

1. GENERAL INFORMATION

NOTE: This permit must be completed and authorized prior to any surface penetration, excavation, or trenching at any depth. A JHA/AHA must be submitted prior to commencing all permitted activities.

Project:		
Superintendent:	Ph:	
Foreman/Supv:	Ph:	
Permit Date:	Pre-Plan Mtg:	
Start Date:	Start Time:	
Exp Date:	Location:	
Purpose:		
811/Dig Alert:	Utility Owner:	
Hospital:	Safety:	
Scope (select all that apply):		
☐ Ground Penetration	☐ Slab / Concrete	☐ Wall Penetration
☐ Excavation	☐ Trenching	
Substrate (select all that apply):		
☐ Drywall/Gypsum	☐ Plaster	☐ CMU/Block
☐ Brick/Masonry	☐ Tilt-Up	☐ Cast-in-Place
☐ Concrete (Reinforced)	☐ Concrete (PT)	☐ Metal Deck
☐ Asphalt	☐ Soil/Earth	☐ Rock/Bedrock
Interfaces / SIMOPs:		
☐ Other trades	☐ Crane/rigging	☐ Adj. excavation
☐ Live traffic	☐ Occupied bldg	☐ Hot work
Personal Protective Equipment:		
☐ Hard Hat	☐ Safety Glasses	☐ Face Shield
☐ Hearing Protection	☐ Hi-Vis Vest	☐ Steel-Toe Boots
☐ Respirator: _____	☐ Gloves: _____	☐ Tyvek/Coveralls
Attached Documents / Plans:		
☐ Site Diagram	☐ As-Built Dwg	☐ Photos
☐ Other		
Remarks:		

2. UTILITIES / ENERGY SOURCES**Utility Identification Methods (locates expire 30 days — CA GC 4216):**

Method	Org / Ticket #	Date
☐ 811 / Public Locate	Ticket #:	
☐ Private Locate	Org:	
☐ Private Locate	Org:	
☐ GPR / Scanning / X-Ray	Org:	
☐ As-Built Reviewed Date:	☐ Hand Excavation	☐ Vacuum Excavating

Utilities / Energy Sources Present:

☐ Gas	☐ Data/Comms	☐ Sewer/Storm	☐ Electrical
☐ Proc/Steam/Oil	☐ Water	☐ Temp/Other	
Located utilities clearly marked?			☐ Y ☐ NA
Locate reports on site and reviewed?			☐ Y ☐ NA

Supplemental Marking:

☐ Stakes	☐ Cones	☐ Delineators
☐ Barricade Tape	☐ Flagging	☐ Other

Energy Isolation / Utility Control:

☐ LOTO required — lockout/tagout applied
☐ Cut and cap completed
☐ Air gap established
☐ Zero-energy verification performed
Pot Holing:
☐ Potholing plan established for known utilities
☐ Non-intrusive methods within 18 in. (hand dig / hydro)
☐ Pothole intervals confirmed (15 ft max)
☐ Utilities daylighted within 6 ft of excavation edge

3. PENETRATIONS (WALLS, SLABS, CONCRETE)**Method of Penetration:**

☐ Saw Cutting	☐ Core Drilling	☐ Chipping
☐ Drilling	☐ Pneumatic	☐ Recip Saw
Slab Thickness:		Max Shot Length:
Item		Y / NA
Slab/wall X-rayed, GPR scanned, or stud-detected prior to penetration.		☐ Y ☐ NA
Embedded utilities marked (PT cables, conduit, rebar, plumbing).		☐ Y ☐ NA

