehicles.

Cyclists do use this junction, and the provision of ASL would not normally have any significant effect on the performance of the junction under traffic signal control.

- 19 **Councillor Potter** is happy to support the proposals

Resident comments

- 20 64 responses were received from residents, with only six either not supporting the proposals or having reservations about certain aspects of the scheme. The main points raised by residents, which have not already been covered by the issues included in the feedback comments above, are discussed in the following paragraphs.

- 21 Would not a roundabout be a better solution, and cause less delays when traffic flows are less ?

Officer response

Constructing a roundabout of adequate size to cope with the size and number of vehicles which use this route would be prohibitively expensive, particularly in terms of land purchase, relocation of underground services, and the amount of carriageway realignment which would be involved.

Another consideration is that better pedestrian facilities can be incorporated within the traffic signals.

- 22 'Part time' traffic signals should be installed, to avoid queues developing during off peak periods.

Officer response

A study carried out by the Department for Transport has indicated a potential increase in accidents at part time signal sites as opposed to full time. In addition, the proposed traffic signals at Wigginton would incorporate pedestrian crossing phases across the B1363 and Mill Lane, and these would obviously not operate if the signals were turned off.

The proposed traffic signals would be set up to run in 'vehicle actuated' mode, using sensors and detector loops in the road. Under this type of operation the signal controller apportions the time between signal changes depending upon where the demand is, therefore, motorists should not experience any long delays in off peak periods

- 23 The installation of signals would reduce the flow of traffic at busy periods.

Officer response

Traffic signals are being proposed with the aim of increasing safety at the junction, rather than improving overall flow rates through the junction. A key

safety feature is that traffic would only be allowed to turn right into Mill Lane when southbound traffic on the B1363 is stopped at a red signal; i.e. turning traffic would not be given a green signal while southbound traffic continues to travel across the junction and then expected to wait for a gap in this traffic before making the right turn.

The introduction of traffic signals should reduce the time it takes for traffic to exit Mill Lane during peak periods, but would inevitably interrupt the flow of traffic along the B1363. However, modelling of the B1363 Mill Lane junction predicts that traffic signals should adequately deal with the amount of traffic using this junction, and should not result in significant queuing or delays.

- 24 The road markings on the Mill Lane approach to the B1363 junction should be realigned to provide separate left and right lanes out onto the main road.

Officer response

Unfortunately, creating separate left and right turn lanes on Mill Lane at the B1363 junction would not be feasible within the constraints of the existing road width, and would require widening of the carriageway.

This has been investigated, but there are a number of underground services which would need to be moved, and the extra expenditure involved would increase the scheme cost above the funding available.

However, calculations indicate that traffic signals in conjunction with the existing single lane should be adequate to handle the vehicle flows exiting onto the main road, and should not result in significant queuing or delays.

- 25 Four accidents in three years is a relatively low number given the high volume of traffic that passes through the area, and the high scheme cost of almost £200,000 could be far better spent on other transport projects in York

Officer response

The number and severity of accidents at a particular location is just one of a number of factors which are considered when evaluating whether a highway improvement scheme is ranked as low, medium or high priority, and also offers value for money in terms of the Council's limited budget. For example, other considerations are vehicular access difficulties, such as turning movements at junctions, vehicle speeds, and associated benefits for pedestrians, cyclists and public transport.

Although only four injury accidents have been recorded at the Mill Lane junction since 2006, of the seven casualties involved three were serious. This goes some way towards emphasising the need for accident reduction measures, and following a feasibility study of a number of junctions around the City, an option to develop an affordable improvement scheme at Mill Lane was ranked as a priority.

- 26 Provide a cycle feeder lane to enable cyclists heading north and intending to turn into Mill Lane to move across into the existing right turn lane, similar to that provided on the Clarence Street approach to the Haxby Road/Wigginton Road

junction.

Officer response

The situation at the Mill Lane junction is different to Clarence Street and other typical locations where such cycle filter lanes have been provided, to cater for cyclist continuing straight ahead at junctions where motor vehicles may be entering an adjoining left turn lane. At Mill Lane cyclists need to move across the path of straight ahead traffic to enter the right turn lane.

