JOB HAZARD ANALYSIS (JHA)

Business name

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

1. BUSINESS AND JOB DETAILS

Job	Paving installation	**Start date**	Nov 9, 2026
Working hours	7:00 am to 3:30 pm	**Trade**	Landscaping

2. JOB STEPS, HAZARDS AND CONTROLS

#	Job step	Hazards	Risk before	Controls	Risk after	Responsible
1	Get 811 locates and excavate the base	Hitting underground services Being hit by heavy equipment Rules: 29 CFR 1926.651(b) and your state 811 law; 29 CFR 1926 Subpart O	**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 dig or vacuum excavate to expose services before using a machine near them. [Engineering] 1.4 Call 811 before you dig and wait until all utilities have marked their lines. [Administrative] 1.5 Keep plans or locate tickets on site and check them again if the work area grows. [Administrative] 1.6 Support or protect exposed utilities so they cannot sag or break while the excavation is open (29 CFR 1926.651(b)(4)). [Administrative] 1.7 If you hit a service, stop, get everyone clear, and call the owner and emergency services. [Administrative] 1.8 Wear safety boots, gloves and hi-vis when digging. [PPE] 1.9 Separate people and equipment with barriers, exclusion zones and marked walkways. [Engineering (guarding)] 1.10 Use equipment with working backup alarms, cameras and lights. [Engineering] 1.11 Have a site traffic plan showing equipment routes, loading areas and pedestrian paths. [Administrative] 1.12 Use a spotter when backing up or working near people. [Administrative] 1.13 Make eye contact with the operator before going near. Stay out of the swing radius. [Administrative] 1.14 Operators are trained and authorized for each machine. Forklift and telehandler operators are trained, evaluated and certified by the employer (29 CFR 1910.178(l), via 1926.602(d)). [Administrative] 1.15 Do a pre-start check on each machine every day and record it. [Administrative] 1.16 Wear hi-vis clothing and a hard hat. [PPE]	**Medium Rare / Fatality**	Site supervisor
2	Compact road base, rotating	Hand-arm and whole-body	**High**	2.1 Use low-vibration tools and methods, such as a breaker	**Medium**	Site supervisor

#	Job step	Hazards	Risk before	Controls	Risk after	Responsible
	operators	vibration Loud noise Rules: 29 CFR 1926.52	**Likely / Recordable / lost time**	on an excavator instead of a hand jackhammer. [Substitution] 2.2 Keep tools sharp and well maintained, and use anti-vibration handles and seats. [Engineering] 2.3 Limit trigger time on high-vibration tools and rotate workers. [Administrative] 2.4 Keep hands warm and dry, and take regular breaks. [Administrative] 2.5 Report tingling, numbness or white fingers early. [Administrative] 2.6 Wear gloves to keep hands warm and dry. [PPE] 2.7 Use quieter tools and methods, such as cut-to-size materials, low-noise machines and battery tools. [Substitution] 2.8 Keep noisy plant away from work areas, and use screens or distance between the noise and people. [Engineering (guarding)] 2.9 Keep tools maintained and use mufflers on compressors and generators. [Engineering] 2.10 Limit time on noisy tools and rotate workers. [Administrative] 2.11 If you have to shout to be heard at arm's length, wear hearing protection. [Administrative] 2.12 Wear earplugs or earmuffs rated for the noise. [PPE]	**Unlikely / Recordable / lost time**	
3	Lay pavers, using a lifter or two people for big ones	Lifting and carrying heavy loads Repetitive work and awkward postures	**High Likely / Recordable / lost time**	3.1 Plan to avoid carrying: have materials delivered, and old items picked up, as close as possible to where they are used. [Elimination] 3.2 Use lighter or smaller loads: order smaller bags and shorter lengths, and drain or break down old items before moving them. [Substitution] 3.3 Use trolleys, pallet jacks, hoists, vacuum lifters or plant instead of carrying by hand. [Engineering] 3.4 Use a two-person lift for anything heavy, long or awkward. Plan the route first and clear it. [Administrative] 3.5 Keep the load close, back straight and no twisting. Turn with your feet. [Administrative] 3.6 Rotate tasks and take breaks on long lifting jobs. [Administrative] 3.7 Wear gloves for grip and safety boots to protect your feet. [PPE] 3.8 Use tools that cut the effort: powered screwdrivers, long-handled tools and extension poles for overhead work. [Substitution] 3.9 Set work up at waist height on benches or trestles where you can. [Engineering] 3.10 Use light tools with good grips, and keep blades and bits sharp. [Engineering] 3.11 Rotate tasks and take short breaks every hour on repetitive work. [Administrative] 3.12 Warm up before heavy physical work and report aches	**Medium Unlikely / Recordable / lost time**	Site supervisor

