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Assessed By:	AK
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Project: Viaduct, 325 Deansgate, Manchester (to be read in conjunction with Document Number DEA-EOC-XX-XX-RP-S-000 and project wide Risk Register)											
Ref	Activity/Element	Hazard	Pre-Risk Rating			Design measures taken to eliminate or reduce the hazard	Residual Risk Rating			Comment on residual risk and advice where appropriate	
			S	P	R		S	P	R		
B - Excavations and Foundations adjacent to viaduct											
B-01	Excavation adjacent to viaduct	Risk of undermining the viaduct foundations	2	2	4	Excavate trial pits to determine the extent of viaduct arch foundations	1	1	1	The Contractor has completed Trial Pits at the arch roots and the profile of foundation corbals/stepouts recorded in these locations (which allows for pile positions to be positioned clear of any corballed footings). Arch footings are founded on the underlying bedrock	
B-02	Piling adjacent to viaduct	Risk of proximity to viaduct footings	2	2	4	Pile locations to be dynamic probed (at the closest edge of the pile location) to all pile positions adjacent to the line of the arches	1	1	1	The probing of adjacent foundations mitigates risk of piles hitting existing foundation structure. The Contractor has completed probing at adjacent locations (Refer to Sub Srfce Probing Logs dated 11 - 08 23). Risk is mitigated as all probed locations were found to be clear of existing foundations and sandstone encountered at probing refusal of approximately 4.0m in all probe locations.	
B-03	Piling adjacent to viaduct	Excessive vibration on the viaduct during pile construction	3	2	6	Low vibration pile techniques to be adopted during pile construction	2	1	2	Contractor is adopting a rotary cored bored piled foundation solution (see piling contractors Risk Assessment)	
B-04	Piling adjacent to viaduct	Risk of causing instability to viaduct during construction	2	2	4	Piles (750mm diameter) are bored and socketed directly into underlying sandstone deposits	1	1	1	The structural load path dictates that all superstructure loads will pass directly into the piles. No imposed loading on the viaduct.	
B-05	Excavation adjacent to viaduct to construct piled raft foundation	Risk of imposed load on viaduct foundations	2	2	4	No structural load will be transerd to the viaduct foundations due to the use of 'soft' joints. Refer also to EOC Document Number DEA-EOC-XX-XX-RP-S-0001.	1	2	2	None	
B-07	Piling Rig Activity	Piling rig impact with viaduct.	2	2	4	piles have been offset a minimum safe working distance away	1	2	2	Risk highlighted and incorporated into the piling contractors risk assessment	
B-07	Excavation adjacent to viaduct	Deep excavation in front of viaduct wall.	2	1	4	Viaduct wall stability appraised and confirmed not to become a retaining element when one side is excavated.	2	1		None	
Probability / Severity: 1 – Low 2 – Medium 3 – High											
Risk = Probability x Severity											
Risk: 9 – Unacceptable 6 – High 4 – Medium 3 – Low 2 – Negligible											