SURFACE PENETRATION, EXCAVATION, TRENCHING PERMIT

JULY 2026

Pre-1978 structure — lead/asbestos survey completed prior to disturbance.	☐ Y ☐ NA
Fire-rated assembly identified — firestop plan in place.	☐ Y ☐ NA
Structural assessment completed (load-bearing/shear wall clearance).	☐ Y ☐ NA
Concealed wiring check completed (stud finder / wire detection).	☐ Y ☐ NA
Sprinkler system isolated, valved-off, or drained.	☐ Y ☐ NA
Sprinkler heads protected with temporary cage covers.	☐ Y ☐ NA
Valve shut-off map posted in work area.	☐ Y ☐ NA
Active utilities visually flagged (incl. sprinkler heads).	☐ Y ☐ NA
Area beneath/above work barricaded with signage.	☐ Y ☐ NA
Spotter beneath/above with communication to crew.	☐ Y ☐ NA
Dust / Silica / Slurry Control:	
☐ Respirable silica exposure assessment completed	
☐ Slurry containment and management plan in place	
☐ Dust control: ☐ Wet cut ☐ Vacuum/HEPA ☐ Containment	
☐ Vacuum/HEPA dust collection operational and verified	
4. EXCAVATION	
Method:	
Depth:	
Soil Class (29 CFR 1926 Subpart P, App A):	
☐ Stable Rock	Natural solid mineral; remains intact with vertical sides while exposed.
☐ Type A	Cohesive, unconfined compressive strength ≥ 1.5 tsf (clay, silty clay, hardpan). Not fissured, no vibration, not previously disturbed.
☐ Type B	Cohesive, 0.5–1.5 tsf (silt, sandy loam, angular gravel); or Type A downgraded by fissures, vibration, or prior disturbance.
☐ Type C	Granular or cohesive < 0.5 tsf (gravel, sand, loamy sand); submerged or freely seeping soil; unstable submerged rock.
Item	Y / NA
Excavation > 4 ft — fall prevention/protection in place. (T8 CCR 1541.1)	☐ Y ☐ NA
Excavation > 4 ft — atmosphere tested before entry (O ₂ , LEL, CO, H ₂ S). (1926.651(g))	☐ Y ☐ NA
Excavation > 5 ft — protective system in place (slope/shore/shield). (1926.652(a))	☐ Y ☐ NA
Excavation > 20 ft — PE-designed protective system. (1926.652(b)-(c))	☐ Y ☐ NA
Access/egress within 25 ft of each worker. (1926.651(c)(2))	☐ Y ☐ NA

Competent person designated for daily inspections. (1926.651(k); T8 CCR 1541(b))	☐ Y ☐ NA
Perimeter protection in place for open excavations. (1926.651(i))	☐ Y ☐ NA
Material/equipment storage ≥ 4 ft from perimeter.	☐ Y ☐ NA
Spotter appointed when equipment near workers.	☐ Y ☐ NA
Spoil pile ≥ 2 ft from edge of excavation. (1926.651(j)(2))	☐ Y ☐ NA
Water accumulation sources identified and controlled. (1926.651(h))	☐ Y ☐ NA
Underground utility crossings identified, exposed, protected.	☐ Y ☐ NA
Traffic controller in place for roadway/pedestrian path. (MUTCD Ch 6)	☐ Y ☐ NA
Top person appointed (trench work only).	☐ Y ☐ NA

5. TRENCHING

Width:		Depth:		Length:	
Item					Y / NA
Annual Trenching Permit current and on file.					☐ Y ☐ NA
Project-specific trench permit completed.					☐ Y ☐ NA
Trench > 5 ft — protective system required. (1926.652(a); T8 CCR 1541.1)					☐ Y ☐ NA
Trench > 20 ft — PE-designed protective system required. (1926.652(b)-(c))					☐ Y ☐ NA
No worker entry between shield and trench wall.					☐ Y ☐ NA
Benching prohibited in Type C soil — not used. (Subpart P App B)					☐ Y ☐ NA
Shield/box extends minimum 18 in. above top of excavation.					☐ Y ☐ NA
Trench rescue equipment on site and rescue plan in place.					☐ Y ☐ NA

6. PERMIT REVIEW & AUTHORIZATION

NOTE: By signing, all parties certify that the conditions documented on this permit have been reviewed, required hazard controls are in place, the pre-task planning meeting has been conducted, and the crew has been briefed prior to commencing work.

Role	Printed Name	Signature	Date
Superintendent			
Competent Person			
Safety Department			

PERMIT INSTRUCTIONS

Required prior to any ground, wall, slab penetration, excavation, or trenching at any depth. Select applicable scope. Complete only applicable sections. Separate permit per location.

Permit validity and expiration:

- Valid from Start Date through Expiration Date. **30 days maximum.**
- Permit expires immediately upon: scope change, conditions change, new hazard, incident, or control failure.
- Extension requires a new permit with fresh authorization and signatures.
- Daily competent person inspections required independently of permit validity.
- Supplements but does not replace JHA/AHA. Both must be on site.
- Retain completed permits minimum 3 years.

