

**STREET LIGHTING SPECIFICATIONS**  
**UNDERGROUND 120/240 VOLT SINGLE PHASE THREE WIRE MULTIPLE SYSTEM**

Street lighting standards shall be as shown by Drawing No. 400.1 page 40 of Uniform Standard Drawings and must conform to sections 400 and 405 and any other applicable sections of the Uniform Standard Specifications.

On 80' R/W streets there shall be 2 poles on diagonal corners.

On 100' R/W streets there shall be one pole at each corner.

Mercury Vapor Luminaires to be used on 51' R/W and 60' R/W streets, except at intersections, shall be 175 watt, 120/240 volt I.E.S. distribution type 3, with integral constant wattage ballast, similar to Line Material catalog #LM442 or approved equal.

Mercury Vapor Luminaires to be used on 51' R/W and 60' R/W streets at intersecting minor streets shall be 250 watt 120/240 volt I.E.S. distribution type 2 with integral constant wattage ballast similar to General Electric Type M-250R, Catalog #C706G012 or approved equal.

Mercury Vapor Luminaires to be used on 80' R/W streets and over, shall be 400 watt 120/240 volt, I.E.S. distribution type 3 with integral constant wattage ballast similar to General Electric Type M-400, Catalog #C704G002 or approved equal.

175 watt Mercury Vapor Lamps shall be ASA Code #H37-22KC/W.

250 watt Mercury Vapor Lamps shall be ASA Code #H37-58C/W.

400 watt Mercury Vapor Lamps shall be ASA Code #H37-1GL/W.

Spacing of standards shall be 180 feet maximum on 51' R/W and 60' R/W streets on one side to provide 0.43 F.C.

Spacing of standards shall be 180 feet maximum on 80' R/W streets on both sides, staggered to provide 0.9 F.C.

Spacing of standards on 100' R/W streets or more shall be 120 feet maximum on both sides and staggered to provide 1.4 to 2.0 F.C.

Standards used on 51' R/W and 60' R/W streets to be set within utility easement back of property line.

Standards used on 80' R/W streets and over to be set 18" back of curb.

Integral Conductor and Duct shall be two 600 Volt insulated conductors and one neutral conductor of the size specified in the applicable plans pre-assembled in a loose fitting flexible polyethylene duct and buried in the ground.

At the discretion of the Field Engineer, Sch. 40 Rigid Non-Metallic Conduit (PVC) or approved equal complying with Article 347 of the National Electrical Code may be used for underground applications.

Fuse Holders and Connectors shall be installed in the bases of all lighting standards, the fuse holders shall be water tight construction and shall be separable (pull-a-part) to provide a disconnecting means for circuit repairs.

Base covers for lighting standards are not to be installed before breakout caps are placed and inspected. All material used in underground wiring, in breakout caps and under base covers to be inspected before installation.

Foundations shall be constructed and located to line and grade as directed by the Field Engineer.

Lighting Standard and Mast Arm Cable to luminaire shall be two conductor #10 stranded 500 Volt copper cable. Each conductor shall be plasticized polyvinyl chloride insulated, with an outer jacket of black polyethylene.

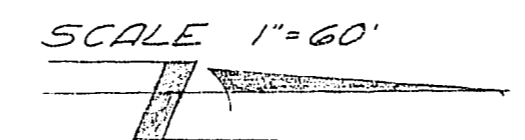
The Contractor shall be responsible for avoiding damage to property, either public or private and in the event of such damage, shall make satisfactory repairs at his own expense.

The Contractor shall furnish complete service to transformers and control systems, if required.

The Service Point standard is to be installed at the approved location shown on plans and to conform to drawing #401.1 page 44 of the Uniform Standards Drawings in the selection of 175, 250 and 400 Watt Mercury Vapor Luminaires to be used in a particular development one approved manufacturer shall be specified.

These specifications to become effective on all City of Las Vegas Multiple Street Lighting Designs approved on or after Jan. 1, 1968.

These specifications shall be superseded by any revised specifications in existence at the time of installation.



**LEGEND & ESTIMATE OF QUANTITIES**

○	175 watt mercury vapor luminaire	13 ea.
⊙	250 Watt mercury vapor luminaire	2 ea.
○	11 Ga. light standard	15 ea.
---	1/4" P.V.C. conduit schedule 40	2640 LF.

- A - Photo cell relay control to be similar to Fisher Pierce Model #6620-A, 120 volt, 60 cycle DPST or approved equal.
- B - Multiple street light relay with photo-electric receptacle to be similar to Westinghouse R.C.O.C. type MRUG Spec #6338 two pole 1/2 60amp, 120/240 A.C. with 120 v. A.C. coil and with holes A & B for 1/4" conduit or approved equal.
- See Telephone Co. & Power Co. Drawgs. for telephone & power locations & details.

- GENERAL NOTES:**
- All construction & materials to meet City of Las Vegas Specs.
  - All street light power source to be placed underground.
  - All wires in conduit to be 600 v. with sizes as indicated.
  - Luminaire to be multiple voltage P.V.C. conduit to be placed as shown per special trench detail, 24" min. depth.
  - The locations of ends of all conduits in structures or termination at curbs shall be marked by an "X" or least 3" high cut into the face of the curb, gutter, or wall directly above conduit.
  - All conduits for future use shall be cleaned, blown out with compressed air and provided with jet line with 2 feet shall be doubled back into conduit at each termination, & the end of the conduit shall be capped.
  - When indicated on the plans, City forces to disconnect all existing high voltage lighting circuits & the contractor is to remove & deliver to City yards all electrical material under direction of the City Engineer.

**APPROVALS:**

*Richard P. Chapman* 10-9-69  
 Las Vegas Power Co. Date

*Ed Shaw* 10-30-69  
 Las Vegas City Engr. Date

*C. D. Johnson, Jr. P.E.* 10-8-69  
 Las Vegas Field Engr. Date

*G. J. Bennett* 10-6-69  
 Las Vegas City Electrician Date

**VOORHEIS-TRINDLE CO. OF NEVADA**  
 2209 Paradise Road Las Vegas, Nevada

**CHARLESTON RAINBOW UNIT 9-E**

**MASTER STREET LIGHTING PLAN**

Submitted by:  
*Victor G. Kremerbauer* R.C.E. (S)

Sheet **10** of 10 sheets

VBC  
 10/8/69