RISK ASSESSMENT AND METHOD STATEMENT (RAMS)

Business name

Document: RAMS-001 Rev 1
Prepared: 9 Nov 2026
Review by: 9 Dec 2026
Highest risk after controls: Medium

1. BUSINESS AND JOB DETAILS

Job	Sewer and drain line replacement	**Start date**	9 Nov 2026
Working hours	7:00 am to 3:30 pm	**Trade**	Plumbing

2. WORK INVOLVING PARTICULAR RISKS (CDM 2015 SCHEDULE 3)

	Risk of burial under earthfalls, engulfment in swampland or falling from a height, made worse by the work, processes or site		Work on wells, underground earthworks and tunnels
YES	Chemical or biological substances that are a particular danger, or that need health monitoring by law		Divers with a system of air supply
	Ionising radiation needing controlled or supervised areas		Work in caissons with a compressed air atmosphere
	Work near high voltage power lines		Use of explosives
	Risk of drowning		Assembling or dismantling heavy prefabricated components

3. RISK ASSESSMENT

#	Activity / step	Hazards	Who might be harmed and how	Risk before	Controls	Risk after	Responsible
1	Get utility plans and locate services before digging	Hitting underground services Gas and fuel lines Electric shock from live wiring Rules: HSE HSG47 Avoiding danger from underground services; Gas Safety (Installation and Use) Regulations 1998; Electricity at Work Regulations 1989	Workers, Public, Occupants. How: Digging, drilling or driving pegs hits a buried power cable, gas pipe or water main, causing electrocution, explosion or flooding. Damaging or opening a gas or fuel line causes a leak, fire or explosion.	**Very high (15) Possible / Fatal**	1.1 Keep machine buckets well clear of marked services and use a spotter. [Isolate] 1.2 Do a CAT and Genny scan before digging and mark services on the ground. [Control (engineering)] 1.3 Hand dig trial holes to find services before machine digging (safe digging practice). [Control (engineering)] 1.4 Get utility plans before digging and check them against what you see on site. [Control (procedures)] 1.5 Keep plans or locate tickets on site and check them again if the work area grows. [Control (procedures)] 1.6 Isolate and purge the line before work, with the owner's approval. [Eliminate] 1.7 Lock off and tag the isolation valve. [Isolate] 1.8 Check for leaks with a gas detector before and during work, and ventilate the area. [Control (engineering)] 1.9 Only Gas Safe registered engineers work on gas fittings. [Control (procedures)] 1.10 Remove ignition sources: no smoking, no hot work and no sparking tools near the line. [Control (procedures)] 1.11 Isolate the power before any work. Do not work live. [Eliminate]	**Medium (5) Very unlikely / Fatal**	Site supervisor

#	Activity / step	Hazards	Who might be harmed and how	Risk before	Controls	Risk after	Responsible
					1.12 Lock out and tag the isolation point with your own personal lock and danger tag. [Isolate] 1.13 Prove dead at the point of work with an approved voltage indicator (GS38), and prove the tester before and after. [Control (engineering)] 1.14 Only competent, qualified electricians do electrical work, following a safe isolation procedure. [Control (procedures)] 1.15 Check for back feeds from solar, batteries and generators that can keep a circuit live after the main switch is off. [Control (procedures)]		
2	Cut and remove concrete or paving with water suppression	Silica dust from concrete, brick, stone and tiles Saw cuts and kickback Loud noise Rules: COSHH Regulations 2002; Provision and Use of Work Equipment Regulations 1998 (PUWER); Control of Noise at Work Regulations 2005	Workers, People nearby. How: Cutting, grinding or drilling concrete, brick, stone, tiles or fibre cement makes fine silica dust that causes silicosis and lung cancer. Circular saws, drop saws and table saws cut fingers and hands or throw material back at the user.	**Very high (20) Likely / Fatal**	2.1 Order materials cut to size, or use low-dust methods such as score and snap or a block splitter. [Reduce / substitute] 2.2 Cut outdoors or in a separate area, with other people well away and upwind. [Isolate] 2.3 Use water on the blade or on-tool dust extraction connected to an H-class vacuum. [Control (engineering)] 2.4 Clean up with a vacuum or wet methods. Never dry sweep or use compressed air. [Control (procedures)] 2.5 Do a COSHH assessment and keep exposure below the workplace exposure limit (0.1 mg/m3 respirable crystalline silica, 8 hours). [Control (procedures)] 2.6 Workers regularly exposed to silica dust get health surveillance (COSHH reg 11, HSE G404). [Control (procedures)] 2.7 Wear a fit-tested FFP3 mask. [PPE] 2.8 Keep blade guards fitted and working, and use the riving knife on table saws. [Control (engineering)] 2.9 Use push sticks and clamps, and support long pieces so they do not pinch the blade. [Control (engineering)] 2.10 Use a sharp, undamaged blade made for the material. [Control (procedures)] 2.11 Stand to one side of the blade line, out of the kickback path. [Control (procedures)] 2.12 Let the blade stop fully before reaching in or putting the saw down. [Control (procedures)] 2.13 Use quieter tools and methods, such as cut-to-size materials, low-noise machines and battery tools. [Reduce / substitute] 2.14 Keep noisy plant away from work areas, and use screens or distance between the noise and people. [Isolate] 2.15 Keep tools maintained and use mufflers on compressors and generators. [Control (engineering)] 2.16 Limit time on noisy tools and rotate workers. [Control (procedures)] 2.17 If you have to shout to be heard by someone 2 metres away, the noise is probably 85 dB(A) or more: wear hearing protection. [Control (procedures)] 2.18 Assess noise. At 85 dB(A) or more, hearing protection is	**Medium (8) Unlikely / Major injury**	Site supervisor

