Committees: Projects Sub Committee *[for decision]* Streets & Walkways Sub Committee [*for decision]*	**Dates:** 19 July 2019 22 July 2019
Subject: Bank on Safety (Implementation of Enhancement Work) **Unique Project Identifier:** 11599	**Gateway 4/5: Options Appraisal and Authority to Start Work (Regular)**
Report of: Director of the Built Environment **Report Author:** Daniel Laybourn - City Transportation	**For Decision**
PUBLIC	

• **Status Update**	**Project Description:** To improve safety and reduce casualties at Bank Junction ahead of the delivery of the longer-term project (All Change at Bank). **RAG Status:** Amber (Green at last report to Committee) **Risk Status:** Medium (Low at last report to Committee) **Total Estimated Cost of Project** *£1,787,974* **Change in Total Estimated Cost of Project** Increase of **£398 716**. **Spend and Committed Funding to Date:** *£1,412,878 (as of 18/6/19)* **Slippage:** Approximately six months slippage to previous reported milestones. This is due to the complex nature of designing the work to accommodate the relocation of the traffic signal infrastructure. This took longer than anticipated. There may also be slippage on the delivery programme in order to avoid being partway through construction during the Lord Mayor's Show.
• **Requested decisions**	**Next Gateway:** *Gateway 6: Outcome Report*

	Next Steps: Subject to the approvals and decisions arising from this report; to proceed with final design elements and the construction of interim improvements to the junction as set out in the recommendations. **Recommendations:** It is recommended that the **Streets and Walkways** and **Projects Sub** Committees: 1. Agree that Option 1A, as the base option, (largest area of footway widening is undertaken using concrete paving) is agreed to proceed to construction; 2. Agree to the proposed prioritisation of the 'Additional Design Measures' in the Design Summary, and that should the selected base option not utilise all of the proposed budget, or additional funding be acquired from other sources, agree that an additional design measure can then proceed. This will be delivered in priority order; 3. Delegate authority to the Director of Built Environment to proceed with items in recommendation 2 above; 4. Delegate authority to the Director of the Built Environment to approve budget adjustments, above the existing authority within the project procedures and in consultation with Chamberlains, between budget lines if this is within the approved total project budget amount; 5. Note that subject to the outcome of the Capital Funding and Fundamental Review in September 2019, it could be necessary to reassess the material choice if this measure were to be in place for longer than anticipated; and 6. Agree that the Bartholomew Lane footway widening improvements proceed to construction using existing and separate local risk funding (as detailed in the last paragraph of the 'Overview of project options section) and if recommendation 1 (For Option 1A) is approved: 7. Agree a budget increase of **£398,716** taking the total project budget to £1,822,374 (Current approved budget is £1,423,658); and 8. Agree to the departures from the design standards set out in the City's Public Realm SPD (2016) to use

<table>
<tr><td></td><td>concrete paving and concrete scan kerbs (adhesive kerbs) as interim footway materials.</td></tr>
<tr><td>• Budget</td><td>(Please note - the budget below is for the Officers' recommended option only. Further information on the other options can be found in Appendix 4a – Financial Information (All Options)

Table 1: Option 1A Finance breakdown
<table>
<tr><th>Item</th><th>Reason</th><th>Funds/ Source of Funding</th><th>Cost (£)</th></tr>
<tr><td>Environmental Services Staff costs</td><td>To enable Highways staff to undertake the required work to Gateway 6</td><td>On-Street Parking Reserve (OSPR)</td><td>40,000</td></tr>
<tr><td>Planning and Transportation (P&T) Staff costs</td><td>To enable City P&T staff to undertake the required work to Gateway 6</td><td>On-Street Parking Reserve (OSPR)</td><td>40,400</td></tr>
<tr><td>Fees</td><td>To fund work by external parties required to reach Gateway 6.</td><td>On-Street Parking Reserve (OSPR)</td><td>38,000</td></tr>
<tr><td>Works</td><td>Funding for construction costs inclusive of the required TfL signal works</td><td>On-Street Parking Reserve (OSPR)</td><td>280,316</td></tr>
<tr><td>TOTAL</td><td></td><td>Requested</td><td>£398,716</td></tr>
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<u>On Street Parking Reserve request</u>
A separate paper, submitted to Resource Allocation Sub Committee on 4 July, sought permission to release up to £400,000 subject to the outcome of this Gateway 4/5 report. This was undertaken out of sequence to release the funding before summer recess to commission the final design elements needed to proceed to construction.

