

**PROJECT DESCRIPTION**

**I. GENERAL**

This project involves the modification of the existing traffic control signal at the intersection of MD 24 and Wheel Road in Harford County, Maryland. MD 24 is considered to run in a north/south direction.

**II. INTERSECTION OPERATION**

The intersection operates in a NEMA six (6) phase, full-traffic-actuated mode. There is exclusive left turn phases for both the north and southbound movements of MD 24. The MD 24 through movements operate concurrently. The Wheel Road movements operate concurrently.

The existing cabinet/controller, and phasing will be utilized at this intersection. The existing 2-channel detector amplifiers are to be replaced. A 4-channelrack mounted loop detector retro-fit kit and four 4-channelrack mounted loop detector amplifiers are to be installed.

**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	813	30 in. x 36 in. R 3-5(L) sign span wire mounting hardware.
4	EA	---	* 4-channelrack mounted loop detector amplifier.
1	EA	---	* 4-channelrack mounted loop detector power supply.
1	EA	---	* 4-channelrack mounted loop detector retro fit kit.

\* To be installed by MD-SHA.

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.
2	EA	811	Handhole.
335	LF	815	Sawcut for signal loop detector.
1150	LF	810	Loop detector wire (No. 14 A.W.G.) encased in flexible tubing.
525	LF	810	2-conductor (aluminum shielded) electrical cable (No. 14 A.W.G.).
30	LF	819	1 in. liquid tight flexible non-metallic conduit for loop detector sleeve.
100	LF	805	2 in. polyvinyl chloride [Schedule 80] electrical conduit - trenched.
30	LF	556	24 in. wide HAPPTPM - white for stop line.
Lump Sum	LS	---	Removal of existing traffic signal equipment.
Lump Sum	LS	---	As-built for S.H.A. Eon CADD.

**CONTACT LIST**

The contact persons for District #4 are as follows:

Mr. Dave Malkowski  
District Engineer  
410-321-2810

Mr. Randall Scott  
Assistant District Engineer - Traffic  
410-321-2781

Mr. Graydon Tobery  
Assistant District Engineer - Utility  
410-321-3460

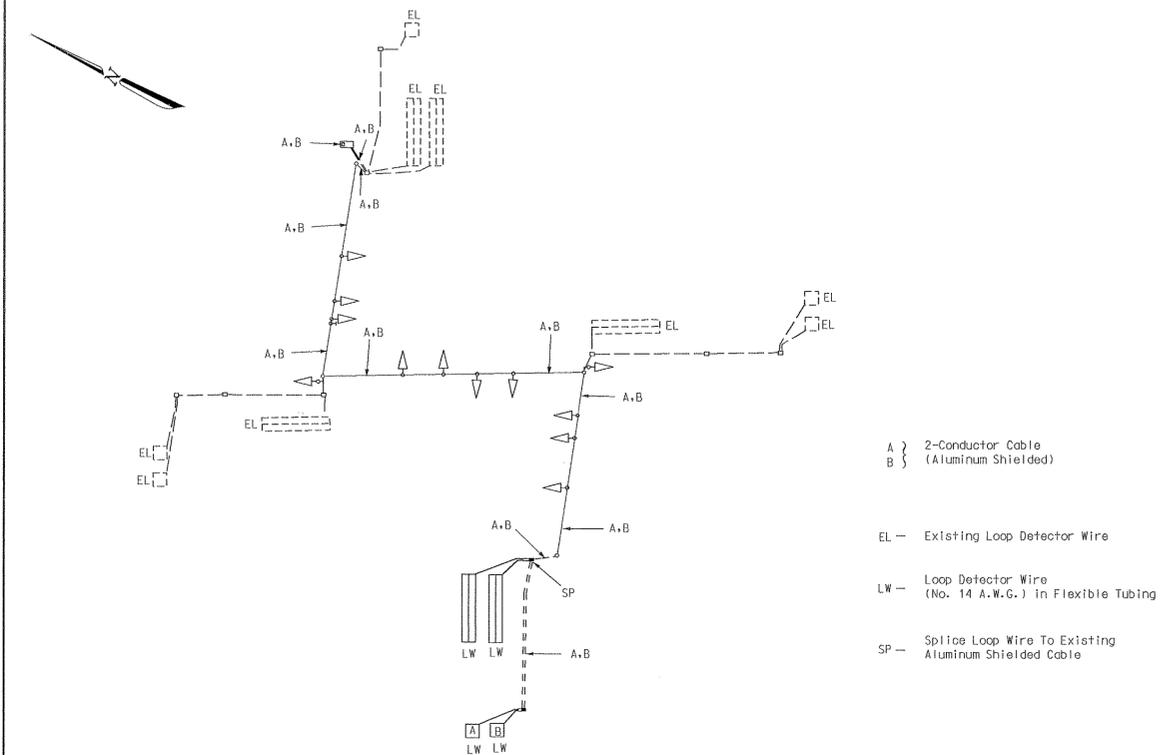
Mr. Dave Ramsey  
Assistant District Engineer - Maintenance  
410-321-2761

