

Report of the Director of City Development

Report to Executive Board

Date: 9 May 2013

Subject: A58M Leeds Inner Ring Road Essential Maintenance Scheme

Capital Scheme Number :- 16444/000/000 Woodhouse Tunnel

Are specific electoral Wards affected?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
If relevant, name(s) of Ward(s): City & Hunslet, Hyde Park & Woodhouse, Burmantofts & Richmond Hill		
Are there implications for equality and diversity and cohesion and integration?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Is the decision eligible for Call-In?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Does the report contain confidential or exempt information?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
If relevant, Access to Information Procedure Rule number:		
Appendix number:		

Summary of main issues

1. The early stages of the Leeds Inner Ring Road (IRR) which were built in the late 60's and early 70's are in urgent need of structural repair and strengthening mainly due to the damage caused by winter de-icing salt. Without intervention, there is a significant risk that due to safety reasons, the IRR would need to be closed within five years.
2. An Essential Maintenance Scheme has been developed for three key structures on the Leeds IRR, and the Department for Transport (DfT) has given a commitment to fund up to a maximum of £16.344 million out of a total scheme budget of £24.96 million.
3. In April 2012, the Executive Board authorised expenditure of £2.446m to implement work to Lovell Park Bridge, one of the three key structures, and also to progress the procurement of the necessary works required for Woodhouse Tunnel by appointing a contractor through Early Contractor Involvement.
4. This report provides a progress update on the Essential Maintenance Scheme and seeks approval from the Executive Board to progress with the proposed construction works on Woodhouse Tunnel.

Recommendations

5. The Executive Board is recommended to:

- (i) Note the update provided in this report, including the substantial completion of New York Flyover and Lovell Park Bridge.
- (ii) Note that a contractor has been appointed for Woodhouse Tunnel and is currently utilising Early Contractor Involvement to look at the optimum solution for delivery and also to feed into the Full Approval process.
- (iii) Subject to Full Approval by the DfT, authorise expenditure of up to £19.483 million to implement the construction phase for Woodhouse Tunnel.

1 Purpose of this report

1.1 The purpose of this report is to:

1.2 Provide an update on progress on the A58M Leeds IRR Essential Maintenance Scheme.

1.3 Subject to Full Approval from the DfT, seek authority to incur expenditure for the construction stage of the Woodhouse Tunnel Strengthening Scheme.

2 Background information

2.1 Stages 1 to 3 of the Leeds IRR, which were constructed in the late 60's and early 70's, have been subject to chloride attack caused by the use of winter de-icing salt on the road since they were constructed.

2.2 Despite significant investment on maintenance, some of the key structures on the IRR have deteriorated, especially in the last decade, to a point where major intervention is now required.

2.3 A scheme was developed which included significant strengthening and repair work on 3 of the key structures on the IRR. These were New York Flyover, Lovell Park Bridge and Woodhouse Tunnel. This scheme was submitted to the Secretary of State for Transport in a funding bid and in December 2011 was granted "Programme Entry" status.

2.4 As mentioned in previous reports to the Executive Board, scheme promoters are expected to provide a local funding contribution. Historically this is 10% minimum and chances of success increase if this can be maximised, and also include Third Party funding. The total scheme budget is currently £24.96 million and the Programme Entry commitment from the Secretary of State for Transport, through the DfT is for £16.344 million. The remaining £8.616 million forms the local contribution element consisting of £3.45 million from the Local Transport Plan Fund, £3.00 million centrally funded from LCC and a combined third party contribution of £2.166 million from the University of Leeds and Leeds NHS Trust to cover their maintenance obligation for Woodhouse Tunnel. A Full Approval

submission is programmed to be submitted to the DfT in May 2013 with a decision expected six weeks later.

- 2.5 Works on New York Flyover and Lovell Park Bridge are now substantially complete and were programmed to be done in advance of the opening of Leeds Arena. Lovell Park Bridge was the subject of a previous Executive Board report and New York Flyover works were undertaken as part of the Bridges capital programme.
- 2.6 However, the most significant of the three elements of the Essential Maintenance Scheme is Woodhouse Tunnel. Some critical repairs were carried out in summer 2011 but the major maintenance and strengthening works are programmed to start in summer 2013 but this will be subject to obtaining Full Approval from the DfT.
- 2.7 Previous reports on the A58M Inner Ring Road Essential Maintenance Scheme have been submitted to the Executive Board on 7 September 2011 and 11 April 2012.

