

Centenary Way Viaduct

This is to be read in conjunction with the Risk Management Strategy (see separate document)

Risk Register

Approx quantification (min) £	20,800.00	Risk register
Approx quantification (expected) £	71,500.00	P50 Value
Approx quantification (max) £	133,000.00	

SCORE	L	M	H
	1	2	3
Prob (%)	10	50	75
Approx. Cost Impact	< 10k	10-100k	>100
Approx. Time Impact	< 1wks	2-5wks	>6 wks

Impact	Min	Expected	Max
	1	1000	5000
2	10000	50000	100000
3	100000	175000	250000

Risk Register	Description	Owner of Risk	Example/Consequence	Comments/Mitigation	Impact	Prob	Prob %	Risk	Time (weeks)	Min. Cost (£k)	Expected Cost (£k)	Max. Cost (£k)	Approx quantification output			Amendments from previous revision
													P x Min	P x Exp.	P x Max	
01	Preparation & Supervision															
	Scheme programme															
01.01	Not following Generic Risk Management Process	All parties	Project Review identifies significant +/-	Review all risks, mitigate and reduce or remove risks. Focus on top risks	1	1	0	1		1,000	5,000	10,000	0	0	0	
01.02	Awareness of other schemes and County/Borough initiatives	LCC	Burnley Borough Councils Proposals/Statutory Undertakers Works	Put in early TMA notices for the work. Liaise with Co-ordination team	1	1	0	1		1,000	5,000	10,000	0	0	0	
01.03	Insufficient time / resource to negotiate target Cost ?	All parties	Risk of not reached agreed FTC		2	1	0	2		10,000	50,000	100,000	0	0	0	
01.04	Technical Approval Procedures	LCC / Designer	AIPs / departures /geotech approvals	Regular meeting with Designer to monitor approvals.	2	1	0	2		10,000	50,000	100,000	0	0	0	
01.05	Loss of key resource	All parties	LCC. Framework consultant contract has not yet been awarded resulting in no design staff.		2	3	0	6		10,000	50,000	100,000	0	0	0	
01.06	Partnership performance	All parties	Approach to partnering		1	1	10	1		1,000	5,000	10,000	100	500	1,000	
01.07	Design issues - General	All parties	Inaccurate pricing, Buildability		3	1	0	3		100,000	175,000	250,000	0	0	0	
01.08	Design issues - Stringcourse and Parapets	All parties	Inaccurate pricing, Buildability		2	2	0	4		10,000	50,000	100,000	0	0	0	
01.09	Design issues - Joints	All parties	Inaccurate pricing, Buildability		1	1	0	1		1,000	5,000	10,000	0	0	0	
01.10	Design issues - Pavement	All parties	Inaccurate pricing, Buildability		1	1	0	1		1,000	5,000	10,000	0	0	0	
01.11	Design issues - Street Lighting	All parties	Inaccurate pricing, Buildability		1	1	0	1		1,000	5,000	10,000	0	0	0	
01.12	Design issues - Bearings	All parties	Inaccurate pricing, Buildability		2	2	10	4		10,000	50,000	100,000	1,000	5,000	10,000	
	Cost Risks															
01.13	Inadequate allowance for change in economic conditions	All parties	Tax / Inflation	2.7% inflation in estimate - monitor and adjust if required	2	1	0	2		10,000	50,000	100,000	0	0	0	
01.14	Third party Fees (supervision / possession)	All parties	Canal and River Trust	Stakeholder Management	1	1	0	1		1,000	5,000	10,000	0	0	0	
01.15	Significant variation in target price vs estimate	All parties	Rework to agree price - delay	Robust estimate and option to revisit scope	1	1	10	1		1,000	5,000	10,000	100	500	1,000	
02	Land and Legal															
	Land & landowners															
2.01	Land Access to areas beneath the bridge for working	LCC		Majority of land owned by Burnley Borough Council. Obtain scheme buy-in at earliest possible stage.	1	1	10	1		1,000	5,000	10,000	100	500	1,000	
03	Strategic															
03.01	Impact of national/international incidents	Not assigned	F&M / Influenza / Terrorism / Civil strike / Rioting	Potential mitigation unclear at present	3	1	10	3		100,000	175,000	250,000	10,000	17,500	25,000	
03.02	LCC financial ordering and approval procedures and systems (Oracle)	LCC	Approval Final Target Cost etc. Oracle ordering limitations		1	1	10	1		1,000	5,000	10,000	100	500	1,000	
	Resource risks															
03.03	Insufficient communication / co-ordination across Project Team	All Parties	Silo working	Robust supervision of design to avoid rework due to invalid assumptions	1	1	10	1		1,000	5,000	10,000	100	500	1,000	
03.04	Lack of clarity in role definition	All Parties		Robust project management	1	1	10	1		1,000	5,000	10,000	100	500	1,000	
04	Design Baseline															
04.01	Euro codes	LCC/Designer	Impact of Euro code design for structures.	Eurocode not implemented yet.	1	1	0	1		1,000	5,000	10,000	0	0	0	
04.02	DMRB revisions	LCC/Designer	DMRB updates between design fixity and start on site	Short design timescale, issue should not arise	1	1	0	1		1,000	5,000	10,000	0	0	0	
04.03	Changes in staff at outside bodies, with different perspective on current proposals.	LCC	Lack of agreement in writing. Redesign and planning issues. Delay & extra cost		1	1	0	1		1,000	5,000	10,000	0	0	0	
04.04	Use of As-Built info	All Parties	As built drawings incorrect		1	1	10	1		1,000	5,000	10,000	100	500	1,000	
04.05	Design errors- zero cost, covered in 1.22 - 1.35	LCC / Designer	Delay and abortive cost	Robust supervision of design	2	1	10	2		10,000	50,000	100,000	1,000	5,000	10,000	
	Detailed design															
05	Engineering: Structures															
	Structures Design standards															
05.01	Difficulties getting AIP's approved.	LCC / Designer	Delay & extra cost	Stakeholder Management	1	1	10	1		1,000	5,000	10,000	100	500	1,000	
	Structures Detailed design															
05.02	Failure to achieve detailed design completion in advance of site.	LCC	Additional cost of compensation events on site. Miss critical programme windows.	Robust supervision of design. Build float into the programme.	3	1	0	3		100,000	175,000	250,000	0	0	0	
05.03	Checking of 3rd party designs	LCC	AIPS	Programme to be agreed for timely approval.	1	1	10	1		1,000	5,000	10,000	100	500	1,000	
05.04	Existing bridge deck in worst state that expected.	LCC	Concrete repairs scope larger than shown on PBIs		2	1	10	2		10,000	50,000	100,000	1,000	5,000	10,000	
05.05	Error in bearing design	LCC	Delay and abortive cost.	Early stage discuss of experience of designer and possible further engagement of experienced designer. Design already complete.	1	1	10	1		1,000	5,000	10,000	100	500	1,000	
06	Statutory Undertakers															
06.01	Statutory Undertaker delay	All Parties	Increased scheme cost due to inflation	Early involvement and agreement with stats. Only stats involvement is street lighting connection.	3	1	0	3	12	100,000	175,000	250,000	0	0	0	
06.02	Stats costs greater than estimates	All Parties	Street lighting connection	Only stats involvement is street lighting connection.	2	1	0	2		10,000	50,000	100,000	0	0	0	
07	Construction/Contractual															

