PROJECT DESCRIPTION

GENERAL

THIS PROJECT INVOLVES THE INSTALLATION OF A NEW TRAFFIC CONTROL SIGNAL WITH INTERCONNECT AT THE INTERSECTION OF MD 45 (YORK ROAD) AND SISTER PIERRE DRIVE IN BALTIMORE COUNTY, MARYLAND. MD 45 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

INTERSECTION OPERATION

THE INTERSECTION WILL OPERATE IN A NEMA FOUR-PHASE, FULL-TRAFFIC-ACTUATED MODE WITH THE MD 45 APPROACHES OPERATING CONCURRENTLY AND SISTER PIERRE DRIVE APPROACH OPERATING ALONE.

EXCLUSIVE/PERMISSIVE LEFT-TURN PHASING IS PROVIDED FOR NORTHBOUND MD 45.

AN ALTERNATE PEDESTRIAN PHASE IS PROVIDED ON THE NORTH LEG OF MD 45.

CONTROLLER REQUIREMENTS

INSTALL A FULL-TRAFFIC-ACTUATED, EIGHT-PHASE CONTROLLER WITH VIDEO INTERFACE EQUIPMENT (1-4 CAMERAS) AND SYSTEM PACKAGE 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.

STANDARD NO. MD-104.03-03 (LEFT LANE CLOSURE)
STANDARD NO. MD-104.03-05 (RIGHT LANE CLOSURE)
STANDARD NO. MD-104.03-07 (PARTIAL ROADWAY CLOSURE)
STANDARD NO. MD-104.03-09 (INTERSECTION FAR-LEFT LANE CLOSURE)
STANDARD NO. MD-104.03-11 (INTERSECTION FAR-RIGHT LANE CLOSURE)
STANDARD NO. MD-104.03-13 (INTERSECTION FAR-SIDE CLOSURE)

PROJECT CONTACTS

THE CONTACT PERSONS FOR SHA ARE AS FOLLOWS:

MR. RANDALL SCOTT
ASSISTANT DISTRICT ENGINEER - TRAFFIC
PHONE: (410) 321-2781/2785

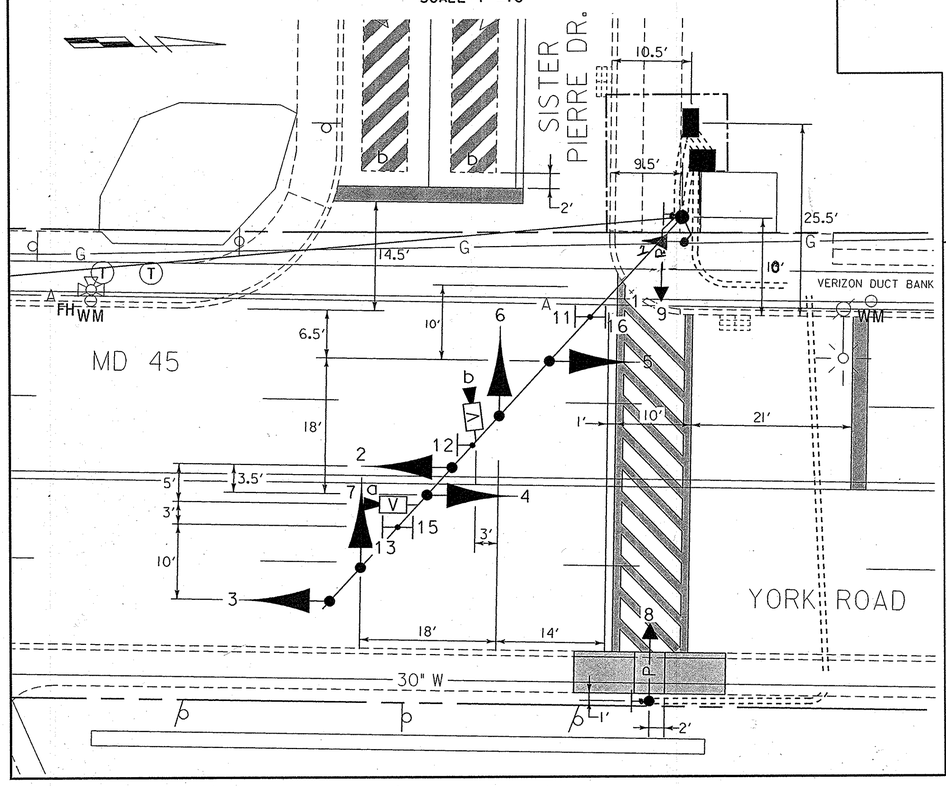
MR. STEVE MARCISZEWSKI
ASSISTANT DISTRICT ENGINEER - MAINTENANCE
PHONE: (410) 321-2761