<u>Additional Estimated Staff Time information</u>
It's estimated that P&T staff will require approximately 400 work hours to manage all required project management aspects through to completion including stakeholder engagement and</td></tr>
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	communication of activities. Environmental Services (Highways) will also require 400 hours of staff time to complete the design and manage the construction of the scheme. **<u>Additional Estimated Fees information</u>** Irrespective of the base option chosen within this report, the estimated fees to external parties, should the scheme proceed, include: • Transport for London Traffic Management approval costs • Future Road Safety Audit • Notification of works letter drop • London Underground structure protection (site engineer) fees
• **Overview of project options**	It was approved in July 2018 by Streets and Walkways Committee that Officers "be instructed to investigate additional measures to further improve compliance, behaviour and performance within the vicinity of the junction" if the experimental traffic order was made permanent. A further report in September 2018 outlined in more detail what would be investigated. In early April 2019, as part of the Chamberlains' Capital Funding - Interim Revised Prioritisation and Project Funding Update report, Resource Allocation Sub-Committee and the Policy and Resource Committee subsequently approved the recommendation to allow Bank on Safety to continue during the review and identified £400,000 from the On-Street Parking Reserve (OSPR) for the construction of the further measures. Officers have investigated various options to resolve the issues below which were identified during the monitoring and consultation of the experimental order: • Reducing pedestrian and cycle conflict; • Improve current pedestrian comfort levels; • Improve pedestrian and cycle compliance and behaviour at pedestrian crossing points and throughout the junction; • Improve compliance with the traffic restriction; and • Investigate options to increase the amount of disabled parking within the Bank Monitoring Area. There is a perception that cycle compliance at red lights at Bank is poor. However, the observation work undertaken determined that the majority of cyclists do comply at this location. Therefore, the focus of the design has been about

	improving pedestrian facilities which will reduce the time and distance that they would be in the carriageway, crossing either formally or informally. This thereby reduces the risk of conflict by reducing the time pedestrians are on the carriageway. It has been determined that there are two base options to address the issues outlined above; 'Full' and 'Partial (3-arm)' schemes. Within these two options there is a choice between two different quality footway materials. Both options improve pedestrian comfort levels, shorten the pedestrian crossing distances and help reduce the opportunity for conflict between pedestrian and cycles, to varying degrees. There are also additional design measures that make a visual impact, to encourage compliance at the traffic restriction enforcement points for vehicles, and also at the pedestrian crossing areas. The aim to make these areas more distinguishable. As a package of measures, these visual cues are thought to assist in reducing the number of vehicles passing through the restriction. They were suggested by a number of people during the consultation period and in other correspondence regarding the enforcement of the scheme. The visual indication at the pedestrian crossing is thought to provide a further visual clue to vehicles that it is a pedestrian crossing area and encourage them to slow. It may also encourage pedestrians to cross at the formal crossing area, however there is little substantive evidence to support this. It is considered that the real change is the footway widening options and the benefits that this would bring to the largest number of people using the junction Finally, an increase in the amount of disabled parking in the Bank monitoring area has been taken forward outside of the project. The process to include two additional disabled parking bays is progressing using existing delegated powers. <u>Budget Cap</u> With a budget cap of £400,000, it is probable that not everything can be delivered which had been designed. The following information sets out the base options to be delivered as the priority, and the additional measures to be delivered if sufficient funding is available after the base project has been delivered. This will ensure that costs remain within the £400,000 maximum. <u>Capital Funding and Fundamental Review</u> It had been assumed during the design phase of these interim measures that further change to the junction would happen as part of the 'All Change at Bank' project, which is anticipated to

