

Committee(s):	Date(s):	
Projects Sub Streets & Walkways	16 May 2013 20 May 2013	
Subject: Detailed Design and Authority to Start Work (Gateway 4c/5) – Cheapside Stage 4A Gresham Street	Public	
Report of: Philip Everett, Director of the Built Environment	For Decision	

Summary

Dashboard

- Project Status – Green;
- Timeline – Implementation from July 2013, works lasting eight weeks;
- Total Estimated Cost – £91,000 (inc. staff costs);
- Spend to Date – £70,500 (inc. staff costs); and
- Overall Project Risk – Green.

Context

Gresham Street was closed in 1993 to eastbound motor traffic as part of the City's original Traffic & Environmental zone (security zone). The zone was extended in 1996 to cover a larger part of the City. The legacy arrangements at Gresham Street remained but now no longer serve the original intended security purpose.

In June 2010, Gresham Street was re-opened to eastbound traffic to facilitate works along Cheapside and surrounding areas. During this temporary two-way arrangement there were a number of requests to make Gresham Street permanently open to traffic in both directions to improve accessibility in the area.

In July 2011, Members approved that a formal assessment should be undertaken. Gresham Street is currently opened to eastbound traffic under an experimental traffic order. A design options report was considered in April 2012 and a report dealing with three objections to the experimental traffic order considered in November 2012, where it was decided to proceed with permanent opening of Gresham Street.

Brief description of project

To permanently re-open Gresham Street to east-bound motor vehicles and to facilitate pedal cycle access from Angel Street to Gresham Street.

Option selected at previous Gateway

Six options were presented at the Gateway 4 reporting stage in April 2012. Option 4 was approved at a total cost of £143,500 (excluding £19,500 for detailed design) to be funded from the £250,000 Cheapside reserve. This option which includes: a two-way arrangement, a raised table at the Gresham Street/Aldersgate Street junction. And a shared pedestrian and cycle footway on the western side of St Martin's Le Grand.

This option was agreed subject to a decision as to which materials should be used in the construction of the raised courtesy crossing. This report recommends construction of the

raised crossing in asphalt together with a contrasting anti-skid surface on a trial basis with the results to be reported back to Members. The trial will assess the effectiveness of this design in delivering expected vehicle speed reduction and cost implications in construction and maintenance.

Following three objections received to the experimental traffic order an objections report was considered by Members in November 2012. Members noted the objections but authorised officers to proceed with the selected option, subject to Members approval of the detailed design (Gateway 4c/5).

Recommendations

Detailed Design & Authority to start work recommendation

I recommend that Members:-

- Approve the detailed design covered in this report;
- Authorise officers to implement the detailed design, subject to the City Surveyor approving strengthening works to the pipe subway; and
- Approve a trial of the raised crossing with officers to report back to Members after 12 months of operation.

Project Success Criteria

The project aims to deliver the following:-

- Improved motor vehicle accessibility for local occupiers;
- Improved highway network resilience;
- Improved cycling accessibility, convenience and safety;
- Usability for pedestrians;
- Minimise the impacts of increased traffic using Gresham Street; and
- Minimise the impact upon road safety in general.

Progress Reporting

A Gateway 7 outcome report will be produced and include the results of the materials trial.

Procurement Strategy

The City's Highways term contractor will be used to deliver the works.

Tolerances

Cost – The total budget required is £91,000.

Time – It is expected that the project will be completed within 8 weeks; a road closure is required throughout the construction period. An outcome report to include the results of the material trial will be presented to Members following at least 12 months of operation of the scheme.

Overview

1. Evidence of Need	<p>In June 2010, Gresham Street was re-opened to eastbound traffic to facilitate works along Cheapside and surrounding areas. During this temporary two-way arrangement there were a number of requests to make Gresham Street permanently open to traffic in both directions to improve accessibility in the area. Officers observed that it provided improved local accessibility and acted to reduce demand on other streets in the local highway network.</p> <p>In July 2011, Members approved that a formal assessment should be undertaken. Gresham Street is currently opened to eastbound traffic under an experimental traffic order. Public consultation demonstrated a strong demand for opening Gresham Street to two-way traffic permanently and for improving cycling provisions from Angel Street to Gresham Street. Section 9 provides a summary of this consultation.</p>
2. Success Criteria	<p>Success criteria for this project:-</p> <ul style="list-style-type: none">● Improved motor vehicle accessibility for local occupiers;● Improved highway network resilience;● Improved cycling accessibility, convenience and safety;● Usability for pedestrians;● Minimise the impacts of increased traffic using Gresham Street; and● Minimise the impact upon road safety in general.
3. Project Scope and Exclusions	<p>The works will take place at the Gresham Street/Aldersgate Street junction and along Gresham Street. The design takes into consideration all street users and has investigated the impacts on the local highway network. There are no notable exclusions.</p> <p>During the detailed design, the City of London's pipe subway that runs along St Martin's Le Grand and terminates at the entrance to the Gresham Street junction was investigated. The City Surveyor has advised that in order to facilitate the proposed design the end cap of the pipe subway structure requires strengthening. It is proposed to include this work in the construction. These additional works can be undertaken at the same time as the junction is built and will result in no extension of the construction programme. The costs of these works are covered in the financial implications section.</p> <p>The project will include a trial in the use of asphalt with an anti-skid finish at a raised courtesy crossing. This will analyse the safety benefits (including attitudes of users) of these materials and assess any construction and maintenance savings.</p>
4. Link to Strategic Aims	<p>Highways are a core infrastructure to facilitate community needs and improving the network accords with the City's strategic aims</p>