MR. MIKE PASQUARIELLO
DISTRICT UTILITY ENGINEER
PHONE: (410) 321-2841

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

DIMENSION DIAGRAM

SCALE 1"=10'

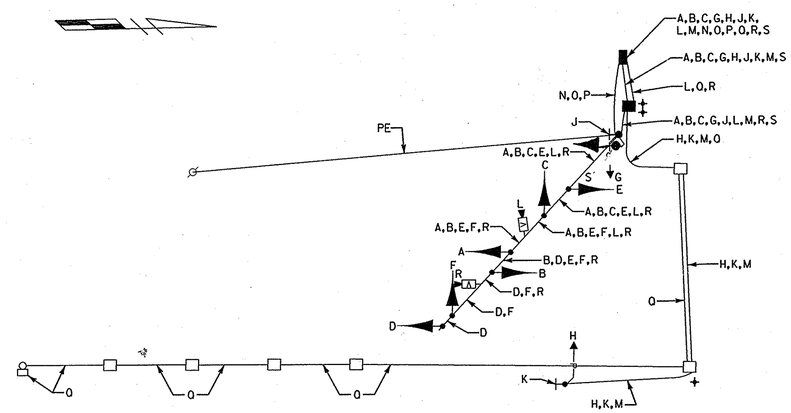


EQUIPMENT LIST "A"

A. EQUIPMENT TO BE SUPPLIED BY THE SHA

ITEM NO.	QUANTITY	DESCRIPTION
9044	1 EACH	EIGHT-PHASE, FULL-TRAFFIC-ACTUATED CONTROLLER WITH SYSTEM PACKAGE HOUSED IN A NEMA SIZE "6" BASE MOUNTED CABINET
9086	1 EACH	VIDEO INTERFACE EQUIPMENT: 1 - 4 CAMERAS
9571	61 S.F.	SHEET ALUMINUM SIGNS TO CONSIST OF :
		- 3 EACH D-3(1) SIGN (VARIABLE x 16 IN.) DUAL FACED - MAST ARM MOUNT
		- 2 EACH R10-12 SIGN (36 IN. x 42 IN.) - MAST ARM MOUNT
		- 2 EACH W3-3 SIGN (36 IN. x 36 IN.) WITH "NEW" PANEL (24 IN. x 24 IN.) AND FLAG - GROUND MOUNT
		- 2 EACH R10-4(1) SIGN (9 IN. x 12 IN.) - POLE MOUNT

WIRING DIAGRAM



WIRING KEY

A B C S } 7-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)

D E F G H } 5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)

J K } 2-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)

L R } VIDEO CAMERA DETECTION LEAD-IN CABLE

M } STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)

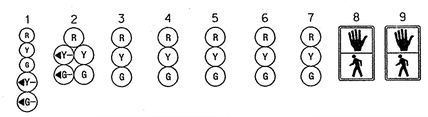
N O P } 1-CONDUCTOR ELECTRICAL CABLE (NO. 4 A.W.G.)

Q } 12-PAIR COMMUNICATION CABLE

PE/PT - PROPOSED OVERHEAD ELECTRICAL AND TELEPHONE SERVICE

+ - 3/4 IN. X 10 FT. GROUND ROD

PHASE CHART



	1	2	3	4	5	6	7	8	9
PHASE 1 + 6	G G	G G	G	R	R	R	R	DW	DW
1 + 6 CHANGE	G Y	G Y	G	R	R	R	R	DW	DW
PHASE 2 + 6	G	G	G	G	G	R	R	DW	DW
2 + 6 CHANGE	Y	Y	Y	Y	Y	R	R	DW	DW
PHASE 4	R	R	R	R	R	G	G	DW	DW
4 CHANGE	R	R	R	R	R	Y	Y	DW	DW
PHASE 4 ALT	R	R	R	R	R	G	G	WK	WK
PED CLEARANCE	R	R	R	R	R	G	G	FL/DW	FL/DW
4 ALT CHANGE	R	R	R	R	R	Y	Y	DW	DW
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	DARK	DARK

