

Appendix G – Risk Registers

Public Realm Risk Register

LUF-Bromsgrove Public Realm - RISK REGISTER - *N.B. A risk has not yet happened, an issue has happened*
 Guidance on risk assessment and RAG ratings can be found on the 'RAG Guidance' tab

Ref	Project/ Phase	Risk	Consequences	Probability	Impact	RAG	Date of potential Risk	Response Action (including date)		Cost of risk (post mitigation) % of TP	Review Date	Owner	Outcome	Date Closed
								Control in Place	Additional Action Planned					
1	Bromsgrove	Scope creep	Cost exceeding budget, or late delivery	High	Critical	18	As programme develops	Introduce strategy to fix concept design and ensure decision making doesn't impact programme.	If further changes/extras are required, additional funding will need to be provided, or the scope in other areas is reduced accordingly to suit budget.	0.00%		Project Manager/ Project Board		
2	Bromsgrove	Late delivery (due to optimistic delivery programme)	Loss of funding	Medium	Substantial	14	As programme develops	Regular monitoring of programme.	Potential for RBC to transfer funding ahead of completion.	0.00%		Project Manager		
3	Bromsgrove	Inflation - particularly material and fuel price increases	Cost exceeding budget	High	Critical	18	As programme develops	Consider early material orders if storage space available	Find additional funding or reduce scope of scheme accordingly	15.00%		Project Manager/ Project Board		
4	Bromsgrove	Existing highway drainage systems not adequate	Additional construction costs to replace drainage system	Medium	Substantial	14	During design	Obtain site records and undertake drainage surveys	Complete detailed design allowing for any constraints	1.00%		Designer		
5	Bromsgrove	Cost Plan/Target Price exceeds budget	Cost exceeding budget	Medium	Critical	16	On receipt of TPs	Estimate based on latest available rates (at time of producing estimate), allowance for inflation	Review once Concept Design is fixed	0.00%		Project Manager		
6	Bromsgrove	Unavailability of contractor resources (Ringway, Prysmian, Telent)	Programme delay	Low	Substantial	12	During mobilisation	Resource availability to be monitored	Regular meetings with delivery team	0.00%		Project Manager/ Contractor		
7	Bromsgrove	Materials not available for site start date	Programme delay	Medium	Substantial	14	During mobilisation	Use readily available products where possible, allow for sufficient mobilisation in programme	Consider early order for materials if storage space is available, procurement to commence 20 weeks in advance of start date.	0.00%		Contractor		
8	Bromsgrove	Impact on traffic flow during works	Public backlash, disruption to businesses, construction starting date delayed due to the ASS BREP project taking place in the same time	High	Critical	18	During construction	No works during key events, christmas embargo? Undertake PIE Early liaison with Streetworks and ASS BREP PM team	Consider off-peak working restrictions. Early meeting with Streetworks to discuss best diversion route whilst taking into account ASS BREP project	0.00%		Project Manager/ Designer		
9	Bromsgrove	Reduced footfall during construction	Public backlash, disruption to businesses	Low	Substantial	12	During construction	Do work in small areas, undertake PIE	Additional signage- business open as usual	0.00%		Project Manager/ Designer		
10	Bromsgrove	Restricted business access (delivery and customer) throughout construction	Disruption to businesses	Medium	Substantial	14	During construction	Undertake PIE (face-to-face with businesses), establish business delivery arrangements and opening hours	Provide temporary loading area. Works directly outside store entrances when closed	0.00%		Contractor		
11	Bromsgrove	Impact on events	Public and business backlash	Low	Critical	14	During construction	Establish key events. No works during key events, christmas embargo?	Identify events as constraints during which contractor can't work	0.00%		Project Manager/ Designer		
12	Bromsgrove	Uncharted services and connections	Utility strike, delay, cost	Medium	Substantial	14	During construction	Stats records to be obtained and refreshed as required	GPRS survey, targeted trial holes	1.00%		Designer/ Contractor		
13	Bromsgrove	Existing cellars and building facades in poor condition	Collapse of cellars or building facades	Low	Critical	14	During construction	Undertake cellar and building facades surveys	Undertake mitigation if required following surveys	1.00%		Designer/ Contractor		
14	Bromsgrove	Unforeseen or inadequate ground conditions	Extra over excavation, cost, delay	Low	Substantial	12	During construction	targeted trial pits to be dug in scope	Allow for dealing with soft spots	3.00%		Designer		
15	Bromsgrove	Finding archaeological remains	Additional construction costs to excavate archaeology	Low	Critical	14	During construction	Review targeted trial holes in design	Limit depth of excavation in design	1.00%		Project Manager/ Designer		
16	Bromsgrove	Weather risk	Increased costs and delays	Medium	Substantial	14	During construction	Programme works in warmer seasons if possible, unless very abnormal conditions the financial risk sits with the contractor	Check long range forecasts	0.50%		Contractor		
17	Bromsgrove	Construction costs more than Target	Increased costs	Medium	Substantial	14	During construction	Accurate take-off of quantities, efficient working methods	Target Price contract limits overall risk	5.00%		Project Manager/ Designer/ Contractor		
18	Bromsgrove	Works on private land	Objections/conflict whilst on site. Planning enforcement	Low	Substantial	12	During and post-construction	Assumed all works on existing public highway, will verify land ownership.	If any 3rd party land is required, ensure any private landowner gives consent and accepts maintenance liability	1.00%		Project Manager/ Project Board		
19	Bromsgrove	Impact on local residents, during works (noise)	Public backlash	Low	Substantial	12	During and post-construction	Undertake PIE	Minimise overnight working, letter drop	0.00%		Project Manager/ Designer		
20	Bromsgrove	Opposition to scheme from local businesses	On site confrontations	Low	Substantial	12	During and post-construction	Ensure adequate loading facilities in design. Undertake PIE	Temporary loading facility to be provided during works. Comms Plan to be in place during construction to inform businesses of progress of works.	0.00%		Project Manager/ Contractor		

