

PROJECT DESCRIPTION

I. GENERAL:

THIS PROJECT INVOLVES THE MODIFICATION OF AN EXISTING TRAFFIC SIGNAL AT THE INTERSECTION OF MD 27 (RIDGE ROAD) AND LEWIS DRIVE/LOCUST DRIVE IN DAMASCUS, MONTGOMERY COUNTY.

MD 27 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

II. INTERSECTION OPERATION:

THE EXISTING TRAFFIC SIGNAL WILL CONTINUE TO OPERATE IN A SEMI-ACTUATED MODE USING FOUR (4) NEMA PHASES.

NORTHBOUND MD 27 OPERATES CONCURRENTLY WITH LEWIS DRIVE AND INCLUDES A PEDESTRIAN MOVEMENT FOR LOCUST DRIVE AND SOUTHBOUND MD 27 OPERATES CONCURRENTLY WITH LOCUST DRIVE, AND INCLUDES AN ACTUATED PEDESTRIAN MOVEMENT FOR LEWIS DRIVE. THIS INTERSECTION IS PART OF THE MD 27 INTERCONNECT SIGNAL SYSTEM.

PEDESTRIAN CROSSINGS SHALL BE UPGRADED TO INCLUDE APS/PCS SIGNALS AND ADA RAMPS. LED VEHICULAR SIGNAL HEADS SHALL BE INSTALLED TO REPLACE THE EXISTING SIGNAL HEADS.

AUDIBLE PUSHBUTTON FUNCTION SHALL BE AS FOLLOWS:

- WHEN A PEDESTRIAN LOCATES AND PASSES THE PUSHBUTTON FOR AN EXTENDED TIME, THE PUSHBUTTON UNIT WILL ANNOUNCE THE FOLLOWING MESSAGE:
FOR NORTH LEG, "WAIT TO CROSS LEWIS AT RIDGE AND LOCUST, WAIT"
FOR EAST LEG, "WAIT TO CROSS RIDGE AT LEWIS AND LOCUST, WAIT"
FOR WEST LEG, "WAIT TO CROSS LOCUST AT RIDGE AND LEWIS, WAIT"
- WHEN THE "WALK" PHASE BEGINS, THE MESSAGE WILL BE A RAPID TICK WHICH WILL CONTINUE FOR THE DURATION OF THE "WALK" PHASE.

PROJECT CONTACTS

THE CONTACT PERSONS FOR THIS PROJECT ARE AS FOLLOWS:

MS. ANYESHA MOOKHERJEE ASST. DISTRICT ENGINEER-TRAFFIC
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MR. EDWARD RODENHIZER MANAGER, SIGNAL OPERATIONS
PHONE: 410-787-7650

MR. TOM FOUNTAIN ASST. DISTRICT ENGINEER-MAINTENANCE
PHONE: 301-513-7304

MR. SONNY BAILEY MANAGER, SIGN OPERATIONS
PHONE: 410-787-7670

MR. VICTOR GRAFTON UTILITY ENGINEER
PHONE: 301-513-7350

MR. MIKE STOCKER OOTS, SIGNAL WAREHOUSE
PHONE: 410-787-8688

MS. CORRIEN JOHNSON CHIEF, TRAFFIC OPERATIONS DIV.
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MR. BOB RICKETTS SUPERVISOR, MONTGOMERY TECHNICAL CENTER
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POWER COMPANY REPRESENTATIVE - PEPCO:
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MAINTENANCE OF TRAFFIC WILL BE HANDLED BY THE CONTRACTOR USING THE STANDARD PLATES FOR TRAFFIC CONTROL FROM SECTION MD 104.00 OF THE SHA BOOK OF STANDARDS FOR HIGHWAYS & INCIDENTAL STRUCTURES.

EQUIPMENT LIST "A"

A. EQUIPMENT TO BE SUPPLIED BY THE ADMINISTRATION.

CATEGORY CODE NO.	QUANTITY	DESCRIPTION
900000	1 EA	VIDEO DETECTION INTERFACE EQUIPMENT: 1-8 CAMERAS
900000	31 SF	SHEET ALUMINUM GROUND MOUNTED SIGNS CONSISTING OF:
	2 EA	W11-2 PEDESTRIAN TRAFFIC (36" X 36") GROUND MOUNT
	1 EA	W16-7p(L) LEFT DIAGONAL ARROW (24" X 12") GROUND MOUNT
	1 EA	W16-7p(R) RIGHT DIAGONAL ARROW (24" X 12") GROUND MOUNT
	1 EA	R10-11b "NO TURN ON RED" (36" X 36") GROUND MOUNT
900000	6 SF	SHEET ALUMINUM MAST ARM /POLE MOUNTED SIGNS CONSISTING OF:
	2 EA	R10-3(1) PUSHBUTTON SIGN (9" X 15") POLE MOUNT "TO CROSS RIDGE ROAD"
	2 EA	R10-3(1) PUSHBUTTON SIGN (9" X 15") POLE MOUNT "TO CROSS LEWIS DRIVE"
	2 EA	R10-3(1) PUSHBUTTON SIGN (9" X 15") POLE MOUNT "TO CROSS LOCUST DRIVE"

