

PROJECT DESCRIPTION

I. GENERAL

This project involves the replacement of inductive loop presence detection with overhead video detection at the intersection of US-113 and MD 376 and installing non-invasive probes on US-113 for passage detection. This replacement is due to the upcoming milling and overlay project on MD 376.

II. INTERSECTION OPERATION

- The intersection will continue to operate in a NEMA (6) six-phase, semi-actuated mode, with the Northbound and Southbound left turns operating concurrently. Eastbound and Westbound movements operate concurrently as well. Firehouse pre-emption is also incorporated at this intersection.
- An existing NEMA full-traffic-actuate eight (8) phase controller housed in a NEMA size 6 base mounted cabinet shall be utilized at this location.

NOTES

- 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 Contractor shall maintain the continuous operation of all interconnect, vehicular, pedestrian detectors, and lighting devices. If any device is damaged by the contractor, it shall be repaired within 72 hours by the contractor at no cost to the Administration after notification by the Engineer.
- All existing traffic signal equipment removed shall become the property of the Contractor upon completion of the signal.
- The Contractor shall be responsible for identifying and labeling each existing cable utilizing the conduit between the signal cabinet and the nearest handhole and removing from all conduits, handholes, and the cabinet any unused cables prior to the installation of new cables. The contractor shall be responsible for terminating all signal cable to the appropriate terminals and properly labeling each cable.

CONTACTS

DISTRICT	OFFICE OF TRAFFIC AND SAFETY
MR. DONNIE L. DREW DISTRICT ENGINEER 410-677-4006	MR. RICHARD DAFF SR. CHIEF, TRAFFIC OPERATIONS 410-787-7630
MR. KENNETH CIMINO ASSISTANT DISTRICT ENGINEER - TRAFFIC 410-677-4040	MR. ROBERT SNYDER ASSISTANT DIVISION CHIEF, TRAFFIC OPERATIONS 410-787-7630
MR. BRUCE W. POOLE UTILITY ENGINEER 410-677-4082	MR. ED RODENHIZER TEAM LEADER SIGNAL OPERATIONS 410-787-7650
MR. GREG HOLSEY ASSISTANT DISTRICT ENGINEER - CONSTRUCTION 410-677-4020	MR. EUGENE BAILEY TEAM LEADER SIGN OPERATIONS 410-787-7670
MR. WAYNE WEICHMAN ASSISTANT DISTRICT ENGINEER - MAINTENANCE 410-677-4010	MS. DARLENE EIDE SUPPLY OFFICER IV (SIGNAL SHOP WAREHOUSE) 410-787-7668

EQUIPMENT LIST

A. EQUIPMENT TO BE FURNISHED BY STATE HIGHWAY ADMINISTRATION

ITEM NO.	DESCRIPTION	UNITS	QUANTITY
9086	VIDEO DETECTION INTERFACE EQUIPMENT: 1-4	EA	1

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

ITEM NO.	DESCRIPTION	UNITS	QUANTITY
1003	MAINTENANCE OF TRAFFIC PER ASSIGNMENT	EA	1
8005	ADJUST HANDHOLE TO GRADE INCLUDING COLLAR	EA	7
8007	ANY SIZE LIGHTING ARM ON SIGNAL STRUCTURE (FOR VIDEO DETECTION)	EA	2
8023	NONINVASIVE DETECTOR (ANY LENGTH) LEAD IN CABLE UP TO 1000'	EA	2
8024	REMOVE & DISPOSE OF EQUIPMENT (PER ASSIGNMENT)	EA	1
8028	VIDEO DETECTION CAMERA AND CABLE (ANY LENGTH)	EA	4
8034	UP TO 4 INCH SCHEDULE 80 RIGID PVC CONDUIT-BORED	LF	120
9041	WEATHERHEAD-UP TO 3-INCH	EA	1
8044	FURNISH AND INSTALL ELECTRICAL HANDHOLE	EA	4