UTILITY IDENTIFICATION**811 / Dig Alert (CA GC 4216):**

- Contact 2+ working days before excavation. Valid 30 calendar days.
- Document ticket # and date. Re-request if expired.
- Mark proposed excavation in WHITE before locator arrives.

APWA Color Code: RED=Electric. YELLOW=Gas/oil/steam. BLUE=Potable water. ORANGE=Comms/fiber. GREEN=Sewer/storm. PINK=Survey. WHITE=Proposed excavation. PURPLE=Reclaimed water.

Potholing (1926.651(b); T8 CCR 1541(d)):

- Pothole at start of every known utility. 15 ft max intervals.
- Non-intrusive within 18 in. Daylight within 6 ft of edge.

ENERGY ISOLATION

- **LOTO** (1910.147; T8 CCR 3314) — Only installer removes lock. Verify zero-energy.
- **Cut/Cap** — Physical disconnect; cap both ends.
- **Air Gap** — Visible physical break. Verified and maintained.
- **Zero-Energy Verification** — Attempt to operate or test. Final step.

PENETRATION HAZARDS

- **PT cables** — catastrophic failure + lethal cable whip. PE clearance required.
- **Concealed wiring** — stud finder/wire detection. Assume energized. LOTO.
- **Fire-rated assemblies** — firestop per UL/FM listing. Fire watch if breached.
- **Sprinkler impairment** — notify fire dept, fire watch, restore immediately.

HAZARD COMMUNICATION

- **Lead** — pre-1978; PEL 10 µg/m³, AL 2 µg/m³ (T8 CCR 1532.1).
- **Asbestos** — survey before disturbance (T8 CCR 1529).
- **PCBs** — older ballasts, caulk. Do not cut; notify environmental.

OVERHEAD POWER LINE CLEARANCE

Voltage	Min Distance
0-50 kV	10 ft
51-200 kV	15 ft
201-350 kV	20 ft

351-500 kV	25 ft
501-750 kV	35 ft
> 750 kV	35 ft + 1 ft/30 kV over

EMERGENCY RESPONSE

GAS LINE STRIKE: Evacuate 300 ft upwind. No ignition sources. Do not operate valves. Call 911 → utility → Superintendent.

ELECTRICAL CONTACT: Do not touch victim/equipment. 35 ft clearance. Jump clear with both feet, shuffle away. Call 911.

WATER MAIN: Evacuate excavation (drowning hazard). Isolate valve if safe. Divert from electrical.

TRENCH COLLAPSE: DO NOT ENTER — 60% of fatalities are rescuers. Call 911. No rescue without trained team + emergency shoring.

FIBER OPTIC: Class 3B/4 laser — do not look into fiber. Cover with opaque material. 10 ft clearance.

UNKNOWN SUBSTANCE: Stop work. 100 ft upwind. Do not disturb. Call 911 if symptoms. Do not re-enter until cleared.

EXCAVATION HAZARDS

Depth	Requirement	Authority
> 4 ft	Fall protection	T8 CCR 1541.1
> 4 ft	Atmosphere tested	1926.651(g)
> 5 ft	Protective system	1926.652(a)
> 20 ft	PE-designed system	1926.652(b)-(c)

Soil: A=1.5+ tsf (3/4:1). B=0.5-1.5 tsf (1:1). C=<0.5 tsf (1.5:1).

Atmospheric monitoring: O₂ 19.5-23.5%. LEL <10%. CO <25 ppm. H₂S <10 ppm. Test before entry; continuous when occupied.

Competent person: Inspect daily + after rain/freeze/vibration. Authority to stop work.

TRENCHING

- > 5 ft: protective system required. > 20 ft: PE-designed.
- No entry between shield and wall. Benching prohibited Type C.
- Shield 18 in. above grade. Rescue plan required.
- Cave-in = 2,700-3,000 lbs/cu yd. Fatal in seconds.

CONFINED SPACE / RESCUE

Excavation becomes PRCS when: enterable, limited access, not for continuous occupancy, AND hazardous atmosphere/engulfment risk. Rescue plan for > 4 ft. Retrieval systems for PRCS. Body harness with retrieval line > 5 ft.

