PROJECT DESCRIPTION

I. GENERAL

THIS PROJECT INVOLVES THE MODIFICATION OF THE EXISTING TRAFFIC CONTROL SIGNAL INTERSECTION OF US 40 (PULASKI HWY) AND MD 222 (PERRYVILLE RD) AND AIKEN AVE IN CECIL COUNTY. THE MODIFICATION WILL UPGRADE VIDEO DETECTION EQUIPMENT FOR ALL LEGS AND INSTALL NON-INVASIVE MICRO-LOOP PROBES ALONG WESTBOUND US 40. US 40 IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION.

II. INTERSECTION OPERATION

1. THE INTERSECTION OPERATES IN A NEMA SIX (6) PHASE, FULLY- ACTUATED MODE WITH EMERGENCY PRE-EMPTION IN THE AIKEN AVE NORTHBOUND APPROACH AND PEDESTRIAN WARNING HIBS IN THE EASTBOUND DIRECTION. MAINLINE US 40 OPERATES WITH AN EXCLUSIVE EASTBOUND LEAD/ WESTBOUND LAG LEFT TURN PHASE AND ASSOCIATED PEDESTRIAN PHASES. MD 222 OPERATES AS A SPLIT PHASE. NORTHBOUND (AIKEN AVE) HAS AN ALTERNATE PEDESTRIAN PHASE.

2. AN EXISTING NEMA FULL-TRAFFIC-ACTUATED, EIGHT (8) PHASE CONTROLLER IN A NEMA SIZE "6" BASE MOUNTED CABINET SHALL BE UTILIZED AT THIS LOCATION. VIDEO DETECTION INTERFACE SHALL BE INSTALLED INTO THE CABINET BY SHA FORCES.

CONTACTS

DISTRICT (DISTRICT 2)

MR. JEFFERY WENTZ
ASSISTANT DISTRICT ENGINEER - TRAFFIC
410-810-3240

MR. WM NORRIS EMBERT
ASSISTANT DISTRICT ENGINEER - CONSTRUCTION
410-810-3270

MR. MIKE LEWIS
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OFFICE OF TRAFFIC AND SAFETY

MS. CORREN JOHNSON
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MR. MICHAEL STOCKER
SIGNAL SHOP WAREHOUSE
410-787-7696

EQUIPMENT LIST

A. EQUIPMENT TO BE FURNISHED BY STATE HIGHWAY ADMINISTRATION

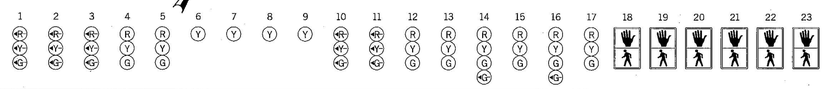
ITEM NO.	QUANTITY	DESCRIPTION
9086	1 EA	[UPDATED] VIDEO DETECTION INTERFACE EQUIPMENT: 1-4 CAMERAS

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

ITEM NO.	QUANTITY	DESCRIPTION
1002	1 EA	MAINTENANCE OF TRAFFIC
8007	1 EA	REMOVE & DISPOSE OF MATERIAL & EQUIPMENT PER ASSIGNMENT
8008	4 EA	VIDEO DETECTION CAMERA & CABLE
8013	165 LF	SCHEDULE 80 RIGID PVC CONDUIT UP TO 4 INCH - BORED
8015	55 LF	SCHEDULE 80 RIGID PVC CONDUIT UP TO 4 INCH - TRENCHED
8016	135 LF	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
8017	2 EA	NONINVASIVE DETECTOR, 1000 FOOT LEAD IN CABLE
8018	3 EA	FURNISH AND INSTALL ELECTRICAL HANDHOLE

C. EXISTING SOLO CAMERA EQUIPMENT REMOVED SHALL BE RETURED TO SHA. ALL OTHER MATERIALS TO BE REMOVED BY THE CONTRACTOR SHALL BECOME THE PROPERTY OF THE SIGNAL CONTRACTOR UPON COMPLETION OF THE SIGNAL MODIFICATIONS.

