



Project Title Prescot to Cronton Cycleway	Project Number 60629784
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Document Title Designers Risk Assessment and Hazard Elimination	Date 14/10/2020
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Designers Risk Assessment and Hazard Elimination

Version History

- 1 Issued for Phases 1, 2 and 6

Description of work

Upgrading of existing infrastructure and construction of new hard standing route through greenfields to accommodate a full shared use route / link between Prescot and Cronton.

Prescot to Cronton Cycleway	Hazard Elimination
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Potential Hazards Arising from:		Risk (without designers elimination / management measures)			Comments
Ref		Not Applicable	Low - NO Action Required	High - Action NEEDED	
1	Existing Environment				
1.1	Existing buildings		X		The route passes through areas with residential properties and buildings but the proposed works will have no impact on them.
1.2	Previous/Existing land/Structures		X		-
1.3	Roadways			X	The proposed route utilises existing footways, adjacent to the highway, or routes away from the main adopted highway extents. Within Phase 1, cyclists need to interact with roadway as they transition from footway to carriageway. This route is very heavily used by traffic and as such when the project moves to the construction phase at some point detailed temporary traffic management layouts need to be developed utilising chapter 8 Traffic signs manual whether working from public highway or not, including of pedestrian management.
1.4	Railways	X			N/A
1.5	Water course	X			N/A
1.6	Ground Conditions:				
	Contamination	X			N/A
	Ground Water	X			N/A
	Instability	X			N/A
	Mineral / Mine workings	X			N/A
1.7	Access restrictions			X	Phase 2 runs through an existing park and access may be problematic due to the limited access points and space available. There is trees located in close proximity to the access points.
1.8	Adjacent properties		X		The route passes through areas with residential properties and buildings but the proposed works will have no impact on them.
1.9	Concurrent site activities		X		Statutory undertakers may require access to site for emergency working to their apparatus
1.10	Interface with the public			X	All phases are in areas of parks and public space which attracts many visitors to the area. When the scheme moves to the construction phase, appropriate pedestrian management in conjunction with Chapter 8
1.11	Occupied premises	X			N/A
1.12	Structural instability	X			N/A
1.13	Fragile materials	X			N/A
1.14	Hazardous materials	X			N/A
1.15	Land use		X		The working area is restricted to that outlined in the location plan, drawing 60629784-SHT-00-PCP0-CT-0100 & 60629784-SHT-00-PCP0-CT-0101
1.16	Traffic			X	The site is surrounded by live traffic, apply chapter 8 TSM methodologies
1.17	Bio-waste	X			N/A
2	Existing Services (Under / above ground)				

Potential Hazards Arising from:		Risk (without designers elimination / management measures)			Comments
Ref		Not Applicable	Low - NO Action Required	High - Action NEEDED	
2.1	Electrical			X	Electrical disconnections and connections (transfers) will be necessary as part of street lighting works. Ensure only qualified electricians work on terminations. For direct feeds only the DNO is allowed to work on the connection / disconnection.
2.2	Gas			X	Contractor should CAT scan the area to confirm the location of any service before digging takes place
2.3	Water			X	When the project moves to the construction phase and if necessary, The Principal Contractor shall carry out investigations as appropriate by locating, if present, the presence of services prior to any ground works starting.
2.4	Telecommunications			X	When the project moves to the construction phase and if necessary, The Principal Contractor shall carry out investigations as appropriate by locating, if present, the presence of services prior to any ground works starting.
2.5	Drainage			X	When the project moves to the construction phase and if necessary, The Principal Contractor shall carry out investigations as appropriate by locating, if present, the presence of services prior to any ground works starting.
2.6	Overhead		X		
3	Earthworks				
3.1	Deep excavations	X			N/A
3.2	Slope/ground stability	X			N/A
3.3	Ground water/Water courses		X		At two locations along the route, the path intersects a watercourse, by either spanning, by use of an existing highway bridge/culvert or by running parallel with. No works proposed that will be affected but needs to be considered during construction in terms of access and contamination.
3.4	Plant movements			X	The site is surrounded by live traffic, apply chapter 8 TSM and ensure there is a sound methodology in place to deal with plant movement
3.5	Interface with services			X	SSE are responsible for relocating of existing lighting columns and erecting traffic signs. Therefore, the Principal Contractor will need to ensure proper communication and liaison is undertaken with them during construction.
3.8	Disruption of tree routes		X		The route is closely bounded by various trees in various locations with will have their canopies lifted to ensure sufficient head room is provided.
3.9	Noise			X	Comply with noise requirements of local environmental Health Team. When the project moves to the construction phase the Principal Contractor must comply with the requirements of Appendix 1/9
4	Foundations				
4.1	Adjacent buildings/structures	X			Yes, Private properties run along phase 1 of the scheme and a railway bridge is spanning across the route at the beginning of phase 6
4.2	Deep excavations	X			N/A
4.3	Plant movements	X			N/A
4.4	Interface with services	X			N/A
4.5	Contamination (ground/water)	X			N/A
4.6	Ground water	X			N/A
4.7	Confined spaces	X			N/A
	Piling:	X			N/A
	Noise	X			N/A

