3.3.8. Installing Joint Utility Service Trenches

When installing electric services underground, the PG&E gas service pipe and the electric service lateral typically are installed in a common, joint trench. A joint trench also may include telephone and cable television facilities.

The following wet facilities are **not** permitted in a joint trench.

- Propane lines
- Sewer pipes
- Sanitary drains
- Storm drains
- Other wet-utility piping or facilities

There are additional requirements for separating a wet utility from a joint trench along with the electric and gas meters and service risers.

Applicants must submit a written request to PG&E when they want to include other facilities in a joint trench. The request must include a justification and be submitted to PG&E for review and approval **before** excavation or work begins.

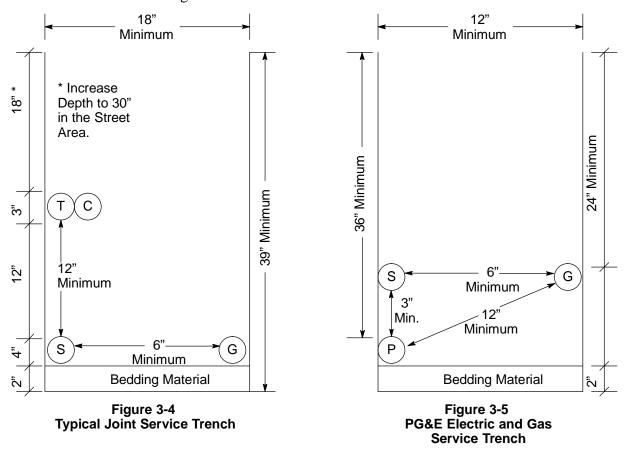
PG&E must coordinate joint trench installations with telephone, cable television, or other facilities. This coordination requires lead time, so applicants should submit their requests and justifications as early in the planning process as possible. Applicants must ensure that PG&E has reviewed and approved their trenching plans before digging begins.

Figure 3-4, on Page 3-12, illustrates a "Typical Joint Service Trench." Separation and clearance details for the trenches are found in Table 3-1 on Page 3-13. Also, see Utility Standard S5453, "Joint Trench," <u>Exhibit B</u>, *Joint Trench Configurations & Occupancy Guide*, located in <u>Appendix B</u> of this manual. This guide contains additional information and joint trench requirements. For PG&E-approved import material, see <u>Appendix B</u> for the Engineering Material Specification <u>Number 4123</u>.

When applicants plan to use joint service trenches, they must ensure that the gas and electric meters are installed either adjacent to, or in close proximity to, each other. <u>Section 5</u>, "Electric Metering: General;" <u>Section 6</u>, "Electric Metering: Residential;" and <u>Section 7</u>, "Electric Metering: Commercial and Industrial;" provide information about determining acceptable locations for utility electric meters. <u>Section 2</u>, "Gas Service," Subsection 2.4.2., "Gas Meter-Set Locations," on Page 2-18, provides information about determining acceptable locations for utility gas meters.

Applicants must discuss the service arrangements and coordinate the meter locations and joint trench requirements with a PG&E project coordinator **before** installing utility conduits or gas service piping.

Applicants must ensure that when multiple service facilities (i.e., gas, electric, and telecommunications) are installed in close proximity (e.g., in a joint trench), a 12-inch minimum, radial separation is maintained where those facilities transition from below ground to above ground. PG&E allows an exception to that rule when the separation is between PG&E secondary, electric-service conduit and gas-service piping. In this instance, the minimum separation distance may be reduced to 6 inches. Clearances between other facilities can be reduced **only** when the facility owners reach a mutual agreement.



Notes in reference to Figure 3-4 and Figure 3-5.

- 1. Trench depth will vary depending on conduit size.
- 2. Soil compaction must meet PG&E's and any applicable Federal, State, County, and local requirements.
- 3. All separation and clearance dimensions must be met in Table 3-1 below.
- 4. For more information on Figure 3-4, see PG&E's *Joint Trench Configurations & Occupancy Guide*, located in <u>Appendix B</u>.

		G	Duct	DB T	С	S	Р
	(In Inches)						
G	Gas (See Notes 4, 7, and 13. ¹)	-	12	12	12	6	12
Т	Telephone (Duct)	12	-	1	1	12	12
Т	Telephone (Direct Bury)	12	1	-	1	12	12
С	CATV	12	1	1	-	12	12
S	Electric Secondary and Service	6	12	12	12	-	3
Р	Electric Primary	12	12	12	12	3	3
SL	Streetlight (See Note 2 below.)	6	12	12	12	1	3

 Table 3-1 Minimum Separation and Clearance Requirements for Service Trenches

For more information about this table see PG&E's <u>Joint Trench Configurations & Occupancy Guide</u> in <u>Appendix B</u> of this manual. Specifically, see Notes 4, 7, and 13.

Streetlight circuits **not owned** by PG&E must be installed to meet the requirements in PG&E's *Joint Trench* <u>Configurations & Occupancy Guide</u>. Specifically, applicants must review the requirements for working with a second utility company.

> Applicants must ensure that adequate amounts of space exist to maintain and operate the facilities. Applicants must ensure that the area immediately **behind** the gas meter, service facilities, and risers and **between** those facilities and the premises or structures being served is kept free and clear of all other facilities or equipment such as pipes, wires, cables, or conduits. See <u>Section 2</u>, Figure 2-19, "Electric and Gas Meter Set Separation Dimensions and Clearances," on Page 2-28.

NOTE: It is recommended that applicants consider installing conduit one size larger than the required minimum in case larger cable is required or needed for future upgrades. Refer to section 1.14. Determining the Service Rating, on page 1-11, for how PG&E determines the ampacity (capacity) rating of customer equipment.

3.3.9. Providing a Service-Termination Facility

In addition to the requirements in Table 3-1 on Page 3-13, applicants must provide and maintain a satisfactory termination facility on or within the building or structure to be served.

PG&E will **not** install services supplied from different electrical sources in the same termination facility unless the services are separated using suitable barriers. When two or more services are in one termination facility, the minimum dimensions of each compartment created by the barriers must be the same as if each compartment were a separate termination facility.