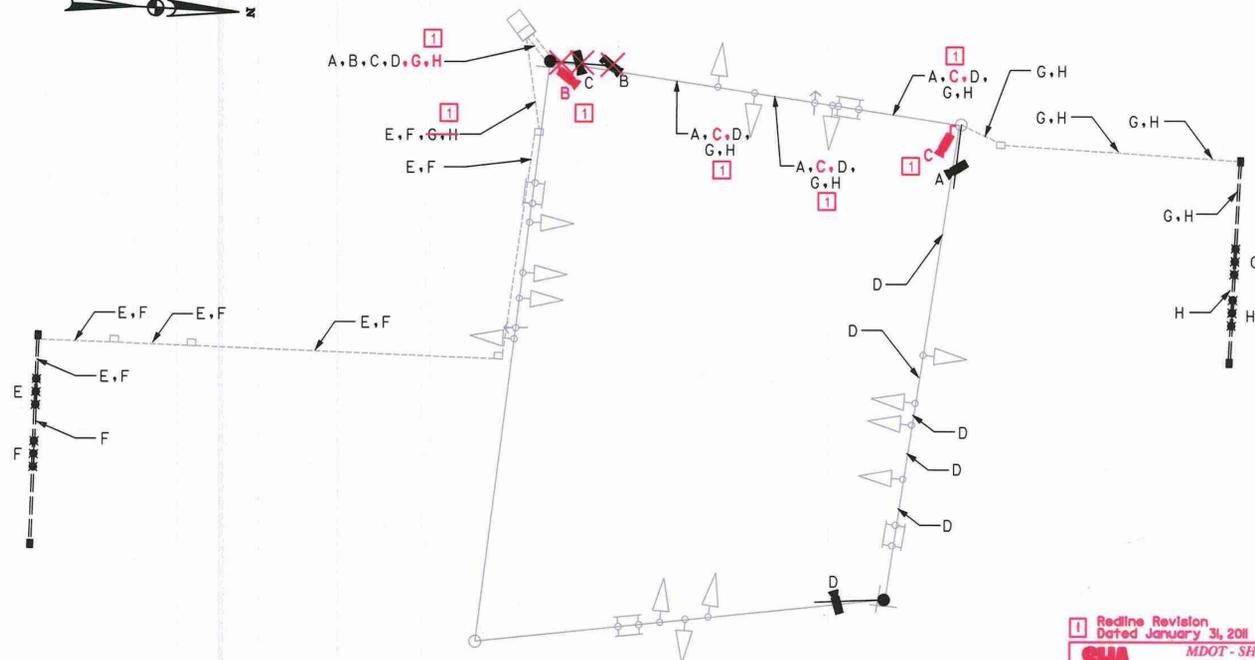
C. IF THE CABINET IS TO BE REMOVED SHA FORCES SHALL REMOVE THE CONTROLLER AND ALL AUXILIARY EQUIPMENT FROM THE CONTROLLER CABINET. THE CABINET AND ALL OTHER MATERIALS TO BE REMOVED BY THE CONTRACTOR SHALL BECOME THE PROPERTY OF THE CONTRACTOR.



PHASE CHART

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
PHASE 1 AND 5	←G-	←G-	R	R	←G-	←G-	R	R	R	R	R	R	R	R
1 AND 5 CHANGE MAY CHANGE TO 1 AND 6, 2 AND 5, OR 2 AND 6														
PHASE 1 AND 6	←G-	←G-	G	G	←R-	←R-	R	R	R	R	R	R	R	R
1 CHANGE	←Y-	←Y-	G	G	←R-	←R-	R	R	R	R	R	R	R	R
PHASE 2 AND 5	←R-	←R-	R	R	←G-	←G-	G	G	R	R	R	R	R	R
5 CHANGE	←R-	←R-	R	R	←Y-	←Y-	G	G	R	R	R	R	R	R
PHASE 2 AND 6	←R-	←R-	G	G	←R-	←R-	G	G	R	R	R	R	R	R
2 AND 6 CHANGE	←R-	←R-	Y	Y	←R-	←R-	Y	Y	R	R	R	R	R	R
PHASE 4 AND 8	←R-	←R-	R	R	←R-	←R-	R	R	G	G	G	G	G	G
4 AND 8 CHANGE	←R-	←R-	R	R	←R-	←R-	R	R	R	Y	Y	Y	Y	Y
FLASHING OPERATION	FL/RA	FL/RA	FL/Y	FL/Y	FL/RA	FL/RA	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R
FIREHOUSE PRE-EMPTION PHASE 1 & 6	←G-	←G-	G	G	←R-	←R-	R	R	R	R	R	R	R	R
PRE-EMPTION CLEARANCE	←Y-	←Y-	Y	Y	←R-	←R-	R	R	R	R	R	R	R	R
PHASE 2 & 6 NORMAL OPERATION	←R-	←R-	G	G	←R-	←R-	G	G	R	R	R	R	R	R
FIREHOUSE PRE-EMPTION PHASE 4	←R-	←R-	R	R	←R-	←R-	R	R	R	R	G	G	G	G
PRE-EMPTION CLEARANCE	←R-	←R-	R	R	←R-	←R-	R	R	R	R	Y	Y	Y	Y
PHASE 2 & 6 NORMAL OPERATION	←R-	←R-	G	G	←R-	←R-	G	G	R	R	R	R	R	R

WIRING DIAGRAM



KEY

- A B C D } 3 CONDUCTOR CABLE FOR VIDEO DETECTION
- E F G H } NON-INVASIVE DETECTOR LEAD IN CABLES

Redline Revision Dated January 31, 2011
MDOT - SHA O.O.T.S.
S.H.A. Approval Date 1/31/2011
T.S. # 1739E T.I.M.S. # J797

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STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION
US-113 (WORCESTER HWY) AT MD 376 (BAY ST)
BERLIN, MARYLAND

GENERAL INFORMATION PLAN

SCALE 1" = 20'	DATE 02/10	CONTRACT NO. XX3536166
DESIGNED BY K. OWENS	COUNTY WORCESTER	
DRAWN BY K. OWENS	LOGMILE 23011328.08	
CHECKED BY A. GRIFFIN/PALADUQU	TIMS NO. J797	
F.A.P. NO.	TOD NO.	
TS NO. 1739 E	DRAWING pSG OF NO01	SHEET NO. 2 OF 2

BY: khodges