Risk ID	Strategic/ Project	Category	Risk Cause 'The Risk is caused due to'	Risk Event 'There is a Risk that will happen'	Risk Impact The Impact of the Risk is'	Risk Owner	Likelihood	Cost Impact	Programme Impact	Relationship Impact	Reputation Impact	SHE Impact	Risk Rating	Price Build Up Notes & Comments n own	Targ atto Risk Mitigation Plan date dos out	Likelihood	Programme Impact	Relationship Impact	Reputation Impact	SHEImpact	Risk Rating	Probability Minimum Cost Impact	Most Likely Cost Impact	Maximum Cost Impact Up Con	ice Build Notes & Risk status omments
R001	Strategic	Strategic/ Programme	Unfavourable result at Public Inquiry	Unfavourable result at Public Inquiry leads to project delays	Project Lost	Matt Johnson	2	3	3	2	5	1	7	MattJohnson	Robust and comprehensive witness statements at PI: witnesses to be PI trained and experienced; early appointment of Counsel	1 3	1	5	5	1	6	5% £1,000	£1,750	£2,500	Open
R002	Strategic	Strategic/ Programme	Inflation leads to increased scheme cost	Inflation increases real cost of scheme & variation in material costs.	Cost increase on project; potential delays for approval- increased cost	Gary Dymond	3	4	1	2	3	1	7	Gary Dymond	Maintenance of up to date cost estimates by experienced OS team. Additional funds from Shropshire Council corporate resources plus ongoing discussions with DfT.	4	1	3	2	1	7	35% £2,50	£3,750	£5,000	Open
R006	Project	Client	Result at Public Inquiry	Unfavourable result at Public Inquiry leads to project delays	Project delayed for resubmission of more acceptable alternative. Judicial review required and if successful, would result in planning application having to be redor	t e Watt Johnson	1	2	5	4	4	1	6	Matt.bhnson	Robust and comprehensive witness statements at PI; witnesses to be PI trained and experienced; early appointment of Counsel	1	5	4	4	1	6	50/	0.05		
R007	Project	Land	Inability to conduct surveys due to landowner refusal	Landowner refuses entry for surveys	Delay while entry powers obtained; loss of goodwill; potential adverse publicity	Matt	2	1	2	1	1	1	4	Matt	Appointment of dedicated liaison officer to discuss issues. Use Shropshire Council powers of entry under Highways Act 1980	1 1	1	1	1	1	2	5% £25i	£625	£1,000	Open
R008	Project	Stakeholder	Lack of public approval of scheme	Public opposition at Exhibitions	Loss of goodwill; adverse publicity; anti-roads lobby potentially mobilised for concerted campaign	Matt Johnson	2	2	2	2	2	1	4	Matt Johnson	Clear explanations of Shropshire Council proposals. Robust Q&A document for use at Exhibitions. Strong Council messaging and media output.	1 2	2	2	2	1	3	5% £25i	F625	£1,000	Open
R009	Project	Statutory Process	Statutory process timeline	Statutory process causes delays in project delivery	Delay in start of construction; increased cost to mainta completion date	ai Matt Johnson	1	1	1		1	1	1	Matt Johnson	Close liaison with Department For Transport re Inspector's reporting period and receipt of SoS decision letter	1 1	1	1	1	1	2	3.0 123			Орен
R010	Project	Environmental	Objection to ES and planning submission	Planning Authority object to preparation of ES and planning submission without full 12 months investigation of protected species	Planning authority rejects planning submission and ES delay to planning decision while further surveys undertaken; delay to project delivery	Chris Middleton	1	1	5	3	4	1	6	Chris	Close liaison with Planning Officers and Council environmental specialists throughout design and survey periods; include future survey programme in ES	1 1	4	3	3	1	5	5% £1	£125	£250	Open Open
R012	Project	Land	Severance	Severance may result in requirement to purchase additional land (outside of red line)	Increased costs	Richard	1	2	1	1	1	1	3	Frank	Dialogue with Estates Department re. land swap and accommodation works	1	1	1	1	1	3	5% £25	6625	£1,000	Open
R013	Project	Strategic/ Programme	Delay in receiving approvals	SC delays to approvals	Loss of project programme	Matt	2	2	2	2	2	1	4	Matt	Close Liaison between Shropshire Council and WSP senior management. Establish of project delivery board and escalation procedure to strategic infrastructure delivery board.	1 2	2	2	2	1	3	5% £25i	£625	£1,000	Open
R014	Project	Strategic/ Programme	Availability of resources	WSP unable to maintain resource levels to deliver to programme	Project programme slips; statutory process delayed	Frank Beech	1	2	3	3	2	1	4	Frank Beach	Close project management through design period and bringing resources from other offices. Ongoing dialogue across WSP	1 2	2	2	2	1	3	5% £25i	£625	£1,000	Open
