Gateway 3/4: Options Appraisal

Committee(s):	Date(s):		Item no.
Streets and Walkways Sub-Committee	17 th Septembe	r 2012	
Projects Sub-Committee	18 th Septembe	r 2012	
Subject:		Public	
Riverside Walk - Millennium Bridge Area Enhancements			
Report of: The Director of the Built Environment		For Deci	sion

Overview

Context

This is a Gateway 3/4 options appraisal report.

This report relates to the enhancement of two areas adjacent to the Millennium Bridge; the bridge approach from the north, and the Riverside Walkway beneath (See Appendix A for plan). The implementation of the recommended option has a total estimated cost for both areas of $\pounds1,473,305$ inclusive of 5 years of maintenance funding. The scheme is proposed to be primarily funded from Section 106 receipts (91%) with the remaining 9% funded from the City's On-street Parking Reserve.

The recommended enhancement scheme forms part of the Riverside Walk Enhancement Strategy approved by Court of Common Council 2005 and revised 2008. This strategy seeks to improve the Thames Path National Trail and enhance adjacent spaces and connections with the rest of the City. The strategy sets out the enhancements needed and the priority and funding strategy for their implementation. To date, 14 projects have been completed including major schemes at Grants Quay and Angel Lane, these are listed in Appendix B, Table 7. Surveys have shown that implementing these changes has resulted in increased numbers of people using Riverside Walk as a route and a place to relax, and improved satisfaction ratings for the City Riverside. Transport for London carried out a before and after survey of the recently completed scheme at Grants Quay (which they funded). This found that the number of people using the space increased by 34% with a 48% increase in users rating the area as very good.

Due to a decline in conditions in the area, the Millennium Bridge Area project was made a Phase One (High priority) project when the revised strategy was approved by committee in 2008. This area is one that provides the busiest pedestrian gateway in to the City and provides the first impression that many get of the City of London. The decline in the area does not match with the environment that has been created around St. Pauls Cathedral, and when combined together these two areas make a significant statement about the quality and values of the City in terms of its civic nature and position within the capital, effectively providing a quality branding for the City. The proposals have been developed in close consultation with the City of London School, who have been promoting, and supporting the enhancements around the school in terms of their own brand and school values.

Millennium Bridge Approach - Existing situation

Originally planned as a corridor for viewing St Paul's Cathedral from the Thames, the Millennium Bridge Approach is now a heavily used pedestrian route which connects

visitors to major London attractions, especially St Paul's Cathedral and Tate Modern. The area is an important gateway into the City, used by 5 million visitors annually. The thoroughfare is paved in York stone, currently set out in a grid pattern, which uses larger than usual paving slabs that are in variable condition and is not aesthetically pleasing as might befit its location. The space includes four steel sculptures known as the HSBC Gates, designed by the artist Sir Anthony Caro, installed as part of the Millennium Bridge works.

Not originally designed and set out to deal with the numbers of people now using it, this area has suffered a noticeable decline in the local environment since the Millennium Bridge opened. The HSBC gates are often used for graffiti and urination and require frequent cleaning and sticker removal. Signage in the area is laid out in an adhoc manner and shows signs of wear and tear. There is also a need to add signage to assist those using the newly repaired Inclinator and there is no signage in place to help pedestrians navigate between the upper and lower levels.

Paul's Walk - Existing situation

Paul's Walk is mainly paved in York stone, with areas of concrete paving (some broken) and a few older park style timber benches. The area in front of the City of London school entrance includes raised planters and air vents (within the school's demise) that are frequently used for seating by the public and also occasionally by skateboarders. The school also has concerns about noise disturbance from the public gathering close to the school's windows in this location.

The space under the Millennium Bridge is under-utilised and drab. The steps down from the bridge to Paul's Walk are of a fairly poor construction and the "antipedestrian" paving on the upper steps gives visitors the impression that they are not welcome, despite the huge numbers that pass through the area. This area also feels unsafe at night and has the potential to attract anti-social behaviour.

There is a stone clad planter opposite Millennium Bridge House that is in a state of disrepair and has steps on the southern side. These steps are a popular seating area, but they also attract anti-social behaviour, with evidence of street drinking, due to their hidden nature. This is particularly undesirable due to the proximity of the nearby City of London school and residential dwellings.

Brief description of project

Photographs of the project area are included in Appendix D. Proposal Visualisations are included in Appendix E.

The area analysis has shown that there are three distinct functions within the public realm in this area:

- The Millennium Bridge approach as a processional route to the Cathedral;
- Paul's Walk as part of the riverside promenade; and
- Greater potential for the space beneath the Bridge to be used as a gathering area.

The project proposes enhancements to the area that accentuate and complement these functions, to establish a pleasant and welcoming environment for the benefit of

all users.

Millennium Bridge Approach - Proposals

The intention of this project is to create a more welcoming and fitting gateway to the City, which recognises the value of this space in terms of the impression given to millions of people that enter and exit the City through this space every year. Options range from repairing areas of damaged paving, to changing the design of the area. The option to change the design of the area includes a new 'gateway' design for the paving that would involve the re-cutting and re-use of around 70% of the existing large paving slabs into smaller modules that would be more resistant to damage. In developing the detailed options for this project it has however become clear that this type of redesign would cost in the region of £350,000 whereas the option of repair only would cost £37,000. Therefore it is proposed an area of the current York stone be intensively cleaned to enable Members to consider whether this would deliver a suitable quality finish for the area given the balance of cost versus quality . There is also the option, as part of repair work, to relay a currently damaged area in suggested new design to assist Members decision.