	complete in 2022. Should the Capital Funding and Fundamental Review outcomes mean this is no longer the case, further consideration to the suitability of the choices made within this report will need to be taken. It is anticipated that the review outcomes will be available in September 2019. This would give an opportunity before work starts on-site in November to pause if necessary and assess if the approved option and the material choices are appropriate if the interim scheme were to be in place for more than three years. <u>Bartholomew Lane footway widening</u> A standalone scheme has been designed for the junction of Bartholomew Lane and Threadneedle Street that has an estimated cost of **£46,125** and can be seen in **Appendix 8 – Footway widening at Bartholomew Lane junction Threadneedle Street plan**. This addresses the issue of people walking who find Bartholomew Lane more difficult to cross due to the increased numbers of vehicles using this street, which are avoiding the timed restrictions at Bank Junction. As there is an existing Courtesy Crossing programme, if Members agree for this to proceed, this can be funded from existing local risk funding and not out of the On-Street Parking Reserve.
• **Confirmation solution meets objectives**	The Benefits Matrix table below is an overview of the two base options. It assesses the benefits score against the required outcomes and their cost. As can be seen, the estimated costs to deliver the base options utilises a considerable proportion of the available budget. The plans for both Options 1 and 2 can be found in **Appendices 6 and 7.** The full Benefits Matrix table with how the scores have been awarded can be seen in **Appendix 5 – All Options Benefit Matrix Table**.

	Table 2: Summary of Benefits matrix (Excluding Additional Design Measures) **Option 1A** - Full Scheme in concrete Paving. 52% increase in footway space. — **Total Score, out of 12: 8** — **Total Estimated Cost): £398,716** **Option 2A** - Partial 3-arm Scheme in concrete paving. 39% increase in footway space. — **Total Score, out of 12: 6** — **Total Estimated Cost): £332,200** **Option 2B** - Partial 3-arm Scheme in yorkstone Paving. 39% increase in footway space. — **Total Score, out of 12: 6** — **Total Estimated Cost): £374,197**
• **Design summary**	**<u>Option 1 A</u>** The Officers' recommendation is that Option 1A, detailed below, is approved as it is expected to deliver the greatest pedestrian benefit, and therefore the best value for money, out of all the possible options. Option 1A – Full scheme with concrete footway paving including the raised feature on Cornhill as can be seen in **Appendix 6 – (Options 1A and 1B 'Full' scheme plan).** The total estimated cost of this option is **£398,716** that delivers a 52% increase in footway space at the main body of the junction. The scope includes: a. Kerb buildouts in temporary materials; b. Wider and shorter pedestrian crossings; c. Road lane marking changes – reducing the number of lanes on approach at Princess Street, Mansion House Street and King William Street/Lombard Street; d. Traffic signal relocation; e. Potential removal of the current guard railing from some or all of the locations around the junction (subject to a more detailed assessment); f. Enlarged cycle advanced stop line (ASL) areas;

	g. Removal of the cycle feeder lane on Cornhill; and h. Removal of some central traffic islands where required, with others being modified. There is also a proposed raised table at the Cornhill pedestrian crossing. This is required to accommodate the proposed removal of the traffic island where a utility chamber in the carriageway is currently protected. Due to limited depth in this location, the carriageway would be required to be raised to allow the depth necessary for traffic to run over the chamber. It has an added benefit of making this crossing flush for pedestrians and provides an element of vertical deflection which should encourage slower speeds. <u>Material choice</u> With departing from the materials set out in the City's Public Realm People Places Projects SPD (2016) and acknowledging the conservation area status, there are some concerns that using a material other than yorkstone would not be appropriate at this location. These concerns are noted but given the budget cap and the intended nature of the scheme design, alternatives have been investigated to give Members greater choice. It is recommended to use non-standard concrete scan kerbs (adhesive kerbs) rather than granite as these will overcome potential issues regarding the adequate depths needed and enable construction to be expedited. This would mean that we do not need to dig new kerb alignments, which reduces the risk of the construction programme. In this instance it is also suggested to use concrete paving which would, in terms of tone, better match the existing yorkstone paving when compared to using tarmac as an alternative. It is believed that this combination offers the greatest value for money for use as a temporary (2-3 years) scheme. **<u>Option 1B</u>** A variation of Option 1A (Option 1B), where yorkstone paving is used instead of concrete paving, was found to be over-budget at a total estimated cost of **£455,891.** It is included in **Appendix 5 – All Options Benefit Matrix Table** for comparison. If the consensus is that yorkstone is required given the location, Option 2B detailed later in this section of the report could be progressed. **<u>Option 2A</u>** An alternative to the recommended option, is Option 2A. This is a partial 3-arm scheme, also with concrete footway paving and can be seen in **Appendix 7 – (Options 2A and 2B 'Partial (3-arm)' scheme plan)**. The total estimated cost for this option is

