662-005 DELETE ALL DESIGNER NOTES FROM YOUR SPECIAL PROVISIONS

Designer Notes:

\* Delete the inappropriate items for your project from the title and from the table in section E Payment.

1. Ramp Closure Gates 24-FT, Item 662.1024.S;
Ramp Closure Gates 26-FT, Item 662.1026.S;
Ramp Closure Gates 28-FT, Item 662.1028.S;
Ramp Closure Gates 30-FT, Item 662.1030.S;
Ramp Closure Gates 32-FT, Item 662.1032.S;
Ramp Closure Gates 37-FT, Item 662.1037.S;
Ramp Closure Gates 40-FT, Item 662.1040.S;
Ramp Closure Gate Arms Stockpile 24-FT, Item 662.3024.S;
Ramp Closure Gate Arms Stockpile 26-FT, Item 662.3026.S;
Ramp Closure Gate Arms Stockpile 28-FT, Item 662.3028.S;
Ramp Closure Gate Arms Stockpile 30-FT, Item 662.3030.S;
Ramp Closure Gate Arms Stockpile 32-FT, Item 662.3032.S;
Ramp Closure Gate Arms Stockpile 37-FT, Item 662.3037.S;
Ramp Closure Gate Arms Stockpile 40-FT, Item 662.3040.S;.

A Description

This special provision describes providing freeway on-ramp closure gates on type 5 steel luminaire poles. This special provision also describes furnishing and delivering spare gate arms.

B Materials

B.1 General

Provide five user manuals and a listing of vendors and contact information for each manufactured component including flasher electrical components.

The engineer may allow alternates equal to specified manufactured components. The engineer may require plan detail modifications to accommodate alternates. The engineer may accept alternate arms or mounting adaptors only if the contractor can demonstrate that the department can easily remove and replace the arms.

B.2 Components

Furnish type 5 steel poles designed to carry twin 15-foot luminaire arms and conforming to standard spec 657 and with dimensions for acceptable installation of the ramp gate hardware as shown on the detail. Ensure a contiguous pole by eliminating the hand hole near base of pole, thus allowing uninhibited mounting of the gate pivot assembly.

Furnish galvanized steel nuts and bolts conforming to ASTM A307 except where designated as high strength (HS), conform to ASTM F3125. For the ramp closure gate locking mechanism, furnish a 3/4-inch handle nut.

Furnish grade A36 steel for the gate supports, gate pivot assembly, and associated hardware galvanized after fabrication by either a mechanical or hot-dip process. Grind welded connections, rough edges, and burrs smooth before galvanizing to ensure a finished appearance. Ensure that the galvanized coating conforms to ASTM A 153.

Provide aluminum/fiberglass gate arms of the nominal length the bid item indicates and conforming to plan dimensions. Cover gate arms on two sides with alternating red and white shop-applied type H reflective from the department's approved products list. Also provide a shear pin base that is the manufacturer’s "permanent pivot" style. Obtain components from:

B&B Roadway

15191 Hwy 243

Russellville, AL 35654

Tel: (888) 560-2060

Gate arm: model MU605

Furnish a worm gear winch with a single line vertical lift capacity of 2000 lbs. Ensure that the winch has hardened steel gears, a handgrip, permanently lubricated bearings, a reinforced arc-welded reel assembly, and mounting plate. Ensure that the winch can be mounted to the winch mount plate shown on the construction details and the handgrip can be operated without conflict with the pole or ramp gate assembly. Furnish a 2-inch outdoor rated, rot resistant polyester strap for the connection between the worm gear winch and the gate arm pivot assembly.

C Construction

C.1 Ramp Closure Gates

Under the Ramp Closure Gates bid items, provide ramp closure gate at the locations the plans show. Apply marine grade anti seize compound compound to all bolt threads and to the interface between the aluminum base and steel pole. The engineer may direct adjustment of the gate arm assembly to ensure the correct vertical and angular orientation of the completed closure gate.

Install structure identification plaques in the location the plan details show.

Specify Regional Representative for Identification Number Issuance

C.2 Furnishing Gate Arms

Under the Ramp Closure Gate Arms Stockpile bid items, furnish and deliver spare arms of the nominal length the bid item indicates conforming to B.2. Deliver spare gate arms to an address provided by:

Specify Regional Representative for Coordination

D Measurement

The department will measure the Ramp Closure Gates bid items as each individual installation acceptably completed.

The department will measure the Ramp Closure Gate Arms Stockpile bid items as each individual unit, acceptably furnished and delivered.

E Payment

The department will pay for measured quantities at the contract unit price under the following bid item:

ITEM NUMBER DESCRIPTION UNIT

662.1024.S Ramp Closure Gates 24-FT EACH

662.1026.S Ramp Closure Gates 26-FT EACH

662.1028.S Ramp Closure Gates 28-FT EACH

662.1030.S Ramp Closure Gates 30-FT EACH

662.1032.S Ramp Closure Gates 32-FT EACH

662.1037.S Ramp Closure Gates 37-FT EACH

662.1040.S Ramp Closure Gates 40-FT EACH

662.3024.S Ramp Closure Gate Arms Stockpile 24-FT EACH

662.3026.S Ramp Closure Gate Arms Stockpile 26-FT EACH

662.3028.S Ramp Closure Gate Arms Stockpile 28-FT EACH

662.3030.S Ramp Closure Gate Arms Stockpile 30-FT EACH

662.3032.S Ramp Closure Gate Arms Stockpile 32-FT EACH

662.3037.S Ramp Closure Gate Arms Stockpile 37-FT EACH

662.3040.S Ramp Closure Gate Arms Stockpile 40-FT EACH

Payment for the Ramp Closure Gate bid items is full compensation for providing ramp closure gates including support poles; for gate arm assemblies including guides, collars, and gate arms; and for structure identification plaques. Payment for the Ramp Closure Gate Arms Stockpile is full compensation for furnishing and delivering spare ramp closure gate arms.

stp-662-005 (20180316)