

<b>Committees:</b>	<b>Dates:</b>	
Culture Heritage and Libraries Projects Sub	24/11/2014 09/12/2014	
<b>Subject:</b> Replacement of High Level Walkway Roof Coverings including New Insulation and Replace/Repair of North and South Tower Roofs – Tower Bridge	<b>Gateway 1 &amp; 2 Project Proposal</b>	<b>Public</b>
<b>Report of:</b> City Surveyor	<b>For Decision</b>	

### **Project Summary**

<p><b>1. Context</b></p>	<p>Tower Bridge exhibition is open 362 days per year attracting around 550,000 visitors and the walkways provide unique views of East and West London as well as housing exhibitions.</p> <p>The walkways are also available for hire with approximately 100-120 private and corporate events taking place each year which include receptions and dining as well as tailor-made settings to meet the clients' needs.</p> <p>As a unique award winning venue it is important to provide a welcoming environment for visitors/clients as well as ensuring that the integrity of the structure is accordingly maintained.</p>
<p><b>2. Brief description of project</b></p>	<p>The two high level walkways span between the North and South Towers. The first aspect of the project comprises the replacement of the profiled metal roof covering whilst also upgrading the insulation in these roofs. This will remedy a long standing problem of leaking roofs and minimising heat loss.</p> <p>The second aspect is to replace/repair the roofs on the North and South Towers as needed. A problem in the North Tower results in significant water ingress during heavy rain despite numerous patch repairs over the past 10 years. The extent of the works on the towers will be decided following an appropriate survey.</p> <p>These works form part of the Tower Bridge 50 year plan and as part of the long term plan, funding has been allocated in the Bridges Repairs, Maintenance and Major Works Fund pending member approval</p>
<p><b>3. Consequences if project not approved</b></p>	<p>There have been problems at various times with water penetration through these roofs during heavy rain and wind, particularly the walkway roofs and North Tower roof. Temporary repairs have been carried out using abseiling contractors but further problems can be expected in the future. Continued water ingress is likely to cause internal fabric and potentially structural damage if allowed to continue long term.</p> <p>The heat losses to the walkways are excessive due to their very exposed location. Additional heating pipework and radiators were installed in the walkways in 2013. The proposed</p>

	<p>insulation to the roofs will reduce the heat losses from the walkways and so improve the effectiveness of the heating. . It is anticipated that the project will give rise to savings on running costs including energy and on-going maintenance</p> <p>If the proposed work is not carried out the condition of the property asset will continue to deteriorate increasing the operational maintenance costs and the existing operational difficulties will increase</p>
<b>4. Success criteria</b>	<p>No water penetration</p> <p>Reduced heating costs</p> <p>The property asset is safeguarded</p> <p>Reduced ongoing maintenance costs</p> <p>Minimise number and length of road closures (NB. The Tower Bridge Bascule re-decking project also requires a significant road closure)</p>
<b>5. Notable exclusions</b>	<p>No insulation works are recommended for the North and South Tower roofs because only repairs to particular areas are expected on these roofs. If on investigation, more extensive work is needed then installation of insulation will be considered</p>
<b>6. Governance arrangements</b>	<p><b>Spending Committee:</b> Planning and Transportation Committee</p> <p><b>Senior Responsible Officer:</b> Alison Hurley</p> <p><b>Project Board:</b> No</p>

### Prioritisation

<b>7. Link to Strategic Aims</b>	<p>SA2: To provide modern, efficient and high quality local service and policing within The Square Mile for workers, residents and visitors with a view to delivering sustainable outcomes.</p> <p>SA3: To provide valued services to London and the nation</p>
<b>8. Links to existing strategies, programmes and projects</b>	<p>S2 City Destination: To transform the sense of The City as a destination</p> <p>(See section 12)</p>
<b>9. Project category</b>	7a. Asset enhancement/improvement (capital)
<b>10. Project priority</b>	B. Advisable

### Options Appraisal

<b>11. Overview of options</b>	<ol style="list-style-type: none"> <li>1) Do nothing – this would require a continuation of the existing reactive maintenance regime.</li> <li>2) Defer the entire project and continue with further patch</li> </ol>
--------------------------------	---

	<p>repairs i.e. continue as 1) above until the project is implemented (period to be determined)</p> <p>3) Complete the work on the roofing and insulation above the walkways and defer or cancel the roof replacement/repair on the North and South Towers – whilst it is not essential to complete the Tower roofs at the same time as the walkway, it will be financially and operationally advantageous to complete the work as a single project. This would also mean that the significant leak to the North Tower roof will continue (period of deferral to be determined)</p> <p>4) Do both the walkways and tower roofs as proposed</p> <p>The merits of each option to be evaluated prior to next Gateway (See 28)</p>
--	--

