

**PROJECT DESCRIPTION**

**I. GENERAL**

This project involves the modification to the existing traffic control signal at the intersection of MD 7 (Philadelphia) and Campbell Blvd./CARMAX Truck Entrance in Baltimore County, Maryland. MD 7 is considered to run in a north/south direction.

**II. INTERSECTION OPERATION**

The intersection currently operates in a NEMA four (4) phase, full-traffic-actuated mode. There is an exclusive/permissive left turn phase for the northbound movement of MD 7. The MD 7 through movements operate concurrently. The Campbell Blvd. through movement operates alone.

The traffic control signal phasing will be modified to operate in a NEMA six (6) phase, full-traffic-actuated mode. There will be an exclusive/permissive left turn phase for both the north and southbound movements of MD 7. The MD 7 through movements will operate concurrently. The Campbell Blvd./CARMAX Truck Entrance through movements will operate concurrently.

The existing cabinet and controller will be utilized.

One 4-channel rack mounted loop detector amplifier will be added.

**EQUIPMENT LIST**

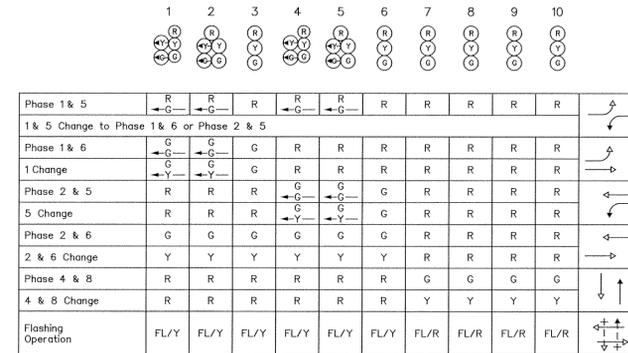
A. Approved S.H.A. equipment to be purchased by the Developer and installed by the Contractor. All equipment in this list shall have catalog cuts submitted for approval prior to installation.

Quantity	Units	Specification Section	Description
1	EA	818	27 ft. steel mast arm pole with a 50 ft. mast arm [Note four 1-3/4 in. x 90 in. anchor bolts].
2	EA	814	12 in., one-way, three section (R,Y,G) adjustable traffic signal head with mast arm mounting hardware and tunnel visors.
1	EA	814	12 in., one-way, five section (R,Y,YA,G,GA) adjustable traffic signal head with mast arm mounting hardware and tunnel visors.
1	EA	814	12 in./8 in., one-way, five section (12 in. YA, GA/ 8 in. R,Y,G) adjustable traffic signal head with mast arm mounting hardware and tunnel visors.
1	EA	813	24 in. x 12 in. M4-5 sign with pole mounting hardware.
1	EA	813	24 in. x 24 in. M1-1 sign with pole mounting hardware.
1	EA	813	21 in. x 15 in. M6-11 sign with pole mounting hardware.
1	EA	813	36 in. x 42 in. R 10-12 sign with mast arm mounting hardware.
1	EA	813	16 in x 96 in. D 3-2 sign with mast arm mounting hardware.
1	EA	---	4-channel rack mounted loop detector amplifier.

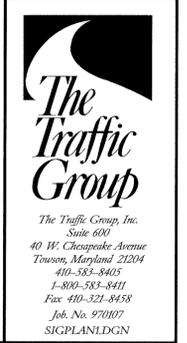
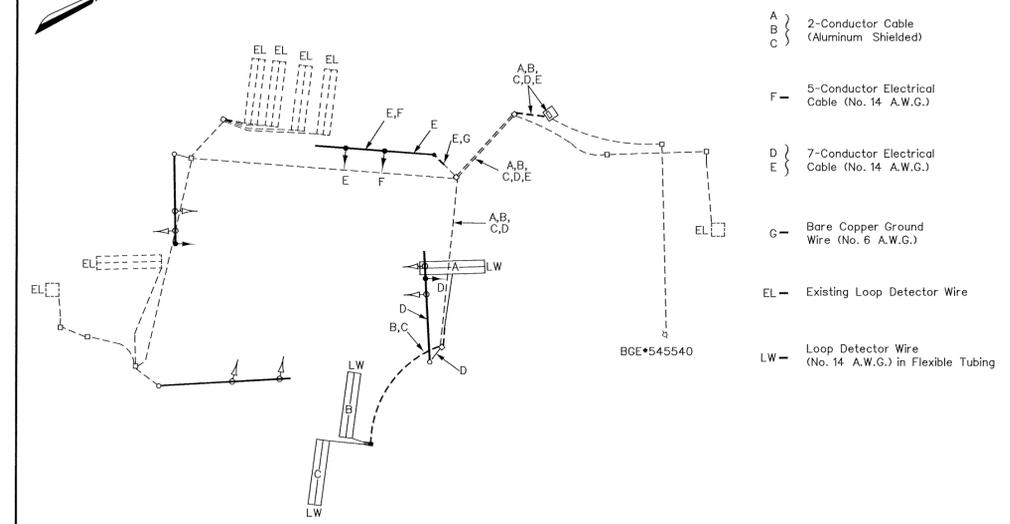
B. Equipment to be furnished and installed by the Contractor. All equipment in this list shall have catalog cuts submitted for approval prior to installation.

Quantity	Units	Specification Section	Description
Lump Sum	LS	108	Mobilization.
Lump Sum	LS	104	Maintenance of traffic.
1	EA	811	Handhole.
345	LF	815	Sawcut for signal loop detector.
1330	LF	810	Loop detector wire (No. 14 A.W.G.) encased in flexible tubing.
550	LF	810	2-conductor (aluminum shielded) electrical cable (No. 14 A.W.G.).
30	LF	810	5-conductor electrical cable (No. 14 A.W.G.).
350	LF	810	7-conductor electrical cable (No. 14 A.W.G.).
12	LF	804	Bare copper stranded ground wire (No. 6 A.W.G.).
40	LF	805	1 in. liquid tight flexible non-metallic conduit for loop detector sleeve.
70	LF	805	2 in. polyvinyl chloride [Schedule 80] electrical conduit - trenched.
2.65	CY	801	Concrete foundation for traffic signal equipment.
1	EA	804	Ground rod 3/4 in. diameter x 10 ft. length.
98	LF	500	5 in. wide pavement marking - white for lane line.
235	LF	500	5 in. wide pavement marking - yellow for center line.
45	LF	550	24 in. wide HAPPTM - white for stop line.
1	EA	556	HAPPTM symbol - white - "ONLY".
2	EA	556	HAPPTM symbol - white - "Right Arrow".
190	LF	---	Remove existing pavement markings by grinding.
Lump Sum	LS	---	Remove existing traffic signal equipment.
23	SF	---	Replace 4 in. sidewalk.
Lump Sum	LS	---	As-built for S.H.A. (on CADD).

**Phase Chart**



**Wiring Diagram**



**MDOT - STATE HIGHWAY ADMINISTRATION**  
*Office of Traffic & Safety*  
**TRAFFIC ENGINEERING DESIGN DIVISION**  
 (General Information)  
**MD 7 (Philadelphia Road ) at Campbell Blvd. / CARMAX**

DATE: July 10, 1998 LOG MILE • 03000706.01

DRAWN BY: J. Storck F.A.P. NO. N/A PLAN SHEET NO.: SHEET NO.  
 CHK. BY: S.H.A. NO. BW996M82 3517A-GI 2 of 2  
 SCALE: N/A COUNTY: BALTIMORE