

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 7 (Philadelphia Rd) and Rossville Blvd in Baltimore County. Countdown pedestrian signals with audible pushbuttons shall be installed at this location. MD 7 (Philadelphia Rd) is assumed to run an east-west direction.

II. INTERSECTION OPERATION

- The intersection shall continue to operate in a NEMA eight-phase, fully-actuated mode, with the MD 7 (Philadelphia Rd) approaches running concurrently. Exclusive left turn phases shall continue to be provided for both approaches of MD 7 (Philadelphia Rd). A new Countdown pedestrian phase with audible pushbutton actuation shall be provided across the west leg of MD 7 (Philadelphia Rd). A new Countdown pedestrian phase with audible pushbuttons on recall shall be provided across the south leg of Rossville Blvd. Farside sampling stations remain in operation on the west leg of Rossville Blvd. at this intersection. The Rossville Blvd approaches shall also continue to run concurrently.
- The existing full-traffic-actuated, eight-phase controller with video interface and all necessary equipment housed in a NEMA size "6" base-mounted cabinet shall be utilized at this intersection.
- 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

- The Contractor shall be responsible for terminating all signal cables to the appropriate terminals and shall properly label each cable.
- 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.
- 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.

The contact persons for District #4 and SHA are as follows:

- Ms. Erin Kuhn
Assistant District Engineer - Traffic
Phone: (410) 229-2381
- Mr. Andre Futrell
Assistant District Engineer - Maintenance
Phone: (410) 229-2361
- Mr. Mike Pasquariello
District Engineer - Utility
Phone: (410) 229-2341
- Mr. Richard L. Daff, Sr.
Chief, Traffic Operations Division
Phone: (410) 787-7630
- Mr. Ed Rodenhizer
Manager, Signal Operations Section
410-787-7652
- Mr. Sonny Bailey
Manager, Sign Shop Operations
410-787-7676

EQUIPMENT LIST (CONT.)

B. EQUIPMENT TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR

ITEM NO.	DESCRIPTION	QUANTITY
1001	Maintenance of traffic per assignment.	2 EA
2001	Class 2 Excavation.	10 C.Y.
2002	Test Pit Excavation	4 C.Y.
5003	Removal of existing permanent pavement line markings Any Width	375 L.F.
5004	12" white lead free permanent preformed thermoplastic pavement marking.	1100 L.F.
5005	24" white lead free permanent preformed thermoplastic pavement marking.	190 L.F.
6001	Standard type A combination curb and gutter 12" gutter pan 8" depth.	650 L.F.
6002	5" concrete sidewalk.	2120 S.F.
6003	Detectable warning surfaces	144 S.F.
8002	2 wire Central Control unit	1 EA
8005	Adjust existing handhole to grade with new frame and cover.	1 EA
8008	Audible/tactile pedestrian pushbutton station & signs.	4 EA
8009	Breakaway pedestal pole (10')	4 EA
8015	LED 16" countdown pedestrian signal heads.	4 EA
8023	Remove and dispose of existing material & equipment per assignment.	1 EA
8038	Schedule 80 rigid PVC conduit up to 4" - trenched.	70 L.F.
8039	Wood sign supports 4"x4".	176 L.F.
8040	Install overhead or ground mounted sign (including all hardware).	82 SF
8042	No. 6 AWG stranded bare copper ground wire.	100 L.F.
8053	Electrical cable - 2 conductor (No. 14 AWG).	470 L.F.
8055	Electrical cable - 5 conductor (No. 14 AWG).	500 L.F.

C. EQUIPMENT TO BE REMOVED

There are no signal materials to be removed for this project.