R015	Project	Design	Results from Topo survey	Topo survey identifies OS base unreliable	Detailed topo survey needed prior to determination o land acquisition needs; programme slips	Gary Dymond	1	2	2	2	2	1	3	Gary	Carry out detailed Topographic survey early in the design process.	1 2	1	1	2	1	3	5% £25i	£625	£1,000	Open
R016	Project	Design	Fatality or serious personal injury during site surveys	Fatality or serious personal injury	Reputation suffers; costs to manage; potential delay t project during HSE investigations; regulatory fine.	d Gary Dymonx	1	2	1	3	3	5	6	Gary	Detailed and specific Risk Assessments for all site inspections; use of experienced surveyors trained in required techniques	1 2	1	3	3	5	6	5% £25i	£625	£1,000	Open
R017	Project	Design	Refusal of consent to discharge drainage	HE refuse consent to discharge project drainage into HE drainage system a Churncote	at Increased cost of scheme; increased design cost	Sary Dymon	2	2	2	2	2	1	4	Gary	Consider alternative drainage routes; early dialogue with HA, EA and STW to confirm requirements	2	2	2	2	1	4	13% £25	6625	£1,000	Open
R018	Project	Design	Highways England require modification to Churncote Roundabout to accommodate modified flows	HE object to details of connection of Shrewsbury North West Relief Road a Churncote roundabout	at Delay to project to amend design; additional costs to modify Churncote Roundabout	Gary Dymond	1	2	2	3	3	1	4	Gary	Early discussions with Highways England. Churncote Roundabout, as delivered under separate contract, to be future proofed for	1 2	2	2	2	1	3	5% £25i	£625	£1,000	Open
R019	Project	Design	Traffic flow information	Inability to accurately forecast traffic flows	Delay in junction design fixity and land take requiremen	Gary Dymond	2	2	2	2	2	1	4	Gary	Close liaison between team leaders and budget leader.	2 2	1	2	2	1	4	13% £25i	£625	£1,000	Open
R020	Project	Design	Departure from standards not accepted	Departures from standards may not be accepted	Increased costs to the project	Gary	1	2	1	1	1	1	3	o ,	Departure schedule to be produced; hold Value Engineering workshops	1 2	1	1	1	1	3	5% £25i	£625	£1,000	Open
R021	Project	Design	Delays in receiving information from third parties	f Traffic modelling: Any third party delay in providing information on currer planning assumptions and/or sub regional growth assumptions	berays to programme	Gary	1	1	1		1	1	2	Lie G	Keep register of information requirements with critical dates. Early engagement with third parties to obtain critical information	1 1	1	1	1	1	2	5% £	£125	£250	Open
R022	Project	Design	Requirements of DfT	Traffic modelling: Any requirements by the DFT to undertake additional sensitivity testing of alternative options, e.g. non-road, low cost and next best, and extending the complexity of the analysis	Delays to programme	Gary Dymond	1	2	1		1	1	3	Gary	Liaise with DFT and Highways England to create common requirements, agree with all parties.	1 2	1	1	1	1	3	5% £25i	£625	£1,000	Open
R023	Project	Environmental	Presence of buried archaeology not known until works commence	n Unexpected archaeological find	Increased project cost or delay to project during archaeological investigations. Further construction cos and potential additional investigation leading to delay	Chris Middleto	2	1	4	2	2	1	6	Chris	Undertake baseline studies and preparation of watching brief for agreement with Local Conservation Officer	2 1	2	2	2	1	4	13% £	£125	£250	Open
R024	Project	Environmental	Objections due to impact upon the Aquifer	FA and STW object during the planning process regarding impacts to the Groundwater Source Protection Zones (SPZ)	Opposition from Statutory consultees at PI; additiona work to rebut	Chris Middletc	2	2	2	4	2	2	6	Chris	Robust case for eliminating potential contamination of SPZ by road run-off and should include mitigation in the drainage	1 2	2	3	2	2	4	5% £25	£625	£1,000	Open
R025	Project	Environmental	Objection from STW and EA	Severn-Trent Water (and EA) maintain objection re water abstraction poli regarding pollution of the River Severn	nt Opposition from Statutory consultees at PI; additional work to rebut	Chris	1	3	2	2	2	1	4	Gary	Detailed water quality assessment to assess potential impacts of routine runoff and accidental spillage risk on intake works	1 3	2	2	2	1	4	5% £1,00	£1,750	£2,500	Open
