

# **WIRRAL COUNCIL**

## **CABINET – 9 DECEMBER 2010**

### **REPORT OF THE DIRECTOR OF TECHNICAL SERVICES**

#### **BIDSTON MOSS VIADUCT UPDATE AND DOCKS LINK ROADS RESURFACING**

##### **1.0 EXECUTIVE SUMMARY**

- 1.1 This report provides a summary of the current progress of the works to strengthen the Bidston Moss Viaduct.
- 1.2 Additionally, the report requests authorisation pursuant to Contract Procedure Rule 5.2 for a contract to be awarded by the Council to Costain Limited, the contractor undertaking the viaduct repair works, on a single tender basis, to carry out resurfacing activities on the Council's highway network adjacent to the viaduct site.

##### **2.0 BACKGROUND**

- 2.1 Members will be aware that work is currently proceeding to strengthen the Bidston Moss Viaduct at junction 1 of the M53. Background to the project, cost sharing arrangements, and that full approval to proceed had been granted by the Department for Transport (DfT), was reported to Cabinet on 15 April 2010 (Minute 401 refers).
- 2.2 Phase A of the contract (site investigation, design and advanced works) commenced on site in April 2009. Phase B of the contract (strengthening and construction activities) commenced in April 2010.
- 2.3 The Council has entered into a Tri-Partite Agreement with the Highways Agency (HA) and Merseytravel, for delivery of the project, following approval from the Council's Executive Board on 8 February 2007 (Minute 251 refers). A condition of the Agreement is that no major traffic restrictions shall be erected on the highway network in the vicinity of the viaduct for a period of five years after completion of the works.

##### **3.0 PROGRESS OF VIADUCT WORKS**

- 3.1 At the time of writing this report 34.83% of the construction works have been completed against a planned 37.25%. However, as a result of proposed additional resources, Costain are currently re-programming the works, forecasting completion of strengthening activities, and hence removal of temporary traffic loading restrictions, by 2 November 2011, against an initial programmed target of 31 December 2011. Costain are also forecasting an overall contract completion of 24 March 2012, against an initial programmed target of 31 March 2012. The current forecast target cost of the contract works is £565,000 below the original target cost.
- 3.2 The works to the viaduct include a variety of internal and external steelwork strengthening solutions to the box girders; concrete repairs and protection to the reinforced concrete columns and viaduct deck, together with replacement street lighting and surface water drainage infrastructure. Additionally, the steel box girders will receive a full replacement specialist paint protective coating system. The internal strengthening and protective coating works are especially complex due to the difficult access, including confined spaces, and associated safety requirements. The site currently includes the largest scaffolding installation in the UK. Some 232 permanent staff are employed on the site at the present time.

- 3.3 In order to carry out some of the critical strengthening operations it is necessary to work in some areas of structure without the effects of traffic loading affecting the integrity of the works. In order to facilitate these operations, Costain have applied for a series of temporary traffic regulation orders to close certain sections of the viaduct to all traffic overnight, between the hours of 8pm and 6am. These closures are agreed with Council officers, Merseytravel officers and Merseyside Police, in advance, as part of a routine traffic co-ordination process. Diversion routes via Hoylake Road and Wallasey Bridge Road, Birkenhead, are clearly signed by Costain during these overnight closures and the closures are advertised in advance, in accordance with the usual notification systems employed by Technical Services Department.
- 3.4 Costain are required to report against stringent indicators and reporting mechanisms set internally and by the HA, on health & safety, programme, commercial matters and performance. The project currently has a Motivating Success Toolkit (MST) score of 8.0 out of 10.0, which is in the blue (highest scoring) zone, and a Client Satisfaction score of 9.12 out of 10.0. There have been a total of 628,102 man hours worked on site to date with no reportable (RIDDOR) accidents, giving a current Accident Frequency Rate (AFR) of 0. The site has received a score of 37.5 out of 40 at last inspection, under the Considerate Constructors Scheme, which is classed as a site that is “exceptionally good”, representing less than 10% of all sites inspected, and will be nominated for a national award as a result.