#	Activity / step	Hazards	Who might be harmed and how	Risk before	Controls	Risk after	Responsible
					required and the zone must be marked. [Control (procedures)]		
3	Excavate the trench, shoring or benching it if deeper than allowed	Trench or excavation collapse Being hit by mobile plant Falling through a floor opening or void Rules: CDM Regulations 2015, regulation 22 (excavations); CDM Regulations 2015 and PUWER 1998; Work at Height Regulations 2005	Workers, Visitors, Public. How: The trench walls cave in and bury or crush a worker. Any excavation can collapse, however shallow. Sides must be supported or battered back wherever a collapse could hurt someone. Excavators, loaders, telehandlers and trucks run over or crush workers, especially when reversing or slewing.	**Very high (15) Possible / Fatal**	3.1 Use methods that keep people out of the trench, such as directional boring or working from the surface. [Eliminate] 3.2 Barricade or cover the excavation so people and plant cannot fall in. [Isolate] 3.3 Support or batter back the sides of any excavation where collapse could happen. Use trench boxes or sheet piling for deeper trenches. [Control (engineering)] 3.4 Keep spoil, materials and plant at least 1 metre back from the edge. [Control (engineering)] 3.5 Provide a safe way in and out, such as a ladder near where people work. [Control (engineering)] 3.6 Inspect the excavation at the start of each shift and after rain or anything that could weaken it. Record it. [Control (procedures)] 3.7 Separate people and plant with barriers, exclusion zones and marked walkways. [Isolate] 3.8 Use plant with working reversing alarms, cameras and lights. [Control (engineering)] 3.9 Have a traffic management plan showing plant routes, loading areas and pedestrian paths. [Control (procedures)] 3.10 Use a spotter when reversing or working near people. [Control (procedures)] 3.11 Make eye contact with the operator before going near. Stay out of the swing radius. [Control (procedures)] 3.12 Cover every hole and penetration with a fixed, secured cover marked "HOLE" or "DANGER". [Isolate] 3.13 Put guardrails with toe boards around stairwells, lift shafts, voids and open edges. [Isolate] 3.14 Install stairs early and fit temporary handrails as soon as they go in. [Control (engineering)] 3.15 Never remove a cover or guardrail without approval. Put it back straight away. [Control (procedures)] 3.16 Inspect covers and barriers daily and after other trades have been through. [Control (procedures)]	**Medium (5) Very unlikely / Fatal**	Site supervisor
4	Cut out the broken pipe, wearing gloves and washing hands often	Sewage and wastewater Cuts from sharp edges	Workers. How: Contact with sewage spreads germs that cause stomach illness, hepatitis and skin infections. Sheet metal, glass, blades, cable tray and offcuts cut hands and arms.	**Medium (9) Possible / Lost time injury**	4.1 Flush and drain the line before opening it, and plan the job to avoid contact. [Eliminate] 4.2 Use drain cameras, jetters and long-handled tools to keep hands out. [Control (engineering)] 4.3 Cover cuts with waterproof dressings. Never eat, drink or smoke before washing. [Control (procedures)] 4.4 Wash hands well and clean tools and boots after the job. [Control (procedures)] 4.5 Keep vaccinations such as tetanus and hepatitis A up to date, on medical advice. [Control (procedures)] 4.6 Wear waterproof gloves, goggles or a face shield, and coveralls.	**Low (4) Unlikely / Minor injury**	Site supervisor

