

GENERAL REQUIREMENTS

1. All circuits shall be underground using #6 aluminum or #8 copper THHN-TW conductors placed in conduit to secondary splice box as specified by PG&E Company. Minimum conduit size shall be 1-1/2 inch. When crossing streets and alleys, 1-1/2 inch rigid conduit shall be installed between pull boxes placed on each side of the traveled way.
2. In single and multiple family residential areas, conduit that is not part of a street or alley crossing may be 1 inch Schedule 40 PVC. Schedule 80 PVC conduit shall be used for streetlights in all other areas.
3. Conduits between streetlight poles and PG&E secondary splice box shall enter splice box at knockout openings having existing cables or conduits installed by PG&E. No separate entrances or knockouts will be allowed to be made by the contractor.
4. Conductors for extended circuits shall be sized to reduce voltage drop to a maximum of 5 percent from normal.
5. Feeder conductors in pole base shall have a minimum of 2 feet of slack between fuse holder and conduit.
6. Conductors from fuse holder to lamp ballast shall be #12 stranded copper minimum with 2 feet of slack.
7. Install a (simultaneous disconnected) bussman 15 amp 300 volt fuse holder. Fuse holder shall be accessible from handhole and shall be two pole waterproof in-line type.
8. Pull box, where required, shall conform to sheet ES-8 of the State Standard Plans.
9. Minimum cover shall be 2 feet for conduit under curb or in parkway, 3 feet for conduit in side or back property easements, 2.5 feet for conduit in streets.
10. The contractor shall submit a marked up drawing showing as-built conduit runs and splice box locations to their Engineer and/or the City Engineering Department.
11. Splicing and insulation shall conform to Method "B", Sheet ES-13A of the State Standard Plans:
 - A. Completely cover the splice area with electrical insulating coating and allow to dry.
 - B. Apply 2 layers of electrical insulating pad with minimum thickness of 4 mm (0.15") each layer or 2 layers, half lapped, synthetic oil resistant, self fusing rubber tape.
 - C. Apply 3 layers half lapped polyvinyl chloride tape.
 - D. Cover entire splice with electrical insulating coating and allow to dry.
12. Conduit excavation and backfill must conform to all requirements of standard T-1 through T-5.
13. All circuits shall consist of 3 conductors; 2-120V & 1-grounding conductor, #8 copper wire.

ENGINEERING DEPARTMENT

CITY OF MERCED, CA.

STREET LIGHT STANDARDS

SL-2

DRAWN: YLC

APPROVED BY:

DATE

DATE: 05/14

David L. Tucker
CITY ENGINEER

3/17/08

REVISED: 3/17/08

SHEET

OF