#### **4.0 HIGHWAY WORKS**

- 4.1 The A5139, Docks Link South, from its junction with the roundabout on the A554, at Junction 1 of the M53, to its junction with the roundabout on A5088 Poulton Bridge Road (approximately some 1.25k in length), was resurfaced by Wirral Council in 1999. Subsequently, in 2000, the A5139 Docks Link North (between the same junctions) was also re-surfaced by the Council. However, the surfacing is now showing signs of severe premature wear, following several changes to the lane configurations for both traffic safety and viaduct loading mitigation reasons, with high volumes of heavy goods traffic concentrated into single lanes in places. The surfacing has had to be patched on numerous occasions, requiring temporary short-term road closures, and may be expected to require regular maintenance interventions until its replacement.
- 4.2 One of the key Project Objectives for the Bidston Moss Viaduct Strengthening project, and a condition of the Tri-Partite Agreement, is that there will be no ‘Type A’ Traffic Management in the area around the Viaduct for a period of 5 years after completion of the works (i.e. no planned maintenance requiring major lane closures etc.). This condition is to help safeguard the public against further restrictions and traffic disruption occurring in the period after the major construction works necessary for the viaduct strengthening. This area, as defined in the Agreement, includes all of the Docks Link Roads as far as their junction with Poulton Bridge Road.
- 4.3 Even with regular maintenance interventions, there is no realistic prospect of the Docks Link Roads’ surfaces lasting in a reasonably serviceable condition until 2017 (5 years after completion of the viaduct strengthening) and hence not requiring major lane closures for resurfacing. Consequently, to comply with the Council’s legal obligations under the Tri-Partite Agreement, any resurfacing work must be completed by March 2012, when the viaduct contract is expected to be finished.

#### **5.0 CONTRACT PROPOSALS**

- 5.1 Because the premature surfacing failure on the viaduct itself is construed as having a direct causal link to the interim load mitigation measures placed on the structure

since 2000, agreement has been reached with the HA that the replacement of all surfacing on the elevated sections of both Docks Link South and Docks Link North (on the Wirral Council-owned sections of viaduct deck and slip roads) will be included in the current viaduct strengthening contract between HA and Costain. Agreement has also been secured with the HA that those areas of surfacing within the site boundary will now be maintained to a safe standard by Costain until completion of the viaduct contract. The surfacing replacement on the Council's sections of viaduct will also include all associated works, such as bridge deck waterproofing, expansion joint replacement, kerbs and hard verge replacement.

5.2 At the request of the Director of Technical Services, a fully costed proposal has now been received from Costain for the resurfacing of all the Docks Links Roads carriageway surfaces, together with the roundabout at Junction 1 of the M53, and part of its approaches on the A554, representing the remainder of the Council's network in need of resurfacing prior to 2017 included within the area defined in the Tri-Partite Agreement (see Appendix A). The quotation is based upon specifications provided by the Director of Technical Services and upon rates for work activities included in the Costain contract with the HA for the viaduct works. The work will include for hot-rolled asphalt surface course material, which presents a better prospect of long term durability than the thin-layer surfacing used previously in this area. The total cost of these works is £832,553. This cost has been checked by officers within Technical Services Department by comparison with rates included in the Council's current Highway Services Contract with Colas Ltd, and by comparison with rates received by the Council in competitive tender for similar works on recent highway reconstruction schemes. As a result of these comparisons, officers believe that the price presented by Costain offers good value for money to the Council in the current market.

5.3 Having Costain undertake these works, as opposed to exposing the works to competitive tender, presents a number of advantages for the Council, including:

- Significantly reduced procurement and administration costs
- Reduced cost of contract preliminaries (site establishment already in place)
- Likely reduced overall costs
- Utilizes high-performing contractor with established local supply chain and workforce
- No risk of conflict with another contractor's operations
- Concurrent working with resurfacing activities already planned under viaduct contract
- Earlier completion of works
- Reduced disruption to public
- Single point of contact during works
- Single contractor responsibility for defects correction
- Ability to guarantee compliance with Tri-partite Agreement obligations

5.4 For these reasons it is proposed that the Director of Technical Services be authorised to agree terms of a lump-sum contract under the NEC3 Option A form of contract or similar standard form of construction contract, with Costain Ltd, for the execution of resurfacing works on the Council's highway network, independent of the current viaduct strengthening contract between Costain and the HA.