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Ref	Project/Phase	Risk	Consequences	Probability	Impact	RAG	Date of potential Risk	Response Action (including date)		Cost of risk (post mitigation) % of TP	Review Date	Owner	Outcome	Date Closed
								Control in Place	Additional Action Planned					
21	Bromsgrove	Damage to local ecology	Loss of ecology/protected species	Low	Substantial	12	During and post-construction	Liaise with County Ecologist during design particularly with respect to lighting. Retain all existing trees wherever possible	Lighting design to include mitigation measures where necessary	1.00%		Project Manager/Designer		
22	Bromsgrove	Road Safety Audit - issues arising that may require changes	Programme delay	Medium	Substantial	14	During and post-construction	Undertake Principal Designer reviews before submission for RSA	Action audits promptly	0.50%		Project Manager/Designer		
23	Bromsgrove	Sightlines from existing CCTV cameras obscured	Ensure new trees/street furniture do not obscure sightlines	Medium	Substantial	14	post-construction	Identify camera positions	Position trees and street furniture accordingly	0.00%		Project Manager/Contractor		
24	Bromsgrove	Utility maintenance works - digging up public realm after upgraded	Reputational damage and potential reinstatement costs	Medium	Substantial	14	post-construction	Attend NRSWA coordination meetings	Issue Section 58 notifications	0.00%		Project Manager		
										30%				

In order to monitor the impact of actions against critical risk, each update should be saved as a new version. This allows us to baseline against the original rag rating

Risk allowance within budget	Inflation	15%
	Pain/gain	5%
	Unforeseens	10%
	TOTAL	30%

Windsor Street Risks

Client Related

ID	Date Raised/Instigated by	Risk Description	Owner	Probability	Impact	Ranking April 2024	Mitigation Actions / Response	Strategy C/E/R/P
A								
A1	13-Feb-24	Design. Ensure client needs are met	BSL	1	6	6	Design well integrated/ Establish clear brief	E
A7	13-Feb-24	Adverse public opinion	NWD	1	4	4	Prepare information for Public consultation	R
A8	13-Feb-24	Large client changes	NWD	1	4	4	Establish sign off and approval process.	E
A9	13-Feb-24	Legal constraints on land	NWD	1	6	6	Early agreement of legals	E
A11	13-Feb-24	Delay in final brief	NWD	1	2	2		
A14	13-Feb-24	Possibility of losing funding streams	NWD	1	10	10		

