

PROJECT DESCRIPTION

THIS PROJECT INVOLVES THE INSTALLATION OF APS AND SIGNS AT THE INTERSECTION OF MD 45 (YORK ROAD) AT WEST ROAD. MD 45 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

INTERSECTION OPERATION

THE INTERSECTION WILL CONTINUE TO OPERATE IN A NEMA SIX-PHASE FULL-TRAFFIC-ACTUATED MODE WITH AN ALTERNATE PEDESTRIAN PHASE FOR THE SOUTH LEG OF THE INTERSECTION. THE MD 45 LEFT TURNS OPERATE WITH EXCLUSIVE-PERMISSIVE PHASING. THE SIDE STREET APPROACHES OPERATE WITH SPLIT PHASING. A RIGHT TURN OVERLAP IS PROVIDED FOR THE WEST ROAD APPROACH. A CONCURRENT PEDESTRIAN PHASE WILL BE PROVIDED FOR THE WEST LEG OF THE INTERSECTION.

CONTROLLER REQUIREMENTS

THE EXISTING FULL-TRAFFIC-ACTUATED EIGHT-PHASE TRAFFIC SIGNAL CONTROLLER HOUSED IN A BASE MOUNTED CABINET SHALL REMAIN. A 2-WIRE APS CENTRAL CONTROL UNIT SHALL BE FURNISHED BY THE CONTRACTOR AND INSTALLED BY SHA.

SPECIAL NOTES

APS WILL FUNCTION AS FOLLOWS:

TO CROSS MD 45 (YORK ROAD):

- A. WHEN PEDESTRIAN LOCATES AND PRESSES PUSHBUTTON FOR AN EXTENDED TIME, THE PUSHBUTTON UNIT MESSAGE WILL BE "WAIT TO CROSS YORK AT WEST. WAIT."
- B. WHEN WALK PHASE BEGINS, THE MESSAGE WILL BE A RAPID TICK WHICH WILL LAST FOR THE DURATION OF THE WALK PHASE.

TO CROSS WEST ROAD:

- A. WHEN PEDESTRIAN LOCATES AND PRESSES PUSHBUTTON FOR AN EXTENDED TIME, THE PUSHBUTTON UNIT MESSAGE WILL BE "WAIT TO CROSS WEST AT YORK. WAIT."
- B. WHEN WALK PHASE BEGINS, THE MESSAGE WILL BE A RAPID TICK WHICH WILL LAST FOR THE DURATION OF THE WALK PHASE.

WIRING KEY	
A,E	5-CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
B,C,D	2-CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
Z	STRANDED BARE COPPER GROUND WIRE (NO. 6 AWG)
PF	EXISTING POWER FEED
EX	USE EXISTING CABLES
⊕	EXISTING GROUND ROD

CONTACT PERSONS FOR DISTRICT #4 ARE AS FOLLOWS:

MR. ERIN KUHN
ASSISTANT DISTRICT ENGINEER - TRAFFIC
PHONE: (410) 229-2381

MR. ANDRE FUTRELL
ASSISTANT DISTRICT ENGINEER - MAINTENANCE
(410) 229-2361

MR. JESSE FREE
ASSISTANT DISTRICT ENGINEER - CONSTRUCTION
(410) 229-2421

CONTACT PERSONS FOR OOTS ARE AS FOLLOWS:

MR. ED RODENHIZER
CHIEF, SIGNAL OPERATIONS
(410)787-7650

MR. ROBERT SNYDER
ASSISTANT DIVISION CHIEF
TRAFFIC OPERATIONS
(410)787-7630

MR. EUGENE BAILEY
CHIEF, SIGN OPERATIONS
(410)787-7676

EQUIPMENT LIST "A, B & C"