	<p>including:-</p> <ul style="list-style-type: none"> To provide modern, efficient and high quality local services and policing within the Square Mile for workers, residents and visitors with a view to delivering sustainable outcomes. 																
5. Within which category does the project fit	Category 7a: Asset Enhancement/Improvement.																
6. What is the priority of the project?	Advisable.																
7. Governance arrangements	<p>It was agreed at Gateway 4 that this project should proceed to implementation without referring back to committee subject to the following:-</p> <ol style="list-style-type: none"> Sufficient funding being available from the Cheapside project reserve funds; The estimated cost of delivery does not increase by more than 15% of the estimated cost; No material amendments are required to the approved option; and No significant adverse outcome following the experimental scheme. <p>Due to the additional consideration regarding the materials used in the design and the objections received in relation to the experimental scheme officers believe it is appropriate that this report is considered by Members.</p>																
8. Resources Expended To Date	<p>To date, the following resources have been expended on the evaluation and detailed design of the Cheapside 4A project:-</p> <table border="1"> <thead> <tr> <th>Gresham St Evaluation & Detailed Design</th> <th>Budget</th> <th>Spend to date</th> <th>Remaining</th> </tr> </thead> <tbody> <tr> <td>Staff Costs</td> <td>£55,390</td> <td>£49,670</td> <td>£5,720</td> </tr> <tr> <td>Fees</td> <td>£21,110</td> <td>£20,810</td> <td>£300</td> </tr> <tr> <td>GRAND TOTAL</td> <td>£76,500</td> <td>£70,480</td> <td>£6,020</td> </tr> </tbody> </table> <p>The remaining budget is expected to be spent on finalising and agreeing the detailed design of the strengthening works to the pipe subway.</p>	Gresham St Evaluation & Detailed Design	Budget	Spend to date	Remaining	Staff Costs	£55,390	£49,670	£5,720	Fees	£21,110	£20,810	£300	GRAND TOTAL	£76,500	£70,480	£6,020
Gresham St Evaluation & Detailed Design	Budget	Spend to date	Remaining														
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9. Results of stakeholder consultation to date	<p>Public consultation was carried out in January 2012 together with an experimental scheme implemented in February 2012. The desire of the majority of stakeholders was to see Gresham Street opened to two-way traffic permanently and for improvements to cycling facilities to be implemented. Some 80% of respondents to the public consultation supported the proposals.</p>																

	Three objections to the experimental scheme were considered by the Streets & Walkways committee, who agreed to proceed with the scheme.
10. Consequences if project not approved	<p>Should the project not obtain approval it would result in:-</p> <ul style="list-style-type: none"> • The benefits realised during the experimental traffic order such as improved accessibility to vehicular traffic and cyclists, and the improved highway network resilience being lost; • Reputational damage to the City. The majority of those consulted in the process of this project wish to see Gresham Street opened to two-way traffic and for cycling facilities to be improved; • Financial costs. It would cost circa £11,500 to re-instate the junction; and • The lower traffic flows (approximately half that of the current two-way operation) and associated environmental conditions of Gresham Street's one-way operation being retained.

Detailed Design

11. Brief description/ design summary	<p>The option approved by Members at Gateway 4 consists of:-</p> <ul style="list-style-type: none"> • Opening Gresham Street to eastbound traffic, enabling two-way functionality; • A raised courtesy crossing at the Gresham Street/Aldersgate Street junction. Following consideration of a material review, it is proposed that the raised table be constructed from asphalt with a contrasting anti-skid finish as opposed to granite. This will reduce vehicle speed and improve safety and accessibility at the junction; and • A shared pedestrian/cyclist footway on the western side of St Martin's Le Grand, enabling cyclists to access Gresham Street from Angel Street. <p>Following investigations, and consultation with the City Surveyor, the design will now incorporate strengthening works to the pipe subway adjacent to the Gresham Street junction.</p>
12. Confirmation that design solution will meet service requirements	<p>By opening Gresham Street to eastbound traffic local accessibility will be improved, benefitting some 1,200 vehicles per day (between 7am-7pm on weekdays) making local trips. While the opening would result in double the amount of vehicular traffic using Gresham Street, the total traffic volumes would still be half that of other comparable Local Access streets; such as Leadenhall Street and Ludgate Hill. Furthermore, the additional traffic using Gresham Street would reflect no net increase of traffic on the local highway network as traffic would be transferred from other routes (namely Cheapside). The two-way functionality would act to improve highway network resilience.</p>