EQUIPMENT LIST "B"

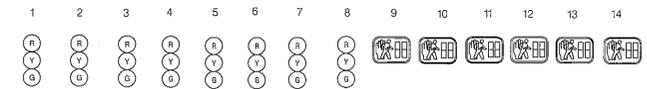
B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR.

CATEGORY CODE NO.	QUANTITY	DESCRIPTION
100000	1 EA	MAINTENANCE OF TRAFFIC (PER INTERSECTION)
201032	3 CY	CLASS 2 EXCAVATION
203030	3 CY	TEST PIT EXCAVATION
585619	400 LF	FIVE INCH YELLOW PREFORMED THERMOPLASTIC PAVEMENT LINES
585621	325 LF	12 INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES
585625	50 LF	24 INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES
585700	560 LF	REMOVAL OF EXISTING PAVEMENT MARKING LINES ANY WIDTH
600000	265 LF	TYPE A COMBINATION CURB AND GUTTER ANY HEIGHT OR DEPTH
600000	67 LF	TYPE A CURB ANY HEIGHT OR DEPTH
65105	1000 SF	5 INCH CONCRETE SIDEWALK
65120	84 SF	DETECTABLE WARNING SURFACE FOR CURB RAMPS
704345	40 SY	PLACING FURNISHED TOPSOIL 4 INCH DEPTH
708220	40 SY	TURFGRASS SOD ESTABLISHMENT
800000	1 EA	2-WIRE APS CENTRAL CONTROL UNIT
800000	5 EA	ADJUST HANDHOLE TO GRADE AND REPLACE FRAME AND COVER
800000	6 EA	AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON STATION AND SIGNS
800000	5 EA	LED 16 INCH COUNTDOWN PEDESTRIAN SIGNAL HEAD
800000	1 EA	REMOVE AND DISPOSE OF EXISTING SIGNAL EQUIPMENT (PER SIGNALIZED INTERSECTION LOCATION)
800000	40 LF	UP TO 4 INCH SCHEDULE 80 RIGID PVC CONDUIT - BORED OR SLOTTED
800000	72 LF	UP TO 4 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
800000	48 LF	WOOD SIGN SUPPORTS UP TO 4 INCH X 8 INCH
800000	37 SF	INSTALL OVERHEAD OR GROUND MOUNTED SIGN (INCLUDING ALL HARDWARE)
800000	6 EA	5 FOOT OR 10 FOOT PEDESTAL POLE WITH BREAKAWAY COUPLINGS, FOUNDATION AND GROUND ROD
800000	1 EA	THIRD PARTY CONCRETE TESTING (PER INTERSECTION)
802501	150 LF	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
860284	24 EA	12 INCH LED VEHICULAR TRAFFIC SIGNAL HEAD SECTION
861105	450 LF	ELECTRICAL CABLE- 2 CONDUCTOR (NO. 14 AWG)
861107	500 LF	ELECTRICAL CABLE- 5 CONDUCTOR (NO. 14 AWG)

