

PROJECT DESCRIPTION

GENERAL

THIS PROJECT INVOLVES THE MODIFICATION OF THE EXISTING TRAFFIC CONTROL SIGNAL AT THE INTERSECTION OF MD 2 (GOVERNOR RITCHIE HIGHWAY) AND ROBINSON ROAD/LEELYN DRIVE IN ANNE ARUNDEL COUNTY, MARYLAND. MODIFICATIONS INCLUDE THE INSTALLATION OF 16 INCH LED COUNTDOWN PEDESTRIAN SIGNAL HEADS AND AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTONS FOR THE NORTH LEG OF MD 2 AND THE WEST LEG OF ROBINSON ROAD. MD 2 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

INTERSECTION OPERATION

THE INTERSECTION WILL CONTINUE TO OPERATE IN A NEMA EIGHT-PHASE, SEMI-TRAFFIC-ACTUATED MODE WITH THE MD 2 APPROACHES OPERATING CONCURRENTLY, THE ROBINSON ROAD/LEELYN DRIVE APPROACHES OPERATING CONCURRENTLY, AND THE MD 648 (BALTIMORE ANNAPOLIS BOULEVARD) APPROACH OPERATING SEPARATELY. PROTECTED LEFT-TURN PHASING IS PROVIDED FOR NORTHBOUND AND SOUTHBOUND MD 2. PROTECTED/PERMISSIVE LEFT-TURN PHASING IS PROVIDED FOR EASTBOUND ROBINSON ROAD.

A NEW AUDIBLE PUSHBUTTON ACTUATED PEDESTRIAN PHASE WILL BE PROVIDED ACROSS THE NORTH LEG OF MD 2.

APS MESSAGE FOR CROSSING AT THE NORTHEAST CORNER OF MD 2 (GOVERNOR RITCHIE HIGHWAY):

- A. WHEN PEDESTRIAN LOCATES AND PRESSES PUSHBUTTON FOR AN EXTENDED TIME, THE PUSHBUTTON UNIT WILL ANNOUNCE "WAIT TO CROSS GOVERNOR RITCHIE AT LEELYN/ROBINSON, 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 AT THE NORTHWEST CORNER OF MD 2 (GOVERNOR RITCHIE HIGHWAY):

- A. WHEN PEDESTRIAN LOCATES AND PRESSES PUSHBUTTON FOR AN EXTENDED TIME, THE PUSHBUTTON UNIT WILL ANNOUNCE "WAIT TO CROSS GOVERNOR RITCHIE AT ROBINSON/LEELYN, 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 ROBINSON ROAD:

- A. WHEN PEDESTRIAN LOCATES AND PRESSES PUSHBUTTON FOR AN EXTENDED TIME, THE PUSHBUTTON UNIT WILL ANNOUNCE "WAIT TO CROSS ROBINSON AT GOVERNOR RITCHIE, 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 'G' 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	6	SF	[UPDATED] SHEET ALUMINUM GROUND MOUNTED SIGN - 1 EACH R7-4(2) (12"x18") - 4 EACH R10-3(1) (9"x15")

PROJECT CONTACTS

THE CONTACT PERSONS FOR SHA ARE AS FOLLOWS:

MS. KIMBERLY TRAN
ASSISTANT DISTRICT ENGINEER - TRAFFIC
PHONE: (410) 841-1019

MR. JOHN MAYS
ASSISTANT DISTRICT ENGINEER - MAINTENANCE
PHONE: (410) 841-1013

MR. ED RODENHIZER
SUPERVISOR - SIGNAL SHOP
PHONE: (410) 787-7650

MR. MIKE HUBER
ASSISTANT DISTRICT ENGINEER - UTILITY
PHONE: (410) 841-1039

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

EQUIPMENT LIST "B"

