

## LIGHTING EQUIPMENT SPECIFICATIONS

### General

Equipment furnished shall be tested and approved, according to procedures set forth by I.E.S. Specifications and shall meet the minimum standards set forth in the American National Standard Practice for Roadway Lighting, latest revision.

Areas with M.I.D. power supply, refer to Stanislaus County Standards for street light details.

### Poles

a. Steel - hot dipped galvanized steel (ASTM A-123) with 8-foot, high upsweep arms and 2-inch tenon, anchor base type, round tapering shaft. Base shall be welded and the pole will be equipped with hand hole, bolt covers and anchor bolts. Anchor shall be of ASTM A-36 steel plate and shall be designed to withstand the full bending moment of the shaft. Steel castings shall conform to ASTM A27-58 grade 65035. Arms shall be raintight fitting type, single bolt. Gauge shall be 10 for ASTM A-245-64T grade C steel having a yield strength of 33,000 psi before forming, or 11 gauge for 48,000 psi yield strength steel.

b. Anchor bolts will be supplied meeting ASTM A-307-61T specifications.

### Ballasts

Ballasts shall be of the regulated type unless otherwise specified. Where practicable, they shall be integral with the luminaire. Ballasts shall have a minimum power factor of 90 percent, inrush current shall be less than operating current; shall operate at plus or minus 10 percent rated voltage. Voltage shall be 120, or as specified. Ballasts shall be of the type recommended for the lamp use.

### Lamps

Lamps shall be 120 volt Inductive (QL) of the following manufacturers code numbers, and as shown on drawing no. L-2. The lamps shall be as follows or an approved equal.

55 Watt                      I.E.S. Type III  
(or approved equal)

Ordering Information  
QLRY-GL-3-55-120V-5K

85 Watt                      I.E.S. Type III  
(or approved equal)

Ordering Information  
QLRY-GL-3-85-120V-5K

165 Watt                     I.E.S. Type III  
(or approved equal)

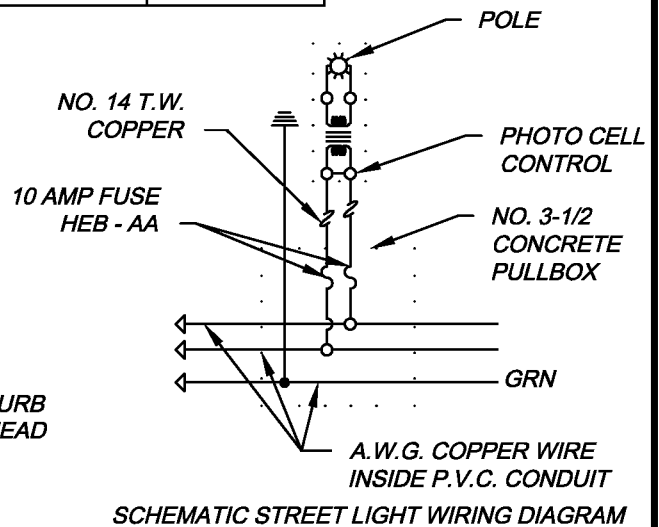
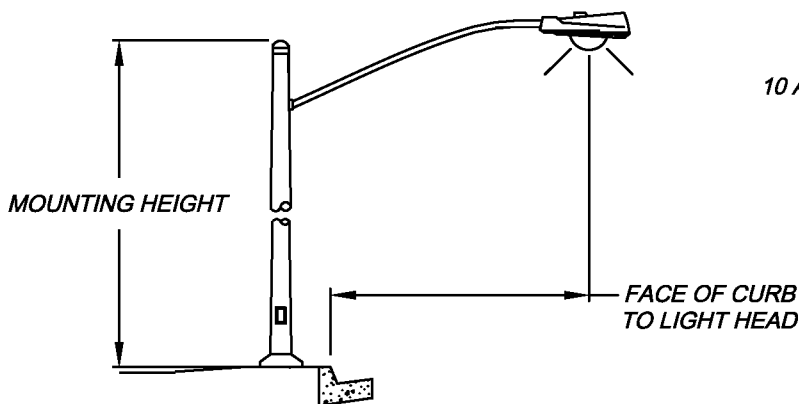
Ordering Information  
QLRY-GL-3-165-120V-5K

