PROJECT DESCRIPTION

I. GENERAL

THIS PROJECT INVOLVES THE MODIFICATION OF THE EXISTING TRAFFIC CONTROL SIGNAL AT THE INTERSECTION OF US 40 (PULASKI HWY) AND MD 279 (ELKTON RD) AND MD 7 (E. OLD PHILADELPHIA RD) IN CECIL COUNTY. THE MODIFICATION WILL UPGRADE VIDEO DETECTION AND INSTALL NON-INVASIVE PROBES ALONG 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. MAINLINE US 40 OPERATES WITH AN EXLUSIVE LEFT TURN PHASE AND CONCURRENT THROUGH MOVEMENTS. MD 279 AND MD 7 OPERATE ON A SPLIT PHASE WITH SOUTHBOUND LEG AS THE LEAD 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
ASSISTANT DISTRICT ENGINEER - MAINTENANCE
410-810-3250

OFFICE OF TRAFFIC AND SAFETY

MS. CORREN JOHNSON
CHIEF, TRAFFIC OPERATIONS DIVISION
410-787-7630

VACANT
ASSISTANT CHIEF, TRAFFIC OPERATIONS DIVISION
410-787-7630

MR. EDWARD RODENHIZER
MANAGER, SIGNAL OPERATIONS SECTION
410-787-7650

MR. EUGENE BAILEY
MANAGER, SIGN OPERATIONS SECTION
410-787-7670

MR. MICHAEL STOCKER
SIGNAL SHOP WAREHOUSE
410-787-7696

EQUIPMENT LIST

A. EQUIPMENT TO BE FURNISHED BY STATE HIGHWAY ADMINISTRATION

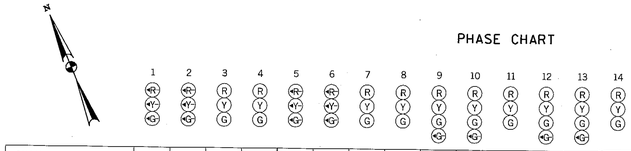
ITEM NO.	QUANTITY	DESCRIPTION
9087	1 EA	(UPDATED) VIDEO DETECTION INTERFACE EQUIPMENT: 5-8 CAMERAS
9570	26 SF	SHEET ALUMINUM GROUND MOUNTED SIGN
		1 EA - M1-1 'I-95' - 24"X24"
		1 EA - M1-5 'MD 7' - 24"X24"
		1 EA - M1-5 'MD 279' - 30"X24"
		1 EA - M3-1 'NORTH' - 24"X12"
		1 EA - M3-4 'WEST' - 24"X12"
		1 EA - M4-5 'TO' - 24"x12"
		2 EA - M6-1R - 21"X15"
		1 EA - M6-2 - 21"X15"
		1 EA - OM-1(1) - 18"X18"
9571	76 SF	SHEET ALUMINUM MAST ARM/POLE MOUNTED SIGN
		1 EA - M1-5(6) - 'WEST US 40 ->' - 24" X 48"
		1 EA - M1-5(6) - 'WEST US 40 <-' - 36" X 72"
		1 EA - M1-5(6) - 'EAST US 40 ->' - 24" X 48"
		1 EA - M1-5(6) - 'EAST US 40 <-' - 36" X 72"
		1 EA - M1-5(6) - 'NORTH MD 279 <-' - 48" X 72"

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 PRE ASSIGNMENT
8008	5 EA	VIDEO DETECTION CAMERA & CABLE
8013	75 LF	SCHEDULE 80 RIGID PVC CONDUIT UP TO 4 INCH - BORED
8014	260 LF	SCHEDULE 80 RIGID PVC CONDUIT UP TO 4 INCH - SLOTTED
8015	845 LF	SCHEDULE 80 RIGID PVC CONDUIT UP TO 4 INCH - TRENCHED
8017	4 EA	NONINVASIVE DETECTOR, 1000 FOOT LEAD IN CABLE
8018	9 EA	FURNISH AND INSTALL ELECTRICAL HANDHOLE
8032-A	102 SF	INSTALL OVERHEAD OR GROUND MOUNTED SIGNS

