



Charles D. Baker, Governor
Karyn E. Polito, Lieutenant Governor
Jamey Tesler, Acting Secretary & CEO
Jonathan L. Gulliver, Highway Administrator



July 12, 2021

606272-114724

ADDENDUM NO. 4

To Prospective Bidders and Others on:

BARNSTABLE
**Federal Aid Project Nos. CMQ-0035(043), HSI-0035(043), NFP(N/I)-0035(043),
STP-0035(043) & TAP-0035(043)**
Intersection Improvements and Related Work (Including Signals)
at Iyannough (Route 28) and Yarmouth Roads

BIDS TO BE OPENED AND READ: **TUESDAY, JULY 20, 2021 at 2:00 P.M.**

Transmitting changes to the Contract Documents as follows:

DOCUMENT A00801: Revised pages 136 and 144.

Please take note of the above, substitute the revised pages for the originals, and acknowledge Addendum No. 4 in your Expedite Proposal file before submitting your bid.

Very truly yours,

Eric M. Cardone, P.E.
Construction Contracts Engineer

HA
cc: Thomas H Currier, Project Manager

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④ Addendum No. 4, July 12, 2021

ITEM 816.01**TRAFFIC SIGNAL RECONSTRUCTION**
LOCATION NO. 1**LUMP SUM**

The work under the this Item shall conform to the relevant provisions of Section 800 of the Standard Specifications, the 2009 MUTCD and the Massachusetts Amendments, supplemented by the following:

- ④ The work to be completed under items related to traffic signal installation consists of the installation of new traffic signal equipment at the intersection of Route 28 (Iyannough Road) and Yarmouth Road, including controllers, cabinet and foundation, signal housings, signal modules, optically programmable signal sections, signal posts and bases, mast arm posts and foundations, video detection, pedestrian signals with countdown timers, accessible pedestrian signals and pushbuttons, service connection, conduit, wire and cable, pre-emption for emergency vehicles, pre-emption for railroad, and providing all incidental materials necessary for operating and controlling the traffic control signals, as specified and as shown on the plans.

The location of the traffic signal control location is as follows:

Location 1: Intersection of Route 28 (Iyannough Road) and Yarmouth Road

Work on Item 816.01 includes the provision of a local intersection controller and controller cabinet.

SHOP DRAWINGS

A list of the major traffic signal items required at each location is included in the Plans. Within 30 days following execution of the Contract, the Contractor shall submit shop drawings for signal supports, a list of equipment, and manufacturer's equipment specifications to the Engineer in accordance with the relevant provisions of Section 800. Only signal equipment listed on MassDOT's latest approved equipment list shall be used on this project.

No work shall be commenced by the Contractor until approval of the shop drawings and the manufacturer's data has been received in writing from the Engineer. Approval of these drawings shall be general in character and shall not relieve the Contractor from the responsibility of, or the necessity of, furnishing materials and workmanship conforming to the plans, specifications, and these special provisions.

ALL NEW MATERIALS

The Contractor shall deliver to the Engineer a certificate of compliance with the manufacturer for all materials purchased from the manufacturer. All materials shall be new, and certain components, such as the controller and cabinet, shall be purchased from the same manufacturer/distributor and assembled by a qualified electrician/technician to ensure compatibility of components.

④ Addendum No. 4, July 12, 2021

ITEM 816.01 (Continued)**BACKPLATES**

Backplates shall be constructed of anodized half hard aluminum with a non-louvered profile. Backplates shall provide a minimum 5-inch border around the signal assembly and shall be of dull flat black color. Corners of the backplates shall be rounded with a 2½-inch radius. All backplates shall have a 3-inch yellow retroreflective border and shall be installed with all vehicle signal heads.

LABELS

All time settings, switches, harnesses, relays, terminals, and fuses shall be clearly and permanently labeled.

POSTS AND BASES

All 8-foot and 10-foot traffic signal posts shall be aluminum. The pole shall be made of 6063-T6 aluminum alloy and shall be a continuously tapered, seamless tube. Bases shall be pedestal type cast aluminum. Pole and base shall be a single unit. Cement concrete for foundation shall be 4,000 psi, 3/4-inch 565 Lbs. Cement Concrete Masonry conforming to the relevant provisions of Section M4 of the Standard Specifications. Reinforcing steel shall be an ASTM A-615, Grade 60.

The paint finish shall be a corrosion resistant 6 mil semi-gloss polyester powder coat finish, black in color, which shall be approved by the Materials Control Section of MassDOT.

VEHICLE SIGNAL HEADS

All vehicle signal heads shall be aluminum. All signal heads on the mast arms shall be fixed mounted, with the bottoms at the same height. All vehicle signal heads shall be 12" in diameter, unless otherwise noted on the plans. Non-louvered backplates shall be 5" provided on all signal heads as noted on the plans.

- ④ Programmable signal sections shall have the ability to tilt in two degree increments for a maximum of ten degrees above and ten degrees below horizontal, while still maintaining a common vertical axis. All programming shall be accomplished optically with no hoods or louvers necessary to accomplish the programming. Optical masking shall be provided for each section to achieve precise visibility as shown on the plans. Optically programmed signal heads shall have a night time automatic dimming circuit to adjust light output according to ambient light conditions.

When in the judgment of the Engineer the visibility of proposed signal faces will be obstructed by trees and other vegetation, the Contractor shall clear the obstructions for proper sight distance. Any clearing necessary shall be done within the State Highway layout, as directed by the Engineer.