

DRILL HOLES

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BORDER REV. DATE: June 1, 2004

PROJECT DESCRIPTION

I. GENERAL

This project involves the reconstruction of an existing strain pole Traffic Control Signal with interconnect of the intersection of MD 355 (Rockville Pike) and Marinelli Road in Montgomery County. A new mast arm Traffic Signal with Countdown pedestrian signals, audible pushbuttons and video detection shall be installed at this location. MD 355 (Rockville Pike) is assumed to run a north-south direction.

II. INTERSECTION OPERATION

- 1. The intersection shall to operate in a NEMA eight-phase, semi-actuated mode, with the MD 355 (Rockville Pike) approaches running concurrently. Exclusive left turn phases shall continue to be provided for both approaches of MD355 (Rockville Pike). The pedestrian phases across both legs of MD 355 (Rockville Pike) shall now be Countdown pedestrian phases with audible pushbutton actuation. The pedestrian phases on recall across the Marinelli Road approaches shall now be Countdown pedestrian phases with audible pushbuttons. Far side sampling stations for both legs of MD 355 (Rockville Pike) shall be provided. Exclusive/Permissive left turn phases for both approaches of Marinelli Road shall be provided. The Marinelli Road approaches shall also continue to run concurrently.
2. A full-traffic-actuated, eight-phase controller with video interface, 2 wire control unit and all necessary equipment housed in a NEMA size 6" base-mounted cabinet shall be installed at this intersection.
3. Montgomery County signal shop shall install APS control unit into controller cabinet. The Contractor shall deliver the Control Unit and audible pushbuttons to the Montgomery County Signal Shop for testing and programming.

III. SPECIAL NOTES

- 1. The Contractor shall be responsible for terminating all signal cables, excluding interconnect, to the appropriate terminals and shall properly label each cable.
2. All controller cabinet wiring will be performed by the Montgomery County Signal Shop. Contact Mr. Kamal Hamud at (240) 777-8761 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. Disconnecting of Traffic Surveillance cable shall be performed by Montgomery County Forces. The Contractor shall run these cables into the splice box and properly tag the cables. All splice box connections will be performed by Montgomery County Forces. Contact Mr. Mike Kinney at (301) 674-8958 one week in advance of intended work for wiring of traffic surveillance camera. Montgomery County shall relocate and install traffic surveillance camera and cabinet.
5. Disconnecting of interconnect cable shall be performed by Montgomery County Forces. The Contractor shall run these cables into the splice box and properly tag the cables. All splice box connections will be performed by Montgomery County Forces. Contact Mr. Keith Lord at (301) 275-1291 one week in advance of intended work for wiring of interconnect.
6. APS will function as follows:
FOR MD 355 (ROCKVILLE PIKE)
a. When pedestrian locates and presses pushbutton for an extended time, the pushbutton unit will be "wait to cross Rockville Pike"
b. When WALK phase begins, the message will be a rapid tick which will last for the duration of the WALK phase.
FOR MARINELLI ROAD
a. When pedestrian locates and presses pushbutton for an extended time, the pushbutton unit will be "wait to cross Marinelli Road"
b. When WALK phase begins, the message will be a rapid tick which will last for the duration of the WALK phase.
The contact persons for District #3 (Montgomery County) are as follows:

Mr. Jeff Wentz, Assistant District Engineer - Traffic Signal Shop, Phone: (301) 513-7358
Mr. Ed Rodenhizer, Signal Shop, 410-787-7652
Mr. Wayne Mowdy, Assistant District Engineer - Maintenance Sign Shop, Phone: (301) 513-7304
Mr. Sonny Bailey, Sign Shop, 410-787-7676
Mr. Augie Rebish, District Engineer - Utility Phone: (301) 513-7350
The power company representative is:
Mr. Steve Custer, PEPCO Customer Design, 201 W Gude Dr., Rockville, MD 20850, Phone: 301 548-4333
Mr. Richard L. Daff, Sr., Chief, Traffic Operations Division, Phone: (410) 787-7630

EQUIPMENT LIST

Table with columns: CAT NO., DESCRIPTION, QUANTITY. Includes items like EIGHT PHASE (FULLY ACTUATED) CONTROLLER AND CABINET - BASE MOUNT, SHEET ALUMINIUM SIGNS, D3-2 'Marinelli Rd' sign, D3-2 'Rockville Pike <11600' sign, R3-5L 'LEFT TURN ONLY' sign, R3-5R 'RIGHT TURN ONLY' sign, R10-11b 'NO TURN ON RED' sign, Pedestrian education R10-3(1) mod sign, Pedestrian education R10-3(1) mod sign.

