Appendix 3 – Details of Options Considered, Alternatives Rejected

The Arup consultancy had been previously commissioned by the City Council on behalf of the Sheffield Bus Partnership to test options for improved bus service operation along the A61 Chesterfield Road Corridor.

Six options were then modelled for potential improvement in the vicinity of the Broadfield Road junction. These can be summarised as;

- Option 1: Low complexity scheme. Carriageway widening to allow two inbound lanes along London Road, one of which is a bus lane. Two lanes formulated out of Broadfield Road. No change to signal operation.
- Option 2: Low complexity scheme Carriageway widening to allow two inbound lanes along London Road, no bus lane (two lanes of traffic instead). Two lanes formulated out of Broadfield Road. No change to signal operation.
- Option 3: Medium complexity scheme Carriageway widening to allow two inbound lanes along London Road, one of which is a bus lane. Two lanes formulated out of Broadfield Road with left slip (uncontrolled). Changes to signals to remove all red pedestrian phase.
- Option 4: Medium complexity scheme Carriageway widening to allow two inbound lanes along London Road, no bus lane (two lanes of traffic instead). Two lanes formulated out of Broadfield Road with left slip (uncontrolled). Changes to signals to remove all red pedestrian phase.
- Option 5: Medium complexity scheme Carriageway widening to allow two inbound lanes along London Road, one of which is a bus lane. Two lanes formulated out of Broadfield Road with left slip (uncontrolled). Left slip lane from London Road South to Broadfield Road. Changes to signals to remove all red pedestrian phase.
- Option 6: Medium complexity scheme Carriageway widening to allow two inbound lanes along London Road, no bus lane (two lanes of traffic instead). Two lanes formulated out of Broadfield Road with left slip (uncontrolled). Left slip lane from London Road South to Broadfield Road. Changes to signals to remove all red pedestrian phase.

Option 4 is promoted as the Council's preferred option (in agreement with the Sheffield Bus Partnership), mainly due to the AM peak benefits observed and the cost effectiveness of the scheme.