

# Finance and Resources Committee

10.00am, Thursday, 7 March 2019

## Award of Contract for Burnshot Bridge Construction

Item number	7.7
Executive/routine	Executive
Wards	1 – Almond
Council Commitments	<a href="#">16 and 17</a>

### 1. Recommendations

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- 1.1 It is recommended that the Finance and Resources Committee approves the appointment of Balfour Beatty Civil Engineering Limited to undertake the construction of Burnshot Bridge for a contract sum of £2,984,495, procured through the Scape Procure Scotland 'National Civil Engineering and Infrastructure Framework – Scotland' framework agreement.

**Paul Lawrence**

Executive Director of Place

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## Award of Contract for Burnshot Bridge Construction

### 2. Executive Summary

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- 2.1 Burnshot Bridge was demolished in November 2017 due to deterioration of the structure. A new bridge has been designed and Balfour Beatty Civil Engineering Limited (BBCEL) have submitted a tender to undertake the construction works for a cost of £2,984,495. The total project cost is budgeted at £4,585,227 for which sufficient funding is included in the Council's Capital Investment Programme. This report seeks the approval of the Finance and Resources Committee to award the contract for the Burnshot Bridge construction to BBCEL, through the Scape Procure Scotland 'National Civil Engineering and Infrastructure Framework – Scotland' framework agreement.

### 3. Background

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- 3.1 The original structure was constructed in 1964 to carry Burnshot Road over the A90 dual carriageway. The bridge deck contained a central span suspended on 'half-joints'; a construction form which was popular at the time but has since been proven to be prone to corrosion and is no longer permitted in new construction. It was this corrosion which initially forced a weight restriction to be placed on the structure, then later the closure of the bridge to vehicular traffic in November 2016 to address the immediate health and safety concern.
- 3.2 A mathematical computer model of the bridge was prepared and this was used to calculate the various forces acting on the bridge. This sophisticated modelling confirmed an earlier analysis which suggested that the bridge should be closed to all traffic.
- 3.3 Regular inspections were undertaken throughout 2017 to monitor the deterioration of the bridge deck. Loose concrete was removed to maintain the safety of A90 road users. The bridge was closed to all users in May 2017.
- 3.4 Studies were undertaken to investigate possible re-use or refurbishment of the existing structure, but it was concluded that re-construction was required. The bridge was therefore demolished in November 2017.

- 3.5 Following confirmation of funding within the Council's Capital Investment Programme in February 2018, a new bridge was designed by engineering consultants Mott Macdonald Limited. The designed bridge is a single-span, concrete structure with provision for 2-way traffic and Active Travel users. Further details of the design solution are contained in the Business Bulletin to the Transport and Environment Committee on 28 February 2019.

## 4. Main report

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### **Procurement Process**

- 4.1 Following the closure of the bridge, it was identified that early engagement with a suitably experienced contractor would be required to draw on their expertise of demolition and construction processes, buildability issues, programming and cost estimating, particularly in relation to possible refurbishment of the structure and during the design of the new structure.
- 4.2 The Scape Procure Scotland 'National Civil Engineering and Infrastructure Framework – Scotland' framework agreement (the Framework) is a contract that the Council has access to and is particularly suited to projects requiring early engagement with a contractor as it clearly defines an initial pre-construction stage separated from the subsequent construction stage by a gateway review point.
- 4.3 This contract for the construction of Burnshot Bridge is the first contract within the Council which will use the Framework. The Framework was introduced on 29 January 2019 following expiry of the previous Scape Group 'National Civil Engineering and Infrastructure Framework' framework agreement, which was used for the Burnshot Demolition and Design contracts, and other Council contracts.
- 4.4 Scape Procure Scotland Limited is a local authority controlled company that has set up a number of framework agreements in respect of different types of construction work. Local authorities may call-off relevant contractors from a particular framework and all 'Delivery Agreements' called off are based on the industry standard NEC4 Conditions of Contract.
- 4.5 BBCEL is the single supplier appointed to the Framework following an open procurement process, which included both quality and financial award criteria, in accordance with EU procurement regulations.
- 4.6 Following conclusion of the Feasibility Reports, BBCEL were directly appointed in October 2017 to undertake the demolition of the original structure, and were directly appointed to undertake the design of the new bridge.
- 4.7 BBCEL undertook a procurement process to competitively tender the design of the new bridge and engineering consultants Mott Macdonald Limited were appointed.
- 4.8 BBCEL were appointed to undertake geotechnical and drainage surveys required to inform the design process. These were completed in October 2018.

- 4.9 Following completion of the pre-construction stage, a tender of £2,984,495 has been received from BBCEL, to construct the new bridge. This has been scrutinised by Council technical staff and negotiated with the Contractor to ensure value for money.

### **Support to the Council**

- 4.10 Aecom Ltd were appointed under the Council's Professional Services Framework Agreement 2015 to provide support in relation to the demolition sequencing, Construction Design and Management (CDM) regulations, Technical Approval and developing the scope for the design of the new structure.

## **5. Next Steps**

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- 5.1 Subject to approval of the recommendations in this report, BBCEL would be formally appointed in March 2019 to undertake the construction of the bridge.
- 5.2 It is anticipated that construction would commence shortly thereafter and will take approximately 10-11 months.
- 5.3 Regular briefing notes will continue to be issued to local Councillors, Community Councils and selected local businesses. These will provide updates throughout the construction stages of the project. The public, including local residents, will be kept informed of any construction works which may affect them.