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

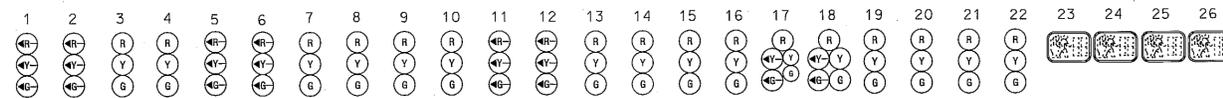
ITEM NO.	QUANTITY	UNIT	DESCRIPTION
2002	1	CY	TEST PIT EXCAVATION
5005	400	LF	12 INCH WHITE LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKINGS
8001	4	EA	FURNISH AND INSTALL AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON STATION AND SIGNS
8002	4	EA	FURNISH AND INSTALL BREAKAWAY PEDESTAL POLE - ANY SIZE
8003	2	EA	FURNISH AND INSTALL 16 INCH COUNTDOWN PEDESTRIAN SIGNAL HEADS
8004	2	EA	RELOCATE SIGNAL HEAD - ANY TYPE
8005	1	EA	REMOVE AND DISPOSE PER ASSIGNMENT
8007	75	LF	FURNISH AND INSTALL UP TO 4 INCH SCHEDULE 80 RIGID PVC CONDUIT - BORED
8008	100	LF	FURNISH AND INSTALL UP TO 4 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
8010	14	LF	WOOD SIGN SUPPORTS 4 INCH X 4 INCH
8012	200	LF	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
8014	1	EA	FURNISH AND INSTALL ELECTRICAL HANDHOLE
8015	6	SF	INSTALL GROUND MOUNTED SIGN
8018	1	EA	GROUND ROD - 3/4 INCH DIAMETER X 10 FOOT LENGTH
8020	1200	LF	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG)
8021	1200	LF	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)

EQUIPMENT LIST "C"

C. EQUIPMENT TO BE REMOVED AND RETURNED TO SHA:

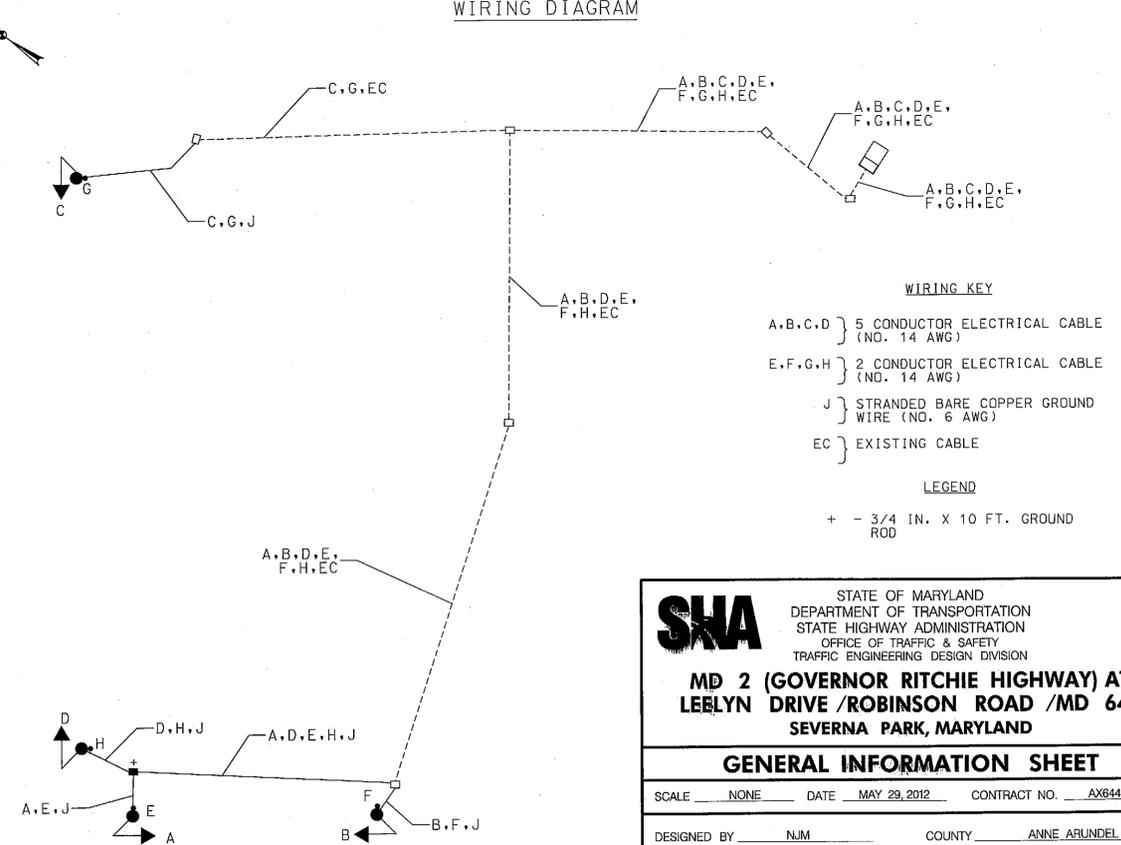
NONE.