3 Main issues

- 3.1 All the structures on the A58M and A64M Leeds IRR are exhibiting deterioration consistent with chloride contamination from the ingress of winter de-icing salts. A scheme has been developed to undertake urgent maintenance and strengthening work on 3 of the key structures. Works on two of the three key structures is now substantially complete with the works on Woodhouse Tunnel remaining.
- 3.2 Woodhouse Tunnel is by far the largest of the three structures included in the current IRR Essential Maintenance Scheme and without timely intervention runs the risk of being closed within five years.
- 3.3 Due to the sensitivity of the road network, and the fact that the tunnel sits below a hospital and university, the contract for this work has been developed using a similar contract strategy that was used for earlier major schemes in Leeds including the A65 Quality Bus Initiative and Stage 7 of the Leeds IRR. These contracts were also in two phases with Phase 1 involving Early Contractor Involvement (ECI).
- 3.4 Following Executive Board approval in April 2012 to adopt this strategy, the ECI Phase of the Woodhouse Tunnel was awarded to Carillion in November 2012 and is currently ongoing. The ECI Phase will result in a robust cost estimate and detailed programme for the implementation of the works. This will then be used in the Full Approval submission to the DfT.
- 3.5 In the early stages of the ECI Phase, it became apparent that the design proposals for the tunnel, which involved the removal of some of the existing concrete, would require temporary supports to prop the tunnel roof whilst the permanent works were installed. The ECI Contractor utilised his expertise to look at the implications of doing this. Providing the necessary props and the associated traffic management and protection would require the tunnel to be fully closed for extended periods of time. This would have an unacceptable effect on

the surrounding highway network and also significantly increase the scheme budget.

- 3.6 The ECI Phase also allows the Contractor to work with the designers to look in detail how the works are to be delivered and look to overcome potential problems. There is also a great deal of knowledge gained from earlier works on the IRR including the tunnel repairs in summer 2011, and the beam lifts for Lovell Park Bridge.
- 3.7 In light of the above, an alternative design was developed which required less of the original structure to be removed, thus avoiding the need to prop the tunnel roof. This would also reduce the amount of disruption in the peak periods and reduced the risk of overspending the existing budget.
- 3.8 The contractor has already looked at a number of options and working within prescribed constraints is formulating the optimum solution for delivery. As already mentioned, one of the key considerations is the effect that the works will have on the highway network, and regular meetings are being held with the Network Management Section. These meetings are looking at all the known events that are planned for Leeds including the potential impact the works might have on the Arena and also to ensure a total embargo for the Tour de France.
- 3.9 The proposed tunnel works are currently programmed to commence on 29 July 2013 to take advantage of the reduced traffic volumes during the summer holiday period. This is after the first event at the Leeds Arena, but it will be important not to have an adverse impact on the opening season. Accordingly, specific consultation will be undertaken with the Arena Operator in order to establish the programme including the size and nature of events. Appropriate working restrictions will then be agreed with Network Management around these events. At this stage it is difficult to assess the effect that network restrictions will have on the overall programme as the full extent of events is not yet known. Some assumptions have been made and it is expected that the works will be completed within the 2015/16 financial year.
- 3.10 Separate consultation will also be undertaken with the *Local Delivery Group* and *Travel Planning Group* which have been established for the Tour de France. Again, appropriate working restrictions will need to ensure that there is no impact on the Grand Depart.
- 3.11 As a result of the constraints placed on the contractor and the re-design of the strengthening proposals, the majority of the work will be undertaken with night time closures of a single bore with contra-flow in the other. This has worked successfully for previous work on the tunnel and existing plans are available. Weekend closures will be required for some operations which include further repair works to the tunnel roof. These will now be kept to a minimum and will be similar to what has successfully been done in the past and can again be programmed for quieter holiday periods.
- 3.12 Regular meetings are continuing to be held with the University and Hospital Trust to update them on progress. As mentioned in previous reports, agreement has been reached with the University of Leeds and Leeds NHS Trust whereby they

have contributed £2.166 million towards the current essential maintenance scheme, which will guarantee the tunnel for the next fifteen years. A payment of a further £1.8516 million (discounted to account for the future works costs) has also been agreed for the following 15 years, removing the liability of costs for maintenance repairs to the tunnel from the University of Leeds and Leeds NHS Trust until 1st April 2042 (30 years).