R026	Project	Environmental	Insufficient surveys Conditions unknown until works commence	Ground conditions not as anticipated	Materials strategy changes; change to earthworks and drainage designs and structures designs	Steven	2	3	2	2	1	1	5	Steven	Amend materials handling and usage strategy - potential opportunity for easier reuse of site won materials	2 2	2	1	1	1	4	13% £25i	£625	£1,000	Open
R027	Project	Environmental	Insufficient surveys, conditions unknown until works start	Unforeseen contaminated land	Additional cost for remediation and programme delay	Steven Dadge	1	2	2	2	1	1	3	Steven	Environmental Desk Study to be carried out as part of any planning submission, further contamination testing to be carried out during subsequent ground investigation works.	1 1	2	1	1	1	3	5% £I	£125	£250	Open
R028	Project	Environmental	Attenuation measures greater than anticipated.	Major groundwater protection works needed at Hencott Pool	increased cost for sustainable drainage; potentially long construction period needed	क् Chris Middleton	2	1	1	2	1	1	4		Robust hydrogeological studies as part of environmental surveys; appropriate Vertical Alignment adjacent to sensitive sites	1 1	1	2	1	1	3	5% £:	£125	£250	Open
R029	Project	Environmental	Seasonal survey time, quality of surveys and awareness of presence of protected species	Protected species found on line of route at start of construction phase	Delays to works while agreement/consent/licence to move is obtained and relocation work carried out. Nee for mitigation license application etc, costs from contractor being on site and the potential for delays.	Chris	2	2	4	2	2	1	6		Early programming of protected species surveys	1 2	4	2	2	1	5	5% £25i	£625	61,000	Open
R030	Project	Environmental	Objection to scheme by environmental groups and statutory bodies in regards to air quality	Adverse effects due to proximity of Hencott Pool (air quality)	May require enhancements to areas of the site and development, with the main impact being additional co of purchasing land		1	2	2	2	2	1	3	Sue Swalles	Modelling of air quality impacts at the Outline Business Case stage to identify potential impacts early and consider mitigation measures	1 1	2	2	2	1	3	5% £:	£125	£250	Open
R031	Project	Environmental	Objection to the scheme due to proximity to areas of environmental importance	/ Campaign Protection Rural England (CPRE) objections on environmenta issues	Additional accommodation works. Extended Public Inquiry. Spend more money on mitigation such as shielding.	Chris Middleton	4	3	3	2	2	1	7	drits	Accommodated issues within the design to date. Early engagement with statutory bodies within planning process	3 2	2	2	2	1	6	35% £1,00		£2,500	Open
R0032	Project	Land	Severn Trent Water object to the land CPO	STW maintain objections regarding land Compulsory Purchase Order	Opposition from Statutory consultees at PI; additional work to rebut; potential for increased cost for alternational solution		1	3	2	2	2	1	4	Sary	Working Paper on alternatives plus minimising works through STW land at Shelton; senior level discussions with STW	1 3	2	2	2	1	4	5% £1,00		£2,500	Open
R033	Project	Land	Delay in agreement with NR	Delays experienced due to requirement for of track side access to railway bridge (NR)		Greg Malley	4	3	5	1	1	1	9	Greo Malev	Close liaison with network Rail throughout design period. Use of WSP Rail structures staff for bridge design	2 2	3	1	1	1	5	13% £1,00	£1,750	£2,500	Onen
R034	Project	Land	Extent of requirements for the flood plain are greater than anticipated from original information	Approval requirements for the EA	Redesign, cost of additional flood areas/ land. Addition time required in the programme	Gary Dymond	1	3	2	1	1	1	4	Gary	Early discussions with EA	1 2	2	1	1	1	4	13% £1,000		£2,500	Open
R035	Project	Land	Legislative and regulatory changes	Change in powers and attitude of HSE	Cost and programme	Gary Dymond	1	1	1		1	1	2	Gary	Awareness of HSE requirements through WSP H&S Teams	1 1	1	1	1	1	2	5% F	£1,730	£2,300	Open

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R036	Project	Land	CPO powers may not allow purchase of Hencott Pool	Inability to purchase Hencott Pool land under CPO powers	Unable to deliver comprehensive management plan for the Pool as part of environmental mitigation	Middle ton	2	2	3 2	2	4		Seek Counsel view on legal powers; seek option agreements with landowners	1	2	2	2 2	2	3	5% £25	£62	£1,000	Open
