

# 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 Std. 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 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 constant wattage, I.E.S. Distribution Type 3, similar to Line Material Catalog #M44A2, or approved equal.  
Mercury Vapor Lamps to be used on 51' R/W and 60' R/W streets, except at intersections shall be 175 Watt, clear, 16,000 Hours, Westinghouse, Catalog #H39-22KC/W 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, constant Wattage, I.E.S. Distribution Type 2, similar to General Electric Type M-250R, Catalog #C706G012, or approved equal.  
Mercury Vapor Lamps to be used on 51' R/W or 60' R/W streets at intersecting minor streets shall be 250 Watt, Clear, 16,000 Hours, Westinghouse Catalog #H37-5KC/W or approved equal.  
Mercury Vapor Luminaires to be used on 80' R/W streets and over, shall be 400 Watt 120/240 Volt constant wattage, I.E.S. distribution Type 3, similar to General Electric Type M-400, Catalog #C704G002 or approved equal.  
Mercury Vapor Lamps to be used on 80' R/W streets and over shall be 400 Watt, Clear, 16,000 Hours, Westinghouse Catalog #H33-1GL/W or approved equal.  
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.

## GENERAL NOTES:

- The locations of ends of all conduits in structures or terminating at curbs shall be marked by a "+" at least 3" high cut into the face of curb, gutter, or wall, directly above conduit.
  - All conduit to have 24" minimum cover in all areas.
  - All conduits for future use shall be cleaned, blown-out with compressed air and provided with a #9 AWG galvanized iron pull wire, 2 feet of pull wire shall be doubled back into conduit at each termination and the end of the conduit shall be capped.
  - All conduits at limits of construction shall be stubbed, capped and located for future extension of conduit runs and "As Built" marked prints returned to the Electrical Engineer.
  - When indicated on the plans, City forces to disconnect all existing high voltage lighting circuits and the contractor is to remove and deliver to City Yards all electrical material under the direction of the City Electrician.
  - Street light conduit to be installed after construction of curb and gutter.
- A Photo cell relay control to be similar to Fisher Pierce model #6620-A, 120 volt, 60 cycle D.P.S.T. or approved equal.
- B Multiple street lighting relay with photo-electric receptacle to be similar to Westinghouse RCOC type MRUG Spec #6338 two pole N.O. 60 amp. 120/240 v A.C. with 120 v A.C. coil and with holes A & B for 1 1/2" conduit or approved equal.

## NOTE:

- See Telephone Co. Dings and power company dings for power and telephone locations and details.
- Pull 2" wire & replace with 3"

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 underbase covers to be inspected before installation.  
Foundations shall be constructed and located to line and grade as directed by Field Engineer.  
Lighting Standard and Mast Arm Cable to luminaire shall be two conductor #10 standard 600 Volt copper cable. Each conductor shall be plasticized polyvinyl chloride insulated, with an outer jacket of black polyethylene.  
Spacing of standards on 51' R/W and 60' R/W streets shall be on one side to provide .43 F.C.  
Spacing of standards on 80' R/W streets shall be on both sides staggered, to provide .9 F.C.  
Spacing of standards on 100' R/W streets or more shall be on both sides staggered to provide 1.4 to 2.0 F.C.  
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 feed-in service when shown is subject to availability of power at the specified location.  
Standards used on 51' R/W and 60' R/W streets to be set within 3' utility easement back of property line.  
Standards used on 80' R/W streets and over to be set 18" back of curb.  
These specifications shall be superseded by any revised specifications in existence at the time of installation.  
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 June 1, 1965.