Mr. Richard L. Daff  
Chief, Traffic Operations Division  
410-787-7630

**Phase Chart**

	1	2	3	4	5	6	7	8	9	10	11	12
Phase 1 & 5	←G	←G	R	R	←G	←G	R	R	R	R	R	R
1 & 5 Change to Phase 1 & 6 or Phase 2 & 5 or Phase 2 & 6	←G	←G	G	G	←R	←R	R	R	R	R	R	R
Phase 1 & 6	←G	←G	G	G	←R	←R	R	R	R	R	R	R
1 Change	←Y	←Y	G	G	←R	←R	R	R	R	R	R	R
Phase 2 & 5	←R	←R	R	R	←G	←G	G	G	R	R	R	R
5 Change	←R	←R	R	R	←Y	←Y	G	G	R	R	R	R
Phase 2 & 6	←R	←R	G	G	←R	←R	G	G	R	R	R	R
2 & 6 Change	←R	←R	Y	Y	←R	←R	Y	Y	R	R	R	R
Phase 4 & 8	←R	←R	R	R	←R	←R	R	R	G	G	G	G
4 & 8 Change	←R	←R	R	R	←R	←R	R	R	Y	Y	Y	Y
Flashing Operation	←FL/R	←FL/R	FL/Y	FL/Y	←FL/R	←FL/R	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R

**Wiring Diagram**



<p>Revision " B "</p> <p>The Traffic Group, Inc. 410-583-8405 Fax 410-321-8458</p>	<p>APPROVALS</p> <p>TEAM LEADER, TRAFFIC ENGINEERING DESIGN DIVISION</p> <p>ASST. CHIEF TRAFFIC ENGINEERING DESIGN DIVISION</p> <p>CHEF, TRAFFIC ENGINEERING DESIGN DIVISION</p> <p>DIRECTOR, TRAFFIC &amp; SAFETY</p>		<p>MARYLAND DOT - STATE HIGHWAY ADMINISTRATION</p> <p>Office of Traffic &amp; Safety</p> <p>TRAFFIC ENGINEERING DESIGN DIVISION</p> <p>(General Information Plan)</p> <p><b>MD 24 at Wheel Road</b></p>	
	<p>DRAWN BY: Frank Hoeckel</p> <p>CHECKED BY:</p> <p>SCALE: N/A</p> <p>DATE: October 21, 1999</p>	<p>F.A.P. NO. N/A</p> <p>S.H.A. NO. XXX</p> <p>COUNTY: Harford</p> <p>LOG MILE: 12002400.22</p>	<p>TS NO. 3435B-GI</p> <p>T.I.M.S. NO. XXX</p>	<p>SHEET NO. 2 OF 2</p>

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