Statutory Risks

ID	Date Raised/Instigated by	Risk Description	Owner	Probability	Impact	Ranking April 2024	Mitigation Actions / Response	Strategy C/E/R/P
B	Statutory							
B1	13-Feb-24	Ecological, implications of Bat survey	MDA	1	2	2	Consultant Appointed, daytime survey complete; nocturnal survey booked in	E
B2	13-Feb-24	Contaminated Land	BSL	6	6	36	Site Investigation and Remediation Strategy completed; further investigation required during works	E
B3	13-Feb-24	Building Regulation approval/timing	ONE	1	2	2	Notice approval only; can be contractor lead	E
B4	13-Feb-24	Planning Permission	ONE	2	6	12	4 Weeks decision period; plans and statements submission	E
B5	13-Feb-24	Existing Rights of Way/ Easements	NWD	1	4	4	Day Centre right of way- included for in land transfer	E
B6	13-Feb-24	Archaeology, possible finds	CONTR	1	4	4		P
B7	13-Feb-24	Asbestos. Material requires removal.	CONTR	6	6	36	Asbestos survey completed identifying large areas of asbestos; risk of more during demolition	R
B9	13-Feb-24	Existing services require disconnection	NWD	6	2	12	Gas and water disconnected; power quotation instructed to disconnect 2nr supplies	E
B10	13-Feb-24	Existing services diversion	NWD	2	4	8		R
B11	13-Feb-24	Poor performance of utility suppliers	NWD	2	6	12	agree programme and maintain communication	R
B12	13-Feb-24	T.P.O's	NWD	1	2	2	No trees affected by proposal	E

Project Risks

ID	Date Raised/Instigated by	Risk Description	Owner	Probability	Impact	Ranking April 2024	Mitigation Actions / Response	Strategy C/E/R/P
C	Project							
C1	13-Feb-24	Poor ground conditions	BSL	1	2	2	No new buildings in this phase	R
C2	13-Feb-24	Health and safety performance	CONTR	1	8	8	Monitoring process, by team	E
C3	13-Feb-24	Poor quality of works	CONTR	1	2	2	Establish responsibility and monitor	E
C4	13-Feb-24	Impact of mine workings	BSL	1	6	6	S I report did not indicate any issues likely	E
C5	13-Feb-24	Unforeseen services exposed	CONTR	1	6	6	Carry out survey prior to removal of soils	E
C6	13-Feb-24	Vandalism	CONTR	2	4	8	Supervise	R
C7	13-Feb-24	Security	CONTR	2	4	8	On site security established	R
C8	13-Feb-24	Working adjacent to occupied buildings	CONTR	2	4	8	Constraints to be clearly identified	R

Procurement Risks

ID	Date Raised/Instigated by	Risk Description	Owner	Probability	Impact	Ranking April 2024	Mitigation Actions / Response	Strategy C/E/R/P
D	Procurement							
D1	13-Feb-24	Insolvency of contractor	MDA	3	8	24	Establish review and screening process/PCG and Bond to sought from Contractor	R
D2	13-Feb-24	Market conditions change	CONTR	3	6	18	Must be monitored and firm costs achieved as soon as possible.	P
D3	13-Feb-24	Poor documentation	MDA	2	8	16	Establish adequate design and programme	E
D4	13-Feb-24	Construction risks are with Client	MDA	2	6	12	Must be monitored and firm costs achieved as soon as possible.	R
D6	13-Feb-24	Insolvency of subcontractor	CONTR	4	8	32	Control through Supply chain and selection	R