	£332,200 which delivers a 39% increase in footway space at the main body of the junction when compared to Options 1 (A & B). The scope includes a) Kerb buildouts in temporary materials on three arms; b) Road lane marking to include the reduction of lanes on all three approaches, as in Option 1A; c) Traffic signal changes on three arms only (Princes Street, Lombard Street and Mansion House Street); d) Wider and shorter pedestrian crossings on those three arms; e) Potential removal of the current guard railing from some or all of the locations around the junction (subject to a more detailed assessment); and f) Enlarged cycle advanced stop line areas would be implemented on all five junction arms. A benefit of Option 2A is that if Members were inclined to try and vary the enhancements to attempt to tackle a wider number of the behaviour change elements, then this option could provide the scope to deliver all the Additional Design Measures, listed below, within the £400,000 budget cap. However, this option is not being recommended as it offers a lesser pedestrian benefit than Option 1A. **<u>Option 2B</u>** This is a variation of Option 2A where yorkstone paving could be used instead, (excluding any Additional Design Measures), which has been estimated to cost **£374,197**. It is included in **Appendix 5 – All Options Benefit Matrix Table** for comparison. **<u>Additional Design Measures</u>** If the recommendation to proceed with Option 1A is accepted, the following additional measures are unlikely to all be accommodated within the capped budget. However, there may be an opportunity to deliver these if the project budget is not fully spent delivering the 'core option' or if other funding sources become available. This is illustrated in appendix 4b. The Additional Design Measures are listed below for Members to agree that these should be included in the project scope to be delivered should funding become available, or if Option 2A or 2B is chosen, they are recommended for prioritisation and delivery as follows: **1.** Enhanced Traffic Enforcement Gateway red coloured resurfacing as can be seen in **Appendix 6 and 7**. This is to improve compliance with the traffic restriction and has a total estimated cost of **£12,500**.

	2. Enhanced Pedestrian Crossing buff coloured resurfacing as can be seen in **Appendix 6,7 and 9 – (Proposed pedestrian crossing visualisation).** This is to give a visual cue both to people who walk to indicate where to cross and to cyclists to better indicate where pedestrian will be crossing, in an effort to reduce the potential for conflicts. It has a total estimated cost of **£12,500**. 3. Pedestrian Crossings bordering 'brickwork' patterning as can be seen in the visualisation in **Appendix 9 (Proposed pedestrian crossing visualisation)**. This is to give a clearer demarcation of the pedestrian crossing area. It is a painted pattern and its purpose is to make the buff colour surface stand out more to oncoming vehicles. Its aim is to reduce conflict on the crossing points between pedestrians and vehicles. It may provide a slight rumble strip effect causing a small reduction in speed across the pedestrian crossing points. It has a total estimated cost of **£9,000** **<u>Equalities</u>** An Equality Impact Assessment (EQIA) Test of Relevance has been carried out on Option 1A, which has been found not to require a full EQIA.
• **Delivery team**	Project management and stakeholder engagement will be provided by the project team within City Transportation. Highway construction works will be delivered by the City's Highway Term Contractor (J.B.Riney & Co. Limited) with construction supervision undertaken in-house by City Highway Engineers. Transport for London (TfL), as the owner of the Traffic Signal infrastructure, will provide the design and construction services for the traffic signal changes that are required.
• **Procurement Strategy**	It is recommended to continue using the existing procurement strategy that was approved at GW3 (2015). This agreed to use the highways term contractor JB Riney to carry out the implementation of any agreed work for Bank on Safety. An updated PT4 form is attached for reference in **Appendix 3**. TfL will provide signal design and engineering services as the owners of the signal infrastructure across London.
• **Programme and key dates**	• Following Committee approvals, TfL's Traffic Signal Infrastructure team would also be commissioned to commence work on their detailed signals design. This is

