

**PROJECT DESCRIPTION**

**I. GENERAL**

THIS PROJECT INVOLVES THE MODIFICATION OF THE EXISTING TRAFFIC CONTROL SIGNAL AT THE INTERSECTION OF MD 450 (ANNAPOLIS RD) AND PRINCESS GARDEN PKWY/LANHAM STATION ROAD IN PRINCE GEORGE'S COUNTY. THE MODIFICATION WILL UPGRADE THE ADA RAMP AND THE EXISTING PEDESTRIAN PUSHBUTTONS TO AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTONS. MD 450 IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION.

**II. INTERSECTION OPERATION**

1. THE INTERSECTION OPERATES IN A NEMA FIVE (5) PHASE, FULLY-ACTUATED MODE. THE MD 450 APPROACHES OPERATE CONCURRENTLY, AND AN EXCLUSIVE-PERMISSIVE LEFT TURN PHASE IS PROVIDED FOR WESTBOUND LEFT TURNS. THE SOUTHBOUND PRINCESS GARDEN PKWY / NORTHBOUND LANHAM STATION RD APPROACHES OPERATE CONCURRENTLY. AN ALTERNATE PEDESTRIAN PHASE WITH AUDIBLE PEDESTRIAN SIGNALS SHALL BE INSTALLED ACROSS MD 450, AND AN ACTUATED AUDIBLE PEDESTRIAN PHASE SHALL BE INSTALLED ACROSS PRINCESS GARDEN PKWY.
2. AN EXISTING FULL-TRAFFIC-ACTUATED, EIGHT (8) PHASE CONTROLLER WITH INTERCONNECT IN A NEMA SIZE "6" BASE MOUNTED CABINET SHALL BE UTILIZED. A NEW 2-WIRE CENTRAL CONTROL UNIT FOR PEDESTRIAN SIGNAL OPERATION SHALL BE INSTALLED INTO THE CABINET.

**III. SPECIAL NOTES**

APS WILL FUNCTION AS FOLLOWS:

TO CROSS MD 450 (ANNAPOLIS RD / NORTH-SOUTH) FROM STREET SIDE.

1. WHEN A PEDESTRIAN LOCATES AND PRESSES THE PUSHBUTTON FOR AN EXTENDED TIME, TIME, THE PUSHBUTTON UNIT WILL ANNOUNCE THE FOLLOWING MESSAGE: "WAIT TO CROSS ANNAPOLIS AT PRINCESS GARDEN AND LANHAM STATION. SECOND PUSHBUTTON IN MEDIAN."
2. WHEN THE WALK PHASE BEGINS, THE PUSHBUTTON UNIT WILL PROVIDE A RAPID TICK WHICH WILL LAST FOR THE DURATION OF THE WALK PHASE.

TO CROSS MD 450 (ANNAPOLIS RD / NORTH-SOUTH) FROM MEDIAN.

1. WHEN A PEDESTRIAN LOCATES AND PRESSES THE PUSHBUTTON FOR AN EXTENDED TIME, TIME, THE PUSHBUTTON UNIT WILL ANNOUNCE THE FOLLOWING MESSAGE: "WAIT TO CROSS ANNAPOLIS AT PRINCESS GARDEN AND LANHAM STATION."
2. WHEN THE WALK PHASE BEGINS, THE PUSHBUTTON UNIT WILL PROVIDE A RAPID TICK WHICH WILL LAST FOR THE DURATION OF THE WALK PHASE.

TO CROSS PRINCESS GARDEN PKWY (EAST-WEST)

1. WHEN A PEDESTRIAN LOCATES AND PRESSES THE PUSHBUTTON FOR AN EXTENDED TIME, THE PUSHBUTTON UNIT WILL ANNOUNCE THE FOLLOWING MESSAGE: "WAIT TO CROSS PRINCESS GARDEN AT ANNAPOLIS. CROSSWALK ANGLES RIGHT."
2. WHEN THE WALK PHASE BEGINS, THE PUSHBUTTON UNIT WILL PROVIDE A RAPID TICK WHICH WILL LAST FOR THE DURATION OF THE WALK PHASE.

