

CONSTRUCTION SPECIFICATIONS

GENERAL

The following are to be used in conjunction with the Standard Specifications for Road, Bridge, and Municipal Construction by the Washington State Department of Transportation as adopted by the City of Longview/Kelso.

CONCRETE STREET LIGHT FOUNDATION

All concrete foundations shall be the size and configuration shown on the plans, except where, in the judgment of the Engineer, unstable soil conditions require enlargement of the foundation. Before placing the concrete, the Contractor shall block out around any other underground utilities that lie in the excavated base so that the concrete will not adhere to the utility line. Concrete base shall class 4000 and be troweled, brushed, edged, and finished in a workmanlike manner. Concrete shall be promptly cleaned from anchor bolts and conduits after placement. Anchor bolts for all poles shall be arranged so that the pole's bracket arm is perpendicular to the centerline of the adjacent roadway right-of-way. Street lights may be installed after a compressive test of 2,400 psi has been achieved.

All poles shall be installed on leveling nuts secured to the anchor bolts and with locking nuts on the top of the base flange. The side of the pole shaft opposite the load shall be plumbed by adjusting the leveling nuts or as otherwise directed by the Engineer. The space between the concrete base and the bottom of the pole flange shall be filled with dry pack mortar to completely fill the space under the flange and around the conduits and be neatly troweled to the contour of the pole flange. A plastic drain hose (1/2 " diameter) shall be inserted through the mortar to provide drainage from the interior of the pole base and trimmed flush with the interior and exterior surface of the mortar. Dry pack mortar shall consist of a 1:3 mixture of cement and fine sand with just enough water so that the mixture will stick together on being molded into a ball by hand and will not exude free moisture when so pressed.

CONDUIT

All conduit shall be schedule 40 PVC except under driveways, and street crossings. These exceptions shall be rigid steel conduit and shall be a minimum of two inches in diameter. All elbows shall be rigid steel.

All underground conduit shall be installed a minimum of 24" below grade. In the driveway or roadway areas, electrical conduit should be installed by boring methods.

GROUNDING

All poles, metal conduits and cabinets in the same area covered by the same power service shall be made mechanically and electrically secure for a continuous grounding system in accordance with the Standard Specifications. Bonding jumpers shall be provided and installed by the Contractor in accordance with WSDOT Standard Plan J-9a to all #8 bare metal conduits in the junction box. Grounding of conduit and ground wire at the service point to the PUD service ground on the PUD power pole shall be accomplished as required under the National Electrical Code.

CATALOG CUTS

Prior to the beginning of construction, catalog cuts of the following items shall be submitted and approved by the City Traffic Engineer. 1. Street Light Standards 2. Luminaires 3. Junction Boxes 4. Wye and In-Line Connectors 5. Service Cabinet 6. In-Line Fuse Holders 7. Conduit 8. Wire.

CRITICAL INSPECTION POINTS

The illumination system will be inspected by the traffic Department and Electrical Inspector. The telephone numbers for the City of Longview inspectors are:

Traffic Inspection: (360) 44-5642, Electrical Inspection: (360) 442-5086.

The electrical inspector shall be responsible for inspecting all service related items.

The following are critical items that are to be inspected by the Traffic inspector:

1. Conduit Depth: No trench shall be filled without the depth of conduit verified.
2. Pole Locations: The pole locations shall be approved by the traffic department prior to excavation of the pole bases.
3. Pole Bases: The pole bases shall be inspected and approved prior to pouring of the concrete.
4. Wiring: The wiring, splices, grounding and fusing shall be approved by the traffic inspector.



STREET LIGHTING - CONSTRUCTION NOTES

STANDARD PLAN:
TR-020

CITY ENGINEER APPROVAL:

Longview: **C.B.**

DATE: **FEB. 2008**

Kelso: **S.Z.**