

PROJECT DESCRIPTION

I. GENERAL

THIS PROJECT INVOLVES THE MODIFICATION OF THE EXISTING TRAFFIC CONTROL SIGNAL AT THE INTERSECTION OF MD 177 (MOUNTAIN RD) AND LAKE SHORE DR IN ANNE ARUNDEL COUNTY. THE MODIFICATION WILL REPLACE THE EXISTING PEDESTRIAN SIGNALS WITH APS/CPS. MD 177 IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION.

II. INTERSECTION OPERATION

THE INTERSECTION OPERATES IN A NEMA THREE (3) PHASE FULLY-ACTUATED MODE. THE MD 177 MOVEMENTS OPERATE CONCURRENTLY AND LAKE SHORE DR OPERATES AS ITS OWN PHASE. THERE IS AN ALTERNATE ACTUATED PEDESTRIAN PHASE WITH AUDIBLE PEDESTRIAN SIGNALS ACROSS THE WEST LEG OF THE INTERSECTION.

III. SPECIAL NOTES

APS WILL FUNCTION AS FOLLOWS:
TO CROSS MD 177 (MOUNTAIN RD)

- WHEN A PEDESTRIAN LOCATES AND PASSES THE PUSHBUTTON FOR AN EXTENDED TIME, THE PUSHBUTTON UNIT WILL ANNOUNCE THE FOLLOWING MESSAGE: "WAIT TO CROSS MOUNTAIN AT LAKE SHORE. WAIT."
- 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 (DISTRICT 5)

MR. LEE STARKLOFF
DISTRICT ENGINEER
410-841-1001

MS. KIMBERLY TRAN
ASSISTANT DISTRICT ENGINEER - TRAFFIC
410-841-1003

MR. MIKE HUBER
DISTRICT UTILITY ENGINEER
410-841-1039

MR. JAMES FOLDEN
ASSISTANT DISTRICT ENGINEER - CONSTRUCTION
410-841-1031

MR. JOSEPH GECKLE
ASSISTANT DISTRICT ENGINEER - MAINTENANCE
410-841-1013

OFFICE OF TRAFFIC AND SAFETY

MS. CORREN JOHNSON
CHIEF, TRAFFIC OPERATIONS
410-787-7630

MR. ROBERT SNYDER
ASSISTANT DIVISION CHIEF, TRAFFIC OPERATIONS
410-787-7630

MR. EDWARD RODENHIZER
CHIEF, SIGNAL OPERATIONS SECTION
410-787-7650

MR. EUGENE BAILEY
CHIEF, SIGN OPERATIONS SECTION
410-787-7670

MR. MICHAEL STOCKER
SUPPLY OFFICER IV (SIGNAL SHOP WAREHOUSE)
410-787-7696

EQUIPMENT LIST

A. EQUIPMENT TO BE FURNISHED BY STATE HIGHWAY ADMINISTRATION

ITEM NO.	QUANTITY	UNIT	DESCRIPTION
9571	2	SF	SHEET ALUMINUM MAST ARM/POLE MOUNTED SIGN 2 EA R10-3(1) "PUSH BUTTON TO CROSS 'FORT SMALLWOOD'" (9"x15")

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

ITEM NO.	QUANTITY	UNIT	DESCRIPTION
1001	1	EA	MAINTENANCE OF TRAFFIC
2002	1	CY	TEST PIT EXCAVATION
5003	200	LF	REMOVAL OF EXISTING PERMANENT PAVEMENT LINE MARKINGS
5004	90	LF	12 IN WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES
6001	160	LF	STANDARD TYPE 'A' COMBINATION CURB AND GUTTER 12 IN. GUTTER PAN 8 IN. DEPTH
6002	390	SF	5 IN. CONCRETE SIDEWALK
6003	20-30	SF	DETECTABLE WARNING SURFACE FOR CURB RAMPS
8001	3	EA	12 IN. LED SIGNAL HEAD SECTION
8002	1	EA	2-WIRE CENTRAL CONTROL UNIT
8005	1	EA	ADJUST HANDHOLE TO GRADE WITH NEW FRAME & COVER
8008	2	EA	AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON STATION AND SIGNS
8009	2	EA	BREAKAWAY PEDESTAL POLE (ANY SIZE)
8018	2	EA	LED 16 IN. COUNTDOWN PEDESTRIAN SIGNAL HEAD
8027	1	EA	REMOVE & DISPOSE OF EQUIPMENT (PER ASSIGNMENT)
8037	55	LF	DISCONNECT, PULL-BACK & REROUTE CABLES
8043	30	LF	UP TO 4 IN. SCHEDULE 80 RIDGID PVC CONDUIT - TRENCHED
8045	2	SF	INSTALL OVERHEAD OR GROUND MOUNTED SIGN (INCLUDING ALL HARDWARE)
8047	40	LF	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
8058	325	LF	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG)
8060	350	LF	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)
8061	300	LF	ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)

C. ALL MATERIALS TO BE REMOVED BY THE CONTRACTOR SHALL BECOME THE PROPERTY OF THE SIGNAL CONTRACTOR UPON COMPLETION OF THE SIGNAL MODIFICATIONS.