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													P x Min	P x Exp.	P x Max	
Quality Risks																
07.01	Timely submission and processing of Traffic Regulation Orders	LCC / Contractor	Carriageway closures	TMA and TTROs submitted in timely manner	1	1	10	1		1,000	5,000	10,000	100	500	1,000	
07.02	Difficulty in installation of proposed bearing	LCC / Contractor	Contractor cannot prop bridge deck as designed	Check Contractor Proposals as expected	2	1	10	2		10,000	50,000	100,000	1,000	5,000	10,000	
07.03	Insolvency - Contractor	LCC	Re-tender	Cost risk with time to re tender. Without time it is a strategic risk. PQQ - Financial standing of contractor checked	1	1	10	1		1,000	5,000	10,000	100	500	1,000	
07.04	Unavailability of Bearings	LCC	Long lead time for manufacture of bearings		2	2	50	4		10,000	50,000	100,000	5,000	25,000	50,000	
Financial processes																
07.05	Extraordinary material/fuel price increase/fluctuation	All parties		Potential mitigation unclear at present. Fuel price currently dropping.	1	1	10	1		1,000	5,000	10,000	100	500	1,000	
07.06	Volatility in Insurance market resulting in unexpectedly high premiums	All parties		Potential mitigation unclear at present	1	2	50	2		1,000	5,000	10,000	500	2,500	5,000	
Totals												20,800	71,500	133,000		

P50