There is also an option to remove the HSBC gates. The Culture, Heritage and Libraries Committee acknowledged that the gates did not work well in their current location. A separate submission outlining their market value and investigating potential disposal options, including, relocation and resale, would need to be considered further by the City Arts Initiative Advisory Panel and the Culture, Heritage and Libraries Committee. The findings will be reported to City Arts Initiative Advisory Panel with recommendations presented to the Culture, Heritage and Libraries Committee in due course.

Improving the signage in this area also forms part of the proposals in order to assist pedestrian navigation. Worn out, damaged and missing signage will be replaced and updated to accord with the City standard. There is also a need to add signage for the newly refurbished Inclinator.

Paul's Walk - Proposals

The design concept for Paul's Walk has been developed to create a green planted border in front of the school, with spaces between the planting areas to accommodate building entrances and exits, together with seating on the outer edges. The broken concrete paving would be replaced with York stone, to create a more consistent finish. Lighting would also be enhanced. There is also an option to remove the existing stepped planter in front of Millennium Bridge House that is in a poor condition and a focus of anti-social gathering and replace it with a more suitable design. As this is an area that is at risk of surface water flooding a sustainable drainage system (SuDS) will also be introduced.

It is proposed to introduce small scale play and/or exercise equipment opposite Millennium Bridge House, utilising specific funding from the London Marathon Charitable Trust. Equipment of a similar design has recently been installed at Dark House Walk.

It is proposed that the area beneath the Millennium Bridge be enhanced to create a more welcoming space with a useable seating area and associated lighting.

Success Criteria	 An improved gateway and connection to the City, Increased green coverage and places to rest, Improvement of the condition and function of the City's assets Enhanced lighting and a safer and more pleasant walking route A reduction in anti-social behaviour Reduced surface water flood risk On completion of works a scheme assessment will be carried out and will be reported to Committee as part a future update report.
Notable Exclusions	N/A
Link to Strategic Aims	This project has links to the following strategic aim:
	 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
	This project will provide much needed amenity space and added asset value to the public realm for the benefit of local occupiers and the millions of visitors who use the area.
	The 'Thames and the Riverside' has been identified through the City's Core Strategy as a 'Key City Place' where the following policies apply:
	STRATEGIC OBJECTIVE 2 To ensure that the challenges facing the five Key City Places are met, complementing the core business function of the City, contributing to its unique character and distinguishing it from other global financial districts.
	The Vision: Thames and the Riverside The Thames and its riverside will provide well designed and managed public spaces, ranging from lively and vibrant areas, to areas of relative tranquillity for relaxation and contemplation. Residential, educational, recreational and employment activity will be enhanced by high quality sustainable streetscapes which will address the challenges of climate change. The river will continue to be used for the transport of people and materials, including through the safeguarded Walbrook Wharf. The riverside will be easily accessible from other parts of the City and from the south side of the Thames.

Within which category does the project fit	Substantially reimbursable
Resources Expended To Date	In May 2012, Members had resolved that officers provide further information on the project proposals and re-submit a report to Committee at the same gateway (3/4). Members also supported the suggestion that Project sub-Committee receive a presentation on the proposals and vision for the area. A similar presentation had been given to the Streets and Walkways Sub-Committee in May 2012.
	To date £57,292 has been spent on the evaluation, design and consultation processes for this project (staff costs and fees). This included surveys, design fees, and staff costs for consultation and engagement with the school, and engineering advice and estimating.
	The evaluation was funded from the On-Street Parking Reserve (£20,000 inclusive of the Playbuilder element on Peter's Hill - £5,000) as part of the Millennium Bridge Area project. The evaluation was also funded from Watermark Place and Riverbank House Section 106s (£27,000) as part of the Riverside Planters and Planting project. The £57,292 expended to date represents approximately 4% of the total project cost to evaluate the project options.
	The total original budget for evaluating this project is $\pounds47,000$. However, the total spend is $\pounds57,292$. This is an increase of $\pounds10,292$ from the Gateway 3/4 report presented to Members in May 2012 and represents approximately 103 officer hours. These figures are reflected in Appendix B Table1.
	It is proposed that the additional costs of £10,292 incurred to date be recovered from the Riverbank House \$106 Agreement (as part of the underspend on Angel Lane project).
	The increase in costs is mainly due to additional staff time for essential project development related to the Environment Agency's latest advice on surface water drainage that was not available at the time of the May 2012 report.
	In mid June 2012 officers were made aware of consultants findings within the then Draft Final Strategic Flood Risk Assessment (SFRA) report presented to the City's Flood Risk Steering Group on 3 rd May 2012. New surface water flow modelling, which takes account of local topography and the drainage and sewer network in the City, identified four areas at risk:
	• Farringdon Street

New Bridge Street
• Victoria Embankment
 Paul's Walk – Thames Riverside.
The consultant's report placed greater emphasis on the flood risk to the Paul's Walk area as it is in a critical sewer flooding zone. Furthermore, the Environment Agency's latest advice suggests that excess surface water can be drained into the Thames, due in part to its relative cleanliness compared to discharge from carriageway. It was therefore necessary to re- visit the project proposals in light of new information on the City's flood risk areas and the latest Environment Agency advice.
On 3 rd July 2012 Planning and Transportation Committee approved the publication of the Final SFRA which provided an update on the evidence of the flood risks the City faced. Appendix C contains a map extract from the report which shows the extent of the City's main flood risk hotspots.
Project sub-Committee's request for further information on the proposals in May 2012 coincided with the emergence of new guidance which would ordinarily have been reported at the detailed design stage.
This revised report has given officers an opportunity to provide Members with the latest information. These revisions are an essential part of the design process and were carried out as part of the project development. The revised recommendation for the partial SuDs scheme (Option 2a) delivers a cost saving of £85,000 over the previously recommended full SuDs scheme (Option 1a).