	<p>It is anticipated that the raised courtesy crossing will reduce vehicle entry speeds and benefit safety and accessibility at the junction. The table will be constructed from asphalt with a contrasting anti-skid finish. This material provides cost savings over granite both in construction and ongoing maintenance and enables officers to trial the use of this material in providing road safety and maintenance benefits at raised crossings.</p> <p>A shared pedestrian and cycle footway on the western side of St Martin's Le Grand with dropped kerbs enables easy access between Angel Street and Gresham Street for cyclists. The dropped kerbs have been sited to ensure the best visibility and safety for cyclists, cycle logos are used to raise awareness of the shared footway and reduce the likelihood of conflicts between pedestrians and cyclists.</p> <p>Pedestrian refuges were considered at the Gresham Street/Aldersgate Street junction and at other locations along Gresham Street. However, due to the carriageway widths it was unachievable in practical terms to implement pedestrian refuges of an adequate width. This presents no significant safety concerns, observations and traffic flow data have shown that there are frequent gaps in the traffic flow; to enable pedestrians to cross without undue delay.</p> <p>Amendments to the four taxi rest bays at the western end of Gresham Street were considered as part of the detailed design but achievable adjustments to the current layout (i.e. relocating bays) provided no significant benefit in terms of junction operation or safety.</p> <p>Following consultation with the City Surveyor, officers have instructed an approved consultant to produce a design for the strengthening works to the pipe subway. This work is currently being undertaken and will be completed imminently. The design will require sign off by the City Surveyor prior to implementation.</p>
<p>13. Key benefits</p>	<p>Permanently reintroducing two-way functionality will benefit vehicular accessibility and increase the local highway network resilience. Improvements to cycle facilities will offer greater convenience, permeability and safety for cyclists.</p>
<p>14. Programme and key dates</p>	<p>The construction of the proposed design is expected to be completed in eight weeks, should Members authorise implementation of the design construction would begin in July 2013.</p> <p>The trial of the raised courtesy crossing will be undertaken over a 12 month period from completion. With the results being incorporated within a Gateway 7 outcome report.</p>
<p>15. Constraints and assumptions</p>	<p>This detailed design is presented to Members on the assumption that the pipe subway strengthening works design is approved by the City Surveyor's Department.</p>
<p>16. Risk</p>	<p>Due to the correlation between traffic flow and collision rate it is</p>

<p>implications</p>	<p>possible that there will be an increase in injury collisions at Gresham Street. However, it is thought that there will be an overall neutral impact on the local highway network; as collisions will likely be reduced at other streets (e.g. Cheapside). Full details on this analysis can be found in the Gresham Street detailed options report which was considered by the Projects Sub and Streets & Walkways Committees in April 2012.</p> <p>The design for the strengthening works to the pipe subway has not yet been approved by the City Surveyor. Should the design not be approved there may be resulting financial and time implications. Note it was decided to proceed with this report prior to this approval in order to avoid delay to the project.</p> <p>The use of asphalt with an anti-skid finish at the Gresham Street/Aldersgate Street raised courtesy crossing will need to be evaluated to ensure it delivers the same road safety benefits as granite does in other locations. The crossing will be closely monitored during the trial period and a report on the effectiveness of this construction presented to Members following 12 months of operation.</p>
<p>17. Stakeholders and consultees</p>	<p>Stakeholders and consultees for this project include:-</p> <ul style="list-style-type: none"> • Local occupiers; • Users of Gresham Street; • Statutory consultees as part of the experimental traffic order process; • Transport for London (TfL); and • Relevant internal departments – Highways, Chamberlain, Comptrollers, Road Safety Team, Access Team, Environmental Enhancement Team, City Surveyor.
<p>18. Legal implications</p>	<p>N/A</p>
<p>19. HR implications</p>	<p>None.</p>
<p>20. Benchmarks or comparative data</p>	<p>N/A</p>
<p>21. RIBA Stage (where relevant)</p>	<p>N/A</p>
<p>22. External advice required</p>	<p>N/A</p>

