

T446: Design Risk Management Schedule

Project No	70044480	Project Name	Poole Park Sluice Bridge
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Guidance Notes <i>(see guidance notes page for more details)</i> <i>Design risk management should be an integral part of the overall design development and designers should think of it in terms of considering constructability, maintainability, etc. Designers only need to document their consideration of risks in this simple risk management schedule format. There is no requirement for quantative design risk assessments to be carried out/documentd and these should be avoided</i> <i>* Risks should be considered in a logical sequence relating to the location/operational environment, constructability/installability, operability (normal/emergency), maintainability (inc routine cleaning, replacement, etc.), and alteration/decommissioning/dismantling/demolition, and should be categorised against those headings, CIRIA guidance documents C755, C756, C686, C607, etc. provide a useful checklist and detailed guidance on the identification of risks to be considered during design and how those risks might be addressed - see detailed guidance notes for more details</i> <i>§ Significant residual risks are those which are unusual, not obvious, difficult to manage, or where critical design assumptions apply. The documentation by designers of residual risks that cover well-known and understood hazards should be avoided.</i>										
Ref	Risk Category* & Phase where appropriate, <i>e.g. location/environment, construction, operation, maintenance, alteration/demolition</i>	Work Element/Location (where appropriate)	Hazard or Risk Issue Identified	Risk Management Owner	Design ERIC Action Required <i>(e.g. hazard elimination/risk mitigation action, information to be provided to others)</i>	Significant Temporary Works Requirements/Management Arrangements and/or any Special Erection/Installation Sequences or Requirements	Design Action Status/Final Resolution Notes <i>(e.g. traceability of ERIC action, communication of significant residual risk, critical design criteria, etc.)</i>	Significant Residual Risk [§]	Date Logged/ Reviewed	Raised By
1	Location/environment	Large vehicle/plant access to site	No space for large vehicle/plant to turn around at the bridge; therefore, reversing over a significant distance will be required. Unprotected edge with lake on north side and railway boundary fence on south side. Risk of reversing vehicle falling into lake or driving through railway boundary fence.	Civil Engineer	Information to be provided to others - Risk included in Specification Appendix 1/23 for contractor to manage. WSP drawings 70044480-SBR-SK-CB-0000, 0001 and 0005 show plan of site with railway boundary and lake on either side. BoP record drawings JS2600.138.01 and 02 included in PCI.	Contractor to manage risk through site rules based on information provided	Closed - risk highlighted to contractor on Specification Appendix 1/23	Yes	Apr-18	Andrew Mitchell
2	Demolition	Existing bridge deck	Very weak existing bridge deck requires demolition	Civil Engineer	Information to be provided to others - Deck poor condition shown on BoP drawing JS2600.138.02 and BoP principal inspection report and photos included in PCI. Structure of existing deck shown on WSP drawing 70044480-SBR-DR-CB-0002. Residual risk highlighted with warning triangle and note on drawing 70044480-SBR-DR-CB-0002 and Specification Appendix 1/23 for contractor to manage	Contractor to manage risk based on information provided	Closed - risk highlighted to contractor on drawing 70044480-SBR-DR-CB-0002 and Specification Appendix 1/23	Yes	Apr-18	Andrew Mitchell
3	Demolition	Demolition of existing bridge	Demolition plant slew and height incursion into railway boundary	Civil Engineer	Information to be provided to others - Boundary fence shown on shown on BoP drawing JS2600.138.01 and BoP inspection photos included in PCI. Boundary fence shown on WSP drawing 70044480-SBR-DR-CB-0002. Residual risk highlighted with warning triangle and note on drawings 70044480-SBR-DR-CB-0002 and Specification Appendix 1/23 for contractor to manage	Contractor to manage risk based on information provided. Plant should be fitted with slew restrictors and height limiters to prevent this accidentally occurring.	Closed - risk highlighted to contractor on drawing 70044480-SBR-DR-CB-0002 and Specification Appendix 1/23	Yes	Apr-18	Andrew Mitchell
