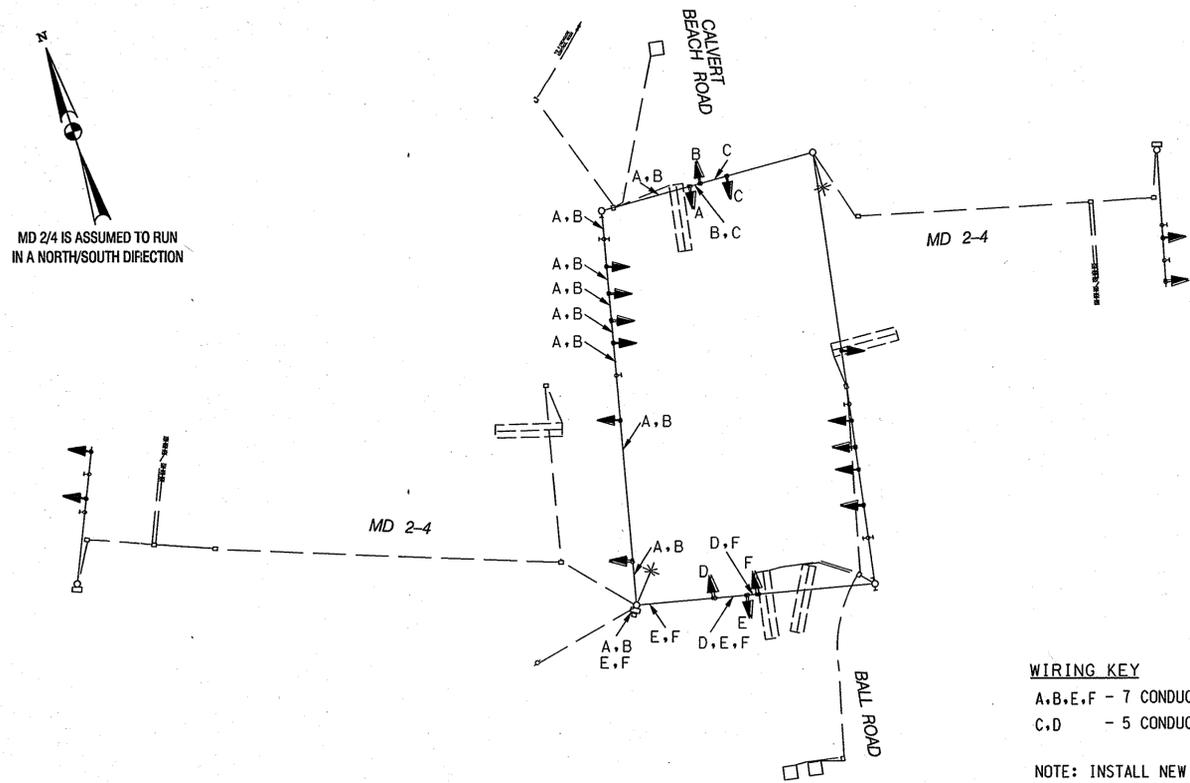


WIRING DIAGRAM

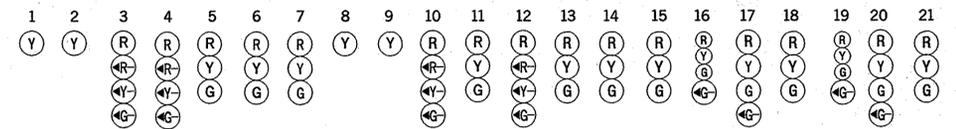


WIRING KEY

A,B,E,F - 7 CONDUCTOR CABLE (NO. 14 AWG)
 C,D - 5 CONDUCTOR CABLE (NO. 14 AWG)

NOTE: INSTALL NEW CABLES AS NOTED.
 ALL OTHER CABLES ARE TO BE REUSED.

PHASING SEQUENCE CHART



PHASE 1 AND 5	FLY	FLY	←G-	←G-	R	R	R	FLY	FLY	←G-	R	←G-	R	R	R	R	R	R	R	R	R	
CONTROLLER MAY SKIP TO PHASES 1 AND 6, PHASES 2 AND 5, OR PHASES 2 AND 6.																						
PHASE 1 AND 6	DARK	DARK	←G-	←G-	G	G	G	FLY	FLY	R/+R	R	R/+R	R	R	R	R	R	R	R	R	R	
1 CHANGE	DARK	DARK	←Y-	←Y-	G	G	G	FLY	FLY	R/+R	R	R/+R	R	R	R	R	R	R	R	R	R	
PHASE 2 AND 5	FLY	FLY	R/+R	R/+R	R	R	R	DARK	DARK	←G-	G	←G-	G	G	G	R	R	R	R	R	R	
5 CHANGE	FLY	FLY	R/+R	R/+R	R	R	R	DARK	DARK	←Y-	G	←Y-	G	G	G	R	R	R	R	R	R	
PHASE 2 AND 6	DARK	DARK	R/+R	R/+R	G	G	G	DARK	DARK	R/+R	G	R/+R	G	G	G	R	R	R	R	R	R	
2 AND 6 CHANGE	FLY	FLY	R/+R	R/+R	Y	Y	Y	FLY	FLY	R/+R	Y	R/+R	Y	Y	Y	R	R	R	R	R	R	
PHASE 3	FLY	FLY	R/+R	R/+R	R	R	R	FLY	FLY	R/+R	R	R/+R	R	R	R	R	R	R	R	R	R	
3 CHANGE	FLY	FLY	R/+R	R/+R	R	R	R	FLY	FLY	R/+R	R	R/+R	R	R	R	R	R	R	R	R	R	
PHASE 4	FLY	FLY	R/+R	R/+R	R	R	R	FLY	FLY	R/+R	R	R/+R	R	R	R	R	R	R	R	R	R	
4 CHANGE	FLY	FLY	R/+R	R/+R	R	R	R	FLY	FLY	R/+R	R	R/+R	R	R	R	Y	Y	Y	R	R	R	
FLASHING OPERATION	DARK	DARK	FL/R/+R	FL/R/+R	FLY	FLY	FLY	DARK	DARK	FL/R/+R	FLY	FL/R/+R	FLY	FLY	FLY	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	