Potential Hazards Arising from:		Risk (without designers elimination / management measures)			Comments
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4.8	Vibration	X			N/A
	Contamination	X			N/A
	Plant	X			N/A
4.9	Grouting:	X			N/A
	Drilling work	X			N/A
	Dust	X			N/A
	Pollution	X			N/A
4.10	Stability of structure	X			N/A
5	Services Installation				
5.1	Excavations	X			N/A
5.2	Ground water	X			N/A
5.3	Ground conditions	X			N/A
5.4	Existing services	X			N/A
5.5	Testing operations	X			N/A
5.6	Lifting operations	X			N/A
5.7	Adjacent structures/activities	X			N/A
5.8	Maintenance	X			N/A
5.9	Contamination	X			N/A
6	Ecological / Arboriculture				
6.1	Protected species			X	Potential for some trees to offer suitable habitat for roosting bats. When the project moves to the next stage additional surveys will be needed to observe bat activity. This will include the need to access top of tree level
6.2	Invasive species		X		There currently no known invasive species within the specific phases of the project.
6.3	Birds nesting			X	Depending on timing a suitable survey will be needed when the project moves to the construction phase
6.4	Tree surgery – working from height and falling items			X	Develop safe working methods to avoid falling objects and use a mobile elevating work platform
6.5	Existing trees			X	The scheme allows for some trees to be removed and a large proportion of the trees to have their crowns lifted. These works will need to be done carefully to avoid damage to the trees and works should be carried out in line with the arboriculturalists method statement.
7	Drainage works				
7.1	Excavations	X			N/A
7.2	Ground Water	X			N/A
7.3	Ground conditions	X			N/A
7.4	Confined spaces	X			N/A
7.5	Weils disease	X			N/A
7.6	Existing services	X			N/A
7.7	Manual handling	X			N/A
7.8	Lifting operations	X			N/A
7.9	Maintenance	X			N/A
8	Sewage	X			N/A
8.1	Traffic	X			N/A
8.2	Contamination	X			N/A
9	Highways				
9.1	Traffic Management			X	Interaction with vehicular and pedestrian traffic (to get to site and in accessing and to access and leave the site)
9.2	Adjacent traffic			X	Interaction with vehicular and pedestrian traffic (to get to site and in accessing and to access and leave the site)
9.3	Construction materials		X		Hot materials dealt with under RAMS submission
9.4	Structural works	X			N/A
9.5	Adjacent structures				

Potential Hazards Arising from:		Risk (without designers elimination / management measures)			Comments
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9.6	Noise		X		Comply with noise requirements of local environmental Health Team. When the project moves to the construction phase the Principal Contract must comply with the requirements of Appendix 1/9
9.7	Vibration			X	Comply with noise requirements of local environmental Health Team. When the project moves to the construction phase the Principal Contract must comply with the requirements of Appendix 1/9
10	Personal Protection				
10.1	Manual handling		X		Avoid heavy lifting or awkward loads. Follow safe working procedures
10.2	Lifting operations		X		As above, ensure material is in small bundles and secure before moving
10.3	Sprains, twists due to uneven ground		X		Follow safe working procedures and undertake inspection of the site before work starts (where safety boots)
10.4	Damage to sight		X		Follow safe working procedures (wear safety glasses)
10.5	Cuts and bruises and general injury		X		Follow safe working practices and ensure full PPE is worn to cover body and extremities