Options Appraisal Recommendation

List of options described	A number of options have been developed in order to enhance the area and address its various needs and problems. These are split into the 2 project areas (Millennium Bridge Approach and Paul's Walk). The Appendix includes further details of these options and cost estimates as well as a breakdown of works items. The main options are summarised below. It is also possible to vary these options further by selecting or de-selecting various works items set out in the Appendix.
	Millennium Bridge Approach
	Option 1 (recommended)
	• To agree to receive a further report on the option to either reconfigure the paving on the millennium Bridge

Approach or simply repair damaged areas once the result of cleansing has been viewed and considered to see if the paving maintained at this higher level of cleanliness would deliver a suitable quality finish when considered against the cost of redesign.
• Ascertain the market value of the HSBC gates and explore potential for their relocation as recommended by the City Arts Initiative,
Signage, lighting and drainage improvements
Option 2
• Ascertain the market value of the HSBC gates and explore potential for their relocation as recommended by the City Arts Initiative (as Option 1),
Signage, lighting and drainage improvements
Option 3
As Option 1, but with the HSBC gates retained
Paul's Walk
Option 1a
Create a green promenade space which includes improved lighting and seating areas.
 Incorporate a sustainable drainage system (SuDs) with attenuation tanks.
 Create a seating area under the bridge together with associated lighting
Option 2a (recommended)
Option 2a (recommended) As Option 1a, but with a partial sustainable urban drainage system without attenuation tanks.
As Option 1a, but with a partial sustainable urban drainage
As Option 1a, but with a partial sustainable urban drainage system without attenuation tanks.
As Option 1a, but with a partial sustainable urban drainage system without attenuation tanks. Option 3a Similar to Option 1a, but with reduced planting and a partial

	drainage.	
Option recommended to progress to Authority to Start Work stage	Options 1 and 2a.	
Resource requirements to reach Authority to Start Work and source of funding	£45,000. Comprising £25,000 fees for design works, surveys and engineering assessment and £20,000 staff costs for project management and consultation. See Appendix B Table 2. This is to be funded from the 20 Fenchurch Street Section 106. See Appendix B Table 3.	
Plans for consultation prior to Authority to Start Work	It is proposed to continue to consult with local occupiers and other relevant parties on the plans prior to authority to start work stage. This will include:	
	 The City of London School, the Salvation Army, Millennium Bridge House 	
	The Environment Agency	
	 The Port of London Authority 	
	 Internally: City Arts Initiative, the City Surveyor, the Highways service, Cleansing Service, the Access Team and the Open Spaces department 	
Level of approval for	Chief Officer for Detailed Design Approval.	
Detailed Design (if required)	 Town Clerk for Authority to Start Work as Streamlined Process 	
Procurement Strategy	Works will be carried out by the City of London highways term contractor J B Riney & Co Ltd.	
Tolerances	It is proposed to create a seating area under the Millennium Bridge, towards the end of the project when costs are known. This element is a lower priority and will only be implemented upon completion of the other elements if sufficient funds remain.	
Recommendation	It is recommended that Members:	
	(i) Approve the progression of Options 1 and 2a to authority to start works stage at a cost of £45,000 (staff costs and fees) to be funded from 20 Fenchurch Street Section 106 contribution.	
	(ii) Approve the environmental enhancements and sustainable urban drainage system (Option 1 and 2a) at an estimated total cost of $\pounds1,393,805$ funded through the 20 Fenchurch Street, Watermark Place and Riverbank House Section 106 contributions ($\pounds1,263,805$), and the On-Street	

	Parking Reserve (f130.000):
	Parking Reserve (£130,000); (iii) Approve the design and installation of the play/sports equipment on Paul's Walk in advance of the main works, funded by the London Marathon Charitable Trust (£34,500) (iv) Approve that the additional staff costs of £10,292 incurred to date be funded from the Riverbank House \$106 Agreement.
Reasons	The Millennium Bridge Area is a major gateway to the City. The area currently does not provide a fitting environment for such an important location. These proposals address the needs of the public and local occupiers to improve the function and appearance of the area whilst also establishing a mechanism for mitigating the potential for flooding. The area lies with an identified flood risk zone due to its proximity to the Thames and is also deemed to be within a critical sewer flooding zone.
	The continued improvement to the Riverside Walk aims to fulfil the City's duty to maintain and enhance the Thames Path National Trail and is in line with the City's Strategic Aims and Core Strategy.
Next Steps	Development of the detailed design and further consultation with local occupiers will be undertaken.
	It is proposed to take forward the play/sports equipment proposals early as the funds must be spent by December 2012. Therefore, it is recommended that these works are implemented in advance of the other works.
Detailed Options	

Detailed Options Appraisal

Millennium Br Approach	idge	
Description	Please see A	ppendix E for sketch visualisations of the following proposals.
The existing paving has degraded over the past 12 years due to the size and layout of this particular York stone and the far greater than anticipated numbers of visitors. The rigid paving pattern draws attention to flaws and cracks in the stone. Over the years, the paving has needed to be repaired periodically which has resulted in an unsuccessful, patchy appearance, rather than the originally intended grid pattern.		
There are now two options to improve this area and provide a more fitting and welcoming environment that makes the appropriate impression for the City. One option is a new paving design that will frame the space. By taking up and cutting some existing slabs into smaller modules which are more resistant to loading, particularly in the busy central section of the walkway, then laying them in a staggered pattern as utilised throughout the City, the surface		

will be longer lasting and future wear and tear will not be as noticeable. If agreed it would be

Millennium Bridge Approach	
-------------------------------	--

intended that up to 70% of the existing paving wouldbe re-used in the scheme, both on the Millennium Bridge Approach and Paul's Walk.

