FIELD LEVEL HAZARD ASSESSMENT (FLHA)

Business name

Document: FLHA-001 Rev 1
Assessed: 2026-11-09 17:46
Valid for this shift / task only
Highest risk after controls: Medium

1. BUSINESS AND JOB DETAILS

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

2. JOB STEPS, HAZARDS AND CONTROLS

#	Job step	Hazards	Risk before	Controls	Risk after	Responsible
1	Get utility locates and locate services before digging	Hitting underground services Gas and fuel lines Electric shock from live wiring Rules: Provincial OHS regulation, electrical safety, and CSA Z462	**Critical Possible / Fatality**	1.1 Keep machine buckets well clear of marked services and use a spotter. [Engineering (guarding)] 1.2 Scan the area with a cable locator before digging and mark services on the ground. [Engineering] 1.3 Hand expose or hydrovac services before machine digging inside the locate tolerance zone. [Engineering] 1.4 Click Before You Dig: lodge a locate request with your provincial one-call service and wait for the locates. [Administrative] 1.5 Follow your province's ground disturbance rules and keep locate sheets on site. [Administrative] 1.6 Keep plans or locate tickets on site and check them again if the work area grows. [Administrative] 1.7 Isolate and purge the line before work, with the owner's approval. [Elimination] 1.8 Lock off and tag the isolation valve. [Engineering (guarding)] 1.9 Check for leaks with a gas detector before and during work, and ventilate the area. [Engineering] 1.10 Only licensed gas fitters work on gas lines. [Administrative] 1.11 Remove ignition sources: no smoking, no hot work and no sparking tools near the line. [Administrative] 1.12 Isolate the power before any work. Do not work live. [Elimination] 1.13 Lock out and tag the isolation point with your own personal lock and danger tag. [Engineering (guarding)] 1.14 Test before you touch: prove dead at the point of work with a tested voltage tester. [Engineering] 1.15 Only licensed electricians do electrical work, to the Canadian Electrical Code and provincial rules. [Administrative] 1.16 Check for back feeds from solar, batteries and generators that can keep a circuit live after the main switch is off. [Administrative]	**Medium Rare / Fatality**	Site supervisor

#	Job step	Hazards	Risk before	Controls	Risk after	Responsible
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: Provincial OHS regulation, silica exposure limits	**Critical Likely / Fatality**	2.1 Order materials cut to size, or use low-dust methods such as score and snap or a block splitter. [Substitution] 2.2 Cut outdoors or in a separate area, with other people well away and upwind. [Engineering (guarding)] 2.3 Use water on the blade or on-tool dust extraction connected to a HEPA vacuum. [Engineering] 2.4 Clean up with a vacuum or wet methods. Never dry sweep or use compressed air. [Administrative] 2.5 Have a silica exposure control plan where your province requires one. [Administrative] 2.6 Wear a fit-tested N95 (or better) respirator. [PPE] 2.7 Keep blade guards fitted and working, and use the riving knife on table saws. [Engineering] 2.8 Use push sticks and clamps, and support long pieces so they do not pinch the blade. [Engineering] 2.9 Use a sharp, undamaged blade made for the material. [Administrative] 2.10 Stand to one side of the blade line, out of the kickback path. [Administrative] 2.11 Let the blade stop fully before reaching in or putting the saw down. [Administrative] 2.12 Use quieter tools and methods, such as cut-to-size materials, low-noise machines and battery tools. [Substitution] 2.13 Keep noisy equipment away from work areas, and use screens or distance between the noise and people. [Engineering (guarding)] 2.14 Keep tools maintained and use mufflers on compressors and generators. [Engineering] 2.15 Limit time on noisy tools and rotate workers. [Administrative] 2.16 If you have to shout to be heard 1 metre away, wear hearing protection. [Administrative]	**Medium Unlikely / Serious injury**	Site supervisor
3	Excavate the trench, shoring or benching it if deeper than allowed	Trench or excavation collapse Being hit by heavy equipment Falling through a floor opening or void Rules: Provincial OHS regulation, excavations and trenches; Provincial OHS regulation, fall protection	**Critical Possible / Fatality**	3.1 Use methods that keep people out of the trench, such as directional boring or working from the surface. [Elimination] 3.2 Barricade or cover the excavation so people and equipment cannot fall in. [Engineering (guarding)] 3.3 Shore, slope or use a trench box in any trench deeper than 1.2 metres (1.5 metres in Alberta and Manitoba). [Engineering] 3.4 Keep spoil, materials and equipment at least 1 metre back from the edge. [Engineering] 3.5 Provide a safe way in and out, such as a ladder near where people work. [Engineering] 3.6 Inspect the excavation at the start of each shift and after rain or anything that could weaken it. Record it. [Administrative] 3.7 Separate people and equipment with barriers, exclusion zones and marked walkways. [Engineering (guarding)]	**Medium Rare / Fatality**	Site supervisor