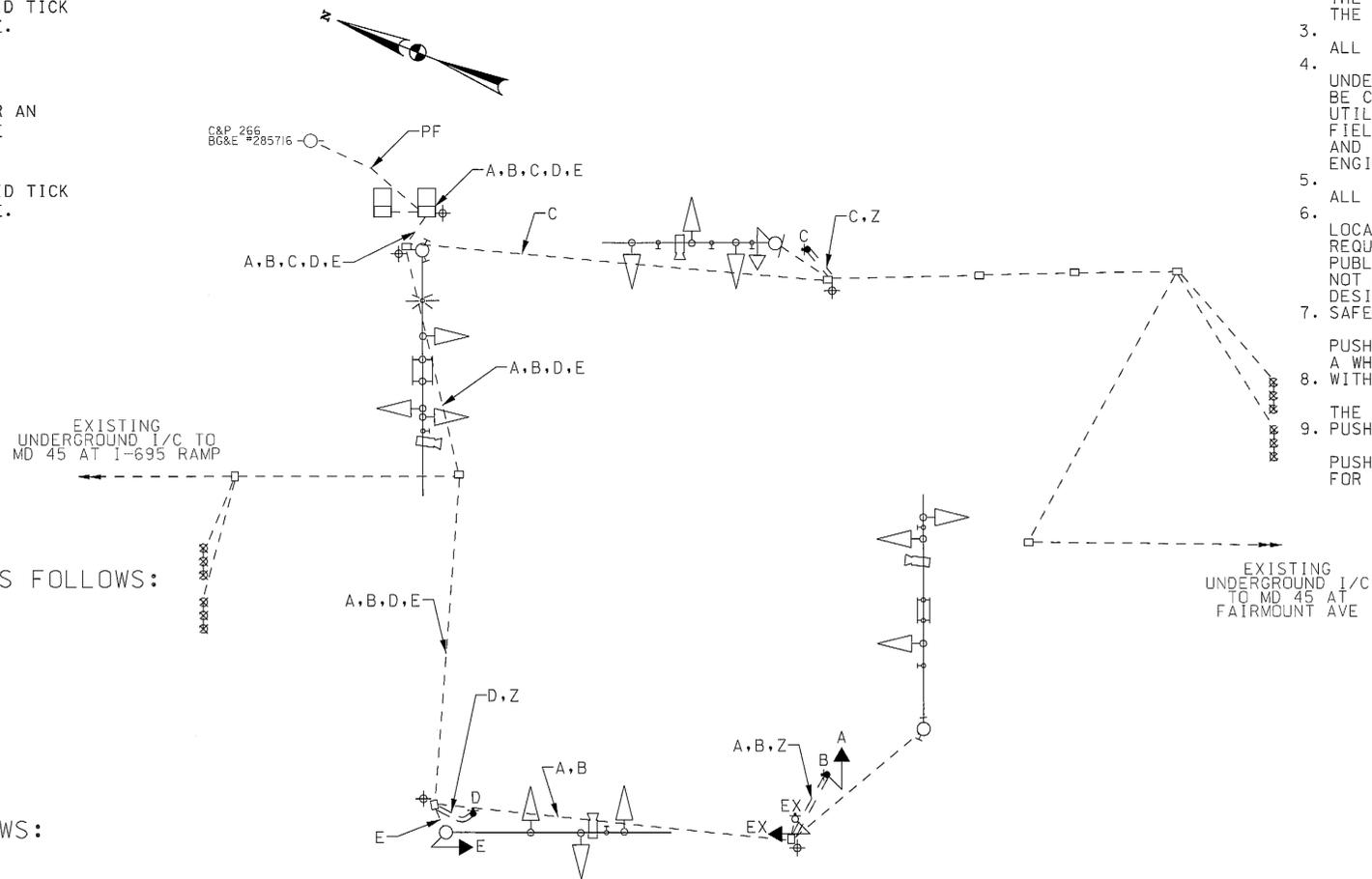
A. EQUIPMENT TO BE SUPPLIED BY SHA.

ITEM NO.	DESCRIPTION	UNIT	QUANTITY
9750	SHEET ALUMINUM GROUND MOUNTED SIGN 8 - W11-2 FY 36"X36" 8 - M6-2(1) FY 30"X24" 1 - R4-7 24"X30" 1 - OM1-3 FY 18"X18"	SF	120
9751	SHEET ALUMINUM MAST ARM/POLE MOUNTED SIGN 4 - R10-3(1) 9"X15"	SF	4

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

ITEM NO.	DESCRIPTION	UNIT	QUANTITY
1001	MAINTENANCE OF TRAFFIC	EA	1
5003	REMOVAL OF EXISTING PERMANENT PAVEMENT LINE MARKINGS	LF	900
5004	12 INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES	LF	750
5005	24 INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES	LF	55
6001	STANDARD TYPE A COMBINATION CURB AND GUTTER 12 INCH GUTTER PAN 8 INCH	LF	87
6002	5 INCH CONCRETE SIDEWALK	SF	429
6003	DETECTABLE WARNING SURFACE FOR CURB RAMPS (TYPE 3 BRICK PAVERS)	SF	23
8002	2-WIRE CENTRAL CONTROL UNIT	EA	1
8008	AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON STATION AND SIGNS	EA	4
8009	BREAKAWAY PEDESTAL POLE (ANY SIZE)	EA	3
8016	LED 16 INCH COUNTDOWN PEDESTRIAN SIGNAL HEAD	EA	2
8024	REMOVE & DISPOSE OF EQUIPMENT (PER ASSIGNMENT)	EA	1
8040	UP TO 4 INCH SCHEDULE 80 RIGID PVC CONDUIT-TRENCHED	LF	50
8041	WOOD SIGN SUPPORTS UP TO 4 "X 6"	LF	99
8042	INSTALL OVERHEAD OR GROUND MOUNTED SIGN (INCLUDING ALL HARDWARE)	SF	124
8044	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE	LF	55
8053	CUT, CLEAN, GALVANIZE AND CAP TRAFFIC SIGNAL STRUCTURE	EA	2
8055	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG)	LF	610
8057	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)	LF	470

