

Hazard ID	Reported by	Construction / Maintenance	Location	Task	Hazard	Risk	Before Design Mitigations			Design Mitigation(s)	Risk Owner(s)	After Design Mitigations			Residual Risk Owner(s)	Suggested Construction / Maintenance Mitigation(s)	Date Raised	Date Closed	Last Review Date
							Impact	Likelihood	Risk Rating			Impact	Likelihood	Risk Rating					
1	Staff name redacted	Construction	Railway line	All activities on proposed pipelines where route crosses railway line	Trains	Major injury / single or multiple fatalities caused by train striking construction workers.	H	M	MH	Select pipeline route which avoids crossing rail lines. If crossing is unavoidable, recommend construction by trenchless techniques.	Staff name redacted	H	L	M	Principal Contractor	Coordinate with Network Rail on all matters related to railway interface. Develop safe system of work to guarantee safety of site operatives and third parties.	22/06/2022	-	22/06/2022
2	Staff name redacted	Construction	Railway line	All activities on proposed pipelines where route crosses railway line	Railway overhead high voltage cables (OLE)	Major injury / single or multiple fatalities caused by site operatives contact with OLE cables.	H	M	MH	Select pipeline route which avoids crossing rail lines. If crossing is unavoidable, recommend construction by trenchless techniques.	Staff name redacted	H	L	M	Principal Contractor	Apply exclusion zones where construction works interface with Network Rail. Follow requirements for safe working defined by Network Rail. Develop safe system of work to guarantee safety of site operatives and third parties.	23/06/2022	-	23/06/2022
3	Staff name redacted	Construction	High voltage power cables	Working near overhead high voltage power cables	High voltage electricity	Major injury / single or multiple fatalities caused by electrocution.	H	M	MH	Design route to avoid overhead HV cables. All crossings to be identified and assessed. Where pipeline route is running parallel or close to overhead HV lines, define minimum clearances to be maintained.	Staff name redacted	H	L	M	Principal Contractor	Coordinate with National Grid on all matters related to interfacing with overhead high voltage cables. Develop safe system of work.	22/06/2022	-	22/06/2022
4	Staff name redacted	Construction	Rivers / major water bodies	Crossing major rivers, canals and other bodies of water.	Deep or fast water bodies	Single or multiple fatalities caused by personnel working near or in deep water. Potential flooding.	H	M	MH	Route alignment designed away from rivers and water bodies. Where proposed pipeline route cross water bodies, trenchless methods are recommended. Assessments to be undertaken of river/canals etc to ensure construction work does not compromise their integrity.	Staff name redacted	H	L	M	Principal Contractor	Develop safe system of work.	22/06/2022	-	22/06/2022
5	Staff name redacted	Construction	Major roads	All activities on proposed pipelines where route is near or crosses roads.	Moving vehicles	Major injury / single or multiple fatalities caused by vehicles striking site operatives.	H	M	MH	Pipeline route designed to be largely in greenfield locations. It is recommended that road crossings to be undertaken with trenchless methods. Detailed design should consider locations of valves and other operational features of the pipeline and locate these away from existing public roads.	Staff name redacted	H	L	M	Principal Contractor	Coordinate with local authority on all matters related to public highways. Develop safe system of work.	22/06/2022	-	22/06/2022
6	Staff name redacted	Construction	Pumping stations, headhouses, sumps etc	General construction	Confined spaces and/or restricted spaces	Injury and or fatality caused by working in restricted and/or confined spaces.	H	M	MH	Design will avoid creation of voids, restricted and/or confined spaces.	Staff name redacted	H	L	M	Principal Contractor	Development of safe system of work to deal with creation of voids, restricted and/or confined spaces during construction.	24/06/2022	-	24/06/2022
7	Staff name redacted	Construction	Roadside	General excavation	Excavation of trenches	Collapse of excavations causes injury/fatality to trapped site workers.	H	M	MH	Work with the principal contractor to identify construction methods which avoid the need for open excavations.	Staff name redacted	H	L	MH	Principal Contractor	Develop safe system of work to guarantee safety of client's operation and maintenance teams.	24/06/2022	-	24/06/2022