**CONTACTS**

**DISTRICT**

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MR. VICTOR GRAFTON  
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**OFFICE OF TRAFFIC AND SAFETY**

MR. RICHARD DAFF SR.  
CHIEF, TRAFFIC OPERATIONS  
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MR. ROBERT SNYDER  
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MR. ED RODENHIZER  
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MR. EUGENE BAILEY  
TEAM LEADER SIGN OPERATIONS  
410-787-7670

MS. DARLENE EIDE  
SUPPLY OFFICER IV (SIGNAL SHOP WAREHOUSE)  
410-787-7668

**EQUIPMENT LIST**

**A. EQUIPMENT TO BE FURNISHED BY STATE HIGHWAY ADMINISTRATION**

ITEM NO.	QUANTITY	DESCRIPTION
9570	26 SF	[UPDATED] SHEET ALUMINUM GROUND MOUNTED SIGN
	2 EA	W11-2 - PEDESTRIAN CROSSING (30"x30")
	1 EA	W16-7p(R) - DIAGONAL ARROW RIGHT (24"x12")
	1 EA	W16-7p(L) - DIAGONAL ARROW LEFT (24"x12")
	1 EA	M3-2 - CARDINAL DIRECTION - EAST (24"x12")
	1 EA	M1-5 - MD ROUTE SHIELD - MD 450 (30"x24")
	1 EA	M6-1 - DIRECTIONAL ARROW -> (21"x15")

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

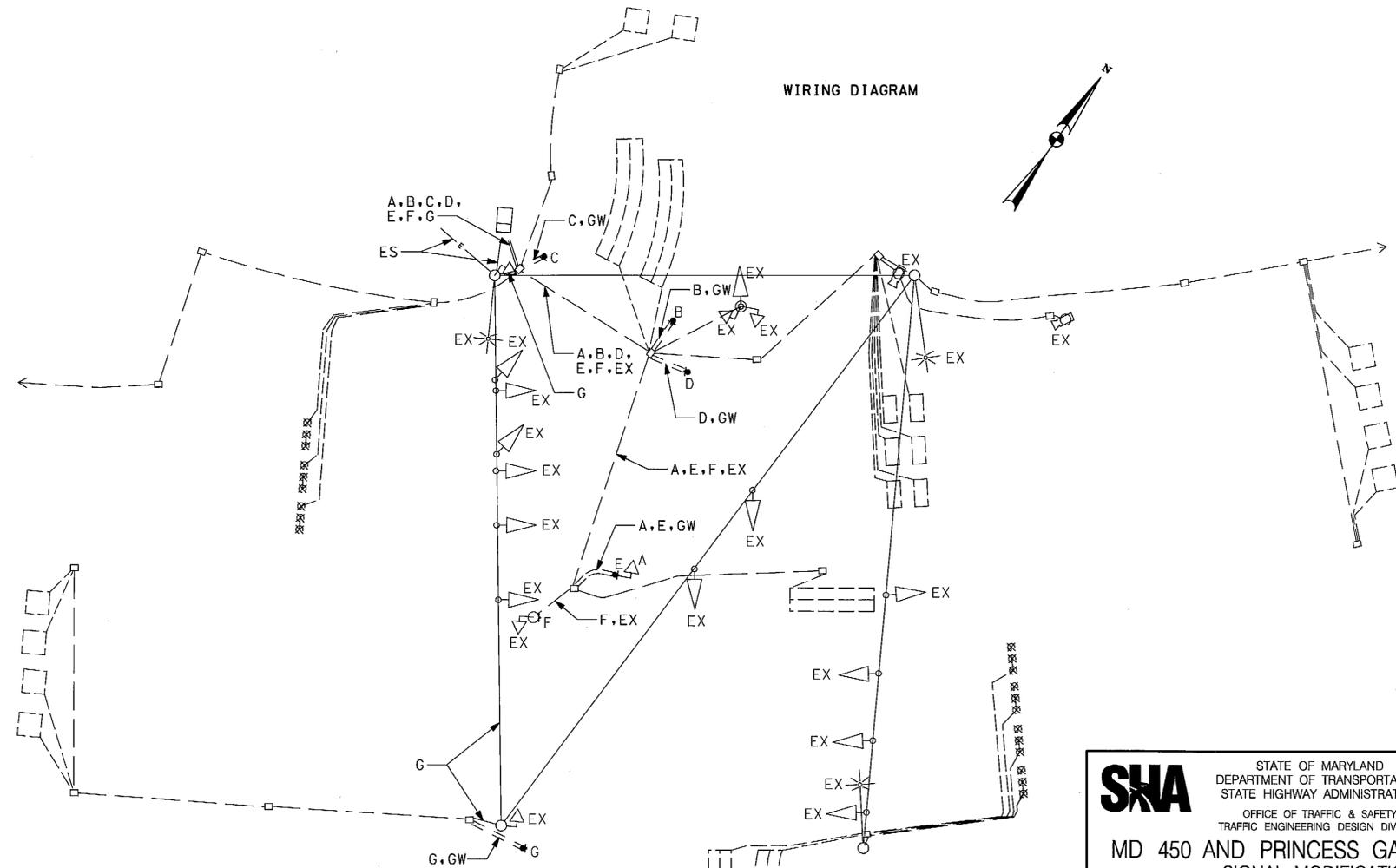
ITEM NO.	QUANTITY	DESCRIPTION
1001	845 LF	REMOVAL OF EXISTING PAVEMENT LINE MARKINGS, ANY WIDTH
1002	1 LS	MAINTENANCE OF TRAFFIC
2002	3 CY	TEST PIT EXCAVATION
5005	355 LF	12 INCH WHITE LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKINGS
8001	6 EA	AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON STATION AND SIGNS
8002	5 EA	BREAKAWAY PEDESTAL POLE - ANY SIZE
8003	6 EA	FURNISH AND INSTALL 2 WIRE CONTROL UNIT
8005	6 EA	PEDESTRIAN EDUCATION SIGN
8006	1 EA	RELOCATE SIGNAL HEAD - ANY TYPE
8007	1 EA	REMOVE AND DISPOSE PER ASSIGNMENT
8012	70 LF	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
8013	65 LF	3 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
8015	26 SF	INSTALL GROUND MOUNTED SIGN
8019	4 EA	CUT, CLEAN, GALVANIZE AND CAP TRAFFIC SIGNAL STRUCTURE
8020	765 LF	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG)
8021	160 LF	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)
NEG	155 LF	24 INCH WHITE LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKINGS
NEG	1 EA	REMOVE FOUNDATION 12" BELOW GRADE
NEG	52 LF	WOOD SIGN SUPPORTS 4" X 6"