Authority to Start Work

23. Proposals for delivery of the project	The City's Highways term contractor would be used to deliver the works.																				
24. Communications strategy	Given the short timescale for implementation no communications beyond the standard works notifications will be produced.																				
25. Quality control arrangements	Work will be completed and monitored commensurate with City standards.																				
<u>Financial Implications</u>																					
26. Total estimated cost (£)	<p>The total estimated cost is £91,000. The table below outlines the costs associated with the implementation; includes costs for the trial/outcome report and compares these against the previous estimate.</p> <table border="1"> <thead> <tr> <th>Tasks</th> <th>Previous Estimate</th> <th>Estimated Cost</th> <th>Variance</th> </tr> </thead> <tbody> <tr> <td>Works</td> <td>£115,000</td> <td>£66,000</td> <td>(£49,000)</td> </tr> <tr> <td>Staff Supervision</td> <td>£14,000</td> <td>£16,000</td> <td>£2,000</td> </tr> <tr> <td>Fees</td> <td>£14,500</td> <td>£9,000</td> <td>(5,500)</td> </tr> <tr> <td>Total</td> <td>£143,500</td> <td>£91,000</td> <td>(£52,500)</td> </tr> </tbody> </table> <p>The costs are significantly lower than previously estimated in the detailed options appraisal report (which was calculated with old term contractor rates and assumed a granite finish). It was previously estimated that this option would have a total cost of £143,500.</p> <p>The majority of savings result from a reduction in works costs which were previously estimated to be £115,000. Of the £49,000 that has been saved in works costs, £15,000 has been saved through the avoidance of drainage works and a further £20,000 through materials savings resulting from value engineering and refinements of the preliminary design. Further savings resulted from reduced rates within the new term contract.</p> <p>The above savings are being offset by the additional strengthening works being needed to the pipe subway, estimated to cost £12,000. These are included in the works cost in the above table.</p> <p>Using the refined detailed design a comparison has been undertaken in order to understand the savings achieved through the use of asphalt rather than granite. The works cost to deliver the raised crossing with granite would be £102,000</p>	Tasks	Previous Estimate	Estimated Cost	Variance	Works	£115,000	£66,000	(£49,000)	Staff Supervision	£14,000	£16,000	£2,000	Fees	£14,500	£9,000	(5,500)	Total	£143,500	£91,000	(£52,500)
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	<p>as opposed to the £66,000 for the current design as set out in the table above. Therefore, opting for an asphalt with anti-skid finish has resulted in a £36,000 saving. This saving is all as a result of the cheaper materials used in construction.</p> <p>Staff supervision costs include supervision during the works and project management costs, which incorporate the cost of producing the material trial and outcome report.</p> <p>The fees element covers the costs of traffic orders and as well as for surveys and a safety audit in the analysis of the trial of the raised courtesy crossing.</p>
27. Breakdown of capital expenditure	N/A
28. Contingency	None.
29. Source of project funding	<p>In April 2012 Members' approved that the sum of £143,500 from the Cheapside reserve be used to fund this project. This approval was subject to a materials review which has now been completed. The materials review including the non use of granite has resulted in a revised cost estimate of £91,000, a reduction of £52,500.</p> <p>The Cheapside Scheme has been funded in part by the On Street Parking Reserve (OSPR). In light of the expected reduced out turn cost and in accordance with the agreed funding strategy, an assessment will be made of the monies that can be returned to the OSPR as part of the Cheapside outcome report due later this year.</p>
30. Phasing of project expenditure	<p>2013/14 - £80,500 – Capital.</p> <p>2014/15 - £9,500 – Supplementary Revenue.</p>
31. Anticipated capital value/return (£)	N/A
32. Fund/budget to be credited with capital return	N/A
33. Estimated revenue implications (£)	N/A
34. Source of revenue funding	N/A
35. Fund/budget to be credited with income/savings	N/A
36. Anticipated life	N/A

37. Budgetary control arrangements	See section 7.
38. <u>Recommendation</u>	Recommended
39. Reasons	<p>It is recommended that the detailed design is approved and authority to implement is granted, subject to the City Surveyor approving strengthening works to the pipe subway. This design is expected to achieve all the success criteria as set out in this report.</p> <p>The permanent opening of the junction to two-way traffic will improve motor vehicle access and cycle provisions; whilst the other measures, in particular, the raised courtesy crossing will mitigate the safety implications likely to arise from the change.</p> <p>Provisions for pedestrians and cyclists have been adequately addressed with the needs of all users of this street fairly balanced.</p> <p>The use of asphalt with a contrasting anti-skid finish at the raised courtesy crossing has achieved cost savings and will be studied as part of a trial of this material at raised crossings.</p>

Appendices

Appendix 1	Detailed Design
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Contact

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Appendix 1 – Detailed Design