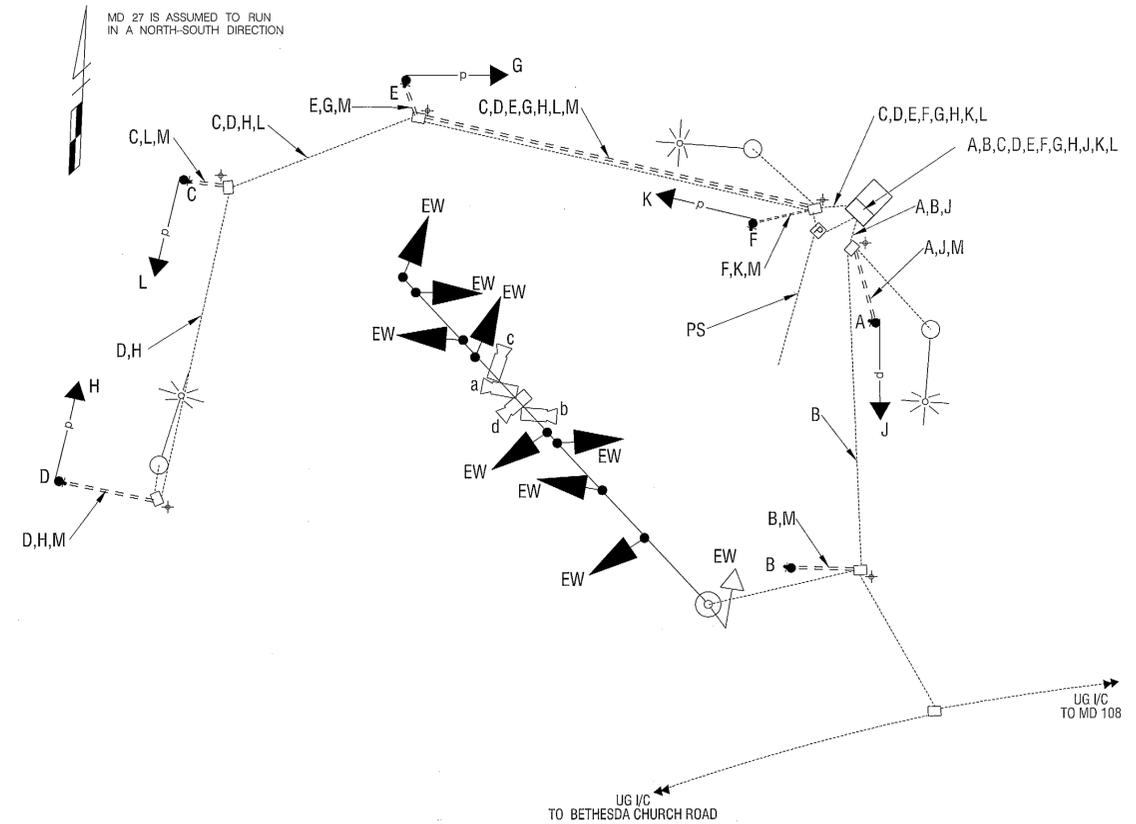
EQUIPMENT LIST "C"

ALL MATERIALS TO BE REMOVED BY THE CONTRACTOR SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

PHASE CHART



PHASE	1	2	3	4	5	6	7	8	9	10	11	12	13	14
PHASE 2 + 6	G	G	G	G	R	R	R	R	DW	DW	WK	WK	WK	WK
PED CLEARANCE	G	G	G	G	R	R	R	R	DW	DW	FL/DW	FL/DW	FL/DW	FL/DW
PHASE 2 + 6 CHANGE	Y	Y	Y	Y	R	R	R	R	DW	DW	DW	DW	DW	DW
PHASE 4 + 8	R	R	R	R	G	G	G	G	DW	DW	DW	DW	DW	DW
PHASE 4 + 8 CHANGE	R	R	R	R	Y	Y	Y	Y	DW	DW	DW	DW	DW	DW
PHASE 4 ALT + 8	R	R	R	R	G	G	G	G	WK	WK	DW	DW	DW	DW
PED CLEARANCE	R	R	R	R	G	G	G	G	FL/DW	FL/DW	DW	DW	DW	DW
PHASE 4 ALT + 8 CHANGE	R	R	R	R	Y	Y	Y	Y	DW	DW	DW	DW	DW	DW
PREEMPTION	R	R	R	R	G	G	R	R	DW	DW	DW	DW	DW	DW
PREEMPTION CHANGE	R	R	R	R	Y	Y	R	R	DW	DW	DW	DW	DW	DW
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	DARK	DARK	DARK	DARK	DARK	DARK



WIRING KEY

- a,b,c,d - EXISTING VIDEO DETECTION CAMERA LEAD-IN CABLE TO CONTROLLER
- A,B,C,D,E,F - 2 CONDUCTOR NO. 14 AWG ELECTRICAL CABLE
- G,H,J,K,L - 5 CONDUCTOR NO. 14 AWG ELECTRICAL CABLE
- EW - EXISTING SIGNAL CABLE TO CONTROLLER
- M - NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
- ⊕ - EXISTING GROUND ROD
- PS - EXISTING SERVICE FEED FROM TRANSFORMER

SHA STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION
MD 27 (RIDGE ROAD)
AND LEWIS DRIVE/LOCUST DRIVE
DAMASCUS, MARYLAND

GENERAL INFORMATION PLAN

SCALE	NONE	ADVERTISED DATE	MARCH 2013	CONTRACT NO.	XY1515185
DESIGNED BY	PMH	COUNTY	MONTGOMERY		
DRAWN BY	PMH	LOGMILE	15002706.56		
CHECKED BY	WS	TIMS NO.	L711		
F.A.P. NO.		TOD NO.			
TS NO. 2449 D	DRAWING	SG-3	OF 3	SHEET NO.	3 OF 3

BY: mhusselbee



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