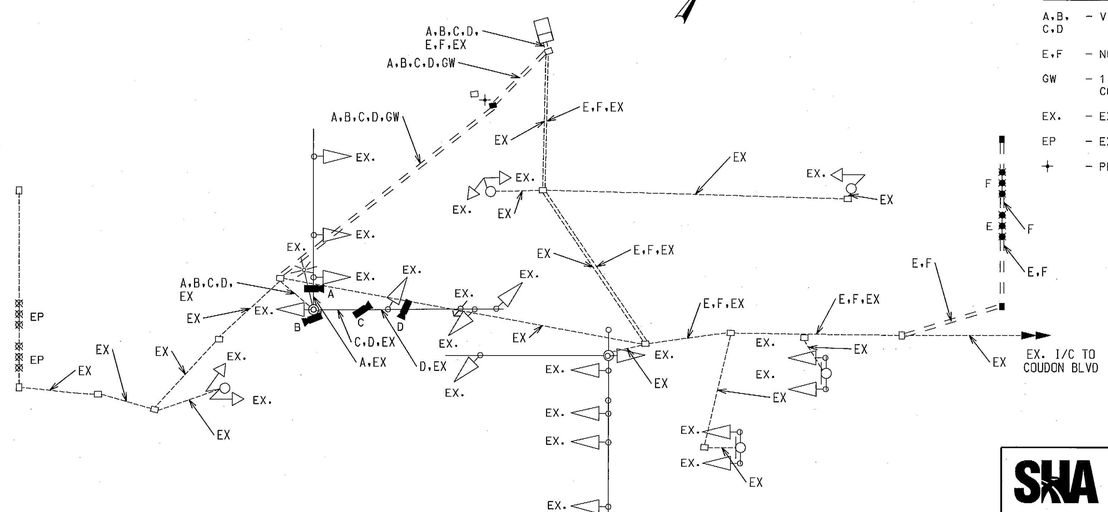
PHASE CHART



	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
PHASE 1 AND 6	◄G–	◄G–	◄G–	G	G	FL/Y*	FL/Y*	FL/Y*	FL/Y*	◄R–	◄R–	R	R	R	R	R	R	DW	WK	WK	DW	DW	DW	
1 CHANGE	◄Y–	◄Y–	◄Y–	G	G	FL/Y*	FL/Y*	FL/Y*	FL/Y*	◄R–	◄R–	R	R	R	R	R	R	DW	WK	WK	DW	DW	DW	
PHASE 2 AND 6	◄R–	◄R–	◄R–	G	G	FL/Y*	FL/Y*	FL/Y*	FL/Y*	◄R–	◄R–	G	G	R	R	R	R	WK	WK	WK	WK	DW	DW	
PED CLEARANCE PHASE	◄R–	◄R–	◄R–	G	G	FL/Y*	FL/Y*	FL/Y*	FL/Y*	◄R–	◄R–	G	G	R	R	R	R	FL/DW	FL/DW	FL/DW	FL/DW	DW	DW	
2 AND 6 CHANGE	◄R–	◄R–	◄R–	Y	Y	FL/Y*	FL/Y*	FL/Y*	FL/Y*	◄R–	◄R–	Y	Y	R	R	R	R	DW	DW	DW	DW	DW	DW	
PHASE 2 AND 5	◄R–	◄R–	◄R–	R	R	FL/Y*	FL/Y*	FL/Y*	FL/Y*	◄G–	◄G–	G	G	R	R	R	R	DW	DW	DW	DW	DW	DW	
2 AND 5 CHANGE	◄R–	◄R–	◄R–	R	R	FL/Y*	FL/Y*	FL/Y*	FL/Y*	◄Y–	◄Y–	Y	Y	R	R	R	R	DW	DW	DW	DW	DW	DW	
PHASE 3	◄R–	◄R–	◄R–	R	R	FL/Y*	FL/Y*	FL/Y*	FL/Y*	◄R–	◄R–	R	R	G/◄G–	G	R	R	DW	DW	DW	DW	DW	DW	
3 CHANGE	◄R–	◄R–	◄R–	R	R	FL/Y*	FL/Y*	FL/Y*	FL/Y*	◄R–	◄R–	R	R	Y	Y	R	R	DW	DW	DW	DW	DW	DW	
PHASE 4	◄R–	◄R–	◄R–	R	R	FL/Y*	FL/Y*	FL/Y*	FL/Y*	◄R–	◄R–	R	R	R	R	G/◄G–	G	DW	DW	DW	DW	DW	DW	
4 CHANGE	◄R–	◄R–	◄R–	R	R	FL/Y*	FL/Y*	FL/Y*	FL/Y*	◄R–	◄R–	R	R	R	R	Y	Y	DW	DW	DW	DW	DW	DW	
PHASE 4 ALT	◄R–	◄R–	◄R–	R	R	FL/Y*	FL/Y*	FL/Y*	FL/Y*	◄R–	◄R–	R	R	R	R	G/◄G–	G	DW	DW	DW	DW	WK	WK	
PED CLEARANCE PHASE	◄R–	◄R–	◄R–	R	R	FL/Y*	FL/Y*	FL/Y*	FL/Y*	◄R–	◄R–	R	R	R	R	G/◄G–	G	DW	DW	DW	DW	FL/DW	FL/DW	