EQUIPMENT LIST "B"

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

ITEM NO.	QUANTITY	DESCRIPTION
1001	1 EACH	MAINTENANCE OF TRAFFIC
2001	3 C.Y.	CLASS 2 EXCAVATION
2002	2 C.Y.	TEST PIT EXCAVATION
5003	500 L.F.	REMOVAL OF EXISTING PERMANENT PAVEMENT LINE MARKINGS - ANY WIDTH
5005	220 L.F.	12 INCH HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKINGS
5006	70 L.F.	24 INCH HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKINGS
6005	115 S.F.	4 INCH CONCRETE SIDEWALK
8001	8 C.Y.	CONCRETE FOR SIGNAL FOUNDATION
8003	14 EACH	12 INCH RED OR GREEN LED SIGNAL HEAD SECTION
8004	8 EACH	12 INCH YELLOW LED SIGNAL HEAD SECTION
8005	1 EACH	2-WIRE CENTRAL CONTROL UNIT
8007	2 EACH	8 INCH RED OR GREEN LED SIGNAL HEAD SECTION
8010	2 EACH	AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON
8013	2 EACH	CONTROL CABLE, 100 FT. VIDEO DETECTION CAMERA TO CONTROLLER
8021	2 EACH	LED 16 INCH COUNTDOWN PEDESTRIAN SIGNAL
8027	1 EACH	PED POLE (ANY SIZE)
8029	1 EACH	REMOVE AND DISPOSE OF EXISTING MATERIAL AND EQUIPMENT AS PER ASSIGNMENT
8038	330 L.F.	DISCONNECT, PULL-BACK & REROUTE CABLES
8040	10 S.F.	DETECTABLE WARNING SURFACE
8043	35 L.F.	WOOD SIGN SUPPORTS 4 INCH x 6 INCH
8044	110 L.F.	NO. 6 A.W.G. STRANDED BARE COPPER GROUND WIRE
8045	32 L.F.	1 IN. ELECTRICAL CONDUIT - GALVANIZED SLEEVE
8051	40 L.F.	2 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
8053	40 L.F.	4 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
8056	50 L.F.	4 INCH SCHEDULE 80 RIGID PVC CONDUIT - SLOTTED
8059	1 EACH	ELECTRICAL UTILITY SERVICE EQUIPMENT 120/240 VOLTS 60 AMPS
8061	90 L.F.	ELECTRICAL CABLE - 1 CONDUCTOR NO. 4 A.W.G - THHN/THWN
8067	1 EACH	FURNISH AND INSTALL ELECTRICAL HANDHOLE
8069	26 S.F.	INSTALL GROUND MOUNTED SIGN
8070	35 S.F.	INSTALL OVERHEAD SIGN
8071	2 EACH	VIDEO DETECTION CAMERA
8081	1 EACH	STEEL POLE WITH A SINGLE 70 FT. MAST ARM
8083	675 L.F.	12-PAIR COMMUNICATION CABLE, JELLYFILLED (UNDERGROUND)
8091	3 EACH	GROUND ROD - 3/4 INCH DIAMETER x 10 FOOT LENGTH
8099	195 L.F.	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 A.W.G)
8101	290 L.F.	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 A.W.G)
8102	340 L.F.	ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 A.W.G)
8112	1 EACH	INSTALL CONTROLLER AND CABINET - BASE MOUNT
NEG.	1 EACH	8 INCH YELLOW LED SIGNAL HEAD SECTION

EQUIPMENT LIST "C"

C. NO EQUIPMENT TO BE REMOVED AND RETURNED TO SHA

TOD No: AT717-18
SHA No: BA523A57/B57
Baltimore County

WR&A
Whitman, Requardt and Associates, LLP
801 South Caroline Street
Baltimore, Maryland 21231
(410) 235-3450

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

GENERAL INFORMATION SHEET
MD 45 (YORK ROAD) AND SISTER PIERRE DR.

DRAWN BY: S. BLOSS	F.A.P. NO.		TS NO. 4304	SHEET NO.	
CHECKED BY: N. LEARY	S.H.A. NO.	AT7175185			
SCALE: NONE	COUNTY:	BALTIMORE	T.I.M.S. NO. F746	2 OF 2	
DATE: 11/28/2005	LOG MILE:	0304500I.13			

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