The other option is that no changes to the paving other than repairs of areas of damaged paving slabs. This will smarten up the area and provide an improved gateway to the City. Given there are significant cost differences between these two options it is proposed a sizeable area of the York stone be deep cleaned to assist Members in forming a view as to which option to agree having regard to the balance of quality versus cost. If the repair option was to be chosen it would e on the understanding that regular in depth cleaning would be necessary to maintain the desired appearance.

It has been confirmed that the HSBC Gates are the property of the City of London. Consultations have been carried out with various City departments to find a suitable location for the sculptures. However, no suitable sites in the City's ownership have been found. From a curatorial perspective, selling the sculptures through the commercial art markets is the most feasible option for their disposal. However, it is understood that the market for such sculptures is quite limited and so the next steps will involve ascertaining the market value of the sculptures and exploring their resale potential. Disposal of the sculptures as scrap metal is also a possibility. The Culture, Heritage and Libraries Committee have acknowledged that the gates do not work well in their current location. Subject to the approval of this report; removal options for the gates will be considered further by the City Arts Initiative Advisory Panel with recommendations presented to the Culture, Heritage and Libraries Committee in due course.

The design for this area can also work with the Gates retained (Option 3). Therefore if the removal of the Gates is not viable, they can be retained without requiring any design changes. However the problems associated with them will remain.

Signage on the Millennium Bridge Approach is in need of improvement. Existing signs are of an inconsistent design and of variable quality. Suggested ways of improvement are as follows (all Options):

- Add more way finding information. These will need to be wall-mounted to avoid clutter and also avoid the need for foundations which would not be feasible on the Millennium Bridge Approach sub-structure.
- Upgrade other information signs so that the overall approach is consistent.

Other associated enhancements are also proposed to lighting and drainage. This would provide a comprehensive improvement to the area and address current deficiencies.

Benefits and strategy for achievement	 Enhancement of the City's Riverside Walk (Thames Path) in accordance with the City's Strategic aims, Core Strategy and Riverside Walk Enhancement Strategy,
	 The creation of an enhanced 'gateway' to the City for the benefit of the millions of visitors who use this area each year and further encourage visitors
	The enhancement of the lighting in the area to improve the

Millennium Bridge Approach	
	environment, safety and discourage anti-social behaviour
	 The encouragement of sustainable modes of transport (walking, as highlighted in the Mayor of London's Transport Strategy 2011)
	 A reduction in anti-social behaviour by creating an attractive, welcoming, well-cared for environment and removing hidden spaces
Scope and exclusions	A plan of the project area is included in Appendix A.
Constraints and assumptions	 The paving proposals for this area can work with or without the HSBC gates
	 Around 70% of the existing York stone will be reused if the redesign option is is approved.
Streetworks Impact	Due to the pedestrianised nature of the area, the impact of the street works will primarily affect pedestrian access. Officers will look to ensure that routes remain open to the public by phasing the works accordingly. Access to buildings will be maintained at all times.
Programme	Further detailed design work will be undertaken before the Authority to start works stage. It is anticipated that Authority to start works will be sought in early 2013 and works expected to begin in the summer to take account of the school holidays and avoid disruption.

Risk	Risk Category	Risk Value	Mitigating Action
Weight restrictions/Access for vehicles delivering materials to site	Time/Cost/Scope	High	A Weight Tolerance Assessment to be undertaken as part of the development these proposals. An Access and Delivery Plan to be developed as part of the Construction Package.
Noise Restrictions for Working close to School and Local Businesses	Time	Medium	Establish and agree working times for noisy works to ensure disturbance is minimised.
No suitable offers/location found for HSBC Gates	Scope	Medium	Investigate fall-back options for the sculptures (such as selling them for scrap value) and revise scope of scheme on Millennium Bridge Approach.

Millennium Bridge Approach		
Legal implications	N/A	
HR implications	N/A	
Anticipated stakeholders and Consultees	Consultations are on-going with the City of London School, The Salvation Army and Millennium Bridge House.	
Results of consultation carried out to date	As part of the development of the project, officers have consulted with the City of London School, Sir Anthony Caro (the artist who designed the HSBC gates), HSBC and St Paul's Cathedral.	
	Consultations with the City of London School	
	Officers met with the City of London School Second Master and his team on three separate occasions, which provided an insight into the needs of the school. The City of London School faces onto much of the project area. As such a number of issues particularly around the deficiencies of the existing public realm and the associated anti-social behaviour have a bearing on the school.	
	The school staff consider that the area is in need improvement and this was also the opinion of the school's Board of Governors. The City of London School's other concerns were as follows:	
	 Members of the public often loiter within the School's curtilage and the noise that they generate has a disruptive effect Skateboarders riding on the school's planters near the entrance are also a problem for them. It was agreed that the best way to deal with this issue was to have seating place further away from the school entrance together with the introduction of more planting close to the building. This would prevent access to areas that are currently used skateboarders. 	
	• There was concern raised about the issue of flooding in the School's basement in heavy rainfall. It was agreed that the design will be developed to address this issue at the detailed design stage if it transpired that the water ingress is from the public walkway.	
	• There were concerns about safety and security, where there was a need to accommodate evacuation/fire access points for the School within the design and a need to improve lighting coverage around the School.	
	These concerns have been considered in the development of this project. The City of London School Board of Governors met on 27 th February 2012 and the proposals to improve the Millennium Bridge Area were well received as they represented a marked	

