

PROJECT DESCRIPTION

GENERAL

THIS PROJECT INVOLVES THE INSTALLATION OF VIDEO DETECTION AND UPGRADING EXISTING SIGNAL HEADS TO LED SIGNAL HEADS. THIS PROJECT IS LOCATED ALONG MD 225 (HAWTHORNE ROAD) AT ROSE HILL ROAD/MARSHALLS CORNER ROAD IN CHARLES COUNTY, MARYLAND. MD 225 IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION.

INTERSECTION OPERATION

THE INTERSECTION OPERATION WILL REMAIN THE SAME.

CONTROLLER REQUIREMENTS

INSTALL A FULL-TRAFFIC-ACTUATED, EIGHT-PHASE CONTROLLER WITH ONE (1) FOUR-CHANNEL DETECTOR AMPLIFIER, VIDEO INTERFACE EQUIPMENT (1-4 CAMERAS), INTERSECTION MONITOR WITH BATTERY BACKUP FOR PHONE DROP AND ASSOCIATED HARNESSES HOUSED IN A NEMA SIZE "6" BASE MOUNTED CABINET.

PHONE DROP

UPON COMPLETION OF THIS PROJECT, THE CONTRACTOR SHALL NOTIFY MR. ROBERT SNYDER OF SHA AT (410) 787-7635 TO ARRANGE FOR THE PHONE LINE INSTALLATION. THE CONTRACTOR IS TO PROVIDE MR. SNYDER THE NEAREST STREET ADDRESS, ZIP CODE, AND PHONE NUMBER.

MAINTENANCE OF TRAFFIC

THE FOLLOWING TRAFFIC CONTROL STANDARDS SHALL BE REFERENCED FOR THE PROJECT. ADDITIONAL TRAFFIC CONTROL STANDARDS MAY BE USED AS DIRECTED BY THE ENGINEER.

STANDARD NO. MD-104.02-10 (FLAGGING OPERATION/2-LANE, 2-WAY)
STANDARD NO. MD-104.06-06 (MOBILE SERVICE WORK)

PROJECT CONTACTS

THE CONTACT PERSONS FOR SHA ARE AS FOLLOWS:

