

PROJECT DESCRIPTION

THIS PROJECT INVOLVES THE MODIFICATION OF THE EXISTING TRAFFIC CONTROL SIGNAL AT THE INTERSECTION OF MD 197 AND MONTPELIER DR/BROCK BRIDGE RD IN PRINCE GEORGE'S COUNTY. IT IS ASSUMED THAT MD 197 RUNS IN A NORTH-SOUTH DIRECTION.

INTERSECTION OPERATION

THIS INTERSECTION CURRENTLY OPERATES IN A NEMA SIX-PHASE FULL-TRAFFIC-ACTUATED MODE WITH AN EXCLUSIVE LEFT TURN PHASE FOR NORTHBOUND AND SOUTHBOUND MD 197, AN ALTERNATE PEDESTRIAN PHASE ACROSS THE SOUTH LEG AND A CONCURRENT PEDESTRIAN PHASE ACROSS THE WEST LEG OF THE INTERSECTION. VIDEO DETECTION EXISTS FOR ALL APPROACHES.

THE INTERSECTION WILL BE MODIFIED TO SPLIT PHASE FOR MONTPELIER DRIVE AND BROCK BRIDGE ROAD. EXISTING SIGNAL HEADS WILL BE REPLACED WITH L.E.D. VEHICULAR TRAFFIC SIGNAL HEADS AND PEDESTRIAN SIGNAL HEADS WILL BE REPLACED WITH 16 IN. L.E.D. PEDESTRIAN SIGNAL HEADS.

CONTROLLER REQUIRMENTS

THE EXISTING FULL-TRAFFIC-ACTUATED EIGHT PHASE TRAFFIC SIGNAL CONTROLLER WITH VIDEO DETECTION INTERFACE EQUIPMENT, INTERSECTION MONITOR WITH BATTERY BACK-UP FOR PHONE DROP, FOUR CHANNEL LOOP DETECTOR AMPLIFIER AND ASSOCIATED HARNESS HOUSED IN A NEMA SIZE "6" BASE MOUNTED CABINET WILL BE USED.

CONTACT PERSONS FOR DISTRICT 3 ARE AS FOLLOWS:

MR. RAY MERCADO
TEAM LEADER - TRAFFIC
(301) 513-7316

MR. KEVIN NOWAK
ASSISTANT DISTRICT ENGINEER - CONSTRUCTION
(301) 513-7385

MR. WAYNE MOWDY
ASSISTANT DISTRICT ENGINEER - MAINTENANCE
(301) 513-7304

CONTACT PERSONS FOR OOTS ARE AS FOLLOWS:

MR. RICHARD DAFF, SR.
CHIEF TRAFFIC OPERATIONS
(410) 787-7630

MR. ED RODENHIZER
CHIEF, SIGNAL OPERATIONS
(410)787-7630

MR. MIKE STOCKER
SIGNAL SHOP WAREHOUSE
(410) 787-7696

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

MR. EUGENE BAILEY,
CHIEF, SIGN OPERATIONS
(410) 787-7676

EQUIPMENT LIST "A"

A. EQUIPMENT TO BE FURNISHED BY SHA.

ITEM NO.	DESCRIPTION	UNIT	QUANTITY
9570	ALUMINUM SHEET GROUND MOUNT 1 - R3-8 MOD (42" X 30") 1 - R3-7R (30" X 30") 1 - D-3(3) (72"X36")	SF	36.0
9571	ALUMINUM SHEET MAST ARM/POLE MOUNT 1 - R3-5R (30" X 36") 1 - R3-6 MOD (42" X 36") 1 - R3-6 (30"X36")	SF	20.5

EQUIPMENT LIST "B"

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

ITEM NO.	DESCRIPTION	UNIT	QUANTITY
1001	MAINTENANCE OF TRAFFIC	EA	1
2002	TEST PIT EXCAVATION	CY	1
5006	REMOVAL OF EXISTING PERMANENT PAVEMENT MARKING LETTERS, SYMBOLS, ARROWS AND NUMBERS	EA	5
5007	FURNISH AND INSTALL HEAT APPLIED PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING LETTERS	EA	4
5008	FURNISH AND INSTALL HEAT APPLIED PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING ARROWS	EA	2
6003	CONCRETE SIDEWALK	SF	25
8002	12 IN. RED OR GREEN L.E.D. SIGNAL HEAD SECTION	EA	25
8003	FURNISH AND INSTALL 12 IN. YELLOW L.E.D. SIGNAL HEAD SECTION	EA	11
8005	FURNISH AND INSTALL 16 IN. L.E.D. PEDESTRIAN SIGNAL HEAD	EA	4
8011	FURNISH AND INSTALL 8 IN. SIGNAL (R,Y,G) HEAD SECTION	EA	6
8015	BREAKAWAY PEDESTAL POLE (10' CUT TO 5')	EA	1
8026	PUSHBUTTON AND SIGN	EA	1
8028	REMOVE AND DISPOSE OF EQUIPMENT	EA	1
8037	DETECTABLE WARNING SURFACE	SF	24
8040	CONCRETE FOR SIGNAL FOUNDATION	CY	1
8041	WOOD SIGN SUPPORTS 4 IN. X 4 IN.	LF	74
8043	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE	LF	10
8049	3" SCHEDULE 80 PVC CONDUIT - TRENCHED	LF	10
8061	NON-INVASIVE DETECTOR, 1000 FOOT LEAD IN CABLE	EA	2
8063	INSTALL GROUND MOUNTED SIGN	SF	31
8064	INSTALL OVERHEAD SIGN	SF	15
8074	CUT, CLEAN, GALVANIZE AND CAP TRAFFIC SIGNAL STRUCTURE	EA	1
8076	ELECTRICAL CABLE - 2 CONDUCTOR NO. 14 AWG	LF	35
NEG	REMOVAL & DISPOSAL OF EXISTING TRAFFIC BARRIER	LF	150
NEG	TRAFFIC BARRIER W BEAM USING 6 FOOT POST	LF	150
NEG	TRAFFIC BARRIER W-BEAM - 6 FOOT POST	EA	13

SPECIAL NOTE:
CONTRACTOR SHALL CONTACT DISTRICT 3 MAINTENANCE PRIOR TO BEGINNING WORK IN ORDER TO COORDINATE VARIABLE MESSAGE SIGN (VMS) INSTALLATION. DISTRICT 3 MAINTENANCE WILL PROVIDE AND INSTALL THE VMS 72 HOURS PRIOR TO AND 72 HOURS DURING THE PHASE CHANGE.