NO.	REVISED	BY	<b>Street and Parking Lot Lighting</b>	APPROVED  CITY ENGINEER RCE-28191
				DATE: 2-2-99
DRAWN BY: MCP				<b>CITY OF RIPON</b>
CHECKED BY: DJR				
V:\125_City of Ripon Standards\Standard Specifications\Drawings\Lighting\L-1.dwg				

**NOTES:**

1. LUMINAIRE DISTRIBUTION PATTERN SHALL BE BASED ON THE ILLUMINATING ENGINEERING SOCIETY (I.E.S.) CODE FOR STREET AND HIGHWAY LIGHTING.
2. LUMINAIRE SHALL BE A MINIMUM OF A 55 WATT, 3,500 LUMEN UNLESS OTHERWISE SPECIFIED BY THE DIRECTOR OF PUBLIC WORKS.
3. LUMINAIRE OPERATING VOLTAGE SHALL BE 120 VOLTS UNLESS OTHERWISE APPROVED BY THE DIRECTOR OF PUBLIC WORKS.
4. LUMINAIRE SHALL BE QL INDUCTIVE 120 DUAL VOLTAGE BUILT IN BALLAST REACTOR TYPE, AND INDIVIDUAL PHOTO CELL CONTROL TYPE III.
5. WIRING MAY BE OVERHEAD TO POLE IN REAR OF PROPERTY, THRU SIDE YARD EASEMENT, WHERE PRIOR APPROVAL IS OBTAINED FROM THE DIRECTOR OF PUBLIC WORKS.
6. POLES SHALL BE GALVANIZED STEEL TAPERED TUBE.
7. FOUNDATIONS SHALL BE CAST IN PLACE.
8. ALL CONDUIT TO BE USED SHALL BE RIGID METAL OR SCHEDULE 40 P.V.C. AND SHALL BE BURIED TO THE FOLLOWING DEPTH.
  - A. WITHIN SIDEWALK OR PARKWAY AREAS 2'-0" MINIMUM
  - B. WITHIN ROADWAY AREAS 3'-0" MINIMUM
9. THE UNDERGROUND CONDUIT AND ALL METAL PARTS SHALL BE CONTINUOUSLY BONDED AND GROUNDED.
10. MINIMUM RADIUS OF ALL BENDS TO BE 18". ALL BENDS AND/OR OFFSETS SHALL BE MADE WITH FACTORY SECTIONS.
11. ALL SPLICES TO BE APPROVED SOLDERLESS WATERPROOF CONNECTIONS OF PROPER SIZE.
12. ALL EMPTY CONDUITS SHALL BE CAPPED AND A 1/4" NYLON PULL ROPE PROVIDED INSIDE.
13. UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER, A NO. 3-1/2 PULL BOX (STATE STD. ES-8) SHALL BE INSTALLED AT ALL STREET LIGHT STANDARDS. PULL BOXES SHALL NOT BE MORE THAN 250' APART ON LONG RUNS. COVERS SHALL BE INSCRIBED "STREET LIGHTING".
14. WATERPROOF FUSED SPLICED CONNECTIONS SHALL BE INSTALLED IN EACH PULL BOX ADJACENT TO THE LIGHT STANDARD.
15. CONTRACTOR TO STENCIL 2" HIGH BLACK I.D. NO. ON STREET SIDE OF POLE, 9'-0" HIGH ABOVE BACK OF WALK. P.G.&E. OR CITY TO PROVIDE I.D. NO.

LUMINAIRE HIGH PRESSURE SODIUM VAPOR				
STREET TYPE	LAMP SIZE		FACE OF CURB TO LIGHT HEAD	MOUNTING HEIGHT
	WATTAGE	LUMEN		
RESIDENTIAL	55	3,500	4' - 0"	28' - 0"
COLLECTOR	85	6,000	4' - 0"	28' - 0"
ARTERIAL	165	12,000	6' - 0"	32' - 6"



NOTE: AREAS WITH M.I.D. POWER IS REFERED TO STANISLAUS COUNTY STANDARDS FOR STREET LIGHT.  
(IN ALL CASES USE CITY OF RIPON STANDARDS FOR CONDUIT AND PULL BOX CONSTRUCTION DETAILS)

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DRAWN BY: MCP				DATE: 2-2-99
CHECKED BY: DJR				STANDARD NO. <b>L-2</b>
V:\25_City of Ripon Standards\Standard Specifications\Drawings\Lighting\L-2.dwg				<b>CITY OF RIPON</b>