MS. KIMBERLY TRAN
ASSISTANT DISTRICT ENGINEER - TRAFFIC
PHONE: (410) 841-1019

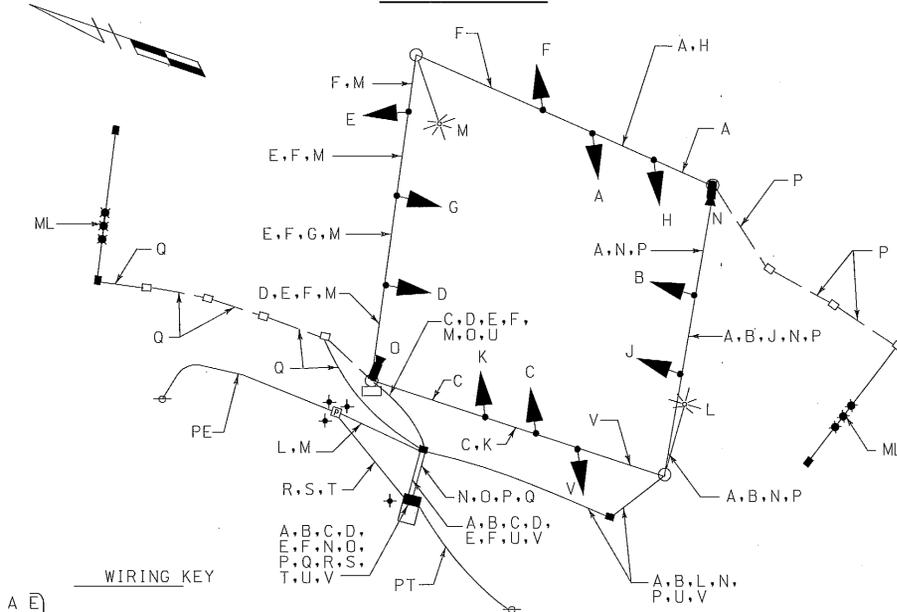
MR. JOHN MAYS
ASSISTANT DISTRICT ENGINEER - MAINTENANCE
PHONE: (410) 841-1013

MR. JOE HORTY
DISTRICT UTILITY ENGINEER
PHONE: (410) 841-1041

MR. RICHARD L. DAFF, SR.
CHIEF, TRAFFIC OPERATIONS DIVISION
PHONE: (410) 787-7630

MR. EDWARD RODENHUZER
SIGNAL OPERATIONS MANAGER
PHONE: (410) 787-7652

WIRING DIAGRAM



- WIRING KEY**
- A, B, C, D } 7-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
 - E, F, G, H } 5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
 - I, J, K, L } 2-CONDUCTOR ELECTRICAL CABLE (NO. 12 A.W.G. TC)
 - M } VIDEO CAMERA DETECTION LEAD-IN CABLE
 - N } MICROLOOP PROBE LEAD-IN
 - O } 1-CONDUCTOR ELECTRICAL CABLE (NO. 4 A.W.G.)
 - P } STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)
 - PT - PROPOSED UNDERGROUND TELEPHONE SERVICE
 - PE - PROPOSED UNDERGROUND ELECTRICAL SERVICE
 - ⚡ - 3/4 IN. X 10 FT. GROUND ROD

EQUIPMENT LIST "A"

A. EQUIPMENT TO BE SUPPLIED BY THE SHA

ITEM NO.	QUANTITY	DESCRIPTION
9016	1 EACH	4 CHANNEL DETECTOR AMPLIFIER
9042	1 EACH	CONTROLLER ASC II WITH TELEMETRY
9044	1 EACH	CONTROLLER CABINET, SIZE 6
9086	1 EACH	VIDEO DETECTION INTERFACE EQUIPMENT: 1-4 CAMERAS
9571	72 SF	SHEET ALUMINUM SIGNS TO CONSIST OF: - EACH ASSOCIATED SHIELD ASSEMBLY "EAST, MD, RIGHT ARROW" (30 IN. X 51 IN.) - POLE MOUNT - EACH ASSOCIATED SHIELD ASSEMBLY "EAST, MD, LEFT ARROW" (48 IN. X 75 IN.) - POLE MOUNT - EACH ASSOCIATED SHIELD ASSEMBLY "WEST, MD, RIGHT ARROW" (30 IN. X 51 IN.) - POLE MOUNT - EACH ASSOCIATED SHIELD ASSEMBLY "WEST, MD, LEFT ARROW" (48 IN. X 51 IN.) - POLE MOUNT

EQUIPMENT LIST "C"

C. EQUIPMENT TO BE REMOVED AND RETURNED TO SHA

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.

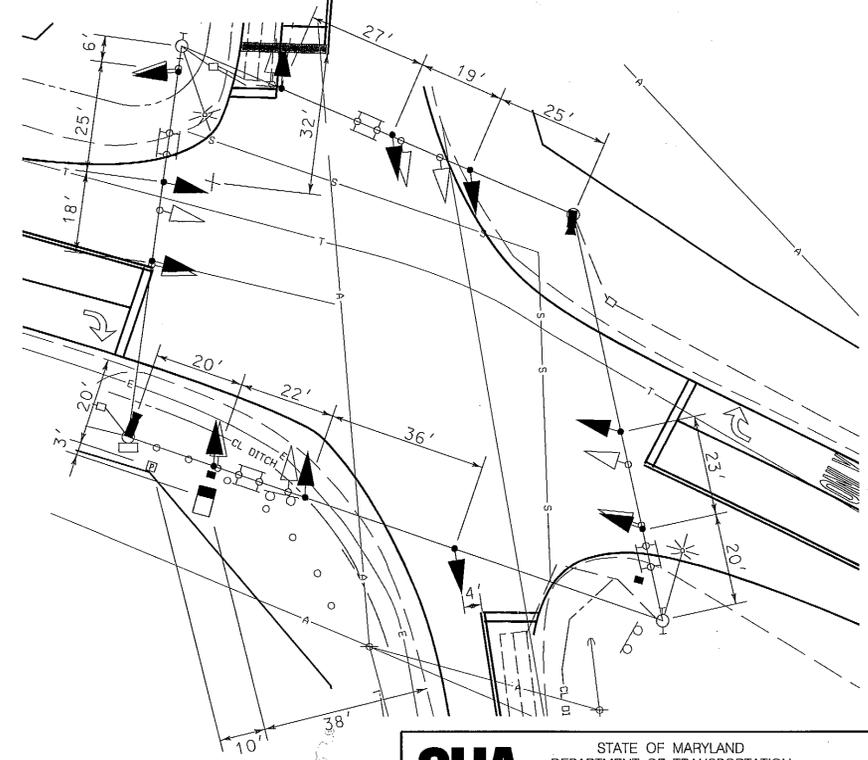
EQUIPMENT LIST "B"