If it were feasible to mark a cycle feeder lane within the existing right turn lane, cyclists would still need to decide when it is safe to move across to enter it. Unfortunately, given the relatively narrow lane widths at the existing B1363 right turn, such a cycle feeder lane could not be accommodated without the additional expense of widening the road.

With traffic signals in place, less confident northbound cyclists wanting to go down Mill Lane could avoid the difficult manoeuvre into the right turn lane by choosing to pull off the road, dismount and use the pedestrian crossing phase at the signals to cross the B1363. They could then walk around to Mill Lane before continuing their cycle journey east along the side road.

- 27 Bus stops should be installed near to the north end of the 40mph speed limit.

Officer response

The Transport Planning Unit are already arranging for bus stops to be provided on each side of the B1363 in the vicinity of the northern extent of the proposed 40mph speed limit in response to a previous request. Both proposals would be coordinated so that the various sign installations do not obscure each other.

- 28 "Keep Clear" markings should be provided at the junction of Corner Close and Mill Lane, to maintain access when traffic approaching the B1363 junction is queuing on Mill Lane

Officer response

The Council does not normally put in 'Keep Clear' markings to allow vehicles to exit side roads and get out easier through queuing traffic, especially at 'cul-de-sacs'. However, if vehicles waiting on the main road to turn right into a side road prevent vehicles behind them from continuing along the main road on a regular basis, then there may be a case for a 'keep clear' to reduce congestion.

The Council tries to use 'Keep Clear' markings sparingly, only introducing them where there is a definite need. This is because such markings do not always work. Those drivers who abide by them tend to be the ones who leave a gap in any case. In addition, where there is a gap in traffic provided for side road access or exit this can potentially encourage some drivers entering or exiting to hurry and, consequently, pay less attention to other more vulnerable road users, such as cyclists, who may be passing the stationary vehicles.

Due to the proximity of Corner Close to the B1363, there could be problems if queuing vehicles prevent drivers from turning right into Corner close. This could cause a tailback within the signalised junction, which could then cause safety

issues when the signal sequence changes. However, it is likely that drivers queuing on Mill Lane would clearly recognise the junction and be likely to leave a gap to allow access.

Therefore, officers consider that it would be appropriate to monitor the situation on Mill Lane following installation of traffic signals, and then consider if further action is deemed necessary.

- 29 "Yellow box" markings required opposite the access to Windmill Industrial Estate off B1363, where traffic may be queuing back from Mill Lane along Sutton Road.

Officer response

'Yellow box' markings are mainly used to keep signalised junctions clear, where vehicles might be backing up from elsewhere, therefore we do not consider that such a measure would be appropriate at this location.

However, modelling of the proposed traffic signals has predicted that southbound traffic queues on the B1363 will extend beyond the Windmill Industrial Estate at certain periods, and it would be a problem if right turning traffic could not enter the site. Hence a 'Keep Clear' marking would be justified in this location opposite the access to the Industrial Estate.

- 30 Approaches to the 40mph speed limit should be reinforced with rumble strips on the road.

Officer response

National guidance recommends that rumble strips should not be installed within 200m of residential properties due to potential noise nuisance. Flatter strips of red colour could be applied across the road, but these are obviously less effective at alerting drivers.

It is thought that the proposed 40mph limit would be well observed, due to the presence of the traffic signals. However, we would monitor the situation afterwards to determine whether further measures might be required to make drivers aware of the reduced speed limit.

- 31 The proposed improved and extended street lighting on the B1363 may create light pollution and light spillage onto adjacent residential properties.

Officer response

The existing inefficient low-pressure 'orange' sodium lighting would be replaced with newer more energy efficient LED white light throughout the full extents of the proposed speed restriction. This more energy efficient lighting takes advantage of new technologies and would be fully "dark skies compliant" to limit light distribution beyond the highway and stop "sky glow"

External organisation comments

- 32 The **Police** have no objections to the proposed speed limit if this is part of the proposed scheme to signalise the junction. However, if the signalistaion did not

proceed then their position would change to one of objection.