5.5 During resurfacing activities, both on the viaduct and elsewhere on the Council's network, it is expected that road closures and associated traffic diversions, including during daylight hours, will be required in order to complete the works safely and expeditiously. At the time of writing this report, it is expected that the majority of the resurfacing works are likely to take place in Spring/Summer 2011 and details would be communicated to the public using the appropriate channels in advance.

## **6.0 FINANCIAL IMPLICATIONS**

- 6.1 The Council's contribution to the viaduct strengthening works is fixed and capped at a maximum of £2.88m by virtue of the Tri-Partite Agreement and the Full Approval funding award letter received from DfT. This includes any resurfacing and associated works carried out on the Council-owned sections of the viaduct as part of the contract between Costain and the HA.
- 6.2 The Council's share of the costs was agreed by Cabinet at its meeting of 22 May 2008 (Minute 26 refers). The Council has already contributed £1.9m of this commitment in payments to the HA. A further payment of £720,000 is due to be made in April 2011. The balance of up to £260,000 is payable in a final instalment in April 2012. The provision exists for these payments in the Council Capital Programme for 2011/12 and 2012/13.
- 6.3 The cost of the works by Costain Ltd to carry out the required resurfacing works on the remainder of the Council's highway network within the area excluded from major maintenance activities until 2017 under the Tri-Partite Agreement, is £832,553, including all necessary design activities. The provision exists to fund this work, by virtue of an allocation of £490,000 in the Local Transport Plan (LTP) Carriageway Structural Maintenance Settlement for 2010/11, and by the remainder of the funding requirements being met from an allocation which will be set aside from the 2011/12 LTP settlement.
- 6.4 The Council's staffing costs for the continued overseeing of the viaduct strengthening project will be met from the LTP allocation for Bridge Assessment, Strengthening and Structural Maintenance. Provision exists to cover the estimated ongoing £20,000 p.a. commitment.

## **7.0 STAFFING IMPLICATIONS**

- 7.1 Officers from Technical Services Department continue to represent the Council, as a key strategic stakeholder and partner in the Tri-Partite Agreement for the viaduct strengthening project at Project Board, Project Steering Group, Site Progress and Traffic Management Co-ordination meetings.
- 7.2 The resurfacing works on the viaduct will be monitored and inspected to ensure compliance with the necessary standards by the HA's Project Manager as part of their obligations under the Tri-Partite agreement. Any resurfacing works on the remainder of Council's network undertaken by Costain will be monitored and inspected by existing staff within Technical Services Department.
- 7.3 There are no further staffing implications arising from this report.

## **8.0 EQUAL OPPORTUNITIES/EQUALITY IMPACT ASSESSMENT**

- 8.1 There are no implications under this heading.

## **9.0 PLANNING IMPLICATIONS**

- 9.1 There are no implications under this heading.

## **10.0 COMMUNITY SAFETY IMPLICATIONS**

- 10.1 There are no implications under this heading.

## **11.0 HUMAN RIGHTS IMPLICATIONS**

11.1 There are no implications under this heading.

## **10.0 LOCAL AGENDA 21 IMPLICATIONS**

10.1 There are no implications under this heading.

## **12.0 SOCIAL INCLUSION IMPLICATIONS**

12.1 There are no implications under this heading.

## **13.0 ANTI-POVERTY IMPLICATIONS**

13.1 There are no implications under this heading.

## **14.0 ACCESS TO INFORMATION ACT**

14.1 Exempt information has been used in the preparation of this report.

## **15.0 LOCAL MEMBER SUPPORT IMPLICATIONS**

15.1 The scheme includes works within Leasowe & Moreton East, Wallasey, and Bidston & St James Wards.

## **RECOMMENDATIONS**

Cabinet is requested to:

- (1) Note the current position regarding progress of the strengthening works at Bidston Moss Viaduct;
- (2) Approve the acceptance of a single tender from Costain Ltd in the sum of £832,553, for the construction of carriageway resurfacing works on the A5139 Docks Link Roads and A554 North Wallasey Approach and Bidston Link Roads, and report this to Council pursuant to Contract Procedure Rule 5.2.

DAVID GREEN, DIRECTOR  
TECHNICAL SERVICES