

PROJECT DESCRIPTION

GENERAL

THIS PROJECT INVOLVES THE MODIFICATION OF THE EXISTING TRAFFIC CONTROL SIGNAL AT THE INTERSECTION OF MD 648E (BALTIMORE ANNAPOLIS BOULEVARD) AND MD 168 (NURSERY ROAD) IN ANNE ARUNDEL COUNTY, MARYLAND. MODIFICATIONS INCLUDE THE INSTALLATION OF 18 INCH LED COUNTDOWN PEDESTRIAN SIGNAL HEADS AND AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTONS FOR THE NORTH LEG OF MD 648E AND THE WEST LEG OF MD 168. MD 648E IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

INTERSECTION OPERATION

THE INTERSECTION WILL CONTINUE TO OPERATE IN A NEMA FIVE-PHASE, FULL-TRAFFIC-ACTUATED MODE WITH THE MD 648E APPROACHES OPERATING CONCURRENTLY AND THE MD 168 APPROACHES OPERATING CONCURRENTLY. PROTECTED/PERMITTED LEFT-TURN PHASING IS PROVIDED FOR NORTHBOUND MD 648E. NEW AUDIBLE PUSHBUTTON ACTUATED PEDESTRIAN PHASES WILL BE PROVIDED ACROSS THE NORTH LEG OF MD 648E AND THE WEST LEG OF MD 168.

APS MESSAGE FOR CROSSING OF MD 648E (BALTIMORE ANNAPOLIS BOULEVARD):

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

APS MESSAGE FOR CROSSING MD 168 (NURSERY ROAD):

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

CONTROLLER REQUIREMENTS

THE EXISTING NEMA SIZE '6' BASE MOUNTED CABINET AND EIGHT-PHASE CONTROLLER AND ALL ASSOCIATED EQUIPMENT WILL CONTINUE TO BE USED. A 2-WIRE CENTRAL CONTROL UNIT WILL BE ADDED TO THE CABINET.

EQUIPMENT LIST "A"

A. EQUIPMENT TO BE SUPPLIED BY SHA:

ITEM NO.	QUANTITY	UNIT	DESCRIPTION
9570	4	SF	[UPDATED] SHEET ALUMINUM GROUND MOUNTED SIGN - 4 EACH R10-3(1) (9"x15")

EQUIPMENT LIST "B"

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

ITEM NO.	QUANTITY	UNIT	DESCRIPTION
2002	2	CY	TEST PIT EXCAVATION
5005	300	LF	12 INCH WHITE LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKINGS
8001	4	EA	FURNISH AND INSTALL AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON STATION AND SIGNS
8002	3	EA	FURNISH AND INSTALL BREAKAWAY PEDESTAL POLE - ANY SIZE
8003	4	EA	FURNISH AND INSTALL 16 INCH COUNTDOWN PEDESTRIAN SIGNAL HEADS
8005	1	EA	REMOVE AND DISPOSE PER ASSIGNMENT
8008	75	LF	FURNISH AND INSTALL UP TO 4 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
8012	100	LF	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
8015	4	SF	INSTALL GROUND MOUNTED SIGN
8020	600	LF	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG)
8021	600	LF	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)

PROJECT CONTACTS

THE CONTACT PERSONS FOR SHA ARE AS FOLLOWS:

MS. KIMBERLY TRAN
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ASSISTANT DISTRICT ENGINEER - UTILITY
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MR. ROBERT SNYDER
ASSISTANT CHIEF, TRAFFIC OPERATIONS DIVISION
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MR. ED RODENHIZER
SUPERVISOR - SIGNAL SHOP
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EQUIPMENT LIST "C"

