

City of London: Projects Procedure Corporate Risks Register

Project Name: **London Bridge Maintenance Works**  
 Unique project identifier: **12017 (Project Number 72800020)**

PM's Overall **Red**

Average unmitigated risk score **7.4**  
 Average mitigated risk score **3.8**

Open Risks **16**  
 Closed Risks **6**

General risk classification									Mitigation actions					Ownership & Action						
Risk ID	Category	Description of the Risk	Risk Impact Description	Likelihood Classification	Impact Classification	Costed impact (£)	Risk score	Confidence in the estimation	Mitigating actions	Mitigation cost (£)	Likelihood Classification after mitigation	Impact Classification after mitigation	Costed impact after mitigation (£)	Mitigated Risk score	Date raised	City of London Dept monitoring the risk	Risk owner (Officer/ External)	Action dependencies	Date Closed/ realised moved to Issues	Comment(s)
1	(5) Safety/ Health	Leaks persist after works	Continuing risk to structure from potential corrosion around post tension cable anchor points.	Rare	Serious	£0	2	A – Very Confident	Waterproofing will minimise leakage. Investigate what additional work can be done to seal ducts. Design waterproofing to work around existing cast iron gullies	£0	Rare	Minor	£0	1	21.05.2018	DBE	T. deSilva		08/01/2019	This project will do everything to mitigate for water going through the structure. The ongoing risk isn't attached to this project, but is a long term risk associated with the structure.
2	(1) Service Delivery/ Performance	Lane closures can't be agreed for the times required.	Could lengthen the works programme and cost	Possible	Extreme	£300,000	24	B – Fairly Confident	Negotiate lane closures during design stage. Carry out bearing and waterproof replacement together, so if any TM is needed for bearings it doesn't have to be negotiated separately. Ensure contractor doesn't establish site until we have confirmed agreement on closures.	£0	Rare	Extreme	£300,000	8	21.05.2018	DBE	Contractor	TfL final approval.		Cost given is for six weeks delay at £50k per week.
3	(2) Financial	Alternative access cannot be created	Additional manhandling (walk across Fish Wharf, through gym, negotiate several stairs and pedestrian load only on Riverside Walkway) Need to work around gym – i.e. night and weekend working. Licence required? Conditions imposed?	Unlikely	Serious	£60,000	4	B – Fairly Confident	ECI to be used. Investigate direct access through west footpath. Request plans of services from Stat undertakers, undertake trial hole / CAT scan where access is proposed. Consider refurbishment of bearings in the northern abutment. Design near completion. Barring obstructions during trial holes, this is considered a negligible risk.	£10,000	Rare	Minor	£60,000	1	21.05.2108	DBE	AECOM		03/04/2019	Consultants confident new access can be created to avoid working via the gym.
4	(1) Service Delivery/ Performance	Successful tenderer doesn't agree with proposals.	If tender occurs at end of design, risk appointed contractor will not agree with ECI proposals.	Unlikely	Serious	£0	4	A – Very Confident	Contractor to be involved in design (ECI). All background information to ECI proposals to be issued with tender. Tenderers to state they are happy with proposals or provide priced alternatives (as well as requested prices). Should have no financial impact as the bid will need to be competitive and compliant to be considered. Only compliant unqualified bids will be accepted. Price and Quality will be	£0	Unlikely	Minor	£0	2	21.05.2018	DBE	T. deSilva			
5	(2) Financial	Access ladders and gantries not sufficient for works	Ladders and gantries need replacement	Possible	Serious	£100,000	6	B – Fairly Confident	Access ladders have been sufficient for use of the designers. Specify access requirements necessary for works. Contractor to assess whether they would need to remove any of the existing equipment, replacements should be provided at the end of the works.		Rare	Serious	£0	2	21.05.2018	DBE	Contractor		08/01/2019	closed
6	(2) Financial	TfL charge for lane rental	Increased project costs	Unlikely	Major	£65,000	8	A – Very Confident	No confirmation yet from TfL on whether this would be charged. C&CS to advise on legality if TfL confirm they would charge.	£0	Rare	Major	£65,000	4	21.05.2018	DBE	T. deSilva	TfL decision		
7	(5) Safety/ Health	Deflection of bridge can't be carried by existing staircase	Check whether existing staircase can carry deflection during jacking? Will need to be shut during jacking or during the whole period the bridge is jacked up?	Rare	Serious	£250,000	2	B – Fairly Confident	Designers to consider effects of jacking on staircase. Outcome - bridge/staircase joint allows for much more movement than the 2mm max expected.	£0	Rare	Minor	£0	1	21.05.2018	DBE	AECOM			
8	(5) Safety/ Health	Services within bridge are damaged by jacking	Damage to services, reputational damage and financial costs to put this right.	Possible	Major	£100,000	12	C – Uncomfortable	Restrict movement during jacking to < 2mm. Stat companies notified so they can take action if needed. GI and TDS have identified cast iron services in abutment, which are bridge drainage and should be replaced.	£0	Rare	Minor	£30,000	1	21.05.2018	DBE	Contractor		22/01/2019	
9	(5) Safety/ Health	Damage to gym/switchroom within bridge during removal of bearings (e.g. hydro demolition)	Damage to gym/switchroom, reputational damage and financial costs to put this right.	Possible	Major	£100,000	12	C – Uncomfortable	Ensure services are protected or the works are enclosed. Tin sheet over plywood as protection during hydrodem. Use handtools or cut whole structure and replace/lap over reinforcing steel instead of using hydrodem over gym and switchroom. Risk remains of damage in north abutment particularly - additional money allowed for working around the gym/switchroom.	£0	Rare	Minor	£30,000	1	21.05.2018	DBE	Contractor			
10	(1) Service Delivery/ Performance	Bridge does not move as one unit during jacking		Rare	Major	£50,000	4	C – Uncomfortable	Design to confirm diaphragms are tied together. Current proposal has jacks under each diaphragm. Jacking restricted to 2mm.	£0	Rare	Minor	£0	1	04.09.2018	DBE	Contractor		08/01/2019	closed
11	(1) Service Delivery/ Performance	Rod Anchorages at back of deck can't take the movement during jacking.	Damage to rods or anchorages. Risk to structure.	Rare	Extreme	£10,000,000	8	C – Uncomfortable	Movement during jacking kept to <2mm. Less than range of movement bridge is designed to take.	£0	Rare	Minor	£0	1	04.09.2018	DBE	AECOM		08/01/2019	closed
12	(1) Service Delivery/ Performance	Joints damaged during works	Additional costs incurred to repair or replace joints	Possible	Serious	£30,000	6	B – Fairly Confident	Hand break only within 0.5m of joint. Condition survey to benchmark defects. Ensure remedial works (cracked epoxy resin and broken rail) are rectified in advance of main works.	£0	Unlikely	Minor	£30,000	2	04.09.2018	DBE	Contractor			
13	(2) Financial	Condition of concrete not acceptable	Smoothing of the surface or repair of defective concrete required before waterproofing can be applied.	Possible	Serious	£100,000	6		Trial holes undertaken, suggest it is sensible to allow for repair of 10% of bridge deck.	£9,000	Unlikely	Serious	£100,000	4	04.09.2018	DBE	T. deSilva			



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