PHASE CHART



	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
PHASE 1 + 6	←G	←G	G	G	←G	←G	G	G	R	R	←R	←R	R	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW
1 + 6 CHANGE	←Y	←Y	G	G	←Y	←Y	G	G	R	R	←R	←R	R	R	R	R	R	R	R	R	R	R	WK	WK	DW	DW
PHASE 2 + 6	←R	←R	G	G	←R	←R	G	G	G	G	←R	←R	G	G	R	R	R	R	R	R	R	R	FL/WK	FL/WK	DW	DW
PED CLEARANCE	←R	←R	G	G	←R	←R	G	G	G	G	←R	←R	G	G	R	R	R	R	R	R	R	R	FL/WK	FL/WK	DW	DW
2 + 6 CHANGE	←R	←R	Y	Y	←R	←R	Y	Y	G	G	←R	←R	G	G	R	R	R	R	R	R	R	R	DW	DW	DW	DW
PHASE 3	←R	←R	R	R	←R	←R	R	R	G	G	←G	←G	G	G	R	R	R	R	R	R	R	R	DW	DW	DW	DW
3 CHANGE	←R	←R	R	R	←R	←R	R	R	G	G	←Y	←Y	Y	Y	R	R	R	R	R	R	R	R	DW	DW	DW	DW
PHASE 4 + 7	←R	←R	R	R	←R	←R	R	Y	G	G	←R	←R	R	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW
4 + 7 CHANGE	←R	←R	R	R	←R	←R	R	R	G	G	←R	←R	R	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW
PHASE 4 + 8	←R	←R	R	R	←R	←R	R	R	G	G	←R	←R	R	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW
4 + 8 CHANGE	←R	←R	R	R	←R	←R	R	R	Y	Y	←R	←R	R	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW
PHASE 4 + 8 ALT	←R	←R	R	R	←R	←R	R	R	G	G	←R	←R	R	R	R	R	R	R	R	R	R	R	DW	DW	W	W
PED CLEARANCE	←R	←R	R	R	←R	←R	R	R	G	G	←R	←R	R	R	R	R	R	R	R	R	R	R	DW	DW	FL/DW	FL/DW
4 + 8 ALT CHANGE	←R	←R	R	R	←R	←R	R	R	Y	Y	←R	←R	R	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW
PHASE 12	←R	←R	R	R	←G	←G	G	G	R	R	←R	←R	R	R	G	G	R	R	R	R	R	R	DW	DW	DW	DW
12 CHANGE	←R	←R	R	R	←Y	←Y	Y	Y	R	R	←R	←R	R	R	Y	Y	R	R	R	R	R	R	DW	DW	DW	DW
FLASHING OPERATION	FL/←R	FL/←R	FL/Y	FL/Y	FL/←R	FL/←R	FL/Y	FL/Y	FL/Y	FL/Y	FL/←R	FL/←R	FL/Y	FL/Y	FL/R	DARK	DARK	DARK	DARK							

WIRING DIAGRAM



- WIRING KEY**
- A.B.C.D } 5 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
 - E.F.G.H } 2 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
 - J } STRANDED BARE COPPER GROUND WIRE (NO. 6 AWG)
 - EC } EXISTING CABLE
- LEGEND**
- + - 3/4 IN. X 10 FT. GROUND ROD

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

**MD 2 (GOVERNOR RITCHIE HIGHWAY) AT
LEELYN DRIVE /ROBINSON ROAD /MD 648
SEVERNA PARK, MARYLAND**

GENERAL INFORMATION SHEET

SCALE NONE DATE MAY 29, 2012 CONTRACT NO. AX6445378

DESIGNED BY NJM COUNTY ANNE ARUNDEL
DRAWN BY NJM LOGMILE 02000229.62
CHECKED BY BSH T.I.M.S. NO. L151
F.A.P. NO. NA T.O.D. NO.

T.S. NO. 168H-GI SG-02 OF SG-02 SHEET NO. 6 OF 6

**McCormick
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509 South Exeter Street
4th Floor
Baltimore, Maryland 21202
(410) 662-7400

BY: cyates