PHASE CHART

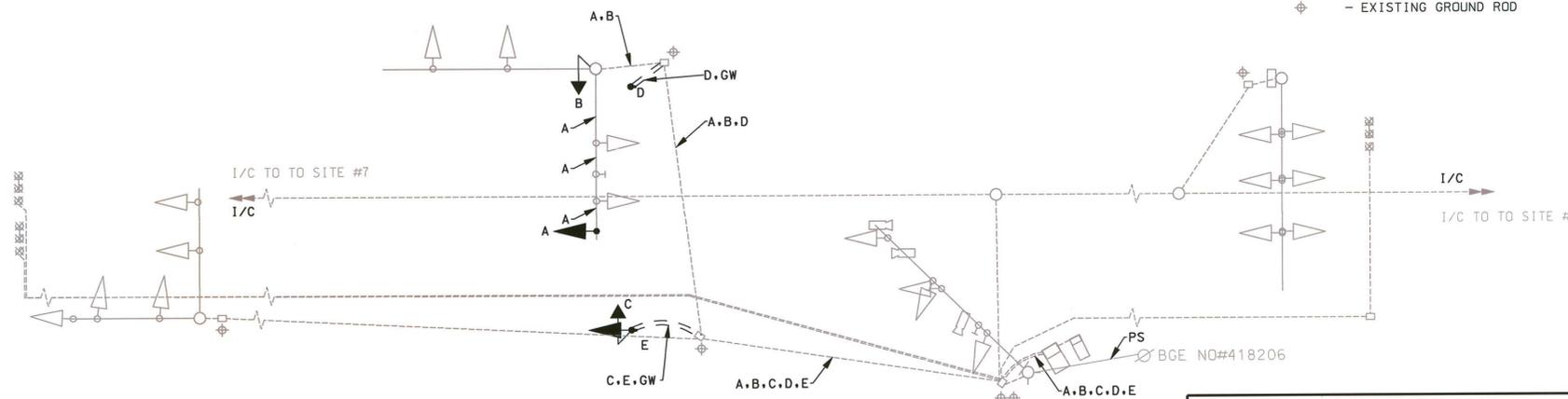
1	2	3	4	5	6	7	8	9	10	11	12	13	14	21	22
R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
G	G	G	G	G	G	G	Y	Y	Y	Y	Y	Y	Y	Y	Y

PHASE 2 & 6	G	G	G	G	G	R	R	DARK	DARK	DARK	DARK	DARK	DARK	DW	DW	
2 & 6 CHANGE	Y	Y	Y	Y	Y	R	R	DARK	DARK	DARK	DARK	DARK	DARK	DW	DW	
PHASE 4	R	R	R	R	R	G	G	DARK	DARK	DARK	DARK	DARK	DARK	DW	DW	
4 CHANGE	R	R	R	R	R	Y	Y	DARK	DARK	DARK	DARK	DARK	DARK	DW	DW	
PHASE 4 ALT.	R	R	R	R	R	G	G	DARK	DARK	DARK	DARK	DARK	DARK	WK	WK	
PED CLEARANCE	R	R	R	R	R	Y	Y	DARK	DARK	DARK	DARK	DARK	DARK	FL/DW	FL/DW	
4 ALT. CHANGE	R	R	R	R	R	R	R	DARK	DARK	DARK	DARK	DARK	DARK	DW	DW	
FIREHOUSE PRE-EMP.	R	R	R	R	R	R	R	R	R	Y	Y	R	R	DW	DW	
PRE-EMP. CHANGE	R	R	R	R	R	R	R	R	R	Y	Y	R	R	DW	DW	
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	DARK	DARK							

WIRING KEY

- A - 7 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
- B.C - 5 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
- D.E - 2 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
- ER - REROUTED EXISTING SIGNAL CABLE
- I/C - EXISTING INTERCONNECT
- PS - EXISTING OVERHEAD POWER CABLE
- GW - 1 CONDUCTOR STRANDED COPPER GROUND WIRE (NO. 6 AWG)
- ⊕ - EXISTING GROUND ROD

WIRING DIAGRAM



TEDD APPROVALS
 2 REDLINE REV.2 8/20/13
 1 REDLINE REV.1 6/17/13 DJD

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STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION
MD 177(MOUNTAIN RD) at LAKE SHORE DR
LAKESHORE, MD

GENERAL INFORMATION SHEET

SCALE	N.T.S.	DATE	MAY 1, 2013	CONTRACT NO.	XY1395185
DESIGNED BY	MAW	COUNTY	ANNE ARUNDEL		
DRAWN BY	MAW	LOGMILE	02017706.13		
CHECKED BY	KMP/UM	TIMS NO.	L658		
F.A.P. NO.		TOD NO.			
TS NO.	1807E-GI	DRAWING	SG-02	OF	02
SHEET NO.	06	OF	06		