

ROTHERHAM BOROUGH COUNCIL – REPORT TO MEMBERS

1.	Meeting:	Town Centres, Economic Growth and Prosperity
2.	Date:	19th March 2012
3.	Title:	Swallownest Crossroads Junction Improvements
4.	Directorate:	Environment and Development Services

5. Summary

To seek approval to refurbish and improve the signal installation at Swallownest Crossroads (B6053 Chesterfield Road, B6053 Rotherham Road, Park Hill and Main Street).

6. Recommendations

It is recommended Cabinet Member resolves that:

- i) approval is given to consult on the proposals identified in the attached drawing (126/17/TT194)**
- ii) detailed design is undertaken on the scheme**
- iii) subject to no objections being received the scheme is implemented within the 2012/13 financial year**

7. Proposals and Details

The existing Swallownest Crossroads signal installation is approaching the end of its recommended life and will shortly require refurbishing. The junction is currently a four arm installation with a separate Pelican Crossing located approximately 30 metres west of the junction on Park Hill. This crossing is linked to the junction and runs within the operation of the junction.

Observations on site have shown that the existing crossing is not well used; this may be due to the crossing not being located on the pedestrian desire; that is the point where pedestrians want to cross. On site observations suggest that school children and others are crossing at the traffic lights of the junction without the aid of the Pelican Crossing due to the 'detour' that using the crossing on Park Hill requires.

The purpose of this report is to seek approval to slightly amend the geometry of the junction on Chesterfield Road / Park Hill such that the crossing on Park Hill can move further east and become an integral crossing of the junction. The attached drawing 126/17/TT194 shows how this can be undertaken; the south western radius of the junction can be tightened by removing the existing left turn lane from Chesterfield Road to create a wider footway and a defined position to which the crossing on Park Hill can be moved to. Furthermore by altering the carriageway at this point we are also able to install a controlled pedestrian crossing across the B6053 Chesterfield Road.

It is good practice to aim to install controlled pedestrian crossings on arms of signalised junctions where this is physically possible and a pedestrian demand has been observed. Observations at this site suggest the heaviest pedestrian flows are across the Park Hill and Chesterfield Road arms. As the crossroads will continue to be signalised and will shortly be refurbished, these new crossings can be installed using the same infrastructure and traffic management. The crossings will then be maintained as part of the junction leading to reduced maintenance costs.

Due to the geometry of the junction it is not feasible to install crossings on the Rotherham Road and Main Street arms of the junction as to do so would require the stop lines to be moved a long way back leading to significant vehicle delay.

Initial traffic modelling suggests that at times where pedestrian demands are low the delay to vehicles will be similar to the existing junction. When pedestrian demand is heavy the average vehicle delay will increase slightly however this will be minimised by the use of Puffin Crossings.

Puffin Crossings have advanced detection methods to cancel the pedestrian demand if the pedestrian has walked away from the crossing or crossed early within gaps in traffic, therefore eliminating unnecessary delay to drivers.

8. Finance

The amendments and upgrade is estimated to cost £80,000 and will be funded by the LTP strategic fund programme and traffic signal maintenance for 2012/13.

9. Risks and Uncertainties

Failure to secure sufficient funding would impact on the ability to upgrade the junction. If the junction is not upgraded here there is a significant risk that the existing traffic signal equipment could fail and cause severe traffic delays.

Statuary Undertakers surveys have already been carried out and are unlikely to add any costs to the scheme.

10. Policy and Performance Agenda Implications

The proposals are in line with the objectives set out in the Third South Yorkshire Local Transport Plan / Sheffield City Region Transport Strategy 2011-2026.

11. Background Papers and Consultation

Appendix A – Drawing number 126/17/TT194 showing the proposed layout of the junction.

Contact Name: *Chris Armitage, Assistant Engineer, ext 54493*
chris.armitage@rotherham.gov.uk