Market Hall Risks

Reference	Date Raised	Type	Title	Description	Consequence	Pre-mitigate	Pre-mitigated	L. Pre-mitigate	Mitigation Strategy	Risk Owner	Post Mitiga	Post Mitiga	Post Mitigated	Status
RR-050	30/09/23	Commercial	Cost exceeds available budget	RIBA 3 project cost estimate is circa. £500,000 over the confirmed budget of £11,078,000.	Available budget will not meet cost estimate, the current scheme will be unaffordable and further VE will need to be completed	4	4	16	Several applications to DLUHC have been made for additional funding. As of January 2024 these have been unsuccessful. Current strategy within BDC is to utilise contingency identified in RIBA 3 Construction Cost Plan. A 7.5% (£814,607) contingency is held against employer change and design development.		3	4	12	Open
RR-010	01/12/22	ISSUE: Stakeholders	Operator plan and model	Operation strategy for the Pavilion building remains unclear, it is currently assumed that the Pavilion will be operated by the BDC. The Commercial building will be built to BCO standards and we assume it will be operated by a private estate management company which is yet to be appointed.	Lack of a clear design and fit out brief for the Pavilion building. Potential abortive/ additional costs once an operator is appointed by council and/or unsuitable final product which is underused or not fit for purpose.	4	4	16	It is currently assumed that the Pavilion will be operated by the BDC and Commercial building (inc. public realm) will be operated by a private estate management company. Cabinet report of February 24 expected to clarify operating arrangements	N/WedR	4	3	12	Open
RR-001	07/02/23	Construction	Archaeological discoveries delay programme	The site is within a high risk archaeology area which requires a Desk Based Assessment at planning and a programme of trial trench investigations before works can commence. If significant discoveries are found during these investigations a detailed programme of investigations will be required including further	A detailed programme of investigations will delay start on site by approximately three - six months	4	4	16	Desk Based Archaeological survey completed prior to planning. Invasive investigations will be completed in Spring through the PCSA contract. WSI to be agreed by LPA early ASAP after agreement of PCSA contract.	Arcadis	4	3	12	Open
RR-049	03/09/23	Commercial	Unanticipated cost increases through PCSA and Second Stage tender	Risk of cost increases above RIBA Stage three formal cost plan following detailed design and engagement with main contractor during PCSA.	Cost increases above available budget. Additional funding will need to be sought or scope reduced further than currently identified VE measures, delaying the programme.	4	3	12	Arcadis cost managers working closely with One Creative to minimise scope creep from Value Engineered scheme submitted for planning. Further Value Engineering may be required during PCSA if budget does not increase.	Arcadis	3	3	9	Open
RR-023	04/05/23	Construction	Providing access to the site off existing highways during construction	Access arrangements for construction traffic may cause disruption to neighbours. Current approach utilising George Street and Hanover street have been approved, subject to CEMP, by WCC	Disruption caused to neighbouring landowners including Waitrose, cost of compensation to neighbouring landowner, delay in construction programme	4	3	12	WCC highways have provided recommendation to approve conditional on receiving CEMP following determination	Arcadis	3	3	9	Open
RR-006	01/12/22	Planning	Construction site constraints: Culvert location	Tightly constrained site with public highway and development surrounding the red line.	Difficulty identifying location of site compound, unloading deliveries on site and ensuring sufficient working room	4	3	12	First stage tender documents included agreed access constraints for the appointed contractor. Bidders to respond to quality question in relation to access/ set up. FEB24 Update: Responses have shown several solutions including off site office accommodation and phasing proposals	Arcadis	3	3	9	Open

RR-008	26/01/23	Stakeholders	Under use of the Pavilion building	Programme of events not fully developed for the pavillion building and asset is underutilised	Reputational and financial risk of the council	3	4	12	BDC leisure and events team attending monthly project team meetings. NWedR and TC manager developing operation strategy for Pavilion	NWedR	3	3	9	Open
RR-032	01/12/22	Construction	Supply chain delays	Materials delayed arriving to site due to supply chain issues. (CLT particularly)	Additional cost and time delays	3	3	9	Early engagement with supply chain via main contractor. Limited suppliers for Copper Alloy cladding flagged in tender responses	Arcadis	3	3	9	Open
RR-034	01/12/22	Design	S.278 Highways works	Incorporation of highways works up to back of kerb.	Objection froms highways statutory authorities	3	3	9	Escalated engagement within Worcestershire County Council and focused attention during PCSA	Arcadis	3	3	9	Open
RR-014	13/01/23	Construction	Foundations of George House left in situ following demolition	Foundations of George House are in situ, additional cost will be incurred remediating to allow for construction of the Pavilion.	Additional cost and programme delay while remediation works take place	4	3	12	Provisional allowance included in RIBA 3 cost plan. Detailed financial and programme impact to be assessed during PCSA.	Arcadis	3	3	9	Open
RR-020	01/12/22	Construction	Sub-contractor insolvency	Sub-contractor become insolvent due to challenging economic conditions	Cost and time delays caused by sourcing new sub-contractors	3	4	12	Assessing sub-contractor financials through contractor. Ensuring main contractor is paying sub-contractors promptly, to be assessed through quality criteria and incentivised through contract.	Arcadis	3	3	9	Open
RR-040	01/12/22	Construction	Oversailing rights and cranes on site	Oversailing rights may be required over neighbouring properties, depending on type of crane used	Neighbouring properties rights are infringed	2	4	8	To be negotiated in PCSA agreement, tenderers have suggested utilising luffing jib crane to minimise oversailing.	Arcadis	2	4	8	Open
RR-004	01/12/22	Financial	Fees and surveys cost inflation	Fees and surveys rise to above available budget	Changes in specification may be required reducing burden on professional fees or additional funding will need to be sought	3	4	12	Continue to monitor fees and surveys expenditure and minimise unnecessary spend	Arcadis	3	2	6	Open
RR-011	01/12/22	Statutory bodies	Securing incoming supplies from statutory authorities	There is insufficient capacity in water, power and gas networks to supply the development	Delays to construction and additional cost to facilitate utilities upgrades	4	3	12	Early engagement with all statutory utilities will be conducted by appointed PCSA contractor	Arcadis	3	2	6	Open
RR-002	26/01/23	Financial	Tenants not identified for office building	Tenants cannot be found for commercial building	Financial and reputation impact for the council	3	3	9	NWEDR engaging with potential tenants and scoping requirements	NWedR	3	2	6	Open
RR-007	01/12/22	Financial	Market viability of current configuration	Currently minimal evidence base for configuration. No operators or partners identified	If building is unoccupied BDC will be responsible for upkeep costs, potential funding clawback and reputational damage	3	3	9	NWEDR are leading production of an Operational strategy. Bruton Knowles have completed a viability appraisal of the current scheme. Draft reports are positive with a residual land value of £3.868m	Arcadis	3	2	6	Open
RR-017	01/12/22	Construction	Health and safety on site	Health and safety incidents on site	Harm to site operatives, liability of client to ensure H&S on site.	4	3	12	H&S strategy to be developed by Principal Designer and Main contractor and agreed by project team	Arcadis/ Main contractor	3	2	6	Open
RR-018	01/12/22	Construction	Health and safety of public	Incidents involving members of the public adjacent to site	Harm or injury to members of public, liability of client and contractors	4	3	12	H&S strategy to be developed by Principal Designer and Main contractor and agreed by project team	Arcadis/ Main contractor	3	2	6	Open