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

ITEM NO.	QUANTITY	DESCRIPTION
1001	1 EACH	MAINTENANCE OF TRAFFIC
1003	30 L.F.	REMOVAL OF EXISTING PAVEMENT LINE MARKINGS - ANY WIDTH
2002	2 C.Y.	TEST PIT EXCAVATION
5003	20 L.F.	24 INCH LEAD FREE RELECTIVE THERMOPLASTIC PAVEMENT MARKINGS
8001	37 EACH	WHITE 12 INCH (R,Y,G) LED SIGNAL HEAD SECTION
8012	2 EACH	CONDUIT BEND IN EXISTING BASE
8013	1 EACH	EMBEDDED METERED SERVICE PEDESTAL
8017	1 EACH	REMOVE & DISPOSE OF EQUIPMENT (PER ASSIGNMENT)
8020	2 EACH	VIDEO DETECTION CAMERA ARM
8025	400 L.F.	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 12 AWG) - TRAY CABLE
8026	280 L.F.	UP TO 4 INCH SCHEDULE 80 RIGID PVC CONDUIT - BORED
8028	290 L.F.	UP TO 4 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
8034	150 L.F.	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
8039	85 L.F.	ELECTRICAL CABLE -1 CONDUCTOR NO. 4 AWG-THHN/THWN
8043	1 EACH	NONINVASIVE DETECTOR, 500 FOOT LEAD IN CABLE
8044	1 EACH	NONINVASIVE DETECTOR, 1000 FOOT LEAD IN CABLE
8045	6 EACH	FURNISH AND INSTALL ELECTRICAL HANDHOLE
8047	72 SF	INSTALL OVERHEAD SIGN
8048	2 EACH	VIDEO DETECTION CAMERA AND CABLE UP TO 500 FT
8058	85 L.F.	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)
8059	1440 L.F.	ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)
8067	1 EACH	INSTALL CONTROLLER AND CABINET - BASE MOUNT
8074	10 L.F.	5 INCH LEAD FREE YELLOW REFLECTIVE THERMOPLASTIC PAVMENT MARKINGS

DIMENSION DIAGRAM

SCALE: 1" = 20'



PHASE CHART

	1	2	3	4	5	6	7	8	9	10	11	
	(R)											
	(Y)											
	(G)											
PHASE 2 + 6	G	G	G	G	G	R	R	R	R	R	R	←
2 + 6 CHANGE	Y	Y	Y	Y	Y	R	R	R	R	R	R	←
PHASE 3	R	R	R	R	R	G	G	G	R	R	R	←
3 CHANGE	R	R	R	R	R	Y	Y	Y	R	R	R	←
PHASE 4	R	R	R	R	R	R	R	R	G	G	G	←
4 CHANGE	R	R	R	R	R	R	R	R	Y	Y	Y	←
FLASHING OPERATION	FLY	FLY	FLY	FLY	FLY	FLR	FLR	FLR	FLR	FLR	FLR	←

TOD NO: XX448-43
SHA NO: CH351A54/B54
MD 225@ROSE HILL RD/MARSHALLS CORNER RD

SHA STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION
MD 225 at Rose Hill Road
and Marshalls Corner Road

REVISIONS

GENERAL INFORMATION SHEET

SCALE	NONE	DATE	8/2/2009	CONTRACT NO.	XX4485185
DESIGNED BY	B. DONOWAY	COUNTY	Charles		
DRAWN BY	B. DONOWAY	LOGMILE	08022507.37		
CHECKED BY	N. LEARY	TIMS NO.	J559		
F.A.P. NO.		TOD NO.			
TS NO.	2401 B	DRAWING	TSP-2	OF	2
		SHEET NO.	2	OF	2

WR&A
WHITMAN, REQUARDT & ASSOCIATES, LLP
801 South Caroline Street, Baltimore, Maryland 21213

BY: bdonoway