POLE AND MASTARM:
Poles and Mastarms shall be a minimum of 10 ga. (48 kpsi) steel. They shall be galvanized inside and out per ASTM A–123.

LUMINAIRIES:
Street light luminaires shall be two–way Cobra head furnished with a Light Emitting Diode (LED) lamp, internal ballast, and an external twist lock photoelectric control unit. Luminaires shall be designed for horizontal mounting with a horizontal burning lamp. They shall be cutoff type that does not allow light above the horizontal. Luminaires shall be cast aluminum with a baked gray enamel finish. They shall be marked to indicate wattage.

PHOTOCELL:
The photocell unit shall consist of a 120 Volt Photoelectric cell in a weatherproof housing which plugs into a 3 terminal twist lock NEMA receptacle integral with the luminaire. The control shall have an activation level between 1 and 2 foot–candles and a shut–off level of 3 times the activation level.

FUSES:
Fuses shall be in–line cartridge type 35 amp fuses installed in the hot leg of the conductor. The fuse shall be located in the base of the pole or in the transformer. Fuse holders shall be Bussman #516–0100 and #516–0110 (boots) or approved equal.

WIRING:
Service runs to lights shall be solid or stranded THW copper wire No. 10 minimum. Size of wire shall be selected so that the voltage drop to the farthest light does not exceed 3% and shall be indicated on the As–Built plans.

SPlicing:
Splices shall be permitted in pull boxes and lighting standard bases only. All splices shall be waterproof, with epoxy encapsulation or heatshrink tubing.

CONDUIT:
All conduit shall be 1–inch UL approved heavy wall polyvinyl chloride (PVC schedule 40). Conduit shall be laid to a depth of not less than thirty (30) inches. Conduit laid in open trench shall not be covered nor shall any trench or inspection hole be backfilled until installation has been accepted by the City Engineer or designee.