	estimated to take approximately three months, and the scheme and works TMAN approval would be sought. • Stakeholder engagement work would begin in August 2019, letting local occupiers know what the changes are and when work is due to start. • The delivery of the approved scope would commence as soon after the Lord Mayor's Show in November 2019 as possible. Starting prior to this may result in additional costs for the highways contractor as they would be required to decant site to make way for this event. There is a general embargo on work in the area six weeks before the Show. • Option 1A is estimated to take six months to construct, whereas option 2A or 2B (the partial 3-arm scheme) would take approximately 4 months to build. The top three risks, which can be considered as the key dependencies for delivery, are detailed in the Risks section of this report. • The construction of any approved additional design measures would be incorporated into the construction of whichever main option is selected, provided sufficient notice of funding is available, so there would be no increase in programme.
• **Risks**	To date, no project risks have been realised during the outline design phase. The top risks from **Appendix 2– Risk Register** associated with the recommendations in this report, in addition to those highlighted in the Design Summary, are: • **Risk 2 - Issues or delays in any required consents such as planning permissions, third party consents, TMO, TMAN, Permits, etc and Risk 16 - Network accessibility before and during construction**- With Bank junction still being used to reduce the traffic impacts of other essential utility work in the City, access for construction work is likely to be difficult. Also, any delays caused by third parties that result in temporary traffic signals being required for longer during construction would increase costs. Furthermore, any construction plans will need to account for the nine bus routes through the junction and be approved by TfL via its TMAN processes. • **Risk 6 - Funding constraint/ conditions implications**– Should project costs increase, descoping of the project would be required to maintain delivery within the budget. This also refers to any potential impacts managing any effects of the Capital Funding and Fundamental Review. • **Risk 12 - Inaccurate or Incomplete project estimates, including cost increases from delays**– If elements of the construction phase take longer than planned, costs would increase accordingly due to traffic management

	costs. Also, costs will increase if items are found to cost more than originally estimated. Members are asked to note that whichever base option is chosen, there are elevated construction risks given the location and complexities of the proposed scheme(s). In particular the moving of traffic signal infrastructure is complex, particularly at this location. The individual risks associated with the project can be found in **Appendix 2 – Risk Register** Given the location of the project, a provision for weekend working has also been included within all estimates.
• **Success criteria**	1. **Increased pedestrian comfort levels** Pedestrian comfort levels would require reassessing within six months of scheme completion to see whether there is an increase in the number of pedestrians and any subsequent impact on the comfort levels, before being compared to previous figures. 2. **Improved compliance** Pedestrian and traffic restriction compliance will be reassessed within six months of scheme completion and compared to previous figures. 3. **Comparison of the number of casualties and accidents pre and post scheme** These figures will be compared as soon as the latest information is made available by TfL and reported in the outcome report and All Change at Bank reports.
• **Progress reporting**	Officers will report via monthly Project Vision updates and the Department of the Built Environment Portfolio Board other than those with associated delegated approval. Issues requiring further decisions will be brought back to Members as an Issue Report.

Appendices

Appendix 1	Project Coversheet
Appendix 2	Risk Register
Appendix 3	PT4 Procurement Form
Appendix 4a	Financial Information (All Options)
Appendix 4b	Additional design measures with Base options
Appendix 5	All Options Benefit Matrix table
Appendix 6	Options 1A 'Full' scheme plan
Appendix 7	Options 2A and 2B 'Partial (3-arm)' scheme plan
Appendix 8	Footway widening at Bartholomew Lane junction Threadneedle Street plan
Appendix 9	Proposed pedestrian crossing visualisation

Background Papers

- Capital Funding – Interim Revised Prioritisation and Project Funding Update - meeting of the Resource Allocation Sub (Policy and Resources) Committee, 8th April 2019

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