

**PROJECT DESCRIPTION**

**GENERAL**

THIS PROJECT INVOLVES THE INSTALLATION OF APS/CPS EQUIPMENT UPGRADES, CONVERTING MD 118 TO EXCLUSIVE PHASING, CONVERTING EASTBOUND DAWSON FARM ROAD TO EXCLUSIVE/PERMISSIVE PHASING, AND SIGNAL HEAD REPLACEMENT TO AN EXISTING SPAN WIRE TRAFFIC SIGNAL AT THE INTERSECTION OF MD 118 (GERMANTOWN ROAD) AT DAWSON FARM ROAD IN MONTGOMERY COUNTY. EXISTING PEDESTRIAN SIGNALS, PUSH BUTTONS AND SIGNS ARE TO BE REMOVED.

MD 118 IS CONSIDERED TO RUN IN A NORTH/SOUTH DIRECTION.

**INTERSECTION OPERATION**

A SYSTEM CONTROLLER HOUSED IN A BASE MOUNTED CABINET EXITS AT THIS LOCATION. THE INTERSECTION WILL CONTINUE TO OPERATE IN A SEMI-ACTUATED MODE USING 8 NEMA PHASES. THE LEFT-TURNS ALONG MD 118 WILL OPERATE WITH EXCLUSIVE LEFT-TURN PHASING DURING PEAK TIMES AND A FLASHING RED ARROW DURING NON-PEAK TIMES (SEE NOTE IS THE PHASING DIAGRAM FOR SPECIFIC TIMES). THE EASTBOUND DAWSON FARM ROAD APPROACH WILL OPERATE WITH EXCLUSIVE PERMISSIVE PHASING. AUDIBLE PEDESTRIAN SIGNALS, NEW CURB AND GUTTER AND SIDEWALK WITH ADA RAMPS AND DETECTABLE WARNING SURFACE MATERIAL SHALL BE INSTALLED ON EACH CORNER OF THE INTERSECTION. THE PEDESTRIAN PHASES ACROSS MD 118 WITH OPERATE WITH PUSHBUTTON ACTUATION. THE PEDESTRIAN PHASES ALONG DAWSON FARM ROAD WILL OPERATE ON RECALL.