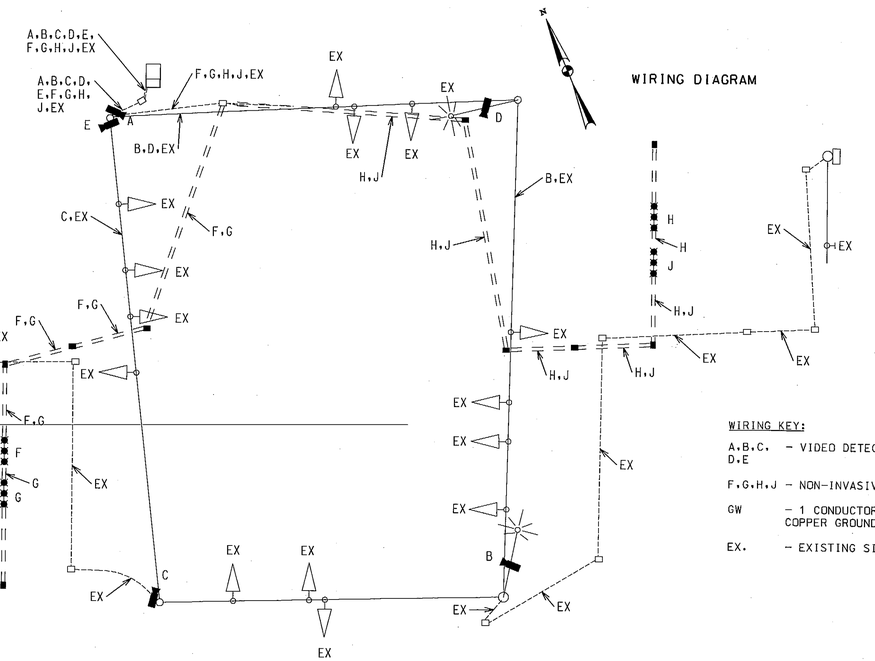
C. EXISTING SOLO CAMERA EQUIPMENT REMOVED SHALL BE RETURNED TO THE SHA. ALL OTHER MATERIALS TO BE REMOVED BY THE CONTRACTOR SHALL BECOME THE PROPERTY OF THE SIGNAL CONTRACTOR UPON COMPLETION OF THE SIGNAL MODIFICATIONS.

PHASE CHART



	1	2	3	4	5	6	7	8	9	10	11	12	13	14
PHASE 1 AND 5	◄G-	◄G-	R	R	◄G-	◄G-	R	R	R	R	R	R	R	R
1 AND 5 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 3	◄R-	◄R-	R	R	◄R-	◄R-	R	R	R	R	R	G/◄G-	G/◄G-	G
3 CHANGE	◄R-	◄R-	R	R	◄R-	◄R-	R	R	R	R	R	Y	Y	Y
PHASE 4	◄R-	◄R-	R	R	◄R-	◄R-	R	R	G/◄G-	G/◄G-	G	R	R	R
4 CHANGE	◄R-	◄R-	R	R	◄R-	◄R-	R	R	Y	Y	Y	R	R	R
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	FL/R	FL/R

WIRING DIAGRAM



WIRING KEY:

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

F,G,H,J - NON-INVASIVE MICROLOOP PROBE LEAD-IN CABLE

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

EX. - EXISTING SIGNAL CABLE

TOD NO: XX662-08
SHA NO: CE398B56
US 40 @ MD 272/US 40 @ MD 279, MD 7, US 40 @ Mechanics

SHA
STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION

US 40 (PULASKI HWY) AT MD 279 AND MD 7

ELKTON, 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 0700401 3.40
TIMS NO. L789
TOD NO.

TS NO.0262E-GI | DRAWING SG-02 OF 02 | SHEET NO. 02 OF 02

PARSONS BRINCKERHOFF
100 S. Charles Street
Tower 1, 10th Floor
Baltimore, MD 21201
(Ph) 410-787-5050
(Fax) 410-727-4608
http://www.pbworld.com

PLOTTED: Thursday, June 13, 2013 AT 10:19 AM
FILE: T:\173124A-TrafficDesignServices\TRF\123\Plans\pSG-N001_US 40 @ MD 279 & MD 7.dgn
BY: Kurgansky -