## **Project Planning**

<p><b>12. Programme and key dates</b></p>	<p><b>Overall programme:</b></p> <p><b>Key dates:</b></p> <p>Gateway Report 1 and 2 to Corporate Projects Board 7 November 2014 and Project Sub Committee 9 December 2014</p> <p>Appoint consultants to prepare budget estimate and outline design Dec 2014</p> <p>Undertake survey works Jan 2015</p> <p>Gateway 3/4 to Project Sub &amp; P&amp;T Committees Mar/Apr 2015</p> <p>Detailed design starts Apr 2015</p> <p>Statutory approvals received Jul 2015</p> <p>Detailed design complete Jun 2015</p> <p>Invite tenders July 2015</p> <p>Tenders received Aug 2015</p> <p>Gateway 5 - Sept 2015</p> <p>Appoint contractor Oct 2015</p> <p>Start on site Dec 2015</p> <p>Complete Apr 2016</p> <p>An alternative programme will be followed if project is to be done in tandem with the bascule re-decking project (see below)</p> <p><b>Other works dates to coordinate:</b></p> <p>Installation of floor glass panels in the high level walkways – completion due Dec 2014</p> <p>Control room relocation – works have started, due for completion Oct 2015</p>
---	--

	<p>Bridge Master's Phase II project - programmed dates Oct/Nov 2014 to Oct/Nov 2015</p> <p>Refurbish the shop – this will follow on from Bridge Master's Phase II project late 2015/early 2016</p> <p>Upgrade to heating system for Towers and Walkways – programmed for summer 2015 if approved</p> <p>Re-decking of bascules/pavement 3 month road closure – current schedule is for late 2016</p> <p>Further works will be undertaken to determine if any opportunities exist to combine works with any of the above projects. As the re-decking project also includes significant road closures it makes sense to investigate the possibility of completing both projects at the same time – See section 22</p>
<b>13. Risk implications</b>	<p><b>Overall project risk:</b> Medium</p> <p>Delay or refusal of obtaining statutory consents</p> <p>Conditions imposed by statutory consents</p> <p>Scope of work and programme could change as project progresses.</p> <p>Adverse weather during works</p> <p>Consent from TfL for road closure and scaffolding (hence proposal to combine with bascule re-decking programme)</p> <p>Scheduling programme around other planned works at Tower Bridge</p>
<b>14. Stakeholders and consultees</b>	<p>Culture, Heritage and Libraries, Chamberlain's, Comptroller and City Solicitor's, Tower Hamlets/Southwark planners, English Heritage, TfL.</p>

### Resource Implications

<b>15. Total estimated cost</b>	<b>Likely cost range: £300,000 - £500,000</b>
<b>16. Funding strategy</b>	This is to be funded from the Bridge Repairs, Maintenance and Major Works Funds through Tower Bridge 50 year plan
<b>17. On-going revenue implications</b>	<p>The proposed repair works will result in a reduction in expenditure on repairs and maintenance in the medium and long term.</p> <p>There is also potentially a reduction in energy use which would result in reduced CRC charges. This is not guaranteed at present as it is possible that the same levels of energy are used to achieve a more comfortable environment than is currently possible.</p>
<b>18. Investment appraisal</b>	Not applicable

<p><b>19. Procurement strategy</b></p>	<p>Each of the surveying, design consultancy, QS and PM services will all be sourced in accordance with the procurement regulations utilising a competitive process evaluated on price. Where appropriate, options to retain these services, will be consider for later in the project based on performance.</p> <p>The main work will be tendered via the London Portal with up to 5 suppliers invited to bid.</p>
<p><b>20. Legal implications</b></p>	<ol style="list-style-type: none"> <li>1. The City of London Corporation, as trustee of Bridge House Estates, has a statutory duty under the Corporation of London (Tower Bridge) Act 1885 to maintain Tower Bridge</li> <li>2. Transport for London (TfL) is the highway authority and COL will have to apply for the appropriate licence to erect scaffolding/access equipment on the highway as required.</li> </ol>
<p><b>21. Corporate property implications</b></p>	<p>Works will be scheduled with the Tower Bridge Operational Team to minimise disruption to the Tower Bridge Exhibition and normal operational activities</p>
<p><b>22. Traffic implications</b></p>	<p>Road closures are likely while scaffold is put up/taken down</p>
<p><b>23. Sustainability and energy implications</b></p>	<p>The project would have a significant reduction to heat loss, making it easier to reach and maintain the temperature within the walkways. The likely reduction has not yet been quantified. The energy team are to be further engaged prior to the next gateway.</p>
<p><b>24. IS implications</b></p>	<p>Not Applicable</p>
<p><b>25. Equality Impact Assessment</b></p>	<p>Tower Bridge is committed to achieving equality and diversity in accordance with the City of London Equality Scheme and as such welcomes visitors and clients from London, the United Kingdom and overseas whilst eliminating any forms of discrimination.</p> <p>Equality Impact Assessments are carried out for any new of significantly changed policies - there is no significant equality impact expected from the completion of this project</p>

