



**SPECIAL PROVISIONS
FOR
AERIAL OBSTRUCTION BEACON, REMOVE AND REPLACE**

**Scott County
IMN-074-1(300)5--0E-82**

**Effective Date
July 15, 2025**

THE STANDARD SPECIFICATIONS, SERIES 2023, ARE AMENDED BY THE FOLLOWING MODIFICATIONS AND ADDITIONS. THESE ARE SPECIAL PROVISIONS AND THEY SHALL PREVAIL OVER THOSE PUBLISHED IN THE STANDARD SPECIFICATIONS.

230317.01 DESCRIPTION.

- A.** This work shall consist of removing the existing aerial obstruction beacon with flashing controller, furnishing and installing an L-810(L) hazard obstruction lighting as shown on the plans and as specified herein.
- B.** Carefully remove the existing obstruction beacons and flashing controllers from the arch, package to protect the items, and deliver to the DOT maintenance garage in Davenport, as directed by the Engineer. Repair any damage documented by the Engineer at no additional cost to the Department.
- C.** Materials and equipment installed for this work shall meet the requirements of the following publications to the extent referenced:
 - Federal Aviation Administration (FAA) – Advisory Circulars AC 150/5345-43 and AC 70/7460-1M.
 - Code of Federal Regulations 14 CFR Part 77.
- D.** Installation and orientation of the aerial obstruction lighting shall be in accordance with the approved plans and rules and regulations of the FAA. Any rules and regulations of the local agencies having jurisdiction shall also apply.
- E.** The Contractor shall be responsible to apply for and obtain any permits and notifications required to the FAA for airspace utilization for temporary outage for the replacement of the obstruction beacon. Provide this documentation to the Engineer.

230317.02 MATERIAL.

- A. Aerial Obstruction Beacon.**

1. Airway hazard obstruction lighting shall meet requirements of the FAA for use on skeletal structures for marking aviation obstructions. The aerial obstruction light fixture shall be FAA type L-810, low intensity providing a steady red light for night.
2. The light fixture shall have high efficiency LED's. Light output shall be in accordance with FAA AC 150/5345-43M. A twist-lock, three-prong photoelectric controller shall be provided with the system.

B. Junction Box.

1. Junction boxes shall be stainless steel and mounted on the surface of the structure as shown on the plans.
2. The junction box shall be furnished with a cover, gasket, and hardware. Hardware furnished for the cover shall be stainless steel.
3. Junction box covers shall have a continuous formed, seamless, urethane, oil-resistant gasket. The gasket shall be placed directly onto the junction box cover. The gasket shall adhere to the cover without the use adhesives. Junction box covers shall be attached to the box with un-slotted hex head screws.
4. A grounding lug shall be provided in every junction box. A stainless steel conduit fitting shall be used to connect to a stainless steel junction box.
5. Junction box shall be sized according to the plans.
6. The stainless steel junction box shall be made of Type 304 stainless steel, not less than 14 gauge with all seams continuously welded with a stainless steel weld wire and ground smooth. Exterior surfaces shall have a smooth polished finish. The box shall be according to NEMA 3R and be UL 50 "Junction and Pull Box", "Junction Box", or "Pull Box."

C. Conduit.

Conduit shall be in accordance with Section 4185 of the Standard Specifications.

D. Wire and Cable.

Cable shall be in accordance with Section 4185 of the Standard Specifications.

230317.03 CONSTRUCTION.

- A. Install the aerial obstruction lighting in accordance with the requirements of the FAA.
- B. After installation, visually verify each light fixture of the aerial obstruction from a distance to ensure the proper display of light.
- C. Upon notice to proceed the Contractor shall become responsible to maintain and operate the existing aerial obstruction beacon. In addition, the Contractor shall be responsible for and maintain all circuits, switching, and relamping for the permanent aerial obstruction lighting until the final acceptance of the work.
- D. Installation of conduit, junction box, wire and cable shall be in accordance with Section 2523 of the Standard Specifications.

230317.04 METHOD OF MEASUREMENT.

The work consisting of removing the existing aerial obstruction beacon with flashing controller, furnishing and installing an L-810(L) hazard obstruction light as shown on the plans and as specified herein will be measured as Lump Sum.

230317.05 BASIS OF PAYMENT.

- A.** Payment is full compensation for the Aerial Obstruction Beacon, Remove and Replace, complete and accepted, for both Eastbound I-74 and Westbound I-74. Such price bid shall be full compensation for removing the existing aerial obstruction beacon and controller, furnishing and installing all cable, conduits, junction boxes, light fixtures and lamps, supports, temporary lighting, and for all labor, tools, equipment and incidentals necessary to complete the work.
- B.** The removal, furnishing, and installing of the support stanchion for the aerial obstruction beacon shall be paid for separately.