EQUIPMENT LIST (CONT.)

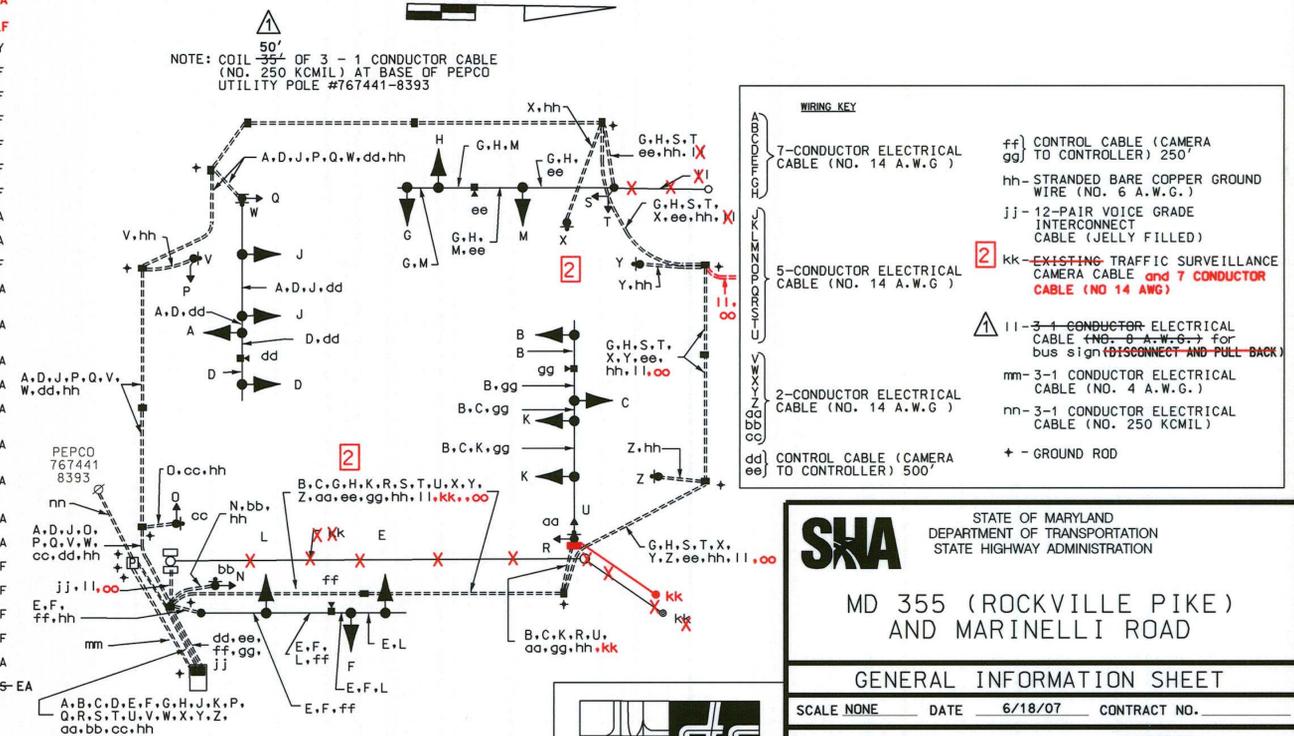
Table with columns: CAT NO., DESCRIPTION, QUANTITY. Includes items like GUIDE SHIELD ASSEMBLY (48"x75") pole mounted, REMOVAL OF EXISTING PAVEMENT LINE MARKINGS - ANY WIDTH, TEST PIT EXCAVATION, CLASS 2 EXCAVATION, 12 INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES, 24 INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES, STANDARD TYPE A COMBINATION CURB AND GUTTER 12 INCH GUTTER PAN 8 INCH DEPTH, 4 INCH CONCRETE SIDEWALK, DETECTABLE WARNING SURFACE FOR CURB RAMPS, ROADWAY PATCH, 16" COUNTDOWN PEDESTRIAN SIGNAL HEAD, 2 WIRE CONTROL UNIT, AUDIBLE TACTILE PEDESTRIAN PUSHBUTTON STATION AND SIGNS, INSTALL SPLICE CABINET, 3 WIRE, 1 CONDUCTOR (NO. 250 KCMIL) ELECTRICAL CABLE, 3" LB, INSTALL CAT 5 CABLE (FOR BUS SIGNS), CONCRETE FOR SIGNAL FOUNDATION, NO. 6 AWG STRANDED BARE COPPER GROUND WIRE, 2 INCH SCHEDULE 80 RIGID PVC CONDUIT-TRENCHED, 3 INCH SCHEDULE 80 RIGID PVC CONDUIT-TRENCHED, 4 INCH SCHEDULE 80 RIGID PVC CONDUIT-TRENCHED, 4 INCH SCHEDULE 80 RIGID PVC CONDUIT-SLOTTED, METERED SERVICE PEDESTAL, FURNISH AND INSTALL ELECTRICAL HANDHOLE, INSTALL OVERHEAD SIGN, VIDEO DETECTION CAMERA, CONTROL CABLE, 250 FOOT, VIDEO DETECTION CAMERA TO CONTROLLER, CONTROL CABLE, 500 FOOT, VIDEO DETECTION CAMERA TO CONTROLLER, VIDEO INTERFACE EQUIPMENT, 10 FOOT BREAKAWAY PEDESTAL POLE, STEEL POLE WITH A SINGLE 50 FOOT MAST ARM, STEEL POLE WITH A SINGLE 60 FOOT MAST ARM, STEEL POLE WITH SINGLE 70 FOOT MAST ARM, GROUND ROD - 3/4 INCH DIAMETER X 10 FOOT LENGTH, 12 INCH LED VEHICULAR TRAFFIC SIGNAL HEAD SECTION, ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG), ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG), ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG), ELECTRICAL CABLE - 3 WIRE (NO. 4 AWG), INSTALL CONTROLLER AND CABINET - BASE MOUNT, REMOVE AND SALVAGE EXISTING EQUIPMENT DISPOSE.

