

PROJECT DESCRIPTION

1. GENERAL

THIS PROJECT INVOLVES THE INSTALLATION OF LED SIGNALS, APS SIGNALS AND ADA RAMP AT THE INTERSECTION OF MD 222 (PERRYVILLE ROAD) AND ST. MARKS CHURCH ROAD/PERRYVILLE HIGH SCHOOL ENTRANCE IN CECIL COUNTY.

MD 222 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

2. OPERATION

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

PROJECT CONTACTS

MR. RICHARD K. LINDSAY
DISTRICT ENGINEER
PHONE: 410-810-3210

MR. ROBERT L. KIEL
ASSISTANT DISTRICT ENGINEER - TRAFFIC
PHONE: 410-810-3240

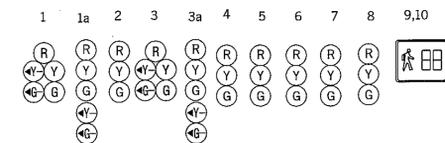
MR. TERRY D. WRIGHT
ASSISTANT DISTRICT ENGINEER - MAINTENANCE
PHONE: 410-841-1031

MR. BARRY CLOTHIER
DISTRICT UTILITY ENGINEER
PHONE: 410-810-3275

MR. EDWARD RODENHIZER
CHIEF, SIGNAL OPERATIONS SECTION
PHONE: 410-787-7652

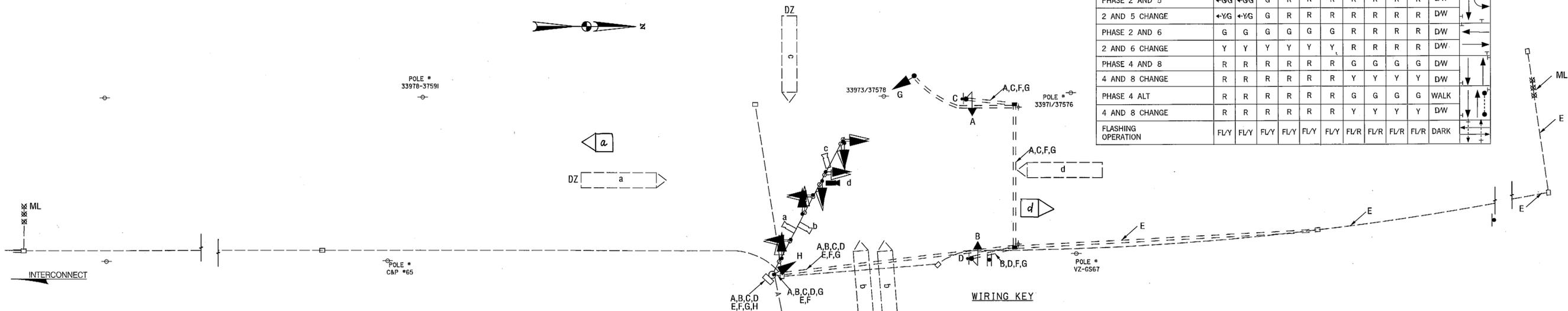
MR. ROBERT SNYDER
ASSISTANT DIVISION CHIEF, TRAFFIC OPERATIONS
PHONE: 410-787-7631

PHASING SEQUENCE CHART



PHASE 1 AND 5	+GR	+GR	R	+GR	+GR	R	R	R	R	R	R	DW	
1 AND 5 CHANGE TO 1 AND 6, 2 AND 5, OR 2 AND 6													
PHASE 1 AND 6	R	R	R	+GG	+GG	G	R	R	R	R	R	DW	
1 AND 6 CHANGE	R	R	R	+YG	+YG	G	R	R	R	R	R	DW	
PHASE 2 AND 5	+GG	+GG	G	R	R	R	R	R	R	R	R	DW	
2 AND 5 CHANGE	+YG	+YG	G	R	R	R	R	R	R	R	R	DW	
PHASE 2 AND 6	G	G	G	G	G	G	R	R	R	R	R	DW	
2 AND 6 CHANGE	Y	Y	Y	Y	Y	Y	R	R	R	R	R	DW	
PHASE 4 AND 8	R	R	R	R	R	R	G	G	G	G	G	DW	
4 AND 8 CHANGE	R	R	R	R	R	R	Y	Y	Y	Y	Y	DW	
PHASE 4 ALT	R	R	R	R	R	R	G	G	G	G	G	WALK	
4 AND 8 CHANGE	R	R	R	R	R	R	Y	Y	Y	Y	Y	DW	
FLASHING OPERATION	FLY	FLY	FLY	FLY	FLY	FLY	FL/R	FL/R	FL/R	FL/R	FL/R	DARK	

WIRING DIAGRAM



WIRING KEY

WIRING KEY

- A,B - 5 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
- C,D - 2 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
- F - 1 CONDUCTOR, STRANDED BARE GROUND (NO. 6 AWG)
- G,H - 7 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
- M L - MICROLOOP PROBE
- E - DETECTOR LEAD-IN
- DZ - DETECTOR ZONE

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

EQUIPMENT LIST "A"

EQUIPMENT TO BE FURNISHED BY THE SHA.