Prescot to Cronton Cycleway	Hazard Elimination Schedule
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Ref	Activity	Hazard	Persons at risk	Design measures taken, or being taken to eliminate or reduce hazard	Information on the residual risk	Date issue raised	Action required by
1.3	Roadways	Live traffic with high volume will be present at peak times.	Pedestrians, Contractors work force, motorists, visitors	Detailed temporary traffic management layouts need to be developed utilising chapter 8 of TSM	Minimal but audits of the TTM should be carried out regularly through the day	14/10/2020	Principal Contractor
1.7	Access restrictions	Phases 2 and 6 run through existing parks and access may be problematic due to the limited access points and space available.	Pedestrians, Contractors work force, motorists, visitors	Detailed temporary traffic management layouts to be developed and closure of route required when needed	Minimal, but audits of the TTM should be carried out regularly through the day	14/10/2020	Principal Contractor
1.1	Interface with the public	The works will be undertaken in an urban and rural environment.	Pedestrians, Contractors work force, motorists, visitors	Detailed temporary traffic management layouts need to be developed utilising chapter 8 of TSM	Minimal but audits of the TTM should be carried out regularly through the day	14/10/2020	Principal Contractor
1.16	Traffic	The site is surrounded by live traffic, apply chapter 8 TSM	Pedestrians, Contractors work force	Detailed temporary traffic management layouts need to be developed utilising chapter 8 of TSM	Minimal but audits of the TTM should be carried out regularly through the day	14/10/2020	Principal Contractor
2	Under / above ground services	Damage to services, explosions / electrocution	Contractors work force and the public	Utility plans have been provided. The contractor should scan the area first and undertake trial holes to locate services. All work around services should be hand dig. The plant protection officer should be contacted, and existing stats records reviewed	Minimal	14/10/2020	Principal Contractor
3.4	Plant movements	The site is surrounded by live traffic.	Pedestrians, Contractors work force, motorists, visitors	Detailed temporary traffic management layouts need to be developed utilising chapter 8 of TSM	Minimal – secure work area and prevent pedestrians or motorists accessing the area. Ensure all plant movement have an associated banks person in place	14/10/2020	Principal Contractor
3.5	Interface with services	Coorindation of lighting contractor for electrical works to ensure done efficiently and together with the civils works.	Contractors work force and the public	SSE have been engaged during the design stages to obtain proposals for relocated lighting columns. During pre-mobilisation, SSE will be invited to bring all of the project team on board for full coorindation.	Minimal	14/10/2020	Principal Contractor and Subcontractor
3.9	Noise	With residential properties in close proximity to the site, the noise restrictions implemented on the construction works will need to be carefully managed and followed.	Pedestrians, Contractors work force, visitors	Comply with noise requirements of local environmental Health Team	Minimal – follow guidance in Specification for Highway Works	14/10/2020	Principal Contractor
6	Ecological	Various issues covering potential for bats roosting, birds nesting and invasive species	Wildlife and society	Suitable survey to be undertaken to look at each issue in detail and a methodology to be developed and included in the contract specification in the event the project moves to the construction stage	If the correct surveys and action is taken, then the residual risk is negatable	14/10/2020	Client to commission necessary surveys
6.4	Tree surgery – working from height and falling items	Falling branches, working at height and tree removal works	Pedestrians, Contractors work force, Visitors & wildlife	Detailed temporary traffic management layouts need to be developed utilising chapter 8 of TSM to give effective working widths. Arboriculture method statement has been produced to specify the specific requirements for how the works are undertaken for the sake of the contractor and the trees.	Minimal – competent landscape contractor to undertake the work and therefore, these works should be well rehearsed in the works and also complying with the methodology provided for the specific landscaping works.	14/10/2020	Principal Contractor and Subcontractor
6.5	Existing trees						
9.1	Traffic Management	Interaction with vehicular and pedestrian traffic (to get to site and in accessing and to access and leave the site)	Pedestrians, contractors/workforce, visitors	Detailed temporary traffic management layouts to be developed and closure of route required when needed	Minimal	14/10/2020	Principal Contractor
9.2	Adjacent traffic	Interaction with vehicular and pedestrian traffic (to get to site and in accessing and to access and leave the site)	Pedestrians, contractors/workforce, visitors	Detailed temporary traffic management layouts to be developed and closure of route required when needed	Minimal	14/10/2020	Principal Contractor
9.7	Vibration	This activity could cause instability of the existing fencing around the site boundary and also the possible unstable ground	Contractors/workforce, visitors	Comply with Appendix 1/9 of the Specification for Highway Works for information.	Ensure proper site investigation works carried out in advance of the construction works to confirm the suitability of ground and fencing	14/10/2020	Principal Contractor