R037	Project	Statutory Process	Lack of information in ES	Planning decision delayed due to lack of information in ES	Determination period slips; PI delayed; project construction programme slips	Openius 1	4	4	4 4	1	5	Y E	Agree scoping reports for environmental disciplines. Close liaison with Planning Officers throughout planning period	1	3	3	3 3	1	4	5% £1,00	£1,75		
R038	Project	Statutory Process	Errors in order	Errors in Orders require republication and delays to statutory Process	Delays to completion of statutory process; delay to start of construction	Dymond 1	2	2	2 2	1	3		Use WSP's Land Services team to support project delivery	1	2	1	2 2	1	3	5% £25	£62	£1,000	Open
R039	Project	Statutory Process	Challenge at Public Inquiry	Traffic modelling being challenged at PI	Delay to programme	3	1	1	1	1	4	:	Rigorous/additional data collection.	2	1	1	1 1	1	3	13% F	F12	5 £250	Open
R040	Project	Construction	Members of the public not supportive of the scheme	Public Protesters at start of construction	Delays to start of construction; additional costs in resolving; adverse publicity; loss of goodwill	uosuųo 2	2	2	1 2	1	4		Arrange for pre-contract felling of trees and demolition of structures and buildings. Communication of Shropshire Council	1	2	2	, ,	1	3	5% £25	£62	£1,000	Once
R041	Project	Construction	Pollution incident due to construction works	Pollution incident during construction	Statutory Fine on Contractor; WSP/Shropshire Council management time to resolve; EA Enforcement Notice; loss of reputation; loss of goodwill with environmental groups. Damage to environment.	puouk(2	1	3 3	3	4		Proposals and liaison with notential protester Robust CEMP; site supervision team to include environmental CoW.	1	2	1	2 2	2	3	5% £25		£1,000	
R042	Project	Construction	Potential shortage in skilled labour	Availability of skilled labour and/or materials for construction	Increased cost; decreased quality; delay in project completion	1	4	3	2 2	1	5		Early liaison with potential contractors and early EU procurement process to define tender this; include labour/material resources statement in Quality submission by tenderers	1	4	2	2 2	1	5	5% £2,50			
R043	Project	Construction	Access required for construction	Construction access for Severn Bridge construction	Need for a Bailey Bridge across Shrewsbury - Chester railway: shorter construction period for major structure could increase cost	nome 1	3	2	2 2	1	4		Seek Contractor's advice on construction methods; include requirement for temporary bridge in Works Information		2	2	2 2	1	4	5% £1,00			
R044	Project	Construction	Stats bodies fail to perform to construction programme	Stats bodies fail to perform to construction programme	Delays to construction programme and associated costs	ninika 1	2	2	2 1	1	3		Close programming of stats diversions by Contractor; advance payments for materials by Shropshire Council		2	2	2 2	1	4	5% £25		£1,000	
R045	Project	Construction	Unrecorded statutory undertakers equipment discovered during works	Unrecorded stats	Delay and cost during construction. Potential services strikes and H&S	Pilolika 1	2	2	1 1	4	5		Ensuring information is up to date prior to tender	1	2	2	1 1	3	4	5% £25			
R046	Project	Construction	Pipe positioning may differ to STW plans which impacts on design	Adequate distance from services at Severn crossing	Increased construction cost.	promite 1	4	5	1 4	4	6		Survey conducted as part of stats exercise	30/11/2017	4	1	1 1	4	5	5% £2,50			
R052	Project	Construction	Lead in times, NR may not have availability for possessions.	Possessions may not be granted (rules of the route possessions).	Requirement for short possessions, cost increase & may after phasing of works	3	2	3	2	1	6		Some Source of S						4	100			
R053	Project	Design	Increased traffic	Highways England may request additional junction due to capacity issues (Churncote Road Roundabout)	increased costs to the project	2	2	1	1	1	4		Early discussions with Highways England. Churnoote Roundabout, as delivered under separate contract, to be future proofed for NWRR traffic flows.	1	2	1	1 1	1	3	13% £25		£1,000	
R055	Project	Environmental	Increased requirements on the sections of the scheme	Air Quality management areas	May negatively effecting air quality areas.	2	2	2	2	2	4		Modelling of air quality impacts at the Outline Business Case stage to identify potential impacts early and consider mitigation measures	1	2	2	2 2	2	3	5% £25	£62	£1,000	Open