THERE IS NO EQUIPMENT TO BE FURNISHED BY THE SHA.

EQUIPMENT LIST "B"

EQUIPMENT TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR.

ITEM NO.	QUANTITY	DESCRIPTION
1001	1 EA	MAINTENANCE OF TRAFFIC
2001	1025 CY	CLASS 2 EXCAVATION
2002	132 CY	TEST PIT EXCAVATION
5001	185 LF	5" WHITE LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKING
5002	430 LF	5" YELLOW LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKING
5003	645 LF	REMOVAL OF EXISTING PERMANENT PAVEMENT LINE MARKINGS
5004	1 EA	REMOVAL OF EXISTING PERMANENT PAVEMENT MARKING ARROWS
5005	280 LF	12" WHITE LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKING
5006	60 LF	24" WHITE LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKING
5007	20.8 SF	HEAT APPLIED WHITE PERMANENT PERFORMED THERMOPLASTIC PAVEMENT MARKING LETTERS
6002	50 LF	STANDARD TYPE A COMBINATION CURB AND GUTTER 12 INCH GUTTER PAN 8 INCH DEPTH
6004	845 SF	5" CONCRETE SIDEWALK
8001	26 EA	12 IN. LED SIGNAL HEAD SECTION
8002	1 EA	2 WIRE CENTRAL CONTROL UNIT
8004	12 EA	8 IN. LED SIGNAL HEAD SECTION

EQUIPMENT LIST "B" (CONTD.)

EQUIPMENT TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR.

ITEM NO.	QUANTITY	DESCRIPTION
8007	2 EA	AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON STATION & SIGN (5"x7" WITH BRAILLE DENOTING CROSSING STREET)
8009	1 EA	3 IN CONDUIT BEND INTO EXISTING STRUCTURE
8020	2 EA	16" LED COUNTDOWN PEDESTRIAN SIGNAL HEAD
8028	3 EA	FURNISH 10' BREAKAWAY PEDESTAL POLE.
8029	1 EA	REMOVE AND DISPOSE MATERIAL AND EQUIPMENT PER ASSIGNMENT
8034	1 EA	VIDEO DETECTION CAMERA AND CABLE
8036	25 LF	3 IN ELECTRICAL CONDUIT - PVC RISER
8041	150 LF	SCHEDULE 80 RIGID PVC CONDUIT 4 IN - BORED.
8043	40 LF	SCHEDULE 80 RIGID PVC CONDUIT 3 IN - TRENCHED
8045	24 SF	DETECTABLE WARNING SURFACE
8048	210 LF	STRANDED BARE COPPER GROUND WIRE NO. 6 AWG
8050	2 EA	3 IN WEATHER HEAD
8054	2 EA	FURNISH AND INSTALL ELECTRICAL HANDHOLE
8062	345 LF	ELECTRICAL CABLE - 2 CONDUCTOR NO. 14 AWG
8064	355 LF	ELECTRICAL CABLE - 5 CONDUCTOR NO. 14 AWG
8065	300 LF	ELECTRICAL CABLE - 7 CONDUCTOR NO. 14 AWG

TOD NO: XX224-01
SHA NO: CE355A51/B51
MD 222 MD 275/ ST MARKS DR

SHA STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION
MD 222 AT SOUTH ENTRANCE TO PERRYVILLE HIGH SCHOOL/
ST. MARKS CHURCH ROAD

GENERAL INFORMATION

SCALE: 1" = 20'	ADVERTISED DATE: DECEMBER 2009	CONTRACT NO. AT9135185
DESIGNED BY: A. POWELL	COUNTY: CECIL COUNTY	
DRAWN BY: J. CRIDER	LOGMILE: 07022200.96	
CHECKED BY: H. DONG	TMS NO.: G486	
F.A.P. NO.:	TOD NO.: AT355-01	
TS NO. 3347D	DRAWING TS-2 OF 2	SHEET NO. 15 OF 15

Edwards AND Kelcey
100 SOUTH CHARLES STREET
TOWER 2, SUITE 1000
BALTIMORE, MD 21201

BY: fanuszewski