Millennium Bridge Approach	
	improvement on the appearance of the existing area.
	Other Consultations
	St Paul's Cathedral has been consulted and expressed support for the scheme.
	Officers have consulted with the artist Sir Anthony Caro who designed the HSBC gates, to ask his thoughts on the problems of graffiti, urination and other problems. Sir Anthony is of the view that the sculptures do not work well in their present location and would have no objections to their removal/relocation, if this was part of a significant enhancement scheme for the wider area. Sir Anthony will be consulted again as part of the decommissioning options assessment.
Financial Implications	

Estimated capital cost (£)

Table 3: Millennium Bridge Area Options Estimated Costs

Task	Option 1 (Recommended)	Option 2	Option 3 HSBC gates retained, lighting and signage	
	Paving Improvements, remove HSBC gates, lighting, signage	Remove HSBC gates, lighting, signage		
	£	£	£	
Paving works	350,000			
	Or 37,000			
	(repair only)			
Remove HSBC Gates	20,000	20,000	-	
Lighting	20,000	20,000	20,000	
Drainage	15,000	15,000	15,000	
signage	10,000	10,000	10,000	
SUBTOTAL (works)	65,000	65,500	45,000	
	Excluding paving	Excluding paving	Excluding paving	

Aillennium Bridge Approach			
Fees	20,000	10,000	15,00
Staff Costs DBE (Highways)	15,000	10,000	12,00
Staff Costs DBE (Planning)	25,000	9,000	23,00
SUBTOTAL (Fees and staff)	60,000	29,000	50,00
TOTAL	125,000	94,500	95,00
	Excluding paving	Excluding paving	Excluding paving

Source of capital funding

The project is proposed to be mainly funded from the Section 106 agreements for 20 Fenchurch Street, Watermark Place and Riverbank House and the City's On-Street Parking Reserve. Further details are set out in the Table 3 in the Appendix and are summarised below in the following Section106 extracts:

• Section 106 Relating to the development of 20 Fenchurch Street – 13th April 2007:

Riverside Strategy Payment: "to be used to further the City's Riverside Strategy"

 Section 106 Relating to Upper Thames Street 90-94 Mondial House (Watermark Place) – 20th December 2006:

"Riverside Walkway Works – ..any other improvement works to the Riverside Walk to be implemented by the City of London Corporation"

• Section 106 Relating to Swan Lane 2 Riverbank House – 31st August 2007:

"..other works in the vicinity of the development site shall be carried out which may include the enhancement of the Riverside Walk."

The precise funding methodology will be confirmed at detailed design stage.

Anticipated phasing of capital expenditure	Please see Appendix B Table 4 for anticipated phasing of capital expenditure for the Millennium Bridge Area Enhancements project	
Estimated capital value/return (£)	N/A	
Fund/budget to be credited with capital return	N/A	
Estimated revenue	All Options	

Millennium Bridge Approach				
implications (£)	It is anticipated that there will be some initial revenue benefits through the enhancement of the City's assets in the public realm.			
Source of revenue funding	Local Risk			
Fund/budget to be credited with income/savings	N/A			
Anticipated life	N/A			
Investment Appraisal	N/A			
Benchmarks or comparative data	The City has implemented numerous similar enhancement schemes over the last 8 years, including completed schemes nearby at St Paul's Churchyard.			
Proposed procurement approach	Works will be carried out by the City of London's highways term contractor J B Riney & Co Ltd.			
Affordability	The project is to be primarily funded from existing Section 106 receipts which have been specifically allocated to the enhancement of the Riverside Walk.			
Next Steps	In depth cleansing of area of bridge to facilitate Member decision on paving options.			

Paul's Walk		
Description	Please see	Appendix E for sketch visualisations.

A recent survey carried out by the Open Spaces Department revealed that the City's communities are generally satisfied with the City's public gardens and spaces, but want more 'green' areas and trees, an increase in benches, more natural planting to help biodiversity, more play space and activities for young people and better links between spaces. These findings are part of the evidence reporting contained with the Open Spaces Strategy endorsed by Members.

It is proposed to create a green frame around the school and Millennium Bridge House with spaces between the planting to accommodate building entrances and exits. The existing

Paul's Walk

planters adjacent to the school (within the school's demise) are to be replanted with mixed planting to better green the area close to the school frontage and deter people from using the area for loitering. New seating arrangements will mean that timber benches will be located away from the school entrance. Further site/structural investigations will be necessary to determine the final planting design in terms of depth and loading. This will be carried out as part of the design development prior to the Authority to Start Work stage.

The existing stone clad stepped planter opposite Millennium Bridge House is currently in a poor state of repair. Options 1a and 2a propose to demolish this planter and introduce more appropriate planting and seating in its place, with a new treatment to the river wall flood defence. Options 3a and 4a propose no changes to this planter and minor repairs instead.

Play and/or exercise equipment is also proposed opposite the Millennium Bridge House, utilising specific funding from the London Marathon Charitable Trust. Equipment of a similar design to that recently installed at Dark House Walk is proposed (see photographs in Appendix)

Outside the school it is proposed to replace the existing concrete paving slabs with York Stone to match surrounding paving on the remainder of the Riverside Walk. It is also proposed to add uplighters to the planting areas and to install festoon lighting on the river wall to enhance the riverside promenade. The lighting would be the latest technology LED which generally requires less maintenance and uses less energy.