R056	Project	Environmental	Uncapped boreholes	Uncapped boreholes may create a pathway to the aquafer	Contamination of the aquafer	afrigation in a series	1	1	1	1	2		Construction of any new and decommissioning of existing boreholes shall be undertaken with direct input from both the EA and STW		1	1	1 1	1	2	5% £	£12	£250	Open
R057	Project	Strategic/ Programme	Traffic movement	Noise impacts in the surrounding areas as a result of the scheme	Additional mitigation measures required	1	1	1	2	1	3		Ohris Mk	1	1	1	1 1	1	2	5% £	£12	£250	
R058	Project	Land	Requirement for additional land at a late stage	Late additional land requirements through CPO leading to delays	Additional costs and delays to the programme	1	4	1	2	1	5		Use WSP's Land Services team to support project delivery	1	4	1	1 2	1	5	5% £2,50	£3,75	£5,000	Open
R059	Project	Land	Inflation and changes to land value	Cost uncertainty around land values may result in increased costs	Increased costs to the project	2	4	1	1	1	6		Richard Edwards	2	4	1	1 1	1	6	13% £2,50	£3,75	£5,000	Open
R062	Project	Land	Damage during site access for surveys, prevention of typical land usage.	Compensation events from Land Owners	Additional costs	2	1	1	1	1	3		Plan surveys in detail through liaison with land owners and tenants	1	1	1	1 1	1	2	5% £	£12	£250	Open
R063	Project	Environmental	Requirements of the EA are higher than anticipated	Environmental Mitigation measures are greater than anticipated	Increased costs to the project	3	1	1	1	1	4		Early discussions with the Environment Agency to understand position and requirements	2	1	1	1 1	1	3	13% £	£12		Open
R064	Project	Financial	On-going costs for maintenance	Maintenance costs for scheme	operational cost	noming 1	1	1	1	1	2		Ongoing maintenance liability to be review by Shropshire Council maintenance team and included in OBC scheme assessment	1	1	1	1 1	1	2	5% £	£12	£250	Open
R067	Project	Strategic/ Programme	More onerous conditions	Refusal of Planning Application due to public objection	Delays and deferment	1	1	1	1	1	2			1	1	1	1 1	1	2	5%	£12	6 £250	Open
R068	Project	Construction	Adverse weather conditions experience	Adverse weather conditions which may effect the construction programm	e Effect construction programme	Dipulifo de la companya de la compan	1	1	1	1	2		Gary Dymond	1	1	1	1 1	1	2	5%	£12		
R069	Project	Construction		HV Cables provision of stats through structures not sufficient	Thickness may require amendment	promotion 1	1	1	1	1	2		Early engagement with National Grid. Consider contribution where provision is for future demand.		1	1	1 1	1	2	5%	£12		
R070	Project	Statutory Utilities	Diversion of stats required	Cost of diversion of Stats into the carriageway	Additional costs	1	1	1	1	1	2		Early and ongoing liaison with utility companies. Engagement in collaborative design	1	1	1	1 1	1	2	5% £	£12		
R071	Project	Design	Design changes	OPP- Reduced cost of delivering scheme	Cost saving	1 1	1	1	1	1	2		Decision records to be kept and key design decision to be agreed at project delivery board	1	1	1	1 1	1	2	5% £	£12	£250	Open
R072	Project	Environmental	Increased EA requirements	Flood Plain level changes due to EA requirements which leads to structure costs	E Increased structure costs and delays to the programme	1	1	1	1	1	2		Early acquisition of flood plain levels	1	1	1	1 1	1	2	5% £	£12	5 £250	Open
R073	Project	Strategic/ Programme	Interdependency with OLR works	Impact of NWRR may lead to additional requirements, eg. retrofit structure for OLR	e, Additional costs to the project	aligning 4	2	1	2	1	6		Undertake regular reviews of interrelationship between schemes. Both project to report to strategic infrastructure board	3	2	1	1 2	1	5	35% £25	£62	£1,000	Open

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R074	Project	Construction	Delayed site access and the need for co ordinated works due to OLR overlap	Potential claims due to OLR completion overlap	Additional costs to the project	Gary Dymon	1 2	2		3	1 4	Gary Dymon	Undertake regular reviews of interrelationship between schemes. Both project to report to strategic infrastructure board	1	2	1	1	1 1	3	59	£250	£625	£1,000	Оре	oen
R075	Project	Design	Increased requirements and need for redesign	Railway underpass requirements may increase due to land use changes	Re- design and potential change to structures costs	Gary Dymond	1 2	1		1	1 3	Gary Dymond	Undertake regular design reviews and project progress meetings	1	2	1	1	1 1	3	59	£250	£625	£1,000	Оре	oen .