#	Job step	Hazards	Risk before	Controls	Risk after	Responsible
				and pains early. [Administrative] 3.13 Wear knee pads for kneeling work and gloves for grip. [PPE]		
4	Cut pavers wet, never dry	Silica dust from concrete, brick, stone and tiles Saw cuts and kickback Loud noise Rules: 29 CFR 1926.1153; 29 CFR 1926 Subpart I; 29 CFR 1926.52	**Critical Likely / Fatality**	4.1 Order materials cut to size, or use low-dust methods such as score and snap or a block splitter. [Substitution] 4.2 Cut outdoors or in a separate area, with other people well away and upwind. [Engineering (guarding)] 4.3 Use wet cutting or on-tool dust collection with a HEPA vacuum, as set out in Table 1 of 29 CFR 1926.1153. [Engineering] 4.4 Clean up with a vacuum or wet methods. Never dry sweep or use compressed air. [Administrative] 4.5 Have a written exposure control plan and a competent person for silica (29 CFR 1926.1153). [Administrative] 4.6 Workers who must wear a respirator 30 or more days a year get a free medical exam every 3 years (29 CFR 1926.1153(h)). [Administrative] 4.7 Wear the respirator Table 1 lists for the task: APF 10 (a fit-tested N95 or half mask) for most tasks, APF 25 (such as a loose-fitting PAPR) for tuckpointing with a handheld grinder for more than 4 hours a shift. [PPE] 4.8 Keep blade guards fitted and working, and use the riving knife on table saws. [Engineering] 4.9 Use push sticks and clamps, and support long pieces so they do not pinch the blade. [Engineering] 4.10 Use a sharp, undamaged blade made for the material. [Administrative] 4.11 Stand to one side of the blade line, out of the kickback path. [Administrative] 4.12 Let the blade stop fully before reaching in or putting the saw down. [Administrative] 4.13 Loud noise: see step 2 for the full controls [Administrative]	**Medium Unlikely / Serious injury**	Site supervisor
5	Sand, compact and clean up	Sun exposure (UV) Heat stress Poor housekeeping and waste Rules: OSH Act Section 5(a)(1) General Duty Clause; state heat rules where they apply (Cal/OSHA T8 3395, WA WAC 296-62-095, OR OAR 437-002-0156, MD COMAR 09.12.32)	**High Likely / Recordable / lost time**	5.1 Plan outdoor work for early morning or late afternoon when UV is lower. [Elimination] 5.2 Put shade covers over fixed work areas. [Engineering] 5.3 Check the UV index each day. Use sun protection when it is 3 or higher. [Administrative] 5.4 Check your skin regularly and see a doctor about any new or changing spots. [Administrative] 5.5 Wear a broad-brim hat or hard hat brim, long sleeves, sunglasses and SPF 30 or higher sunscreen, reapplied every 2 hours. [PPE] 5.6 Schedule heavy work for the cooler part of the day. [Elimination] 5.7 Provide shade over work and rest areas, and fans or cooling in attics. [Engineering] 5.8 Supply cool drinking water close by and drink a cup every	**Medium Unlikely / Serious injury**	Site supervisor

#	Job step	Hazards	Risk before	Controls	Risk after	Responsible
				15 to 20 minutes. [Administrative] 5.9 Take regular rest breaks in the shade, more often as it gets hotter. [Administrative] 5.10 Let new and returning workers build up to full work in the heat over about a week. [Administrative] 5.11 In California, Washington, Oregon and Maryland, follow the state heat illness rule: written plan, shade, water, rest and high-heat procedures. [Administrative] 5.12 Order materials to size and send packaging back where you can. [Elimination] 5.13 Put dumpsters and waste chutes close to the work. [Engineering] 5.14 Clean as you go, and do a full clean up at the end of each day. [Administrative] 5.15 Keep exits, stairs and walkways clear at all times. [Administrative] 5.16 Stack materials neatly on level ground, away from edges. [Administrative]		

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
Safety-toe boots (ASTM F2413) Knee pads Safety glasses (ANSI Z87.1) N95 respirator Hearing protection (earmuffs or plugs) Sun protection (sunscreen, hat, long sleeves) High-visibility safety apparel, ANSI/ISEA 107 Class 2 or 3 (Type R near roadways) Hard hat (ANSI Z89.1) Work gloves Half-face respirator (P100 cartridges)	None required

4. PLANT AND EQUIPMENT

Plant / equipment	License or training needed	Inspection needed	Rego / ID	Last inspected	Certificate / report
Skid steer					
Plate compactor					
Concrete saw (cut-off saw)					

Plant / equipment	License or training needed	Inspection needed	Rego / ID	Last inspected	Certificate / report
Wet tile saw		Visual check of cord, plug and guards before each day's use; if you run an assured equipment grounding program instead of GFCIs, test every 3 months (29 CFR 1926.404(b)(1))			
Hand tools					

5. TRAINING REQUIRED FOR THIS WORK

- Equipment operator training (29 CFR 1926.20(b)(4)); forklift and telehandler operators trained, evaluated and certified, re-evaluated every 3 years (29 CFR 1910.178(l))
- Silica training on the exposure control plan and Table 1 controls (29 CFR 1926.1153(i)); respirator fit test and medical evaluation (29 CFR 1910.134)

6. CREW TRAINING AND CERTIFICATIONS

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

7. 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 a fatality to OSHA within 8 hours, and an in-patient hospitalization, amputation or eye loss within 24 hours.		

8. MONITORING, REVIEW AND LEGAL BASIS

A competent person inspects the job site, materials and equipment before work each day and as conditions change (29 CFR 1926.20(b)(2)). Any time this JHA is revised, the affected crew is re-briefed and signs again.

Legal basis: OSH Act Section 5(a)(1) and 29 CFR 1926, Safety and Health Regulations for Construction (incl. 1926.20 and 1926.21). OSHA requires employers to find and fix hazards and to train workers on them. A JHA breaks the job into steps, lists the hazards in each step and the controls that protect the crew. General contractors often require one before you start.

Keep this JHA on site during the job, and keep it with the training and inspection records for at least 1 year after the job (longer if your state plan or general contractor requires it). OSHA does not set a retention period for JHAs themselves.

9. REVISION HISTORY

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

10. SIGN-OFF

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

By signing below, each crew member confirms they were trained on the hazards and controls in this JHA before work started, and will follow it. Stop work and tell the supervisor if conditions change.

Name	Role / company	Tickets / licences	Signature	Date

Name	Role / company	Tickets / licences	Signature	Date