SILICA / DUST EXPOSURE

Standard	PEL
Federal OSHA (1926.1153)	50 µg/m ³ TWA
Cal/OSHA (T8 CCR 1532.3)	25 µg/m ³ TWA

Table 1: Saw=water or HEPA. Core drill=water. Jackhammer=water+HEPA.
Grinding=HEPA+shroud.

RESPIRATORY PROTECTION	
Type	APF
Half-face APR	10
Full-face APR	50
PAPR (loose)	25
PAPR (tight)	1,000
SAR / SCBA	10,000

Medical clearance + annual fit test required. (1926.103; T8 CCR 3385)

PPE SELECTION GUIDE	
Activity	Required PPE
Excavation/trench	Hard hat, glasses, hi-vis, boots, gloves
Saw cutting	Above + respirator, face shield, hearing
Core drilling	Above + face shield, hearing, rubber boots
Chipping/demo	Above + respirator, face shield, hearing, Tyvek
Wall penetration	Above + resp if pre-1978 or unknown
LOTO/electrical	Above + voltage gloves, arc-rated shield

DEWATERING

- Discharge requires NPDES or SWPPP permit. Route to sediment control.
- Never discharge turbid water to storm drains. Monitor levels continuously.

TRAFFIC CONTROL

- TCP required for roadway/pedestrian impact. (MUTCD Ch 6; T8 CCR 1599)
- Flaggers: ATSSA certified. ANSI 107 Class 2 hi-vis minimum.

PERMIT CLOSE-OUT

- Verify utilities protected/backfilled. Confirm compaction.
- Restore fire protection. Remove barricades. Final signatures. Retain 3+ years.

REGULATORY REFERENCE

Excavation & Trenching

1. 29 CFR 1926 Subpart P — Excavations (§650-652)
2. Subpart P Appendices A-C — Soil Classification, Sloping, Shoring
3. T8 CCR §1540-1543 — Excavation Safety Orders

Confined Space

4. 29 CFR 1926 Subpart AA — Confined Spaces in Construction
5. T8 CCR §5157 — Permit-Required Confined Spaces

Electrical / Energy Control

6. 29 CFR 1910.147 — Control of Hazardous Energy (LOTO)
7. 29 CFR 1926.417 — Lockout and Tagging of Circuits
8. 29 CFR 1926.1408 — Power Line Safety (Cranes)
9. 29 CFR 1926.405 — Wiring Methods

10. T8 CCR §3314 — Lockout/Tagout
11. T8 CCR §2320.1 — Electrical De-Energization
12. T8 CCR §2946 — Power Line Clearance
13. NFPA 70E — Electrical Safety in the Workplace

Silica / IH / Respiratory

14. 29 CFR 1926.1153 — Respirable Crystalline Silica
15. 29 CFR 1926.103 — Respiratory Protection
16. T8 CCR §1532.3 — Silica
17. T8 CCR §1532.1 — Lead
18. T8 CCR §1529 — Asbestos
19. T8 CCR §3385 — Respiratory Protection
20. NIOSH 42 CFR 84 — Respirator Approval; NIOSH 0600/7500/7602 — Sampling Methods
21. ACGIH TLV — Respirable Crystalline Silica

Fire Protection / Interior

22. NFPA 25/13 — Fire Protection Systems
23. NFPA 51B — Fire Prevention During Hot Work
24. NFPA 101 / IBC Chapter 7 — Fire-Rated Assemblies
25. UL/FM — Firestop Listings

PPE

26. 29 CFR 1926 Subpart E — Personal Protective Equipment (§95-103)
27. T8 CCR §3380-3387 — Personal Protective Equipment
28. ANSI Z89.1 Head Protection; Z87.1 Eye/Face; S12.6 Hearing
29. ANSI/ISEA 107 — High-Visibility Safety Apparel
30. ASTM F2413 — Protective Footwear

Utility / Traffic / General

31. CA Government Code §4216 — Dig Alert / 811
32. 49 USC §60114 — One-Call Notification Programs
33. ASCE 38-02 — Standard for Subsurface Utility Engineering
34. APWA — Uniform Color Code
35. FHWA MUTCD Chapter 6 — Temporary Traffic Control; T8 CCR §1599
36. 29 CFR 1926.21 — Safety Training and Education; T8 CCR §1510
37. EM 385-1-1 — USACE Safety and Health Requirements
38. Clean Water Act §402 — NPDES Discharge