# Trench Restoration

**Guidelines and requirements** for excavation in the right of way





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## PENALTIES

Violations of Article 2.4 of the Public Works Code or permit conditions can result in enforcement and corrective action, which may incur fines up to \$10,000 per day.

### **Common violations include:**

- Excavating without a valid permit
- Failure to meet minimum backfill and restoration requirements
- Improper housekeeping (graffiti, debris and materials not properly contained)
- No Underground Service Alert (USA) marking
- Improper site protection (metal plate not properly secured)



San Francisco Public Works Street-Use and Mapping 49 South Van Ness Avenue, Suite 300 San Francisco, CA 94103 Phone: (628) 271-2000

San Francisco Public Works **Permit Center** 49 South Van Ness Avenue, Suite 200

Processing Hours: Please visit https://sf.gov/location/permit-center for operating hours of the Permit Center.

Closed on official holidays





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Public Works Order No. 187005 establishes restoration dimensions, construction and quality controls. The intent is to keep roads safe for all users and to maximize the life of

Article 2.4 of the Public Works Code and



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#### 1. WHAT IS A TRENCH AND WHEN ARE THEY USED ?

A trench is a type of excavation in the ground that is generally deeper than it is wide. A trench is typically utilized to install utility service lines and conduits for various services.

#### 2. WHAT ARE THE GUIDELINES FOR TRENCH RESTORATION?

**A.** After utility facility repairs or installation, the trench must be backfilled within 72 hours. Backfill will be in 8-inch thick sections (lifts) and must be compacted to a minimum of 95% in the top 3 feet and 90% in the remainder of the excavation.

**B.** For asphalt roadways, after backfilling and compacting, a new minimum 8-inch thick concrete base is poured prior to restoring the asphalt. A minimum 10-inch thick concrete base is required for roadways that serve as bus routes.

**C.** The concrete base provides structural integrity and its edges shall extend a minimum of 1 foot beyond the undisturbed trench on all sides. After the concrete base is poured, a new minimum 2-inch thick asphalt wearing surface will be installed.

**D.** For concrete roadways, parking strips and gutters, after backfilling and compacting, all affected concrete panels must be replaced in their entirety, from panel joint to panel joint.

**E.** All restoration shall be completed in a timely manner. After backfill is restored and compacted, the concrete base shall be poured within 120 hours and the asphalt shall be placed within 120 hours of setting the concrete base. For concrete streets, the concrete panels shall be poured within 120 hours of backfill restoration and compaction.



**F.** When a trench excavation affects less than 25% of the length of a block, the asphalt must be restored the full width of the affected lane and beyond the edges of the concrete base and must be straight-lined and contiguous.



**G.** When a trench excavation affects more than 25% of the length of a block, all affected lanes for their entire width and length on the block must be restored with asphalt.

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	L = STREET LENGTH	
Trenching on centerline on striped street >25% length of block		



**H.** When a trench excavation affects an intersection, any quadrant of the intersection affected by the trench shall be restored with asphalt. If three quadrants are affected, the entire intersection shall be restored with asphalt.





**I.** When two (2) or more lateral (service connection) trenches are within 50 feet of one another, asphalt restoration shall be contiguous for all affected lanes.



J. When eight (8) or more lateral (service connection) trenches are required on a block, and when at least 50% of the properties on a block require trenches for utility service, all affected lanes for the entire length of the block shall be restored with asphalt or full concrete panels.





- Please reference Public Works Order No. 187005 and Order No. 184350 (curb ramp requirements) for trenching through an intersection.
- Please reference Public Works Order No. 187005 for additional cases, scenarios and requirements.
- If you have questions in the field, contact your assigned inspector to review your site prior to starting trench restoration.