EQUIPMENT LIST

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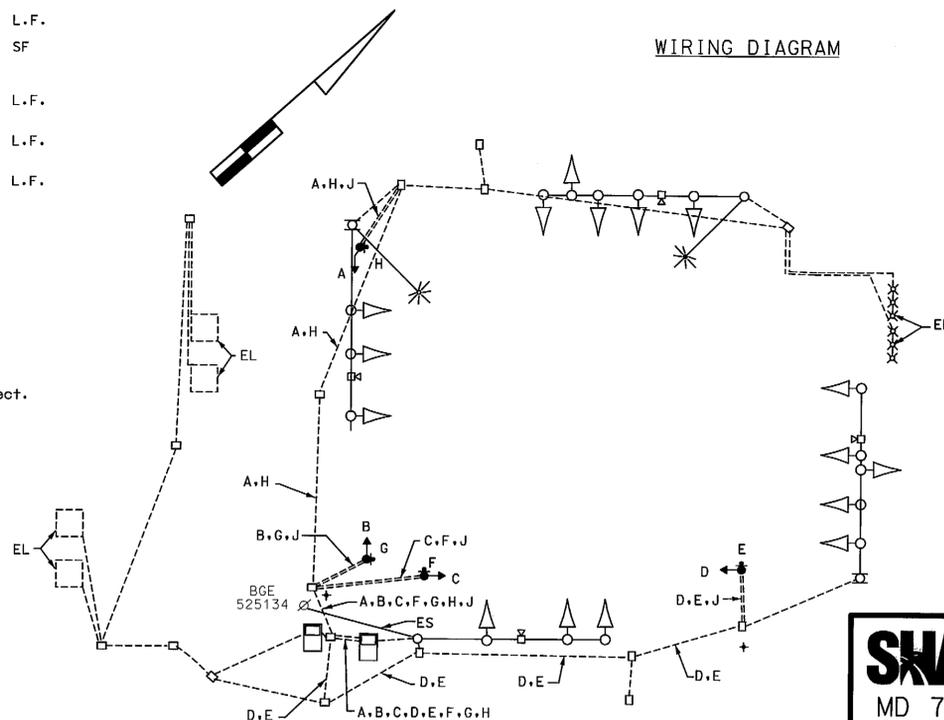
A. EQUIPMENT TO BE SUPPLIED BY S.H.A..

ITEM NO.	DESCRIPTION	QUANTITY
9570	Sheet aluminum signs to consist of: (ground mount with hardware)	78 SF
	R4-7 "KEEP RIGHT" sign (24" x 30")	2 EA
	W11-2 "PEDESTRIAN CROSSING (SYMBOLIC)" sign. (30" x 30")	8 EA
	W16-7P(L) "arrow (symbolic)" diagonal sign. (24" x 12")	4 EA
	W16-7P(R) "arrow (symbolic)" diagonal sign. (24" x 12")	4 EA
	SPEC "LONG'S HIGHWAY / ADOPT A HIGHWAY" sign.	1 EA
9571	Sheet aluminum signs to consist of: (mast arm or pole mount)	4 SF
	Pedestrian education R10-3(1) mod sign. (Note: Sign to read "PUSHBUTTON TO CROSS PHILADELPHIA ROAD".)	2 EA
	Pedestrian education R10-3(1) mod sign. (Note: Sign to read "PUSHBUTTON TO CROSS ROSSVILLE BLVD.".)	2 EA