#	Activity / step	Hazards	Who might be harmed and how	Risk before	Controls	Risk after	Responsible
					[PPE] 4.7 Deburr or cover sharp edges, and fit edge protectors on exposed sheet metal. [Control (engineering)] 4.8 Use knives with retractable or self-retracting blades. [Control (engineering)] 4.9 Cut away from your body and keep your other hand clear. [Control (procedures)] 4.10 Put used blades in a blade bin or sharps container. [Control (procedures)] 4.11 Use two people to handle large sheets of metal or glass. [Control (procedures)] 4.12 Wear cut-resistant gloves and long sleeves. [PPE]		
5	Lay and join the new pipe to grade, then test the line	Lifting and carrying heavy loads Pressure testing Rules: Manual Handling Operations Regulations 1992; Pressure Systems Safety Regulations 2000	Workers, Occupants. How: Lifting, carrying, pushing or twisting with heavy or awkward loads strains the back, shoulders or knees. A pipe, fitting or cap fails under test pressure and blows apart, hitting people nearby.	**High (12) Likely / Lost time injury**	5.1 Plan to avoid carrying: have materials delivered, and old items picked up, as close as possible to where they are used. [Eliminate] 5.2 Use lighter or smaller loads: order smaller bags and shorter lengths, and drain or break down old items before moving them. [Reduce / substitute] 5.3 Use trolleys, pallet jacks, hoists, vacuum lifters or plant instead of carrying by hand. [Control (engineering)] 5.4 Use a two-person lift for anything heavy, long or awkward. Plan the route first and clear it. [Control (procedures)] 5.5 Keep the load close, back straight and no twisting. Turn with your feet. [Control (procedures)] 5.6 Rotate tasks and take breaks on long lifting jobs. [Control (procedures)] 5.7 Wear gloves for grip and safety boots to protect your feet. [PPE] 5.8 Test with water instead of air or gas where the system allows it. Never put water in refrigerant pipework, which is tested with dry nitrogen. [Reduce / substitute] 5.9 Keep people out of the test area with signs and barriers. [Isolate] 5.10 Use a calibrated gauge and a relief valve set to protect the system. [Control (engineering)] 5.11 Test to the pressure the system calls for and hold it for the set time. Never go over. [Control (procedures)] 5.12 Release the pressure fully before tightening anything or fixing leaks. [Control (procedures)] 5.13 Wear safety glasses or a face shield. [PPE]	**Medium (6) Unlikely / Lost time injury**	Site supervisor
6	Backfill and compact in layers, reinstate the surface and clean up	Hand-arm and whole-body vibration Loud noise Poor housekeeping and waste Rules: Control of Vibration at Work	Workers, People nearby, Visitors. How: Long periods on jackhammers, grinders, compactors or riding plant cause white finger, numbness and back damage. Saws,	**High (12) Likely / Lost time injury**	6.1 Use low-vibration tools and methods, such as a breaker on an excavator instead of a hand jackhammer. [Reduce / substitute] 6.2 Keep tools sharp and well maintained, and use anti-vibration handles and seats. [Control (engineering)] 6.3 Limit trigger time using the HSE vibration calculator to stay below the exposure action value, and rotate workers. [Control (procedures)] 6.4 Keep hands warm and dry, and take regular breaks. [Control	**Medium (6) Unlikely / Lost time injury**	Site supervisor

#	Activity / step	Hazards	Who might be harmed and how	Risk before	Controls	Risk after	Responsible
		Regulations 2005; Control of Noise at Work Regulations 2005	grinders, jackhammers and machines cause permanent hearing loss and ringing in the ears over time.		(procedures)] 6.5 Report tingling, numbness or white fingers early. [Control (procedures)] 6.6 Wear earplugs or earmuffs rated for the noise. [PPE] 6.7 Loud noise: see step 2 for the full controls [Control (procedures)] 6.8 Order materials to size and send packaging back where you can. [Eliminate] 6.9 Put skips and waste chutes close to the work. [Control (engineering)] 6.10 Clean as you go, and do a full clean up at the end of each day. [Control (procedures)] 6.11 Keep exits, stairs and walkways clear at all times. [Control (procedures)] 6.12 Stack materials neatly on level ground, away from edges. [Control (procedures)] 6.13 Use a registered waste carrier and keep waste transfer notes for at least 2 years. Keep hazardous waste such as asbestos separate, with consignment notes (special waste in Scotland). [Control (procedures)]		

Risk key: risk = likelihood x consequence on a 5 x 5 matrix. Low, Medium, High, Very high. Work must not start while the risk after controls is high or above. Controls are listed in order of the hierarchy of control (eric-pd): Eliminate, Reduce / substitute, Isolate, Control (engineering), Control (procedures), PPE.

