

PROJECT DESCRIPTION

I. GENERAL

This project involves the modification of an existing mast arm Traffic Control Signal with street lighting and interconnect at the intersection of MD 355 (Urbana Pike) and Lowe's Lane in Frederick County. The CarMax Driveway entrance is being constructed opposite of Lowe's Lane in conjunction with MD 355 widening at this location. This will result in the need for the installation of new mast arm poles at this intersection. Additionally, Countdown pedestrian signal heads with audible pushbutton shall be installed across the east, north and west legs of the intersection. MD 355 (Urbana Pike) is assumed to run a north-south direction.

II. INTERSECTION OPERATION

- 1. The intersection is to operate in a NEMA eight-phase, fully-actuated mode, with the MD 355 (Urbana Pike) approaches running concurrently. An Exclusive/Permissive left turn phase shall be provided for the southbound approaches of MD 355 (Urbana Pike). The Exclusive/Permissive left turn phase for the northbound approach shall remain in operation. A Countdown pedestrian phase with audible pushbutton actuation across the north leg of MD 355 (Urbana Pike) shall now be provided. New Countdown pedestrian phases with audible pushbuttons on recall shall be provided across the CarMax driveway and Lowe's Lane. The Lowe's Lane / CarMax Driveway approaches shall operate as a side street split phase. A right turn overlap phase shall be provided for both approaches of Lowe's Lane / CarMax Driveway.
2. The existing full-traffic-actuated, eight-phase controller with all necessary equipment housed in a NEMA size "6" base-mounted cabinet shall be utilized at this intersection. Video interface shall be installed into the cabinet.
3. SHA signal shop shall install APS control unit into controller cabinet. The Contractor shall deliver the Control Unit and audible pushbuttons to the SHA Signal Shop for testing and programming.

III. SPECIAL NOTES

- 1. The Contractor shall be responsible for terminating all signal cables, to the appropriate terminals and shall properly label each cable.
2. All controller cabinet wiring will be performed by the S.H.A. Signal Shop Contact Mr. Ed Rodenhizer at (410) 787-7652 seventy-two hours in advance of intended work.
3. All underground and overhead utilities shown on these plans are schematic only and may not be complete. The Contractor shall be responsible for notifying Miss Utility prior to construction so that all utilities may be located in the field. If the Contractor perceives that a conflict between the utilities and the traffic signal will occur, the Contractor shall notify the Project Engineer immediately so that the conflict may be resolved.

4. APS will function as follows:

FOR MD 355 (URBANA PIKE)

- a. When pedestrian locates and presses the pushbutton for an extended time, the pushbutton unit will announce the following message "Wait to cross Urbana at Lowe's and CarMax. Wait."
b. When the WALK phase begins, the pushbutton unit will provide the following message: "Urbana, WALK sign is on to cross Urbana."

FOR CARMAX DRIVEWAY

- a. When pedestrian locates and presses the pushbutton for an extended time, the pushbutton unit will announce the following message "Wait to cross CarMax at Urbana. Wait."
b. When the WALK phase begins, the pushbutton unit will provide the following message: "CarMax, WALK sign is on to cross CarMax."

FOR LOWE'S LANE

- a. When pedestrian locates and presses the pushbutton for an extended time, the pushbutton unit will announce the following message "Wait to cross Lowe's at Urbana. Wait."
b. When the WALK phase begins, the pushbutton unit will provide the following message: "Lowe's, WALK sign is on to cross Lowe's."

The contact persons for District #7 are as follows:

Mr. John Concannon Assistant District Engineer - Traffic Phone: (301) 624-8141
Mr. Richard L. Daff, Sr. Chief, Traffic Operations Division Phone: (410) 787-7630
Ms. Sue Palmer Assistant District Engineer - Maintenance Phone: (301) 624-8105
Mr. Ed Rodenhizer Manager, Signal Operations Section 410-787-7652
Ms Andrea Abend Assistant District Engineer - Utility Phone: (301) 624-8115
Mr. Sonny Bailey Manager, Sign Shop Operations 410-787-7676

EQUIPMENT LIST (CONT.)

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR

Table with columns: SPEC. NUMBER, DESCRIPTION, QUANTITY. Includes items like 814 12" one-way, five-section (R,Y,A,G,G) (left arrows) LED traffic signal head, 205 Test pit excavation, 813 Overhead (mast arm / pole) mounted sheet aluminum sign.

EQUIPMENT LIST (CONT.)

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR

Table with columns: SPEC. NUMBER, DESCRIPTION, QUANTITY. Includes items like 556 Furnish and install heat applied permanent preformed thermoplastic pavement marking arrow, 805 Furnish and install 2" schedule 80 rigid polyvinyl chloride - trenched, 811 Furnish and install electrical handhole.

EQUIPMENT LIST

A. EQUIPMENT TO BE FURNISHED BY THE SHA

THERE IS NO EQUIPMENT TO BE SUPPLIED BY THE SHA

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR

Table with columns: SPEC. NUMBER, DESCRIPTION, QUANTITY. Includes items like 814 12" one-way, three-section (R,Y,G) LED traffic signal head, 814 12" one-way, four-section (R,Y,G,G) (left arrow) LED traffic signal head, 814 8'/12" one-way, four-section 8"(R,Y,G) 12'(GA) (left arrow) LED traffic signal head.

Table with columns: SPEC. NUMBER, DESCRIPTION, QUANTITY. Includes items like 556 5" white permanent thermoplastic pavement marking, 556 5" yellow permanent thermoplastic pavement marking, 556 12" white heat applied permanent preformed thermoplastic pavement marking, 556 24" white heat applied permanent preformed thermoplastic pavement marking.

Redline Revision Dated October 17, 2013

SHA MDOT - SHA O.O.T.S. S.H.A. Approval Date 10-18-13 T.S. # 4055B T.I.M.S. # 1580



STATE OF MARYLAND DEPARTMENT OF TRANSPORTATION STATE HIGHWAY ADMINISTRATION

MD 355 AND LOWE'S LANE / CARMAX DRIVEWAY FREDERICK, MD

GENERAL INFORMATION SHEET

Table with project details: SCALE NONE, DATE 7/16/12, CONTRACT NO. BW996M82, DESIGNED BY RRZ, COUNTY FREDERICK, DRAWN BY R.C., LOGMILE 10035508.91, CHECKED BY, TIMS NO. 1580, F.A.P. NO. N/A, TOD NO., TS NO. 4055 B, DRAWING NO. 3 OF 6, SHEET NO. OF

605361.DGN PLOTTED: #DATE# TIME# FILE: #FILE#