- 33 The **Cyclist Touring Club** support the scheme, in particular the inclusion of advance stop lines for cyclists.

They have also commented that there should be adequate road width maintained for motor vehicles to overtake cyclists adjacent to any islands within the scheme.

Officer response

The issue of adequate road width for vehicles to pass cycles at traffic islands is something to be addressed as part of the more detailed design.

Another factor that would need to be taken into account in the detailed design of the islands is that the B1363 is a designated abnormal load route for high and wide loads. Consequently, consideration would be given to installing 'bolt down' traffic islands with demountable features, or provide sloping kerbs so that abnormal loads could drive up and over the islands. Such installations would also have the advantage of reducing excavation and hence would minimise disruption to road users during installation.

- 34 **York Cycle Campaign** broadly support the scheme, but note that no feeder lanes are shown to allow cyclists to pass traffic queues and reach the ASL boxes.

Officer response

The Council has adopted a policy covering standards and principles for use when designing cycling facilities around the City. This includes a requirement that ASL be provided at traffic signal junctions, together with 'lead-in' cycle lanes where feasible of sufficient length for cyclists to bypass traffic queuing at signalised junctions.

Although the leaflet illustration for the Wigginton proposals only showed ASL without any feeder lanes, the provision of 'lead in' cycle lanes is something which would be included as part of the more detailed design.

- 35 **TRO feedback** : No objections have been received

Road safety audit

- 36 A road safety audit Risk Assessment has noted that the scheme proposes significant changes to the way the potential conflicts between road users and pedestrians are controlled around the junction, but has not identified any fundamental concerns or recommended that a Stage 1 (feasibility) audit be carried out. However, a Stage 2 (detailed design) and a Stage 3 (scheme completion) road safety audit will be carried out, and any issues arising taken into account in the development of the proposals.

Revised scheme proposals following consultation

37 Revised scheme proposals have been produced, which take into account consultation feedback and are considered to be beneficial modifications to the scheme. These amendments relate to the junction layout and are shown in **Annex B**

38 The key changes are listed below :-

- Bus stop locations near to the northern extent of the proposed 40mph limit.
- Cycle feeder lanes provided in conjunction with ASL
- 'Keep Clear' road marking provided opposite access to Windmill Industrial Estate.

Options for the way forward

39 The options for the Executive Member to consider are :-

Option 1 - authorise implementation of the original scheme shown at **Annex A**

Option 2 - approve for implementation the scheme shown in **Annex A** with the revisions shown in **Annex B**, plus any other changes to the proposals that the Executive Member considers necessary.

Option 3 - abandon the scheme

Analysis of Options

40 **Option 1** – addresses the basic road safety concerns and access issues highlighted by the earlier village accessibility review.

41 **Option 2** – should have the same benefits as Option 1, but would also take into account issues and suggestions arising from the consultation, which should make the scheme more effective.

42 **Option 3** – would not address the current issues at the junction.

43 Consultation has produced some positive support, together with useful feedback leading to revised scheme proposals being developed. Hence, **Option 2** is recommended as the preferred way forward.

Corporate Priorities

44 Introducing traffic signals and a 40mph speed limit would contribute to the following corporate objectives and priorities :-

- **Sustainable City** – Implementing the measures outlined in **Option 2** should make turning into and out of the Mill Lane junction with the B1363 easier, particularly for public transport and cyclists. The proposed signalised

crossing facilities should provide easier access to nearby bus stops and may encourage more use of public transport.

- **Safer City** – Implementing the measures outlined in **Option 2** should reduce road accidents and casualties by make turning into and out of the Mill Lane junction with the B1363 safer. The proposed signalised crossing facilities should also make crossing the busy roads safer.
- **Inclusive City** – Implementing the measures outlined in **Option 2** should make it safer and easier for people in the Wigginton area to access opportunities and facilities around York, and elsewhere.

45 The proposed scheme should also contribute the aims of the Local Transport Plan 2006-2011 (LTP2), namely :-

- Reduce the levels of actual and perceived safety problems,
- Enhance opportunities for community members, including disadvantaged groups, to play an active part in society.