4 ALT CHANGE	◄R–	◄R–	◄R–	R	R	FL/Y*	FL/Y*	FL/Y*	FL/Y*	◄R–	◄R–	R	R	R	R	Y	Y	DW	DW	DW	DW	DW	DW	
FLASHING OPERATION	FL/◄R–	FL/◄R–	FL/◄R–	FL/Y	FL/Y	FL/Y*	FL/Y*	FL/Y*	FL/Y*	FL/◄R–	FL/◄R–	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	DARK	DARK	DARK	DARK	DARK	DARK	
PRE-EMPT 1	◄R–	◄R–	◄R–	R	R	FL/Y*	FL/Y*	FL/Y*	FL/Y*	◄R–	◄R–	R	R	G/◄G–	G	R	R	DW	DW	DW	DW	DW	DW	

*NOTE: CONTINUOUS, ALTERNATE FLASH

WIRING DIAGRAM



WIRING KEY:

A,B, C,D - VIDEO DETECTION CAMERA LEAD-IN CABLE

E,F - NON-INVASIVE MICROLOOP PROBE LEAD-IN CABLE

GW - 1 CONDUCTOR (NO. 6 A.W.G.) STRANDED BARE COPPER GROUND WIRE

EX. - EXISTING SIGNAL CABLE

EP - EXISTING PROBES

+ - PROPOSED GROUND ROD

TOD NO: XX662-07
SHA NO: CE398B55
US 40 @ MD 222/US 40 @ Red Toad Road

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION

US 40 (PULASKI HWY) AT MD 222 (PERRYVILE RD)

PERRYVILLE, MD

GENERAL INFORMATION SHEET

SCALE N.T.S. DATE MAY 20, 2013 CONTRACT NO. XX6625185

DESIGNED BY ESA
DRAWN BY ESA
CHECKED BY JK /MF
F.A.P. NO.

COUNTY CECIL
LOGMILE 07004000.18
TIMS NO. L793
TOD NO.

TS NO. 290 L | DRAWING SG-02 OF 02 | SHEET NO. 02 OF 02

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BY: Kurgansky -

SEE REVISION "K" TIMS #L858 (2/1/2013) FOR APS/CPS INSTALLATION NOT SHOWN ON THIS PLAN