8	Staff name redacted	Construction	Roadside	General excavation	Contaminated ground	Injury or ill-health caused by exposure to contaminated ground.	M	M	MH	Geotechnical and contaminated land surveys to be carried out ahead of construction work. Analysis of samples to identify locations of contaminated ground.	Staff name redacted	M	M	M	Principal Contractor	Develop safe system of work to guarantee safety of client's operation and maintenance teams.	24/06/2022	-	24/06/2022
9	Staff name redacted	Maintenance	Railway line	All activities on proposed pipelines where route crosses railway line	Trains	Major injury / single or multiple fatalities caused by trains striking operation and maintenance workers.	H	M	MH	Select pipeline route which avoids rail line crossing where possible.	Staff name redacted	H	L	M	Affinity Water	Develop safe system of work to guarantee safety of client's operation and maintenance teams.	22/06/2022	-	22/06/2022
10	Staff name redacted	Maintenance	Railway line	All activities on proposed pipelines where route crosses railway line	Railway overhead high voltage cables (OLE)	Major injury / single or multiple fatalities caused by operation and maintenance staff contact with railway OLE.	H	M	MH	Select pipeline route which avoids rail line crossing where possible.	Staff name redacted	H	L	M	Affinity Water	Develop safe system of work to guarantee safety of client's operation and maintenance teams.	23/06/2022	-	23/06/2022
11	Staff name redacted	Maintenance	High voltage power cables	Working near overhead high voltage power cables	High voltage electricity	Major injury / single or multiple fatalities caused by operation and maintenance staff contact with overhead high voltage cables	H	M	MH	Design route to avoid overhead HV cables. All crossings to be identified and assessed. Where pipeline route is running parallel or close to overhead HV lines, define minimum clearances to be maintained.	Staff name redacted	H	L	M	Affinity Water	Develop safe system of work to guarantee safety of client's operation and maintenance teams.	22/06/2022	-	22/06/2022
12	Staff name redacted	Maintenance	Rivers / major water bodies	Crossing major rivers / water bodies	Deep or fast water bodies	Single or multiple fatalities caused by personnel working near or in deep water	H	M	MH	Route alignment designed away from rivers and water bodies.	Staff name redacted	H	L	M	Affinity Water	Develop safe system of work to guarantee safety of client's operation and maintenance teams.	22/06/2022	-	22/06/2022
13	Staff name redacted	Maintenance	Major roads	All activities on proposed pipelines where route is in or crosses major roads	Moving vehicles	Major injury / single or multiple fatalities caused by vehicles striking operation and maintenance staff.	H	M	MH	Pipeline route designed to be largely in greenfield locations. Detailed design should consider locations of valves and other operational features of the pipeline and locate these away from existing public roads.	Staff name redacted	H	L	M	Affinity Water	Develop safe system of work to guarantee safety of client's operation and maintenance teams.	22/06/2022	-	22/06/2022
14	Staff name redacted	Maintenance	Pumping stations, headhouses, sumps etc	General maintenance work	Confined spaces and/or restricted spaces	Injury and or fatality caused by working in restricted and/or confined spaces.	H	M	MH	Design will avoid creation of voids, restricted and/or confined spaces.	Staff name redacted	H	M	MH	Affinity Water	Develop safe system of work to guarantee safety of client's operation and maintenance teams.	24/06/2022	-	24/06/2022
15	Staff name redacted	Construction	Rivers / major water bodies	Crossing major rivers / water bodies	Contaminated water.	Major injury / ill-health caused by exposure to contaminated water	M	M	MH	Contaminated water surveys to be carried out ahead of construction work. Analysis of samples to identify locations of contaminated water and contaminants.	Staff name redacted	M	L	ML	Principal Contractor	Develop safe system of work to guarantee safety of client's operation and maintenance teams.	29/06/2022	-	29/06/2022
16	Staff name redacted	Maintenance	Pumping stations	Electrical Maintenance	High voltage electricity	Injury or fatality caused by working on High Voltage equipment. Pump systems likely to be HV to achieve required duties	H	M	MH	Design to be developed in close liaison with client to ensure electrical equipment ratings and voltage are compatible with end user specifications and competency skill sets.	Staff name redacted	H	M	MH	Affinity Water	Develop safe system of work to guarantee safety of client's operation and maintenance teams. Additional specialist HV training and workforce may be required.	05/07/2022	-	06/07/2022