RR-048	19/08/23	Legal	Covenants on title	Pavilion building area is subject to a covenant preventing the sale of alcohol. Of the two key beneficiaries, one has agreed to extinguish the covenant. The second has appointed solicitors and is attempting to claim compensation.	Cost of possible compensation payment to Beneficiaries, uncertainty of ability to serve alcohol at Pavilion events.	3	3	9	BDC legal and property teams are making enquires and liaising with solicitors appointed by the impacted party. Other option is reconfiguration of the design so that Pavilion becomes Office Accommodation and Community Events transfer to the Market Hall building.	BDC	3	2	6	Open
RR-038	01/12/22	Design	Integration of High Street South Works	Co-ordination of High street south works led by WCC, also using LUF funding	Poor quality appearance of incogruent finishes or specifications	3	2	6	Early engagement with WCC highways, WCC rep to be added to Project Team meeting. Feb 24: Review of detailed plans shows that works are less intensive and further from site than originally thought. Current site access plans would route most traffic away from works area.	Arcadis	2	2	4	Open
RR-031	01/12/22	Construction	Delays associated with diversion of footpath	Delays and additional costs of diverting existing footpath St John street	Public safety compromised while following diversion. Cost associated with diversion measures	4	3	12	Contractor to ensure appropriate signage and barriers are place during construction. To be detailed in CEMP approved with WCC highways	Arcadis / Main contractor	2	2	4	Open
RR-025	01/12/22	Design	Flood risk	Site is within flood zones, extent clear	Design vulnerable to flooding / Planning risk	3	3	9	Further investigation of flood risk through flood risk assessment. If in a high flood zone, mitigations included within design and NW/WM/EA consulted through planning application. Recommendation to approve received from planning committee. Stakeholder engagement and consultation programme took place during February-March 2023 and October 2023 in advance of planning application with mostly positive outcomes. Monthly meetings held with BDC Planning.		2	2	4	Open
RR-015	01/12/22	Planning	Stakeholder engagement	Very limited stakeholder engagement conducted through RIBA 2 and LUF bid	Scheme may be rejected at planning committee or receive political opposition if no substantive engagement takes place before planning application	3	3	9	Clear governance process, close coordinated cost and design management. Early stakeholder engagement, coordinated by Project Team meeting	One Creative	2	2	4	Open
RR-027	01/12/22	Design	User/ stakeholder changes	Changes requested by users and stakeholders beyond the project brief	Programme delays/ cost overruns	3	2	6	Risk assessment to be conducted with agreed RIBA III designs. Community safety team now included in Project Team	Arcadis	2	2	4	Open
RR-028	01/12/22	Design	Secure by design - ASB and public safety	Design is not safe and secure in terms of encouraging ASB and hostile vehicles/ terrorism	Potential for future security incidents and ASB in operation	3	2	6	Invasive site investigation has been completed and shows no signs of significant contamination	Arcadis	2	2	4	Open
RR-026	01/12/22	Design	General undetected below ground obstructions and contamination	Any issues arising from SI, potential for remaining foundations from previous uses (before Birdbox)	Additional cost or delay caused by remediation and/or higher quality pilling	2	2	4		Arcadis	2	2	4	Open