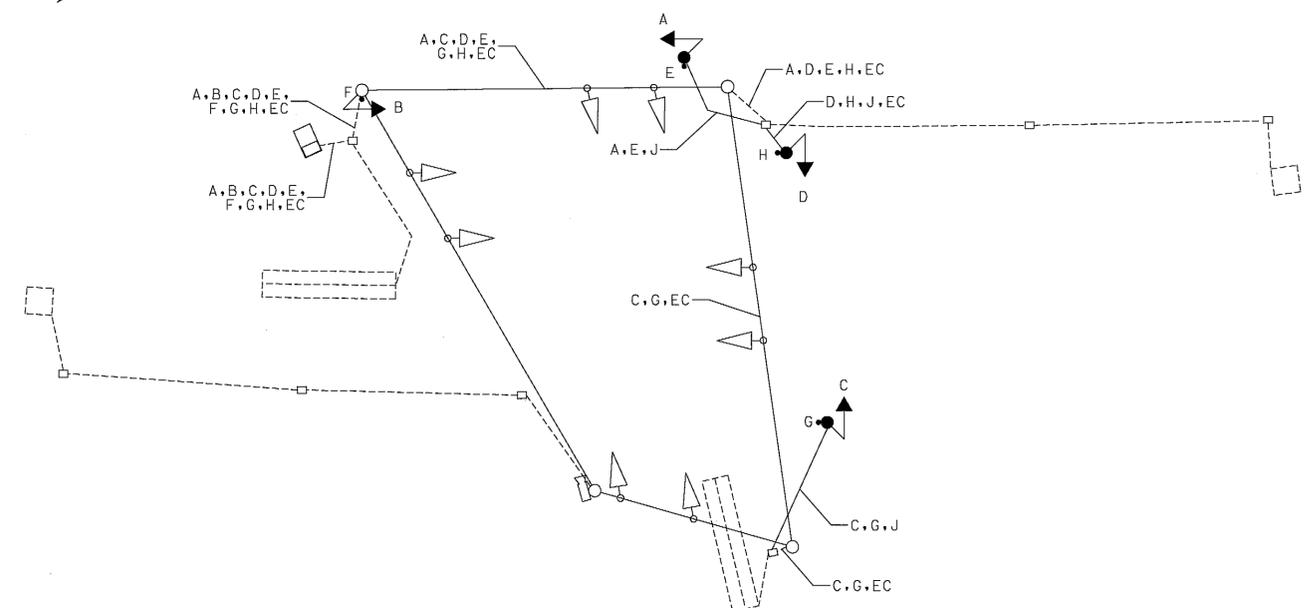
C. EQUIPMENT TO BE REMOVED AND RETURNED TO SHA:

NONE.

PHASE CHART

	1	2	3	4	5	6	7	8	9	10	11	12
PHASE 1 + 6	G	R	R	R	R	R	R	R	DW	DW	DW	DW
1 + 6 CHANGE	G	R	R	R	R	R	R	R	DW	DW	DW	DW
PHASE 2 + 6	G	G	G	G	R	R	R	R	FL/DW	FL/DW	DW	DW
PED CLEARANCE	G	G	G	G	R	R	R	R	FL/DW	FL/DW	DW	DW
2 + 6 CHANGE	Y	Y	Y	Y	R	R	R	R	DW	DW	DW	DW
PHASE 4 + 8	R	R	R	R	G	G	G	G	DW	DW	DW	DW
4 + 8 CHANGE	R	R	R	R	Y	Y	Y	Y	DW	DW	DW	DW
PHASE 4 + 8 ALT	R	R	R	R	G	G	G	G	DW	DW	W	W
PED CLEARANCE	R	R	R	R	G	G	G	G	DW	DW	FL/DW	FL/DW
4 + 8 ALT CHANGE	R	R	R	R	Y	Y	Y	Y	DW	DW	DW	DW
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	DARK	DARK	DARK	DARK

WIRING DIAGRAM



WIRING KEY

- A,B, } 5 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
- C,D } (NO. 14 AWG)
- E,F, } 2 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
- G,H } (NO. 14 AWG)
- J } STRANDED BARE COPPER GROUND WIRE (NO. 6 AWG)
- EC } EXISTING CABLE

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

MD 648E (BALTIMORE ANNAPOLIS BOULEVARD) AT MD 168 (NURSERY ROAD) PUMPHREY, MARYLAND

GENERAL INFORMATION SHEET

SCALE NONE DATE OCTOBER 16, 2012 CONTRACT NO. AX6445378

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CHECKED BY BSH T.I.M.S. NO. L324
F.A.P. NO. N/A T.O.D. NO.

T.S. NO. 1529F-GI SG-02 OF SG-02 SHEET NO. 7 OF 7

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