

SECTION 16532

COMMERCIAL BUSINESS STREET LIGHTING (HISTORIC)

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Exterior luminaires and accessories.
- B. Poles.

1.02 RELATED SECTIONS

- A. Section 003310 – Concrete Work.

1.03 REFERENCES

- A. ANSI C78.379 – Electric Lamps – High-Intensity Discharge Reflector Lamps – Classification of Beam Patterns.
- B. IES RP-8 – Recommended Practices for Roadway Lighting.
- C. IES RP 20-Lighting for Parking Facilities.
- D. NFPA 70-National Electrical Code.

1.04 SUBMITTALS FOR REVIEW

- A. Shop drawings: Indicate dimensions and components for each luminaire.
- B. Product Data: Provide dimensions, ratings, manufacturer, type, model and performance data.
- C. Test Reports: Indicate measured illumination levels.
- D. Submit manufacturer's installation instructions.

1.05 COORDINATION

- A. Coordinate with electrical contractor.
- B. Coordination with City and Heber Light & Power to verify location and connection of fixtures.
- C. Receive approval by Civil Engineer for pole foundation.
- D. Furnish bolt templates and pole mounting accessories to installer / contractor of pole foundations.

PART 2 APPROVED PRODUCTS

2.01 MANUFACTURER

- A. Phillips Hadco
- B. Mountain States Lighting

2.02 FIXTURE REQUIREMENTS

- A. LED MODULE: Phillips Hadco - Hagerstown TX03
 - 1. 64, 3000K (Warm) Phillips Lumileds Luxeon T LEDs, Typical 75 Color Rendering Index (CRI), > 100,000 hours of operational life, injection molded typ III optical plates, IP66 rated LED Module.
 - 2. Integral Philips Advance Xitanium LED Driver, class 1, IP66 rated, 530mA, 0-10V dimming, IntelliVolt 120-277 VAC, 50-60Hz, RoHS Compliant, field replaceable, 10kV/10kA surge suppression.
 - 3. Delivered Lumens: 9408, Wattage: 106W
 - 4. Field Adjustable Wattage Switch (FAWS)
- B. Globe: None
- C. Finial: Cast Aluminum
- D. Driver Cover: Die-Cast Aluminum, tool-less entry
- E. Camden Adaptor: Die-Cast Aluminum
- F. Driver Enclosure: Die-Cast Aluminum with side hinged access door, twist-lock photo control and 3" I.D. Slip Fitter
- G. Fasteners: Stainless Steel Hex Head Bolts

2.03 POLES

- A. Model: Mountain States Lighting model #14.5TFS-6.5/4.5-11GA-16S-TT3.5X4 with Heber Arm Assembly – 20WASH-BLACK
- B. Fixture Arm: MSL Double Arm #HDSA-(2)3X3TT-(2)30" FUBA-GFI/HUB
- C. Banner Arm: Double 30" Solid Banner Arm integral to fixture mounting hub
- D. Base: Mountain States decorative base 20" Washington to match existing syle. ½" min thickness high density elastomer.
- E. Loading Capacity Ratings:
 - 1. 100 Pounds.
 - 2. Steady Wind: 90 MPH minimum.
- F. Installation Conditions: Outdoor Use Only.

PART 3 EXECUTION

3.01 INSTALLATION

- A. Pole to be direct burial at locations indicated. Auger hole without disrupting the soil below butt of the pole. Do not dig pole hole with a backhoe, to minimize disruption of firm soil. Fill with sand around pole, tamped regularly while backfilling.
- B. Install poles plumb. Provide shims and double nuts to adjust to plumb.
- C. Install all components according to manufacturer recommendations.
- D. Install conduit and secondary boxes according to Heber Light and Power specifications.

3.02 FIELD QUALITY CONTROL

- A. Operate each luminaire after installation and connection. Inspect for proper connections and operation.
- B. Test for photo-electric cell operation.

3.03 ADJUSTING

- A. Adjust luminaries to provide illumination levels and distribution as directed.
- B. Adjust photo-electric cell to operate correctly.

3.04 CLEANING

- A. Clean electrical parts to remove conductive and deleterious materials.
- B. Remove dirt and debris from enclosure.
- C. Clean photo-cell surface as recommended by the manufacturer.
- D. Clean finish and touch up damage.

3.05 PROTECTION OF FINISH WORK

- A. Relamp luminaries which have failed work at substantial completion.

3.06 LIGHTING LOCATION

- A. Install at locations as indicated on the plans or as otherwise approved by the City Engineer.

3.07 SPACING

- A. 150' to 250' on one side. Spacing can double to 300' to 500' on one side if alternating on both sides.

END OF SECTION