- C. EQUIPMENT TO BE REMOVED: Montgomery County Forces shall remove the controller and all auxiliary equipment from the controller cabinet. The cabinet and all other removed signal materials are to become property of the contractor.
D. EQUIPMENT TO BE SUPPLIED BY MONTGOMERY COUNTY SIGNAL SHOP: CAT 5 CABLE (FOR BUS SIGNS) 1250 LF

PHASE CHART

Phase chart table with columns 1-22 and rows for PHASE 1 & 5, PHASE 1 & 6, PHASE 2 & 5, PHASE 2 & 6, PHASE 3 & 8, PHASE 4 & 8, PHASE 3 & 8 ALT, PHASE 4 & 8 ALT, PHASE 4 & 8 ALT CHANGE, PED CLEAR / COUNTDOWN, FLASHING OPERATION.

WIRING DIAGRAM



ADDENDUM 1: DATE: 10/16/07

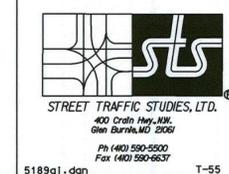
REDLINE REVISION 8/8/08, TEDD APPROVAL

STATE OF MARYLAND DEPARTMENT OF TRANSPORTATION STATE HIGHWAY ADMINISTRATION

MD 355 (ROCKVILLE PIKE) AND MARINELLI ROAD

GENERAL INFORMATION SHEET

Table with fields: SCALE NONE, DATE 6/18/07, CONTRACT NO., DESIGNED BY JWA, COUNTY MONTGOMERY, DRAWN BY RC, LOGMILE 15035506.17, CHECKED BY, TMS NO. H997, F.A.P. NO. AC-STPG-000A(241)E, TOD NO., TS NO. 3162E, DRAWING NO. 2 OF 3, SHEET NO. 41 OF 42.



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