FIREHOUSE PREEMPTION

FIREHOUSE PREEMPTION PHASE 3	FLY	FLY	R/+R	R/+R	R	R	R	FLY	FLY	R/+R	R	R/+R	R	R	R	R	R	R	R	R	R	
PREEMPTION CLEARANCE	FLY	FLY	R/+R	R/+R	R	R	R	FLY	FLY	R/+R	R	R/+R	R	R	R	R	R	R	Y	Y	Y	
NORMAL OPERATION PHASES 2 AND 6	DARK	DARK	R/+R	R/+R	G	G	G	DARK	DARK	R/+R	G	R/+R	G	G	G	R	R	R	R	R	R	

PROJECT DESCRIPTION

1. GENERAL

THIS PROJECT INVOLVES PROVIDING SPLIT PHASING FOR THE EASTBOUND AND WESTBOUND APPROACHES, AND INSTALLATION OF LED SIGNAL HEADS AT THE INTERSECTION OF MD 2-4 AT CALVERT BEACH ROAD/BALL ROAD IN CALVERT COUNTY.

MD 2-4 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

2. OPERATION

THE INTERSECTION WILL RUN IN A NEMA SIX PHASE FULL TRAFFIC ACTUATED MODE.

THE EASTBOUND AND WESTBOUND PHASES WILL BE SPLIT.

THE INTERSECTION IS CURRENTLY PROVIDED WITH HAZARD IDENTIFICATION BEACONS AT THE NORTHBOUND AND SOUTHBOUND APPROACH ALONG MD 2-4. FIREHOUSE PREEMPTION IS PROVIDED AT THE BALL ROAD APPROACH OF THE INTERSECTION.

PROJECT CONTACTS

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 CHIEF, SIGNAL OPERATIONS SECTION
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MR. ROBERT SNYDER
 ASSISTANT DIVISION CHIEF, TRAFFIC OPERATIONS
 PHONE: 410-787-7631

EQUIPMENT LIST "A"

EQUIPMENT TO BE FURNISHED BY THE SHA.

ITEM NO.	QUANTITY	DESCRIPTION
9571	12 SF	SHEET ALUMINUM POLE MOUNTED SIGN 1 EA - ASSOCIATED SHIELD ASSEMBLY (30" X 57") SOUTH, MD 2-4, RIGHT ARROW

EQUIPMENT LIST "B"

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

ITEM NO.	QUANTITY	DESCRIPTION
1001	1 EA	MAINTENANCE OF TRAFFIC
5001	20 LF	5 INCH WHITE LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKINGS
5004	184 LF	24 INCH WHITE LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKINGS
5005	188 LF	REMOVAL OF EXISTING PERMANENT PAVEMENT LINE MARKINGS
8001	57 EA	12 IN. SIGNAL HEAD SECTION - 15 EA RED BALL SIGNAL HEAD SECTION - 15 EA YELLOW BALL SIGNAL HEAD SECTION - 11 EA GREEN BALL SIGNAL HEAD SECTION - 4 EA RED ARROW SIGNAL HEAD SECTION (LEFT) - 4 EA YELLOW ARROW SIGNAL HEAD SECTION (LEFT) - 8 EA GREEN ARROW SIGNAL HEAD SECTION (LEFT)
8007	6 EA	8 IN. SIGNAL HEAD SECTION - 2 EA RED BALL SIGNAL HEAD SECTION - 2 EA YELLOW BALL SIGNAL HEAD SECTION - 2 EA GREEN BALL SIGNAL HEAD SECTION

EQUIPMENT LIST "B"

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

ITEM NO.	QUANTITY	DESCRIPTION
8017	1 EA	REMOVE AND DISPOSE EQUIPMENT PER ASSIGNMENT
8046	12 LF	INSTALL OVERHEAD SIGN
8060	23 LF	ELECTRICAL CABLE - 5 CONDUCTOR (NO 14 AWG)
8061	444 LF	ELECTRICAL CABLE - 7 CONDUCTOR (NO 14 AWG)

TOD No: AT936-24
 SHA No: CA361A51/C51
 MD 2 @ Ball Rd/Calvert Beach Rd

SHA STATE OF MARYLAND
 DEPARTMENT OF TRANSPORTATION
 STATE HIGHWAY ADMINISTRATION
 OFFICE OF TRAFFIC & SAFETY
 TRAFFIC ENGINEERING DESIGN DIVISION
 MD2-4 AND BALL ROAD/CALVERT BEACH ROAD
 INSTALLATION OF SPLIT PHASING AND NEW LED SIGNAL HEADS

GENERAL INFORMATION SHEET

SCALE NOT TO SCALE DATE JUNE 2007 CONTRACT NO. AT9365185

DESIGNED BY H. DONG COUNTY CALVERT
 DRAWN BY A. POWELL LOGMILE 04000213.6
 CHECKED BY TIMS NO. 1330X
 FAP NO. TOD NO.

TS NO. 3375 D DRAWING TS-1 OF 1 SHEET NO. 2 OF 2

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