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

**PHASE CHART**

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
PHASE 2 & 5	R	R	R	G	G	G	G	G	R	R	R	R	R	WK	WK	DW	DW	DW	DW
5 CHANGE	R	R	R	G	G	G	G	G	R	R	R	R	R	WK	WK	DW	DW	DW	DW
PHASE 2 & 6	G	G	G	G	G	G	G	G	R	R	R	R	R	WK	WK	DW	DW	DW	DW
PED CLEARANCE/COUNTDOWN	G	G	G	G	G	G	G	G	R	R	R	R	R	FL/DW	FL/DW	DW	DW	DW	DW
2 & 6 CHANGE	Y	Y	Y	Y	Y	Y	Y	Y	R	R	R	R	R	DW	DW	DW	DW	DW	DW
PHASE 4 & 8	R	R	R	R	R	R	R	R	G	G	G	G	G	DW	DW	DW	DW	DW	DW
4 & 8 CHANGE	R	R	R	R	R	R	R	R	Y	Y	Y	Y	Y	DW	DW	DW	DW	DW	DW
4 & 8 ALT.	R	R	R	R	R	R	R	R	G	G	G	G	G	DW	DW	WK	WK	WK	WK
PED CLEARANCE/COUNTDOWN	R	R	R	R	R	R	R	R	R	R	R	R	R	DW	DW	FL/DW	FL/DW	FL/DW	FL/DW
4 & 8 ALT. CHANGE	R	R	R	R	R	R	R	R	Y	Y	Y	Y	Y	DW	DW	DW	DW	DW	DW
FLASHING OPERATION	FL/Y	FL/R	FL/R	FL/R	FL/R	FL/R	DARK	DARK	DARK	DARK	DARK	DARK							

**WIRING DIAGRAM**



**WIRING KEY**

- A - 5 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
- B,C,D,E,F,G - 2 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
- GW - NO. 6 AWG GROUND WIRE
- EX - EXISTING CABLE
- ES - EXISTING SERVICE FEED

**SNA** STATE OF MARYLAND  
DEPARTMENT OF TRANSPORTATION  
STATE HIGHWAY ADMINISTRATION  
OFFICE OF TRAFFIC & SAFETY  
TRAFFIC ENGINEERING DESIGN DIVISION  
**MD 450 AND PRINCESS GARDEN PKWY**  
SIGNAL MODIFICATION  
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**GENERAL INFORMATION PLAN**

SCALE: N.T.S. DATE: MARCH 1, 2010 CONTRACT NO.: AX7035168

DESIGNED BY: M. FUKUJI COUNTY: PRINCE GEORGE'S  
DRAWN BY: M. FUKUJI LOGMILE: 16045004.87  
CHECKED BY: K. PERMISOHN TMS NO.: K179  
FAP NO.: TOD NO.:

TS NO. 330D-GI DRAWING **SG 2** OF 02 SHEET NO. 15 OF 15