## **6. Financial impact**

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- 6.1 BBCEL have submitted a tender of £2,984,495 to undertake the construction stage works.
- 6.2 The total budgeted cost of the project is £4,585,227. This is comprised of £820,677 for the demolition (including Early Contractor Involvement) works, £323,155 for the design services and £3,441,395 for the construction works. These figures include external consultancy costs, Council staff costs, public utility costs and optimism bias relating to the risk associated with the construction works.
- 6.3 All of the costs associated with the demolition and design contracts were contained within the Council's Capital Investment Programme 2017-2019. All of the costs associated with the construction works contract can be contained within the Council's Capital Investment Programme 2019-2020.
- 6.4 BBCEL's people costs, overheads and profit elements were competitively tendered in their appointment to the Framework and are defined therein. The remaining costs within their tender are typically made up of sub-contracted work packages which have been market tested, thus ensuring that competitive prices and value for money can be demonstrated.

- 6.5 The cost associated with procuring this contract is estimated as £20,000, which includes a proportion of Council staff costs to date, as well as fees associated with using the Framework.
- 6.6 Due to the level of certainty of the scope of the construction works, the contract will be awarded on a Fixed Price basis. The Fixed Price can only increase if there are changes to the scope or other matters arise which are defined as being the Council's risk under the contract (for example exceptionally adverse weather). A contingency amount is included within the total project cost to allow for such risks.
- 6.7 This report outlines a total capital investment of £4,585,227. If fully funded by loans fund advances the overall loans charges associated with this over a 20 year period would be a principal repayment of £4,585,227 and interest of £2,920,019, resulting in a total cost of £7,505,246, based on a loans fund interest rate of 5%.
- 6.8 It should be noted that the Council's Capital Investment Programme is funded through a combination of General Capital Grant from the Scottish Government, developers and third party contributions, capital receipts and borrowing. The borrowing required is carried out in line with the Council's approved Treasury Management Strategy, provided for on an overall programme basis rather than for individual capital projects. Following instruction from Members, notional loan charge estimates have been provided above on the assumption of borrowing in full for this capital project.

## **7. Stakeholder/Community Impact**

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- 7.1 Since the closure of the bridge to all users in May 2017, regular briefing notes have been issued to local Councillors, Community Councils and selected local businesses. These provided updates throughout the feasibility, demolition and design stages of the project.
- 7.2 In advance of the demolition, Open Events were held in Kirkliston to fully inform local residents of the demolition works, and the Communications team published press releases to local media.
- 7.3 A Major Stakeholder consultation meeting was held in February 2018 to seek feedback on initial design proposals. These comments were incorporated in the scope for the design.
- 7.4 The proposed Active Travel layout has been agreed following consultation with a number of Stakeholders including our Active Travel team, SPOKES and Sustrans, and considering possible future expansion of the Active Travel network in the area.
- 7.5 A Business Bulletin was submitted to the Transport and Environment Committee meeting of 28 February 2018.
- 7.6 Stakeholder engagement will continue throughout the construction stage of the project.

- 7.7 The project contributes towards Council priorities 16 (Invest £100m in roads and pavements over the next 5 years) and 17 (Guarantee 10% of the transport budget on improving cycling in the city).
- 7.8 The impacts of this report in relation to the three elements of the Climate Change (Scotland) Act 2009 Public Bodies Duties have been considered, and the outcomes are summarised below. Relevant Council sustainable development policies have been taken into account and are noted at background reading later in this report.
- 7.8.1 The proposals in this report will reduce carbon emissions because travel time for vehicles will be reduced compared to the diversion currently in place, and Active Travel will be encouraged due to the new pedestrian/cyclist facilities incorporated within the design.
- 7.8.2 The proposals in this report will help achieve a sustainable Edinburgh because the bridge will facilitate travel between local facilities and be inclusive to all users. Additionally, the Key Performance Indicators defined in the Framework, which the contractor will be regularly monitored against, include targets for the amount of non-hazardous waste diverted from landfill, energy use during construction, local employment and the use of local suppliers.
- 7.8.3 Restoring Burnshot Bridge will help contribute towards a sustainable Edinburgh by ensuring that this key route is re-available for use, thus maintaining the current levels of social inclusion and equality of opportunity that are within the circle of influence of this project.
- 7.8.4 In line with good practice on construction sites, appropriate steps will be taken by the contractor to ensure that any temporary pedestrian diversions put in place do not unnecessarily disadvantage those with mobility issues.

## **8. Background reading/external references**

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- 8.1 [Scape Procure Scotland Framework Agreement](#)
- 8.2 [Burnshot Bridge update](#), Transport and Environment Committee 28 February 2019
- 8.3 [Resilient Edinburgh Climate Change Adaptation Framework](#)
- 8.4 [Sustainable Design and Construction Policy Statement](#)
- 8.5 [Sustainable Edinburgh 2020](#)
- 8.6 [Sustainable Procurement Policy](#)
- 8.7 [Sustainable Travel Plan](#)
- 8.8 [Transport 2030 Vision](#)

**9. Appendices**

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Appendix 1 Summary of Tendering and Evaluation Process.

### Summary of Tendering and Tender Evaluation Process

Contract	Burnshot Bridge construction
Contract Period	April 2019 – March 2020
Estimated Contract Value	£2,984,495
Procurement Route Chosen	Use of national framework (Scape Procure Scotland 'National Civil Engineering and Infrastructure Framework – Scotland')
Invitations to Tender Issued	One (Balfour Beatty are the single supplier on the Framework)
Tenders Returned	One
Tenders Fully Compliant	One
Recommended Supplier	Balfour Beatty Civil Engineering Limited
Primary Criteria	<p>Compliant tender in accordance with the requirements of the Framework, including the Framework requirement for market testing of all sub-contract packages to demonstrate value for money.</p> <p>The appointment of BBCEL to the Framework itself followed a competitive OJEU compliant tender process with a 60:40 Quality:Price ratio.</p>
Evaluation Team	The tender was scrutinised by experienced bridge engineers from the Place Directorate.