#	Job step	Hazards	Risk before	Controls	Risk after	Responsible
				3.8 Use equipment with working backup alarms, cameras and lights. [Engineering] 3.9 Have a site traffic plan showing equipment routes, loading areas and pedestrian paths. [Administrative] 3.10 Use a spotter when backing up or working near people. [Administrative] 3.11 Make eye contact with the operator before going near. Stay out of the swing radius. [Administrative] 3.12 Cover every hole and penetration with a fixed, secured cover marked "HOLE" or "DANGER". [Engineering (guarding)] 3.13 Put guardrails with toe boards around stairwells, lift shafts, voids and open edges. [Engineering (guarding)] 3.14 Install stairs early and fit temporary handrails as soon as they go in. [Engineering] 3.15 Never remove a cover or guardrail without approval. Put it back straight away. [Administrative] 3.16 Inspect covers and barriers daily and after other trades have been through. [Administrative]		
4	Cut out the broken pipe, wearing gloves and washing hands often	Sewage and wastewater Cuts from sharp edges	**Medium** **Possible / Lost time injury**	4.1 Flush and drain the line before opening it, and plan the job to avoid contact. [Elimination] 4.2 Use drain cameras, jetters and long-handled tools to keep hands out. [Engineering] 4.3 Cover cuts with waterproof dressings. Never eat, drink or smoke before washing. [Administrative] 4.4 Wash hands well and clean tools and boots after the job. [Administrative] 4.5 Keep vaccinations such as tetanus and hepatitis A up to date, on medical advice. [Administrative] 4.6 Wear waterproof gloves, goggles or a face shield, and coveralls. [PPE] 4.7 Deburr or cover sharp edges, and fit edge protectors on exposed sheet metal. [Engineering] 4.8 Use knives with retractable or self-retracting blades. [Engineering] 4.9 Cut away from your body and keep your other hand clear. [Administrative] 4.10 Put used blades in a blade bin or sharps container. [Administrative] 4.11 Use two people to handle large sheets of metal or glass. [Administrative] 4.12 Wear cut-resistant gloves and long sleeves. [PPE]	**Low** **Unlikely / Minor injury**	Site supervisor
5	Lay and join the new pipe to grade, then test the line	Lifting and carrying heavy loads Pressure testing	**High** **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. [Elimination] 5.2 Use lighter or smaller loads: order smaller bags and shorter lengths, and drain or break down old items before moving them. [Substitution]	**Medium** **Unlikely / Lost time injury**	Site supervisor

#	Job step	Hazards	Risk before	Controls	Risk after	Responsible
				5.3 Use trolleys, pallet jacks, hoists, vacuum lifters or equipment instead of carrying by hand. [Engineering] 5.4 Use a two-person lift for anything heavy, long or awkward. Plan the route first and clear it. [Administrative] 5.5 Keep the load close, back straight and no twisting. Turn with your feet. [Administrative] 5.6 Rotate tasks and take breaks on long lifting jobs. [Administrative] 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. [Substitution] 5.9 Keep people out of the test area with signs and barriers. [Engineering (guarding)] 5.10 Use a calibrated gauge and a relief valve set to protect the system. [Engineering] 5.11 Test to the pressure the system calls for and hold it for the set time. Never go over. [Administrative] 5.12 Release the pressure fully before tightening anything or fixing leaks. [Administrative] 5.13 Wear safety glasses or a face shield. [PPE]		
6	Backfill and compact in layers, reinstate the surface and clean up	Hand-arm and whole-body vibration Loud noise Poor housekeeping and waste	**High Likely / Lost time injury**	6.1 Use low-vibration tools and methods, such as a breaker on an excavator instead of a hand jackhammer. [Substitution] 6.2 Keep tools sharp and well maintained, and use anti-vibration handles and seats. [Engineering] 6.3 Limit trigger time on high-vibration tools and rotate workers. [Administrative] 6.4 Keep hands warm and dry, and take regular breaks. [Administrative] 6.5 Report tingling, numbness or white fingers early. [Administrative] 6.6 Wear earplugs or earmuffs rated for the noise. [PPE] 6.7 Loud noise: see step 2 for the full controls [Administrative] 6.8 Order materials to size and send packaging back where you can. [Elimination] 6.9 Put waste bins and chutes close to the work. [Engineering] 6.10 Clean as you go, and do a full clean up at the end of each day. [Administrative] 6.11 Keep exits, stairs and walkways clear at all times. [Administrative] 6.12 Stack materials neatly on level ground, away from edges. [Administrative]	**Medium Unlikely / Lost time injury**	Site supervisor

