

PROJECT DESCRIPTION

I. GENERAL

This project involves the installation of a new mast arm Traffic Control Signal with interconnect at the intersection of MD 355 (Rockville Pike) and Alta Vista Road / Bellevue Drive in Montgomery County. The signal shall operate in three modes: AM PEAK, PM PEAK and OFF PEAK. MD 355 (Rockville Pike) is assumed to run a north-south direction. Video detection shall be in use for all approaches including farside sampling stations on both legs of MD 355

II. INTERSECTION OPERATION

1. AM PEAK PERIOD (7AM-9AM MONDAY-FRIDAY)

The intersection is to operate in a NEMA three-phase, semi-actuated mode, with the MD 355 (Rockville Pike) approaches running concurrently. An Exclusive/Permissive left turn phase shall be provided for the southbound approach of MD 355 (Rockville Pike). The fiber optic sign for northbound MD 355 (Rockville Pike) shall display "NO LEFT TURN (SYMBOLIC)". The pedestrian phase across Alta Vista Road shall be on recall. The Alta Vista Rd / Bellevue Dr approaches shall operate in a flashing "Red" mode.

2. PM PEAK PERIOD (4PM-7PM MONDAY-FRIDAY)

The intersection is to operate in a NEMA four-phase, semi-actuated mode, with the MD 355 (Rockville Pike) approaches running concurrently. Exclusive/Permissive left turn phases shall be provided for both approaches of MD 355 (Rockville Pike). The pedestrian phase across Alta Vista Road shall be on recall. The Alta Vista Rd / Bellevue Dr approaches shall operate in a flashing "Red" mode.

3. OFF PEAK PERIOD

The intersection is to operate in a NEMA six-phase, semi-actuated mode, with the MD 355 (Rockville Pike) approaches running concurrently. Exclusive/Permissive left turn phases shall be provided for both approaches of MD 355 (Rockville Pike). The pedestrian phase across Alta Vista Road shall be on recall. The Alta Vista Rd / Bellevue Dr approaches shall also run concurrently.

4. A full-traffic-actuated, eight-phase controller with video interface, L.A.U. and L.A.U. Panel and all necessary equipment housed in a NEMA size "6" base-mounted cabinet shall be installed at this intersection.

III. SPECIAL NOTES

- The Contractor shall be responsible for terminating all signal cables, excluding interconnect, to the appropriate terminals and shall properly label each cable.
- Disconnecting and splicing of interconnect cable shall be performed by Montgomery County Forces. The contractor shall run the interconnect cable into the base of each cabinet and properly tag the cable. Contact Mr. Bob Gonzales at (240) 777-8761 seventy-two hours in advance of intended work.
- 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.

EQUIPMENT LIST

A. EQUIPMENT TO BE SUPPLIED BY S.H.A..

ITEM NO.	DESCRIPTION	QUANTITY
9042	Controller ASC II with telemetry base mounted size "6" TS-2 type 2 cabinet (MSHA Specifications) with Econolite ASC 2S controller, Malfunction Management Unit MMU 16 E, TS-2 power supply, Video detection panel, Econolite Autoscope Solo minihub TS2 with interconnecting cable, LAU panel and relay package to be wired by Montgomery County Forces.	1 EA
9044	Controller cabinet, size "6"	1 EA
9086	Video detection interface equipment: 1-4 cameras (To be installed by signal shop).	1 EA
9570	Sheet aluminum signs to consist of: (ground mount) R4-7 "KEEP RIGHT (symbolic)" sign, (24" x 30"). W3-3 NEW "SIGNAL AHEAD" sign, (36" x 36") with hardware. R3-5 (MOD) "LEFT TURN AND U TURN (SYMBOLIC)" sign, (30" x 36"). R3-5(2) "RIGHT TURN ONLY" / 7-9 AM, 4-7 PM, MONDAY-FRIDAY" sign, (30" x 54").	63 SF
9571	Sheet aluminum signs to consist of: (pole mount) D3-2 "Rockville PK 9600" / "Rockville PK <9600" sign, (dual faced), (variable x 16") D3-2 "(arrow) Bellevue Dr <9600" / "(arrow) Alta Vista Rd <5000" sign, (dual faced), (variable x 16") D3-2 "Alta Vista Rd(arrow) / 5000" / "(arrow) Alta Vista Rd <5000" sign, (dual faced), (variable x 16") R10-12 "LEFT TURN YIELD ON GREEN (BALL)" sign, (36" x 42").	72 SF

EQUIPMENT LIST (CONT.)