Implications

46 This report has the following implications

- **Financial** - £215k is included in the 2009/10 Transport Capital Programme for implementation of a scheme at the B1363 Mill Lane junction. The current estimate for the proposals outlined in **Annex B** is within that allocation.
- **Human Resources (HR)** – There are no HR implications for the Council
- **Equalities** - Implementing the measures outlined in **Annex A** should enhance opportunities for community members, including disadvantaged groups, to play an active part in society.
- **Legal** – City of York Council, as Highway Authority for the area, has powers under the following Acts and associated Regulations to implement improvements and any associated measures on the highway ;
 - The Highways Act
 - The Road Traffic Regulations and General Directions
 - The Road Traffic Act

A Traffic Regulation Order (TRO) is required for the proposed 40mph speed limit. No formal objections have been received in respect of the TRO.

- **Crime and Disorder** – There are no crime and disorder implications at present
- **Information Technology (IT)** - There are no IT implications expected
- **Land and Property** – The proposed works would be within the adopted highway.

- **Other** – There are no other known implications anticipated.

Risk Management

47 In compliance with the Council's Risk Management Strategy, the main risks associated with this report are considered to be as follows :-

Strategic – If it is decided not to implement the proposals there is a risk that this could lead to an inability to meet the council's priorities, and the council may not meet some of the aims of the Local Transport Plan.

Physical – If it is decided to implement the proposals the main physical risk to achieving implementation on time are thought to be the provision of mains power connections for the traffic signals and street lighting by an external contractor. If the scheme is approved the necessary electrical work would be ordered straight away, in order to keep any potential delay to a minimum.

Although queuing should be reduced on Mill Lane, the proposed measures will reduce flow capacity along the B1363 and could result in delay with queuing at certain periods. Therefore, there is a risk of complaints and adverse comment from road users and local residents as a result of the likely reduction in flow rate along the B1363 and the associated consequences.

In addition, traffic signals are being proposed with the aim of increasing safety at the junction, and to make it easier to exit Mill Lane onto the B1363. It should be appreciated that one consequence of this might be an increase in drivers choosing to use the Mill Lane junction in preference to other routes where there can be more congestion. If this were to happen it could lead to some criticism from current users of the junction.

Financial – This report relates to cost estimates based upon site surveys, investigations and preliminary design. There is a potential risk that the scheme costs may increase, the main financial uncertainty being related to the need to move or protect underground services which are not at the depth or location anticipated from records.

Organisation / Reputation – There is a risk of criticism if a scheme which has been prioritised for implementation during the current fiscal year and publicised is not delivered.

Measured in terms of impact and likelihood, the risk score for each of the above risks has been assessed at less than 16, as indicated in the following table;

Risk Category	Impact	Likelihood	Score
Strategic	Low	Possible	6
Physical	Medium	Possible	9
Financial	Medium	Possible	9
Organisation / Reputation	Medium	Possible	9

The above scores indicate that at this point the risks need only be monitored, as they do not provide a real threat to the achievement of the objectives of this report

Contact Details:

Author

Graham Kelly
Engineer
Transport and Safety
Engineering Consultancy

Telephone : 01904 55 3457

Chief Officer Responsible for the report

Damon Copperthwaite
Assistant Director
(City Development and Transport)

Report Approved **Date** 13 November 2009

Specialist Implications Officer(s)

There are no specialist officer implications

Wards Affected:

Haxby and Wigginton

All

For further information please contact the author of the report.

Background Papers:

" Village Accessibility Review " – Report of the Director of City Strategy
Decision Session : Executive Member for City Strategy - 7 July 2009

Annexes:

Annex A Information leaflet (*intended for printing @ A3 then folded to A4 size*)
explaining and illustrating the scope and extent of the proposed scheme

A1 - Information leaflet : Front page explanatory text

A2 - Information leaflet : Inside illustration

A3 - Information leaflet : Back page explanatory text

Annex B **B1** - Revised layout around the B1363 Mill Lane junction