4. METHOD STATEMENT: SEQUENCE OF WORK

Step	What we will do	How it is done safely
1	Get utility plans and locate services before digging	Keep machine buckets well clear of marked services and use a spotter. Do a CAT and Genny scan before digging and mark services on the ground. Hand dig trial holes to find services before machine digging (safe digging practice).
2	Cut and remove concrete or paving with water suppression	Order materials cut to size, or use low-dust methods such as score and snap or a block splitter. Cut outdoors or in a separate area, with other people well away and upwind. Use water on the blade or on-tool dust extraction connected to an H-class vacuum.
3	Excavate the trench, shoring or benching it if deeper than allowed	Use methods that keep people out of the trench, such as directional boring or working from the surface. Barricade or cover the excavation so people and plant cannot fall in. Support or batter back the sides of any excavation where collapse could happen. Use trench boxes or sheet piling for deeper trenches.
4	Cut out the broken pipe, wearing gloves and washing hands often	Flush and drain the line before opening it, and plan the job to avoid contact. Use drain cameras, jetters and long-handled tools to keep hands out. Cover cuts with waterproof dressings. Never eat, drink or smoke before washing.
5	Lay and join the new pipe to grade, then test the line	Plan to avoid carrying: have materials delivered, and old items picked up, as close as possible to where they are used. Use lighter or smaller loads: order smaller bags and shorter lengths, and drain or break down old items before moving them. Use trolleys, pallet jacks, hoists, vacuum lifters or plant instead of carrying by hand.
6	Backfill and compact in layers, reinstate the surface and clean up	Use low-vibration tools and methods, such as a breaker on an excavator instead of a hand jackhammer. Keep tools sharp and well maintained, and use anti-vibration handles and seats. Limit trigger time using the HSE vibration calculator to stay below the exposure

Step	What we will do	How it is done safely
		action value, and rotate workers.

5. PPE AND PERMITS

Required PPE	Permits and plans
Safety boots Hi-vis vest Chemical-resistant gloves Safety glasses Ear defenders FFP3 dust mask Half-mask respirator (P3 filters) Safety helmet Safety goggles Face shield Coveralls Cut-resistant gloves Rigger gloves	Permit to dig

6. PLANT AND EQUIPMENT

Plant / equipment	Licence or training needed	Inspection needed	Rego / ID	Last inspected	Certificate / report
Excavator (360)	CPCS or NPORS excavator card	Daily pre-use checks and PUWER inspection; if used to lift loads, LOLER thorough examination every 12 months and its lifting accessories every 6 months			
Hand tools					
Cut-off saw (Stihl saw)		User check before each use; inspected and serviced to the maker's schedule (PUWER regs 5 and 6). Discs changed only by people trained in abrasive wheels			
Wacker plate					
Drain jetting unit					

7. CREW COMPETENCY, TICKETS AND LICENCES

Crew listed at sign-on below, with ticket and licence numbers.

8. EMERGENCY ARRANGEMENTS

Emergency number	999	**First aid kit**	In the work vehicle

Fire extinguisher	In the work vehicle	**Alarm and evacuation**	Shout "Fire" or "Stop" and use the site alarm. Stop work, make the area safe and go to the assembly point. Do not go back in until the supervisor says it is safe.
Reporting incidents	Report reportable incidents to HSE under RIDDOR 2013 (hse.gov.uk/riddor).		

9. SITE ARRANGEMENTS

Welfare	Toilets, drinking water, hand washing and a break area on site	**Security and access**	Work area fenced or kept locked when unattended. Tools and materials secured. Public kept out.
Environmental and waste	Waste goes in a skip or the van and is taken away by a registered waste carrier, with waste transfer notes kept (duty of care). Hazardous waste such as asbestos is kept separate and consigned correctly. Dust and noise kept to a minimum. No run-off into drains.		

10. MONITORING, REVIEW AND LEGAL BASIS

The supervisor checks the controls at the start of each shift and during the work. Stop work and review this RAMS if the work, the crew or the site conditions change, after any incident or near miss, or if the principal contractor asks.

Legal basis: Management of Health and Safety at Work Regulations 1999 and the Construction (Design and Management) Regulations 2015. Employers must assess the risks of their work and record the significant findings (required where you employ 5 or more people). On CDM projects, contractors give their RAMS to the principal contractor before starting, and brief the workers on it.

Keep this RAMS, every revision and the signed briefing register with the site file for the length of the job, and keep a copy in your records afterwards.

11. REVISION HISTORY

Rev	Date	By	What changed
1	9 Nov 2026		First issue

12. APPROVAL AND BRIEFING REGISTER

	Name	Signature	Date	
Prepared by				
Approved by				
Supervisor				
Principal contractor review				Accepted for use: Yes / No

By signing below, each person confirms this RAMS was explained to them in a site briefing, they understand it and will follow it, and they will stop work and tell the supervisor if anything changes.

Name	Role / company	Tickets / licences	Inducted	Signature	Date

Name	Role / company	Tickets / licences	Inducted	Signature	Date