The City's Electrical Engineer has advised that installing modern low energy, long life LED lighting represents a marked improvement on many existing light fittings. The new fittings are more energy efficient and are therefore likely to have positive revenue implications.

Sustainable Drainage System

The City's Preliminary Flood Risk Assessment and Climate Change Adaptation Strategy identify this as an area at risk of flooding due to its proximity to the Thames. The area is also deemed to be within a critical sewer flooding zone. Due to the area's potential for flooding, it is proposed to incorporate a sustainable drainage system (SuDs) (Options 1a, 2a and 3a). A relatively new technology, SuDs is simply a way of dealing with excess water run-off and slowing the rate at which it discharges into the sewer system. This is done by either storing water in tanks for later release (Option 1a) or utilising surface treatments/design to slow the rate of ingress into the sewer system (Option 2a and 3a).

In the City it is very difficult to find space for water storage (attenuation) (Option1a) because of utilities and other structures under the surface. However, due to the location of the pipe subway under the Riverside Walkway, the space exists but further investigations into loading and capacity will be required to determine whether storage can be accommodated here.

The recommended option (2a) proposes the introduction of a partial SuDs system that would not use water attenuation tanks but would instead utilise the planting areas to collect water from the paving, with excess water then being released either into the sewer system or into the Thames. This option is recommended because the Environment Agency's latest advice suggests that excess surface water can be drained into the Thames, thereby relieving pressure on the sewer system in this critical sewer flooding zone. This means that water storage tanks (Option 1a) would not offer significant benefits in this area. Option 2a delivers a saving of £85,000 over Option 1a. Further technical development of the SuDs scheme will also be

Paul's Walk

required, that will be reported at Gateway 5.

Area under the Millennium Bridge

The central steps under the bridge are used as an elevated seating point allowing great views across the Thames. However, this area is quite bleak and uninviting at present.

It is proposed to introduce a formal seating arrangement on the steps beneath the bridge. They will be clad in timber and incorporate raised dividers as arm rests. This arrangement will help to prevent rough sleeping and skate boarding. The enhancements will also include additional lighting hung from the bridge structure and also linear led lighting under the seats. This will make the space feel safer at night and discourage anti-social behaviour. The design of the space beneath the Millennium Bridge will be developed to enable access to the bridge for maintenance purposes.

Benefits and strategy for achievement	 Enhancement of the City's Riverside Walk (Thames Path) in accordance with the City's Strategic aims, Core Strategy and Riverside Walk Enhancement Strategy, 		
	 An increase in the coverage of green infrastructure and encouragement of biodiversity, 		
	 The addition of more comfortable and accessible seating on the Riverside to provide pleasant places for people to rest, 		
	 The introduction of a sustainable approach to drainage and surface water management (Options 1a, 2a and 3a), 		
	 The enhancement of the lighting in the area to improve the environment, safety and discourage anti-social behaviour 		
	 The addition of play/exercise equipment to encourage play and well-being. 		
	 The encouragement of sustainable modes of transport (walking, as highlighted in the Mayor of London's Transport Strategy 2011) 		
	 A reduction in anti-social behaviour by creating an attractive, welcoming, well-cared for environment and removing hidden spaces 		
Scope and exclusions	A plan of the project area is included in Appendix A.		
Constraints and assumptions	 A plan of the project area is included in Appendix A. A small section of publically accessible planting falls within the private demise of the School and an agreement will be required with the school to carry out the works and maintain a potential increase in planting coverage attributable to the School. This matter has been discussed with the School who are supportive of the need to alter the scope of their current maintenance agreement with Open Spaces. The detailed nature and scope of the agreement will be reported at the 		

Paul's Walk			
	Walk Enhancement Strategy which advocates a coherent approach to improve local amenities.		
	 The City of London School's planters are adjacent to the Riverside Walkway and their improvement furthers the City's Riverside Walk area based Strategy in line with the purposes of the 20 Fenchurch Street \$106. These proposals will improve the local environment by improving local biodiversity and increasing overall green coverage. 		
	• The existing stone planter opposite Millennium Bridge House also forms part of the flood defence and has access steps to the foreshore. A suitable replacement defence wall and steps will be required. The Environment Agency have been consulted and further agreement with them will be required as part of the statutory consent process.		
	• Further site investigations are needed to determine the depth and loading for the planting areas.		
	• The London Marathon Charitable Trust funding for play/sport related enhancements (£34,500) must be expended by December 2012. Therefore, if approved, it is proposed to implement this element in advance of the main works.		
Streetworks Impact	See Millennium Bridge Approach above		
Programme	See Millennium Bridge Approach above		
	Further detailed design work will be undertaken before the Authority to start works stage. This will involve further site condition investigations to establish the depth of the planting and loading.		
	If approved, the works will be phased to enable the location of play equipment to be established on site by the end of 2012.		
Pisk implications			

Risk implications

Risk	Risk Category	Risk Value	Mitigating Action
Weight restrictions /underground conditions limit planting proposals	Cost/Scope	High	Ensure weight restrictions and underground conditions are checked and develop fallback design options.
Weight restrictions/Access for vehicles delivering materials to site	Time/Cost/Scope	High	A Weight Tolerance Assessment to be undertaken as part of the development these proposals. An Access and Delivery Plan to be developed as part of the Construction Package.
SUDs scheme is not feasible	Scope	High	Carry out necessary surveys and trial holes and ensure expert input in design team prior