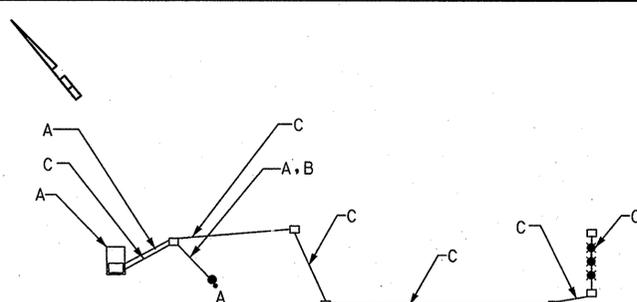
MESSAGES ARE AS FOLLOWS:

PRIOR: SCREEN 1 : NEW/TRAFFIC/PATTERN
SCREEN 2 : ON OR/ABOUT/(DATE)

AFTER: SCREEN 1 : NEW/TRAFFIC/PATTERN
SCREEN 2 : STAY ALERT

PHASE CHART

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
PHASE 1 & 5	<G-	<G-	R	R	<G-	<G-	R	R	R	R	R	R	R	R	DW	DW	DW	DW
1 & 5 CHANGE	PHASE 1 & 5 MAY CHANGE TO PHASE 1 & 6, 2 & 5 OR 2 & 6																	
PHASE 1 & 6	<G-	<G-	G	G	<R-	<R-	R	R	R	R	R	R	R	R	DW	DW	DW	DW
1 CHANGE	<Y-	<Y-	G	G	<R-	<R-	R	R	R	R	R	R	R	R	DW	DW	DW	DW
PHASE 2 & 5	<R-	<R-	R	R	<G-	<G-	G	G	R	R	R	R	R	R	WK	WK	DW	DW
5 CHANGE	<R-	<R-	R	R	<Y-	<Y-	G	G	R	R	R	R	R	R	WK	WK	DW	DW
PHASE 2 & 6	<R-	<R-	G	G	<R-	<R-	G	G	R	R	R	R	R	R	WK	WK	DW	DW
PED CLEAR	<R-	<R-	G	G	<R-	<R-	G	G	R	R	R	R	R	R	FL/DW	FL/DW	DW	DW
2 & 6 CHANGE	<R-	<R-	Y	Y	<R-	<R-	Y	Y	R	R	R	R	R	R	DW	DW	DW	DW
PHASE 3	<R-	<R-	R	R	<R-	<R-	R	R	R	R	R	R	R	R	G	DW	DW	DW
3 CHANGE	<R-	<R-	R	R	<R-	<R-	R	R	R	R	R	R	Y	Y	Y	DW	DW	DW
PHASE 3 ALT.	<R-	<R-	R	R	<R-	<R-	R	R	R	R	R	R	R	R	G	DW	DW	WK
PED CLEAR	<R-	<R-	R	R	<R-	<R-	R	R	R	R	R	R	R	R	G	DW	FL/DW	FL/DW
3 ALT. CHANGE	<R-	<R-	R	R	<R-	<R-	R	R	R	R	R	R	Y	Y	Y	DW	DW	DW
PHASE 4	<R-	<R-	R	R	<R-	<R-	R	R	R	R	R	R	R	R	DW	DW	DW	DW
4 CHANGE	<R-	<R-	R	R	<R-	<R-	R	R	R	Y	Y	Y	R	R	R	DW	DW	DW
PRE-EMPTION	<G-	<G-	G	G	<R-	<R-	R	R	R	R	R	R	R	R	DW	DW	DW	DW
PRE-EMPTION CHANGE	<Y-	<Y-	Y	Y	<R-	<R-	R	R	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/R	FL/R	FL/R	FL/R	FL/R	FL/R	DARK	DARK	DARK	DARK



WIRING KEY

- A - 2-CONDUCTOR ELECTRICAL CABLE (No. 14 AWG)
- B - STRANDED BARE COPPER GROUND WIRE (NO. 6 AWG)
- C - NON-INVASIVE DETECTOR WITH 1000 FOOT LEAD IN CABLE

NOTE: ALL OTHER EXISTING WIRING SHALL BE USED FOR PROPOSED TRAFFIC SIGNAL HEADS

EQUIPMENT LIST "C"

C. EQUIPMENT TO BE REMOVED BY THE CONTRACTOR AND RETURNED TO SHA.

ALL UNUSED EQUIPMENT AND MATERIAL REMOVED BY THE CONTRACTOR SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

SHA STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION
MD 197 (LAUREL - BOWIE RD)
AND MONTPELIER DRIVE

GENERAL INFORMATION SHEET

SCALE	NONE	DATE	8/2005	CONTRACT NO.	AT7825185
DESIGNED BY	MLH	COUNTY	PRINCE GEORGES		
DRAWN BY	MLH	LOGMILE	16019712.99		
CHECKED BY	DAE	TIMS NO.	G804		
FAP NO.		TOD NO.			
TS NO.	25466	DRAWING	-	OF	SHEET NO. 2 OF 2

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