Risk key: risk = likelihood x consequence on a 5 x 5 matrix. Low, Medium, High, Critical. Work must not start while the risk after controls is high or above. Controls are listed in order of the hierarchy of controls: Elimination, Substitution, Engineering (guarding), Engineering, Administrative, PPE.

3. PPE AND PERMITS

Required PPE	Permits and plans
CSA green triangle safety boots (CSA Z195) High-visibility vest (CSA Z96) Chemical-resistant gloves Safety glasses (CSA Z94.3) Hearing protection N95 respirator Respirator fit tested to CSA Z94.4 (P100 for dust, or the type the air test calls for) Hard hat (CSA Z94.1) Safety goggles Face shield Coveralls Cut-resistant gloves Work gloves	Ground disturbance permit / locate

4. PLANT AND EQUIPMENT

Plant / equipment	Licence or training needed	Inspection needed	Rego / ID	Last inspected	Certificate / report
Excavator	Provincial operator training				
Hand tools					
Concrete saw (cut-off saw)					
Plate tamper					
Sewer jetter					

5. CREW COMPETENCY, TICKETS AND LICENCES

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

6. EMERGENCY ARRANGEMENTS

Emergency number	911	**First aid kit**	In the work vehicle
Fire extinguisher	In the work vehicle	**Alarm and evacuation**	Shout for help and stop work. Make the area safe and go to the assembly point. Call the emergency number and send someone to meet the ambulance.
Reporting incidents	Report serious incidents to the provincial regulator as required.		

7. MONITORING, REVIEW AND LEGAL BASIS

The supervisor and crew review this assessment at the start of the shift, whenever the task, crew or conditions change, and before any new work process starts. Re-assess and initial the changes below.

Legal basis: Provincial occupational health and safety law (e.g. Ontario OHSA and O. Reg. 213/91, BC OHS Regulation, Alberta OHS Code). Employers must identify hazards before work starts and control them, and workers must be told about them. A field level hazard assessment is done on site, at the start of each shift or task, and reviewed again when conditions change.

Keep completed hazard assessments for at least 3 years (COR auditors sample the last 12 months). Review this FLHA and re-sign whenever the task, crew or conditions change.

8. PRE-JOB CHECKS

Check	Yes	No
PPE inspected and in good condition		
Tools and equipment inspected		
Permits reviewed and posted		
Locates valid and on site (if digging)		
Barricades or warning ribbon in place		
Muster point and emergency plan reviewed with the crew		
SDS available for products used		
Working alone check-in set up (if anyone works alone)		

9. RE-ASSESSMENT WHEN CONDITIONS CHANGE

Time	What changed	New hazards	Controls	Initials

10. END OF SHIFT REVIEW

Completed at		**Reviewed by**	
Area cleaned up and safe		**Permits closed**	
Incidents or near misses		**Hazards remaining**	

11. REVISION HISTORY

Rev	Date	By	What changed
1	Nov 9, 2026		First issue

12. SIGN-OFF

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

By signing below, each worker confirms they took part in this hazard assessment, it was reviewed with them before work started, and they will follow it. Stop and re-assess if anything changes.

Name	Role / company	Tickets / licences	Signature	Date

Name	Role / company	Tickets / licences	Signature	Date