PHASE CHART

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
PHASE 1 & 5	←G-	←G-	R	R	←G-	←G-	R	R	←R-	←R-	R	R	←R-	←R-	R	R	DW	DW	DW	DW
CHANGES TO PHASES 1 & 6, 2 & 5 OR 2 & 6																				
PHASE 1 & 6	←G-	←G-	G	G	←R-	←R-	R	R	←R-	←R-	R	R	←R-	←R-	R	R	WK	WK	DW	DW
1 & 6 CHANGE	←Y-	←Y-	G	G	←R-	←R-	R	R	←R-	←R-	R	R	←R-	←R-	R	R	WK	WK	DW	DW
PHASE 2 & 5	←R-	←R-	R	R	←G-	←G-	G	G	←R-	←R-	R	R	←R-	←R-	R	R	DW	DW	DW	DW
2 & 5 CHANGE	←R-	←R-	R	R	←Y-	←Y-	G	G	←R-	←R-	R	R	←R-	←R-	R	R	DW	DW	DW	DW
PHASE 2 & 6	←R-	←R-	G	G	←R-	←R-	G	G	←R-	←R-	R	R	←R-	←R-	R	R	WK	WK	DW	DW
PED CLEAR / COUNTDOWN	←R-	←R-	G	G	←R-	←R-	G	G	←R-	←R-	R	R	←R-	←R-	R	R	FL/DW	FL/DW	DW	DW
2 & 6 CHANGE	←R-	←R-	Y	Y	←R-	←R-	Y	Y	←R-	←R-	R	R	←R-	←R-	R	R	DW	DW	DW	DW
PHASE 3 & 7	←R-	←R-	R	R	←R-	←R-	R	R	←G-	←G-	R	R	←G-	←G-	R	R	DW	DW	DW	DW
CHANGES TO PHASES 3 & 8, 4 & 7 OR 4 & 8																				
PHASE 3 & 8	←R-	←R-	R	R	←R-	←R-	R	R	←G-	←G-	G	G	←R-	←R-	R	R	DW	DW	DW	DW
3 & 8 CHANGE	←R-	←R-	R	R	←R-	←R-	R	R	←G-	←G-	G	G	←R-	←R-	R	R	DW	DW	DW	DW
PHASE 4 & 7	←R-	←R-	R	R	←R-	←R-	R	R	←R-	←R-	R	R	←G-	←G-	G	G	DW	DW	DW	DW
4 & 7 CHANGE	←R-	←R-	R	R	←R-	←R-	R	R	←R-	←R-	R	R	←Y-	←Y-	G	G	DW	DW	DW	DW
PHASE 4 & 8	←R-	←R-	R	R	←R-	←R-	R	R	←R-	←R-	G	G	←R-	←R-	Y	Y	DW	DW	DW	DW
4 & 8 CHANGE	←R-	←R-	R	R	←R-	←R-	R	R	←R-	←R-	Y	Y	←R-	←R-	Y	Y	DW	DW	DW	DW
PHASE 4 & 7 ALT	←R-	←R-	R	R	←R-	←R-	R	R	←R-	←R-	R	R	←G-	←G-	G	G	DW	DW	WK	WK
4 & 7 ALT CHANGE	←R-	←R-	R	R	←R-	←R-	R	R	←R-	←R-	R	R	←Y-	←Y-	G	G	DW	DW	WK	WK
PHASE 4 & 8 ALT	←R-	←R-	R	R	←R-	←R-	R	R	←R-	←R-	G	G	←R-	←R-	G	G	DW	DW	WK	WK
4 & 8 ALT CHANGE	←R-	←R-	R	R	←R-	←R-	R	R	←R-	←R-	G	G	←R-	←R-	G	G	DW	DW	WK	WK
PED CLEAR / COUNTDOWN	←R-	←R-	R	R	←R-	←R-	R	R	←R-	←R-	G	G	←R-	←R-	G	G	DW	DW	FL/DW	FL/DW
4 & 8 ALT CHANGE	←R-	←R-	R	R	←R-	←R-	R	R	←R-	←R-	Y	Y	←R-	←R-	Y	Y	DW	DW	DW	DW
FLASHING OPERATION	FL/R	FL/R	FL/Y	FL/Y	FL/R	FL/R	FL/Y	FL/Y	FL/R	DARK	DARK	DARK	DARK							

WIRING DIAGRAM



WIRING KEY

- A, B, C, D - 5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
- E, F, G, H, J - 2-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
- J - STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)
- EM - MICROLOOP LEAD-IN CABLE
- EL - LOOP WIRE (NO. 14 A.W.G.) EXISTING
- ES - EXISTING OVERHEAD SERVICE TO BE MAINTAINED BY BGE
- + - GROUND ROD

SHA STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

MD 7 (PHILADELPHIA ROAD) AND ROSSVILLE BOULEVARD
ROSEDALE, MARYLAND

GENERAL INFORMATION SHEET

SCALE NONE DATE 7/22/11 CONTRACT NO. XX6455185

DESIGNED BY R.R.Z. COUNTY BALTIMORE
DRAWN BY R.C. LOGMILE 03000702.93
CHECKED BY F.A.P. NO. TIMS NO. K737
TOD NO.

REVISION "E"

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