- 3.13 The University of Leeds and Leeds NHS Trust have engaged a private consultant to give an independent check to the current LCC proposals to give further assurance that the strengthening scheme will deliver the required outcome. The Bridges design team are working with this consultant to satisfy their requirements.

4 Corporate Considerations

4.1 Consultation and Engagement

- 4.1.1 Widespread consultation has already been undertaken as part of the bid made to the DfT and extensive consultation was carried out as part of the tunnel repairs in Summer 2012 and for the full closures of the IRR which were required for the Lovell Park Bridge beam lifts.
- 4.1.2 As a result of this consultation, and with careful programming, both the tunnel roof repairs, and the beam lifts took place with minimal disruption to traffic, especially on the adjacent highway network.
- 4.1.3 The proposed works for Woodhouse Tunnel are essential maintenance works, there is little scope for making significant change to the proposals as a result of consultation. The feedback from consultation will be considered as part of the construction programming to minimise impact and where possible address any concerns raised.
- 4.1.4 Although the proposed works for Woodhouse Tunnel are more extensive than the earlier repair work, a similar traffic management strategy will be used, and the majority of the proposed work will be undertaken at night with selected weekend closures future consultation. This will utilise, and build on the existing good practice which is already in place. As the works progress, consultation and engagement will continue but due to the nature of the work this will mainly be in the form of information about ongoing and proposed works.
- 4.1.5 As mentioned previously, detailed consultation is already taking place with Network Management looking at the effect the works might have on events and the availability of the network. This will also include specific consultation with the Leeds Arena Operator, and also take account of the Tour de France.
- 4.1.6 Around 80,000 vehicles a day travel through the tunnel, a significant proportion of which are travelling through the city rather than travelling to or from an area within the city. It is difficult to engage with these people but extensive use of the Council's website, including social media will be used in consultation. Variable message signs are also proposed at either end of the tunnel to advertise pending work.

4.5 Legal Implications, Access to Information and Call In

- 4.5.1 Other than the normal statutory processes involved in procuring and carrying out works on the highway, there are no further legal implications directly related to this report.

4.6 Risk Management

- 4.6.1 Over the last decade, many of the structures on the Leeds IRR have deteriorated to a state where significant intervention is now required. An Essential Maintenance Scheme has been developed to address three of the key structures. Works are substantially complete on two of the structures but works on Woodhouse Tunnel are reliant on grant funding from the DfT. Without intervention, there is a real risk that Woodhouse Tunnel would need to be closed on safety grounds within five years.
- 4.6.2 Progress is being made on the final stages of design for Woodhouse Tunnel which includes Early Contractor Involvement. As the maximum contribution from the DfT is capped at £16.344 million the use of ECI should provide a degree of confidence in delivering the scheme within the overall budget envelope.

5 Conclusions

- 5.1 The Council has been successful in securing Programme Entry approval from the DfT for funding up to £16.344 million for essential maintenance for 3 key structures on the Leeds IRR.
- 5.2 The Council has also reached agreement with the University of Leeds and the Leeds NHS Trust over the terms of their lease for Woodhouse Tunnel and secured Third Party contributions for the works to Woodhouse Tunnel.
- 5.3 In order to consolidate these agreements and secure the available funding, a contractor has been appointed firstly through ECI to work with LCC in the final stages of design for Woodhouse Tunnel.
- 5.4 At the end of the ECI phase, a Full Approval document will be submitted to the DfT in May 2013. This will include a robust cost estimate and programme prepared by the contractor to substantiate the DfT's earlier commitment for £16.344 million at Programme Entry. A favourable Full Approval decision is expected from the DfT to allow construction work to commence on Woodhouse Tunnel at the end of July 2013.
- 5.5 Whilst the Essential Maintenance Scheme will address the immediate pressures caused by the poor condition of the IRR structures, it is essential that a longer term strategy is developed for the long term future of the IRR.

6 Recommendations

- 6.1 The Executive Board is recommended to:
- (i) Note the update provided in this report, including the substantial completion of New York Flyover and Lovell Park Bridge.

- (ii) Note that a contractor has been appointed for Woodhouse Tunnel and is currently utilising Early Contractor Involvement to look at the optimum solution for delivery and also to feed into the Full Approval process.
- (iii) Subject to Full Approval by the DfT, authorise expenditure of up to £19.483 million to implement the construction phase for Woodhouse Tunnel.

7 Background documents¹

7.1 None

¹ The background documents listed in this section are available to download from the Council's website, unless they contain confidential or exempt information. The list of background documents does not include published works.