**Recommended Course of Action**

<p><b>26. Next steps</b></p>	<p>Employ a consultant to evaluate the options (see 11) and provide detailed design options and estimated costs as a prerequisite for preparation of the tender documents.</p> <p>Undertake survey works to fully scope the extent of the works on the towers.</p> <p>The brief for the detailed design options would be as follows:</p>
------------------------------	--

	<ul style="list-style-type: none"> <li>• Assessment of the technical options for the walkway roof recovering and the roof recovering to the North and South Towers. This would include materials, appearance, insulation type, life expectancy and maintenance implications.</li> <li>• Investigation and assessment of Statutory Consents needed for the work. Listed Building Consent and Planning Consent would have an influence on the appearance of the work. Building Regulations approval would affect the insulation performance and heat losses.</li> <li>• Assessment of how the work can be carried out e.g. scaffolding, goods hoist, road closures, etc.</li> </ul> <p>The brief for the estimated costs would be as follows:</p> <ul style="list-style-type: none"> <li>• Estimated cost of the proposed work as the outline design details.</li> <li>• Cost of different options for the North Tower roofs and the walkway roofs.</li> <li>• Estimated costs for temporary work and access arrangements i.e. scaffolding, out of hours working etc.</li> </ul>
--	--

<b>27. Approval track and next Gateway</b>	<b>Approval track:</b> 2. Regular <b>Next Gateway:</b> Gateway 3/4 - Options Appraisal (Regular)
--	---

<b>28. Resource requirements to reach next Gateway</b>	<table border="1"> <thead> <tr> <th data-bbox="528 1108 724 1211">Item</th> <th data-bbox="724 1108 951 1211">Reason</th> <th data-bbox="951 1108 1177 1211">Cost (£)</th> <th data-bbox="1177 1108 1406 1211">Funding Source</th> </tr> </thead> <tbody> <tr> <td data-bbox="528 1211 724 1429">Survey work</td> <td data-bbox="724 1211 951 1429">To fully scope the extent of the works on the towers</td> <td data-bbox="951 1211 1177 1429">£10,000</td> <td data-bbox="1177 1211 1406 1429">Bridges Repairs, Maintenance and Major Works Fund</td> </tr> <tr> <td data-bbox="528 1429 724 1682">Appoint consultant to prepare outline design</td> <td data-bbox="724 1429 951 1682">To progress design incorporating scope, materials, methods</td> <td data-bbox="951 1429 1177 1682">£15,000</td> <td data-bbox="1177 1429 1406 1682">Bridges Repairs, Maintenance and Major Works Fund</td> </tr> <tr> <td data-bbox="528 1682 724 1935">Appoint QS to prepare cost estimate and tender documents</td> <td data-bbox="724 1682 951 1935">To establish estimated cost of options</td> <td data-bbox="951 1682 1177 1935">£6000</td> <td data-bbox="1177 1682 1406 1935">Bridges Repairs, Maintenance and Major Works Fund</td> </tr> <tr> <td data-bbox="528 1935 724 2094">Appoint external PM to manage</td> <td data-bbox="724 1935 951 2094">No in house resource available</td> <td data-bbox="951 1935 1177 2094">£5000</td> <td data-bbox="1177 1935 1406 2094">Bridges Repairs, Maintenance and Major</td> </tr> </tbody> </table>				Item	Reason	Cost (£)	Funding Source	Survey work	To fully scope the extent of the works on the towers	£10,000	Bridges Repairs, Maintenance and Major Works Fund	Appoint consultant to prepare outline design	To progress design incorporating scope, materials, methods	£15,000	Bridges Repairs, Maintenance and Major Works Fund	Appoint QS to prepare cost estimate and tender documents	To establish estimated cost of options	£6000	Bridges Repairs, Maintenance and Major Works Fund	Appoint external PM to manage	No in house resource available	£5000	Bridges Repairs, Maintenance and Major
Item	Reason	Cost (£)	Funding Source																					
Survey work	To fully scope the extent of the works on the towers	£10,000	Bridges Repairs, Maintenance and Major Works Fund																					
Appoint consultant to prepare outline design	To progress design incorporating scope, materials, methods	£15,000	Bridges Repairs, Maintenance and Major Works Fund																					
Appoint QS to prepare cost estimate and tender documents	To establish estimated cost of options	£6000	Bridges Repairs, Maintenance and Major Works Fund																					
Appoint external PM to manage	No in house resource available	£5000	Bridges Repairs, Maintenance and Major																					

	works to next gateway			Works Fund
	Sub Total		£36,000	
	Staff costs	Further works progressing the project	£4000	City Surveyor's local risk budget
	TOTAL		£40,000	

**Contact**

<b>Report Author</b>	Cornell Farrell
<b>Email Address</b>	cornell.farrell@cityoflondon.gov.uk
<b>Telephone Number</b>	020 7332 3469