A. EQUIPMENT TO BE SUPPLIED BY S.H.A..

ITEM NO.	DESCRIPTION	QUANTITY
	R3-2(2) "NO LEFT TURN (SYMBOLIC)" 7-9 AM MONDAY-FRIDAY" sign, (24"x36").	1 EA
	R3-5(2) "RIGHT TURN ONLY 7-9 AM 4-7PM MONDAY-FRIDAY" sign, (30"x54").	2 EA
	Pedestrian Education sign (Note: Top portion to be left blank).	2 EA

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

ITEM NO.	DESCRIPTION	QUANTITY
1001	Maintenance of traffic per assignment.	3 EA
2001	Class 2 Excavation, (for pavement and sidewalk removal).	3 C.Y.
2002	Test Pit Excavation	4 C.Y.
5005	12" white heat applied permanent preformed thermoplastic pavement marking.	105 L.F.
5006	24" white heat applied permanent preformed thermoplastic pavement marking.	115 L.F.
6003	Monolithic concrete median 4', type A-1.	30 L.F.
6004	4" concrete sidewalk.	110 S.F.
8001	Furnish and install concrete for signal foundation.	14 C.Y.
8002	Furnish and install 12" pedestrian signal head section	4 EA
8008	Pre-manufactured camera to controller (200' length) cable	3 EA
8009	Pre-manufactured camera to controller (300' length) cable	1 EA
8014	Furnish and install 15' T mast arm pole and 50' mast arm.	1 EA
8027	Furnish and install wood sign supports 4" x 4".	20 L.F.
8028	Furnish and install wood sign supports 4" x 6".	20 L.F.
8029	Furnish and install No. 6 AWG stranded bare copper ground wire.	375 L.F.
8037	Furnish and install 2" schedule 80 rigid polyvinyl chloride - trenched.	15 L.F.
8038	Furnish and install 3" schedule 80 rigid polyvinyl chloride - trenched.	130 L.F.
8039	Furnish and install 4" schedule 80 rigid polyvinyl chloride - trenched.	85 L.F.
8042	Furnish and install 4" schedule 80 rigid polyvinyl chloride - slotted- NIGHT TIME	280 L.F.
8045	Furnish and install electrical utility service equipment (120/240 V, 1 phase 3 wire system).	1 EA
8052	Furnish and install electrical handhole.	8 EA
8054	Install ground mounted sign.	63 S.F.
8055	Install overhead sign.	72 S.F.
8056	Furnish and install video detector camera.	4 EA
8061	Furnish and install 21' mast arm pole and 38' (cut to 30') mast arm.	1 EA
8066	Furnish and install 21' mast arm pole and 70' mast arm.	1 EA

EQUIPMENT LIST (CONT.)

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

ITEM NO.	DESCRIPTION	QUANTITY
8068	Furnish and install 12-pair communication cable, jelly-filled, (underground).	230 L.F.
8073	Furnish and install ground rod 3/4" x 10'.	4 EA
8075	Furnish and install 12" vehicular traffic signal head section	38 EA
8078	Cut, clean, galvanize and cap traffic signal structure.	1 EA
8082	Furnish and install electrical cable - 3 conductor (No. 14 AWG).	200 L.F.
8083	Furnish and install electrical cable - 5 conductor (No. 14 AWG).	690 L.F.
8084	Furnish and install electrical cable - 7 conductor (No. 14 AWG).	1315 L.F.
8094	Install controller and cabinet base mount.	1 EA
Neg.	Furnish and install fiber optic sign. R3-2 "NO LEFT TURN (SYMBOLIC)" fiber optic sign, (30"x30")	3 EA
Neg. 8037	Furnish and install 2" schedule 80 rigid polyvinyl chloride - trenched.	15 L.F.
Neg. 8087	Sawcut for roadway.	50 LF

C. EQUIPMENT TO BE REMOVED

There is no equipment to be removed as part of this project.

The contact persons for District #3 (Montgomery County) are as follows:

Mr. Lee Starkloff
Assistant District Engineer - Traffic
Phone: (301) 513-7318

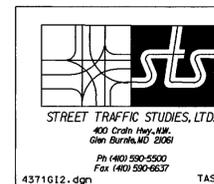
Mr. Raleigh Medley
Assistant District Engineer - Maintenance
Phone: (301) 513-7304

Mr. Augie Rebish
District Engineer - Utility
Phone: (301) 513-7350

Mr. Richard L. Daff, Sr.
Chief, Traffic Operations Division
Phone: (410) 787-7630

The power company representative is:

Steve Custer
PEPCO
4061 Powder Mill Road
Suite 600 Center Park II
Calverton, MD 20705
Phone: 301 931-2880



MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION
MD 355 (ROCKVILLE PIKE) AND
ALTA VISTA ROAD / BELLEVUE DRIVE

DRAWN BY: <u>ROB CICCHINI</u>	F.A.P. NO. <u>N/A</u>	TS NO. <u>TS 4269-628</u>
CHECKED BY: <u>R ZACHERL</u>	S.H.A. NO. <u>MD204A01281</u>	SHEET NO. <u>3 OF 3</u>
SCALE: <u>NONE</u>	COUNTY: <u>MONTGOMERY</u>	T.I.M.S. NO. <u>E617</u>
DATE: <u>7-10-03</u>	LOG MILE: <u>15009706.108</u>	