PROJECT DESCRIPTION

This Project involves the modification of the existing traffic control signal at the intersection of MD 152 and MD 165 in Harford County .
The modification involves adding exclusive/permissive left-turn phasing for northbound and southbound MD 152.

INTERSECTION OPERATION

The intersection currently operates in a NEMA four phase, full-traffic actuated mode with the MD 152 through movements operating concurrently and the MD 165 through movements operating concurrently.

EQUIPMENT TO BE FURNISHED BY SHA

9089	155	SF	LEFT TURN YIELD ON GREEN SIGN, SPAN MOUNTED R10-12 (36" X 42") - 2 EA SHIELD ASSEMBLY SIGNS, POLE MOUNTED MD 152 (48"X75") - 2 EA MD 152 (24"X51") - 2 EA SHIELD ASSEMBLY SIGNS, POLE MOUNTED MD 165 (48"X75") - 2 EA MD 165 (24"X51") - 2 EA
9000	1	EA	RETROFIT DETECTOR RACK
9000	1	EA	POWER SUPPLY
9000	3	EA	4 CHANNEL AMPLIFIER

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

100000	1	EA	MAINTENANCE OF TRAFFIC
869101	200	LF	FURNISH AND INSTALL STEEL SPAN WIRE- ¼INCH DIAMETER
805160	15	LF	FURNISH AND INSTALL 1 IN. LIQUID-TIGHT FLEXIBLE NON-METALLIC ELECTRICAL CONDUIT (DETECTOR WIRE SLEEVE)
862102	250	LF	FURNISH AND INSTALL SAW CUT FOR SIGNAL (LOOP DETECTOR)
862101	865	LF	FURNISH AND INSTALL LOOP WIRE ENCASED IN FLEXIBLE TUBINBG (NO. 14 AWG)
861104	320	LF	FURNISH AND INSTALL ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG) - ALUMINUM SHIELDED
861107	25	LF	FURNISH AND INSTALL ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)
861108	370	LF	FURNISH AND INSTALL ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)
813015	155.0	SF	INSTALL OVERHEAD SIGN
800000	1	EA	REMOVE AND DISPOSE OF EXISTING MATERIAL AND EQUIPMENT PER ASSIGNMENT
800000	6	EA	FURNISH AND INSTALL 8 INCH VEHICULAR TRAFFIC SIGNAL HEAD SECTION - BLACK FACE
800000	32	EA	FURNISH AND INSTALL 12 INCH VEHICULAR TRAFFIC SIGNAL HEAD SECTION - BLACK FACE

CONTACT LIST

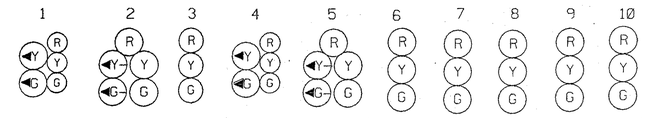
Mr. Dave Malkowski, District Engineer
Phone: (410) 321-2761

Mr. Joseph McMahon, Assistant District Engineer-Utilities
Phone: (410) 321-2841

Mr. Edward Rodenhizer, Chief
SHA Traffic Signal Shop
Phone: (410) 787-7650

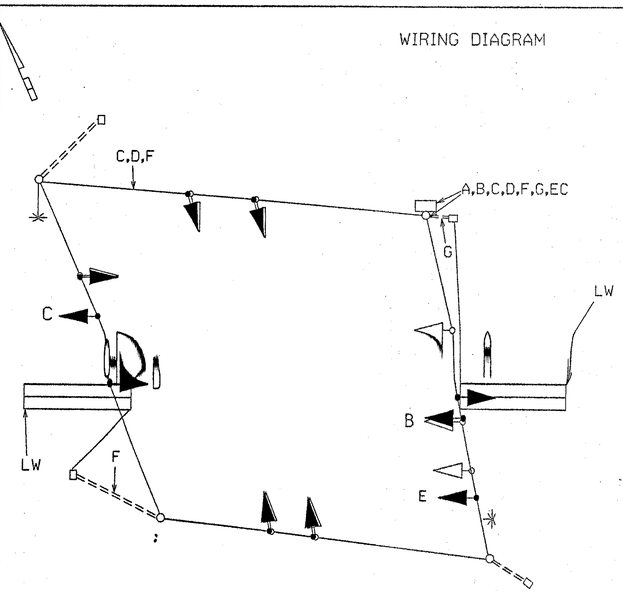
Mr. Richard Daff SR., Chief
Traffic Operations Division
Phone: (410) 787-7630

PHASE CHART



	1	2	3	4	5	6	7	8	9	10
Phase 1 & 5	◄G – R	◄G – R	R	◄G – R	◄G – R	R	R	R	R	R
1 & 5 Change	THE CONTROLLER MAY SKIP TO PHASES 1 & 6 OR 2 & 5 OR 2 & 6									
Phase 1 & 6	◄G – G	◄G – G	G	R	R	R	R	R	R	R
1 & 6 Change	◄Y – G	◄Y – G	G	R	R	R	R	R	R	R
Phase 2 & 5	R	R	R	◄G – G	◄G – G	G	R	R	R	R
2 & 5 Change	R	R	R	◄Y – G	◄Y – G	G	R	R	R	R
Phase 2 & 6	G	G	G	G	G	G	R	R	R	R
2 & 6 Change	Y	Y	Y	Y	Y	Y	R	R	R	R
Phase 4 & 8	R	R	R	R	R	R	G	G	G	G
4 & 8 Change	R	R	R	R	R	R	Y	Y	Y	Y
Flashing Operation	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R

WIRING DIAGRAM



A, B, C, D } 7-Conductor Electrical Cable (No. 14 A. W. G)

E } 5-Conductor Electrical Cable (No. 14 A. W. G)

F, G } 2-Conductor Electrical Cable (No. 14 A. W. G) aluminum shielded

LW } Loop Wire (No. 14 A.W.G.)

EC } Existing cable

REVISIONS					
D	INSTALL E/P LT PHASING ON MD 152 SHA NO. DT 2000				
BV					
C	REPLACE FAILED LOOP DETECTORS AW 573-501-085 FAP No.: AC-CMS-STPO-0005(191)E				3/94
B	INSTALLED LOOP DETECTOR FOR E/B MD 165				8/90
A	RELOCATE SIGNAL EQUIPMENT AND CUT LOOPS FOR GEOMETRIC WORK				9/29/87
DA	SR	ETP	DAZ		TH

APPROVALS

TEAM LEADER, TRAFFIC ENGINEERING DESIGN DIVISION

ASST. CHIEF TRAFFIC ENGINEERING DESIGN DIVISION

CHIEF, TRAFFIC ENGINEERING DESIGN DIVISION

DIRECTOR, TRAFFIC & SAFETY

MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION

MD 152 @ MD 165

DRAWN BY: BRIGIDA VDOORNIK	F.A.P. NO.		TS NO. 1737 D	SHEET NO.	
CHECKED BY:	S.H.A. NO.	H-803-501-485			
SCALE:	COUNTY:	HARFORD	T.I.M.S. NO. D-962	02 OF 02	
DATE: 08/04/00	LOG MILE:	1215201 3.35			