4	Demolition	Watercourse spanned by bridge	Contamination of watercourse via demolition and repair activities	Civil Engineer	Information to be provided to others - Inform the contractor of the risk and advise that mitigation measures and consultation with the Poole Harbour Commission is the responsibility of the Contractor	Measures to avoid contamination of the watercourse	Closed - risk highlighted to contractor on drawing 70044480-SBR-DR-CB-0002 and Specification Appendix 30/11	Yes	Apr-18	Andrew Mitchell
5	Demolition	Demolition of existing pilasters	Significant voids behind lake shore wall adjacent to pilasters - potential collapse of substructure during demolition	Civil Engineer	Information to be provided to others - BoP principal inspection report and photos included in PCI. Residual risk highlighted with warning triangle and note on drawing 70044480-SBR-DR-CB-0002 and Specification Appendix 1/23 for contractor to manage	Contractor to manage risk based on information provided	Closed - risk highlighted to contractor on drawing 70044480-SBR-DR-CB-0002 and Specification Appendix 1/23	Yes	Apr-18	Andrew Mitchell
6	Demolition and Construction	Edge of lake and sluice channel	Unprotected edge	Civil Engineer	Information to be provided to others - Residual risk highlighted with warning triangle and note on drawing 70044480-SBR-DR-CB-0002 and Specification Appendix 1/23 for contractor to manage.	Contractor to manage risk based on information provided	Closed - risk highlighted to contractor on drawing 70044480-SBR-DR-CB-0002 and Specification Appendix 1/23	Yes	Apr-18	Andrew Mitchell
7	Construction	Installing new bridge deck	Installation plant slew and height incursion into railway boundary	Civil Engineer	Information to be provided to others - Boundary fence shown on shown on BoP drawing JS2600.138.01. Boundary fence shown on WSP drawing 70044480-SBR-DR-CB-0001 and 0005. Residual risk highlighted with warning triangle and note on drawing 70044480-SBR-DR-CB-0001 and Specification Appendix 1/23 for contractor to manage	Contractor to manage risk based on information provided. Plant should be fitted with slew restrictors and height limiters to prevent this accidentally occurring.	Closed - risk highlighted to contractor in drawing 70044480-SBR-DR-CB-0001 and Specification Appendix 1/23	Yes	Apr-18	Andrew Mitchell
8	Operation	Parapets	Bridge parapets too low for cyclists	Civil Engineer	Height of parapets raised to 1400mm on deck to accommodate cyclists	None	Closed - parapet design amended on drawing 70044480-SBR-DR-CB-0001	No	May-18	Andrew Mitchell
9	Maintenance	Parapets	Parapet replacement - side mounted parapet on north end would require scaffolding or floating platform to remove	Civil Engineer	Design altered for parapet to be mounted on top of deck on both sides so no working over water required	None	Closed - parapet design amended on drawing 70044480-SBR-DR-CB-0001	No	May-18	Andrew Mitchell
10	Maintenance	Cill beam	Void between east & west pilasters and FRP deck will collect debris and be difficult to clean due to new parapets	Civil Engineer	Design altered so that void replaced with concrete cast after FRP deck installed on top of cill beam	None	Closed - parapet design amended on drawing 70044480-SBR-DR-CB-0001 and 70044480-SBR-DR-CB-0003 and bar bending schedule 70044480-SBR-BBS-CB-0003	No	May-18	Andrew Mitchell
11	Construction	All	Access from one side of sluice channel to the other	Civil Engineer	Site extents defined to allow for scaffold or pontoon access from one side to the other	None	Subject to be covered in precommencement meeting to ensure all parties are aware of all options. Site extents shown on drawing 70044480-SBR-DR-CB-0000	No	Apr-18	Brendon Pell
12	Construction	All	Working over water / under existing bridge deck	Civil Engineer	Potential options identified and explored, such that contactor has options for mitigating risk including selection of access equipment and potential to control / adjust water levels in the lake as described in Appendix 1/13 and 1/23	None	Subject to be covered in precommencement meeting to ensure all parties are aware of all options	No	Apr-18	Brendon Pell
13	Operation and maintenance of sluice gates	Sluice Gate Compound	Trips from uneven surfaces, eye, hand or foot injury from strimming operations	Civil Engineer	New paved surface provided to sluice gate compound as part of this project	None	n/a	No	May-18	Brendon Pell

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