

CONSTRUCTION PHASE RISK ASSESSMENT

TO BE READ IN CONJUNCTION
WITH THE
METHOD STATEMENT

Client:	Spence Construction Ltd
Site:	Ely Gatehouse
Description of Works:	Demolition of brick building near railway lines
Supervisor:	TBC
Contract Number:	DMOTBC-004
Assessment By:	Shaun Stephenson
Date of Assessment:	18/12/2023
Risk Assessment Review Date:	Feb 2024

<u>Likelihood of Occurrence (Rating A)</u>	<u>Severity of Hazard (Rating B)</u>
<p>Low (1) May occur in time. However, hazard exists infrequently or hazardous event occurs very infrequently. Low expectation of occurrence.</p> <p>Medium (2) Likely to occur in time. Hazard exists intermittently or hazardous event occurs occasionally. It may be useful to define by exclusion, {i.e. clearly not 'High' or 'Low' may be the most practical approach}.</p> <p>High (3) Likely to occur imminently or in the very short term. Hazard exists permanently or hazardous event occurs frequently, or much evidence of previous harm.</p>	<p>Low (1) Hazard resulting in minor injury requiring first aid treatment only. Minor consequential loss potential to both individual and organisation.</p> <p>Medium (2) Hazard capable of resulting in personal injury/illness requiring brief absence from work. Medical attention required. But ... Again, defining by exclusion, i.e. it simply isn't obviously 'High' or 'Low'.</p> <p>High (3) Hazard capable of resulting in death, severe injury or illness. Major consequential loss potential to the individual and organisation.</p>
<p><u>Residual Risk Rating (Risk Prior C)</u></p> <p>Likelihood of Occurrence (Rating A) x Severity of Hazard (Rating B) = Risk Prior C</p> <p> High = (9), (6)</p> <p> Medium = (4), (3)</p> <p> Low = (2), (1)</p>	

TASK ACTIVITY	HAZARD	RATING A	RISK TO	RATING B	RISK PRIOR C	PREVENTION CONTROL	RISK AFTER
Site Establishment							
Establishing Exclusion Zone/ Control of personnel on site.	Public and unauthorised personnel entering site. Difficulty in enforcing exclusion zones. Inability to evacuate site in case of emergency.	Med (2)	Public and unauthorised personnel. Operatives in the vicinity of work activities.	Med (2)	Med (4)	Site and hazardous work activities to be enclosed with barrier. All site personnel (including visitors) are to sign on and off site. Fencing/gates around skip area to remain closed. Emergency escape routes should be established.	Low (2)
Asbestos survey to be carried out prior to any demolition works.	Unforeseen asbestos located within the building, release of asbestos fibres into the atmosphere.	Med (2)	All operatives working on site and public.	High (3)	High (6)	Building has not been surveyed fully due to fire damage. Asbestos is suspected and so operatives are in place with asbestos control measures ready. Waste is to be placed in a separate lay-down area and sorted through by the operatives. Any ACM's found will be double bagged and placed in a sealed hazardous waste skip.	Low (2)
Service Disconnections							
Failure to Disconnect/ Isolate incoming electrical services	Machine or operatives come into contact with electricity, electric shock, skin burns, fire and possible death.	High (3)	Individual teams of operatives contacting services on initial commencement of work.	Med (2)	High (6)	Ensure all pipework and electrics are spaded, disconnected or locked off. Check that this is shown on the client's permit. Ensure you have service plans of the area and isolation certificates of all services that have been confirmed as dead. Any remaining live services on site must be clearly identified in writing by the client. If unsure whether a service is live or dead please stop work and check with management. Carry out checks with a cable locating device and finally visual checks before commencing work. Permits to work to be issued by RIS M&E	Med (3)
Failure to Disconnect/ Isolate incoming gas services	Gas pipe strike causing gas leak. If gas ignited can cause explosion. If gas inhaled can cause dizziness,	High (3)	Individual teams of operatives contacting services on initial commencement of work.	Med (2)	High (6)	Ensure all pipework and gas connections are disconnected or locked off. Check that this is shown on the client's permit.	Med (3)

TASK ACTIVITY	HAZARD	RATING A	RISK TO	RATING B	RISK PRIOR C	PREVENTION CONTROL	RISK AFTER
	health problems and possible death.					Ensure you have service plans of the area and isolation certificates of all services that have been confirmed as dead. Any remaining live services on site must be clearly identified in writing by the client. If unsure whether a service is live or dead please stop work and check with management. Carry out checks with a cable locating device and finally visual checks before commencing work. Permits to work to be issued by RIS M&E subcontractor.	
Failure to Disconnect/ Isolate incoming water services	Water pipe strike leading to water leak, saturated ground meaning unworkable conditions and possible flooding.	Med (2)	Individual teams of operatives contacting services on initial commencement of work.	Med (2)	Med (4)	Ensure to disconnect internal water and sewer lines from the mains. A licensed plumber must do this work. This requirement is also to notify the Water Corporation before commencing works and arrange for the disconnection of its services. If the water service is still required (e.g. for future development) you should engage a licensed plumber to secure the internal water service at the property.	Low (2)
Demolition							
Working on a demolition site.	Flying debris striking operatives	High (3)	Operatives involved in the demolition process and operatives in close proximity.	Med (2)	High (6)	All work to be carried out to the approved Method Statement. All company procedures and demolition code of practice BSI 6187:2011 to be followed at all times. Exclusion zones to be set up and access to work area to be controlled. Operatives to be trained and as a minimum hold a CSCS card.	Med (3)
Working close to railway lines	Structure collapsing onto lines	High (3)	Railway lines	Med (2)	High (6)	All work to be carried out to the approved Method Statement. The structure to be pulled towards the machine and away from the lines. Protection to be laid on the tracks.	Low (2)