C. ALL MATERIALS TO BE REMOVED BY THE CONTRACTOR SHALL BECOME THE PROPERTY OF THE CONTRACTOR.



PHASING CHART

PHASE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
PHASE 1 AND 5	R	R	R	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW
1 AND 5 CHANGE TO 1 AND 6, 2 AND 5, OR 2 AND 6																
PHASE 1 AND 6	R	R	R	G	G	G	R	R	R	R	R	R	DW	DW	DW	DW
1 AND 6 CHANGE																
PHASE 2 AND 5	G	G	G	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW
2 AND 5 CHANGE																
PHASE 2 AND 6	G	G	G	G	G	G	R	R	R	R	R	R	DW	DW	WK	WK
PED CLEARANCE																
2 AND 6 CHANGE	Y	Y	Y	Y	Y	Y	R	R	R	R	R	R	DW	DW	DW	DW
PHASE 3	R	R	R	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW
3 CHANGE																
PHASE 3 ALT	R	R	R	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW
PED CLEARANCE																
3 ALT CHANGE																
PHASE 4	R	R	R	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW
4 CHANGE																
FLASHING OPERATION	FL/Y	RD	DARK	DARK	DARK											

GENERAL NOTES

- THE CONTRACTOR SHALL VERIFY ALL PROPOSED POLE LOCATIONS PRIOR TO INSTALLATION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR TERMINATING ALL SIGNAL CABLE TO THE APPROPRIATE TERMINALS AND PROPERLY LABELING EACH CABLE.
- ALL UNUSED CABLE SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR.
- UNDERGROUND 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.
- ALL PEDESTAL FOUNDATION TOPS SHALL BE INSTALLED FLUSH WITH SIDEWALK GRADE.
- LOCATION OF ACCESSIBLE PEDESTRIAN SIGNAL PUSHBUTTONS MUST MEET LOCATION REQUIREMENTS OF MUTCD SECTION 4E.09 AND FIGURE 4E.2 AND THE NCHRP PUBLICATION, "ACCESSIBLE PEDESTRIAN SIGNALS: GUIDE TO BEST PRACTICE." IF NOT MET, THE CONTRACTOR IS TO STOP WORK ON PUSHBUTTON LOCATIONS UNTIL A DESIGN WAIVER IS OBTAINED, APPROVED BY THE DIRECTOR, OFFICE OF TRAFFIC AND SAFETY.
- PUSHBUTTONS ARE TO BE LOCATED SO THAT THEY CAN BE ACTIVATED BY A PERSON IN A WHEELCHAIR REACHING LESS THAN 18" FROM A 60" X 60" LEVEL LANDING AREA WITH A CROSS SLOPE OF LESS THAN OR EQUAL TO 2%.
- THE 10' SEPARATION BETWEEN PUSHBUTTONS IS TO BE MEASURED FROM FACE OF PUSHBUTTON TO FACE OF PUSHBUTTON, NOT CENTER OF POLE TO CENTER OF POLE.
- PUSHBUTTON ARROWS AND SIGNS ARE TO BE ORIENTED PARALLEL TO THE CROSSING FOR WHICH THEY ARE INTENDED.

TOD NO: XY125-16
SHA NO: BA087B5A
MD 45 @ I-695, West Rd/Bosley Ave./Washington Ave.

SHA STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION
MD 45 (YORK RD) AT WEST ROAD
TOWSON, MARYLAND

REVISIONS	GENERAL INFORMATION SHEET		
	SCALE	DATE	CONTRACT NO.
	NONE	OCTOBER 2012	
	DESIGNED BY	COUNTY	BALTIMORE
	NTS	LOGMILE	03004503.07
	DRAWN BY	TMS NO.	L667
	NTS	TOD NO.	
	CHECKED BY		
	BJG		
	FAP NO.		
	TS NO.3384F-61	DRAWING	SP-06 OF 08
			SHEET NO. 6 OF 12

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