Paul's Walk					
				to Authority to start works stage.	
Development of the River Park (private scheme) may impact upon works timing and scope	Time/Scope		Medium	Should application prove successful develop a dialogue with developer and the Environmental Agency to agree solution for the removal of the planter and the design around the River Defences.	
Existing Flood Defence - restricts alterations to existing planter	Sc	ope	Medium	Liaise closely with the Environmental Agency to develop design	
Noise Restrictions for Working close to School and Local Businesses	Tin	ne	Medium	Establish and agree working times for noisy works to ensure disturbance is minimised.	
Water supply for irrigation is not feasible	С	ost/Scope	Medium	Discuss the planting plans with Open Spaces and design the necessary water supply requirements as part of the overall design	
Funding from the London Marathon Charitable trust is not able to be spent within the time limit	Cost/scope		Medium	Take forward this element of the scheme in advance of main works in order to spend funding allocation in time	
Legal implications		The School already pay the Open spaces Department to maintain the planters in front of their building. An agreement is required with the School to undertake the works and amend the maintenance agreement. This would include funding the first 5 years of establishment costs of the planting from the Section 106. Consent from the Environment Agency under the Flood and Water			
		management Act 2010 will be required to carry out works to the flood defence.			
HR implications		N/A	4		
Anticipated stakeholders and ConsulteesConsultations are on-going with the City of London School, T Salvation Army, Millennium Bridge House, the Environment A and Port of London Authority.			m Bridge House, the Environment Agency		
carried out to date		See Millennium Bridge Approach above. Initial consultations have also taken place with the Environment Agency in relation to the flood defence.			

Financial Implication	ns			
Financial Implicatio	<u>ns</u>			
Estimated capital c	:ost (£)			
Estimated capital c Table 4: Paul's Walk Op	cost (£) ptions Estimated Costs			
Estimated capital c	ost (£) tions Estimated Costs Option 1a	Option 2a	Option 3a	Option 4a
Estimated capital c Table 4: Paul's Walk Op	ost (£) otions Estimated Costs Option 1a Full Planting, Full	Option 2a (Recommended)	Reduced	Reduced
Estimated capital c Table 4: Paul's Walk Op	cost (£) otions Estimated Costs Option 1a Full Planting, Full SuDS (with attenuation)	Option 2a (Recommended) Full Planting Partial SuDS (without	Reduced Planting Partial SuDS (without	Reduced Planting, Conventional
Estimated capital c Table 4: Paul's Walk Op	cost (£) otions Estimated Costs Option 1a Full Planting, Full SuDS (with	Option 2a (Recommended) Full Planting Partial SuDS (without attenuation)	Reduced Planting Partial SuDS (without attenuation)	Reduced Planting, Conventional Drainage, no
Estimated capital c Table 4: Paul's Walk Op	cost (£) otions Estimated Costs Option 1a Full Planting, Full SuDS (with attenuation)	Option 2a (Recommended) Full Planting Partial SuDS (without	Reduced Planting Partial SuDS (without	Reduced Planting, Conventional
Estimated capital c Table 4: Paul's Walk Op Task Paving works (incl.	cost (£) otions Estimated Costs Option 1a Full Planting, Full SuDS (with attenuation)	Option 2a (Recommended) Full Planting Partial SuDS (without attenuation)	Reduced Planting Partial SuDS (without attenuation)	Reduced Planting, Conventional Drainage, no SuDS
Estimated capital of Table 4: Paul's Walk Op Task Paving works (incl. site preparation)	cost (£) options Estimated Costs Option 1a Full Planting, Full SuDS (with attenuation) £ 220,000	Option 2a (Recommended) Full Planting Partial SuDS (without attenuation) £ 220,000	Reduced Planting Partial SuDS (without attenuation) £ 220,000	Reduced Planting, Conventional Drainage, no SuDS <u>£</u> 220,000
Estimated capital of Table 4: Paul's Walk Op Task Paving works (incl. site preparation) Lighting	cost (£) otions Estimated Costs Option 1a Full Planting, Full SuDS (with attenuation) £ 220,000 40,000	Option 2a (Recommended) Full Planting Partial SuDS (without attenuation) £ 220,000 40,000	Reduced Planting Partial SuDS (without attenuation) £ 220,000 40,000	Reduced Planting, Conventional Drainage, no SuDS £ 220,000 40,000
Estimated capital of Table 4: Paul's Walk Op Task Paving works (incl. site preparation)	cost (£) options Estimated Costs Option 1a Full Planting, Full SuDS (with attenuation) £ 220,000	Option 2a (Recommended) Full Planting Partial SuDS (without attenuation) £ 220,000	Reduced Planting Partial SuDS (without attenuation) £ 220,000	Reduced Planting, Conventional Drainage, no SuDS <u>£</u> 220,000
Estimated capital of Table 4: Paul's Walk Op Task Paving works (incl. site preparation) Lighting Street Furniture Play Equipment Full Planters	cost (£) otions Estimated Costs Option 1a Full Planting, Full SuDS (with attenuation) £ 220,000 40,000 40,000	Option 2a (Recommended) Full Planting Partial SuDS (without attenuation) £ 220,000 40,000 40,000	Reduced Planting Partial SuDS (without attenuation) £ 220,000 40,000 40,000 34,500	Reduced Planting, Conventional Drainage, no SuDS £ 220,000 40,000 40,000 34,500
Estimated capital of Table 4: Paul's Walk Op Task Paving works (incl. site preparation) Lighting Street Furniture Play Equipment	cost (£) otions Estimated Costs Option 1a Full Planting, Full SuDS (with attenuation) £ 220,000 40,000 40,000 34,500	Option 2a (Recommended) Full Planting Partial SuDS (without attenuation) £ 220,000 40,000 40,000 34,500	Reduced Planting Partial SuDS (without attenuation) £ 220,000 40,000 40,000	Reduced Planting, Conventional Drainage, no SuDS £ 220,000 40,000 40,000
Estimated capital of Table 4: Paul's Walk Op Task Paving works (incl. site preparation) Lighting Street Furniture Play Equipment Full Planters Reduced Planters	cost (£) ptions Estimated Costs Option 1a Full Planting, Full SuDS (with attenuation) £ 220,000 40,000 40,000 34,500 138,500 -	Option 2a (Recommended) Full Planting Partial SuDS (without attenuation) £ 220,000 40,000 40,000 34,500 138,500	Reduced Planting Partial SuDS (without attenuation) £ 220,000 40,000 40,000 34,500	Reduced Planting, Conventional Drainage, no SuDS £ 220,000 40,000 40,000 34,500
Estimated capital of Table 4: Paul's Walk Op Task Paving works (incl. site preparation) Lighting Street Furniture Play Equipment Full Planters Reduced Planters Full Planting	cost (£) otions Estimated Costs Option 1a Full Planting, Full SuDS (with attenuation) £ 220,000 40,000 40,000 34,500	Option 2a (Recommended) Full Planting Partial SuDS (without attenuation) £ 220,000 40,000 40,000 34,500	Reduced Planting Partial SuDS (without attenuation) £ 220,000 40,000 40,000 34,500 - 78,000	Reduced Planting, Conventional Drainage, no SuDS £ 220,000 40,000 40,000 34,500 - 78,000
Estimated capital of Table 4: Paul's Walk Op Task Paving works (incl. site preparation) Lighting Street Furniture Play Equipment Full Planters Reduced Planters	cost (£) ptions Estimated Costs Option 1a Full Planting, Full SuDS (with attenuation) £ 220,000 40,000 40,000 34,500 138,500 -	Option 2a (Recommended) Full Planting Partial SuDS (without attenuation) £ 220,000 40,000 40,000 34,500 138,500	Reduced Planting Partial SuDS (without attenuation) £ 220,000 40,000 40,000 34,500	Reduced Planting, Conventional Drainage, no SuDS £ 220,000 40,000 40,000 34,500