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						Railway line closure in place for 24 hours minimum.	
Working on a demolition site around dust.	Dust causing damage to respiratory tract and lungs.	Med (2)	Operatives involved in the demolition process and operatives in close proximity.	Med (2)	Med (4)	Please see below section 'silica' for more information on dust but in general; Supress site dust as much as possible by use of dust suppression from a spray bottle. Extract fan to be used. Operatives are to wear P3 disposable masks during particularly dust demolition processes.	Low (2)
Loading the skip	Falling objects Collision Instability Stored energies	Med (2)	All operatives working on site Nearby plant and structures	Med (2)	Med (4)	Work to be carried out by trained and competent personnel. Exclusion zone in place to protect others. All lifting equipment tested in line LOLER 1998 and checked before use.	Low (2)
Plant/Equipment							
Use of demolition rig	Unstable ground Structural instability Falling objects Nearby pedestrians	High (3)	Death/major injuries to personnel Damage to plant/equipment	High (3)	High (9)	Only plant operators with the appropriate training and experience are permitted to operate only the plant and equipment they have the appropriate training for. Operatives will remove keys from the cab when not in operation. The operator will ensure that the ground/pad they are working from is stable and free from voids. Any pad created to increase the reach of the machine shall be designed in accordance with BS5975. Site arisings will be infilled into any voids and suitable compacted to allow for the high reach to track into place to continue with the demolition of the structure. All works are carried out in compliance with 'BS6187:2011 Code of practice for demolition' and industry best practice as details in NFDC (National Federation of Demolition Contractors) guidance notes.	High (6)

TASK ACTIVITY	HAZARD	RATING A	RISK TO	RATING B	RISK PRIOR C	PREVENTION CONTROL	RISK AFTER
						<p>Site supervisor and machine operator to carry out walk around survey. Ask advice if not sure of building and or structures construction.</p> <p>Ensure through good supervision that the work is being carried out according to the method statement.</p> <p>Safe working spaces and exclusion zones to be managed in line with clause 13 of BS6187:2011</p> <p>Ensure that the machine is suitable and sufficient to carry out the works and is able to reach the structure safely. Banksmen will use two-way radios to keep in constant communication with the plant operator during the demolition phase.</p> <p>Machines to have FOPS.</p> <p>Ensure the physical barriers to prohibit unauthorised persons into the working area are effective. The exclusion zones shall be increased if required during the works to ensure prevention of unauthorised access. Ensure the warning signs posted are clearly visible.</p> <p>Operator will not oversail into neighbouring property.</p> <p>Machines will avoid facing neighbouring properties.</p>	
Vehicle Movement							
Vehicle movements around site	Damage to vehicles and structures. Injury to site personnel such as crush and physical injury to all parts of body, possible death.	High (3)	Operatives working on site. Other vehicles and structures.	Med (2)	High (6)	<p>Vehicles are to wait until the Rhodar Industrial Services site manager or Client site manager has arranged for them to be supervised or guided by a banksman to enter the work area.</p> <p>Banks man to be used when reversing.</p> <p>Vehicles to be only driven by licensed and authorised personnel.</p> <p>Pedestrians to use footpaths where possible, wear high visibility clothing.</p> <p>Always be aware of moving plant and vehicles and know their route.</p>	Med (3)

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						Segregate the footpath from the vehicular route. All vehicles leaving site to be inspected for load security and any possible contamination. Wheel washing may be necessary.	
Vehicle Movements on demolition site.	Collapse of manhole cover or underground voids resulting in vehicle overturning and crushing personnel.	High (3)	Plant movements moving across site.	Med (2)	High (6)	All fragile surface structures are to be identified, marked and cordoned off. Visual inspection of manhole covers to be carried out by site manager and when required cover by steel plating. Vehicles to stick to designated segregated routes.	Med (3)

KEY SAFETY ISSUES

Chemicals

Substances hazardous to health/environment.	Inhalation, absorption, and ingestion resulting in ill health. Damage to the environment	Med (2)	Operatives on site using hot works techniques, re-fuelling plant or using certain cleaning products.	Med (2)	Med (4)	Adoption of COSHH control measures i.e. refer to Rhodar Industrial Services specific COSHH assessments and hazard data sheets for each substance specifically used on site. All operatives will wear correct PPE to be appropriate to the conditions. Always wash before eating and drinking, shower when leaving site. Site Manager to ensure all precautionary measures are adhered to. Containers with unknown contents to be tested and removed from site by a specialist contractor All nearby drains to be bunged with protective pads.	Low (2)
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TASK ACTIVITY	HAZARD	RATING A	RISK TO	RATING B	RISK PRIOR C	PREVENTION CONTROL	RISK AFTER
Exposure to Crystalline Silica review and include demolition							
Legal Requirements – Silica’s work place exposure limit of 0.1mg/m3, expressed as an 8 hour time weighed average. Exposure should be reduced to as low as reasonably practicable, below the WEL. Reference to RPE-should have a protection factor of at least 20 (e.g. FFP3 filtering face piece. Qualitative face fit test required.							
General cleaning and removing dust with hand sweeping brush. (silica % dependent on material within dust)	Breathing in the very fine dust of crystalline silica can lead to the development of silicosis. This involves scarring of the lung tissue and can lead to breathing difficulties. Can cause fibrosis and loss of lung function.	High (3)	Operatives within the working area. Members of the public surrounding the site.	High (3)	High (9)	Use respiratory protective equipment (RPE) for hand-shovelling rubble or any manual rubble clearance. Make sure that workers check that their RPE works properly every time they put it on. Extraction to be used.	Low (2)