Paul's Walk				
Conventional	-	-	-	52,000
drainage				
SUBTOTAL (works)	732,000	665,000	592,500	564,500
Fees	40,000	35,000	36,300	25,000
Staff Costs Open	41,000	41,000	26,000	26,000
Spaces Staff Costs DBE	35,000	30,000	30,000	25,000
(Highways)				
Staff Costs DBE (Planning)	55,000	50,000	40,000	30,000
SUBTOTAL (Fees and	171,000	156,000	132,300	106,000
staff)	171,000	100,000	102,000	100,000
SUBTOTAL	903,000	821,000	724,800	670,500
Open Spaces	60,305	60,305	40,305	40,305
Maintenance (5				
years)				
DBE Maintenance	15,000	12,000	14,000	12,000
(irrigation, drainage				
and cleansing, 5				
years)				
SUBTOTAL	75,305	72,305	54,305	52,305
(maintenance)				
SUBTOTAL	978,305	893,305	779,105	722,805
Retained Element for	60,000	60,000	60,000	60,000
Risk Management				
(Area under the				
Millennium Bridge)				
TOTAL	1,038,305	953,305	839,105	782,805

Source of capital funding

See Millennium Bridge Area above. Furthermore, there is specific funding of £34,500 for play/sport equipment in the area from the London Marathon Charitable Trust. Further details are set out in the tables in Appendix B.

Anticipated phasing of capital expenditure	Please see Appendix B Table 6 for anticipated phasing of capital expenditure.
Estimated capital value/return (£)	N/A
Fund/budget to be credited with capital return	N/A
Estimated revenue implications (£)	The scheme includes the addition of more planting areas in line with the approved Riverside strategy. The first 5 years establishment costs for this planting will be covered by the Section 106 funding, after which on-going maintenance costs would be borne by the Department of Open Spaces and the City of London School.
	In order to implement schemes in line with the Open Spaces

Paul's Walk	
	Strategy Members will need to consider the long term maintenance implications of the City's increasing open space asset beyond scope of the Section 106 contributions. The Department of Open Spaces will seek efficiencies from the current Open Spaces Local Risk Budget for this project and will report the long term maintenance solutions for the City's open spaces to Committee in due course. It is proposed that the irrigation, drainage and cleansing maintenance will be funded from Section 106s for five years after which the on-going maintenance costs would be contained within the Department of the Built Environment.
Source of revenue funding	Section 106 funds will cover the establishment of the planting for 5 years. Following this, costs will be borne by the Department of Open Spaces local risk budget.
Fund/budget to be credited with income/savings	N/A
Anticipated life	N/A
Investment Appraisal	N/A
Benchmarks or comparative data	The City has implemented numerous similar enhancement schemes over the last 8 years, including completed schemes nearby at Paul's Walk, Angel Lane and Grant's Quay.
Proposed procurement approach	As Millennium Bridge Approach
Affordability	The project is to be primarily funded from existing Section 106 receipts and the London Marathon Charitable Trust which have been specifically allocated to the enhancement of the Riverside Walk and play in the area. Approximately 9% of the project costs are to be funded from the City's On-Street Parking Reserve which has been allocated to the project as part of the original bid report approval by Committees.
Next Steps	As Millennium Bridge Approach