**SPECIAL NOTES**

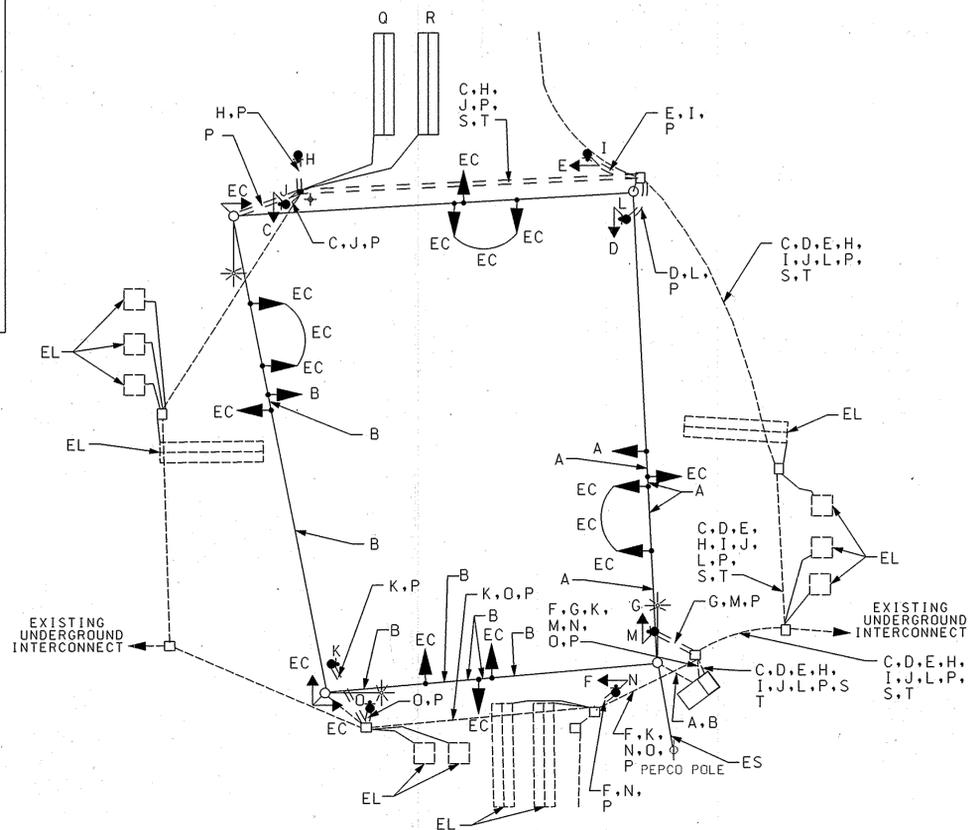
- THE CONTRACTOR SHALL NOT BLOCK VIEW OF EXISTING SIGNAL INDICATIONS DURING INSTALLATION OF PROPOSED SIGNAL HEADS. IF NEW INSTALLATION CANNOT BE INSTALLED DUE TO CONFLICT WITH EXISTING SIGNAL INDICATIONS, A SIGNAL OUTAGE SHALL OCCUR DURING NON-PEAK HOURS AS DIRECTED BY THE ENGINEER.
- CONTRACTOR SHALL USE CAUTION WHEN INSTALLING SIGNAL EQUIPMENT TO AVOID DISTURBANCE OF EXISTING UNDERGROUND UTILITIES INCLUDING SIGNAL CONDUIT. CONTRACTOR SHALL TEST PIT TO DETERMINE EXACT LOCATION AND DEPTH OF UNDERGROUND UTILITIES PRIOR TO INSTALLING SIGNAL EQUIPMENT.
- MAINTENANCE OF TRAFFIC WILL BE HANDLED BY THE CONTRACTOR UTILIZING SECTION 104 FROM THE MARYLAND BOOK OF STANDARDS.
- ALL CONTROLLER CABINET WIRING WILL BE PERFORMED BY THE SHA SIGNAL SHOP. ALSO, ALL ACCESSIBLE PEDESTRIAN CONTROL EQUIPMENT SHALL BE DELIVERED TO THE SHA SIGNAL SHOP FOR TESTING AND PROGRAMMING PRIOR TO INSTALLATION. CONTACT MR. ED RODENHIZER TO COORDINATE BOTH AT (410) 787-7652.
- APS WILL FUNCTION AS FOLLOWS:  
TO CROSS MD 118  
A. WHEN PEDESTRIAN LOCATES AND PRESSES PUSHBUTTON FOR AN EXTENDED TIME, THE PUSHBUTTON UNIT WILL BE WAIT TO CROSS GERMANTOWN AT DAWSON FARM.  
B. WHEN WALK PHASE BEGINS, THE MESSAGE WILL BE A RAPID TICK, WHICH WILL LAST FOR THE DURATION OF THE WALK PHASE.  
TO CROSS DAWSON FARM ROAD  
A. WHEN PEDESTRIAN LOCATES AND PRESSES PUSHBUTTON FOR AN EXTENDED TIME, THE PUSHBUTTON UNIT WILL BE WAIT TO CROSS DAWSON FARM AT GERMANTOWN.  
B. WHEN WALK PHASE BEGINS, THE MESSAGE WILL BE A RAPID TICK, WHICH WILL LAST FOR THE DURATION OF THE WALK PHASE.
- THE FOLLOWING CONTACT PERSONS FOR THIS PROJECT ARE AS FOLLOWS:  
MR. JEFFREY WENZEL, ASSISTANT DISTRICT ENGINEER - TRAFFIC  
PHONE: (410) 513-7318  
MR. AUGIE REBISH, ASSISTANT DISTRICT ENGINEER - UTILITY  
PHONE: (301) 513-7350  
MR. WAYNE MOWDY, ASSISTANT DISTRICT ENGINEER - MAINTENANCE  
PHONE: (301) 513-7304  
MR. RICHARD L. DAFF SR., CHIEF - TRAFFIC OPERATIONS DIVISIONS  
PHONE: (410) 787-7630  
MR. EDWARD RODENHIZER, CHIEF - SIGNAL OPERATIONS SECTION  
PHONE: (410) 787-7652  
MR. EUGENE BAILEY - SIGN SHOP  
PHONE: (410) 787-7676  
THE POWER COMPANY REPRESENTATIVE IS:  
MR. STEVE CUSTER  
POTOMAC ELECTRIC POWER COMPANY  
8300 OLD MARLBORO PIKE  
UPPER MARLBORO, MARYLAND 20772  
PHONE: (301) 548-4333

**PHASE CHART**

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
PHASE 1 & 5	+G-	+G-	R	R	+G-	+G-	R	R	R	R	R	R	R	R	DW							
CHANGES TO PHASES 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	WK	WK	DW	DW	DW	DW	DW
1 & 6 CHANGE	+Y-	+Y-	G	G	+R-	+R-	R	R	R	R	R	R	R	R	DW	WK	WK	DW	DW	DW	DW	DW
PHASE 2 & 5	+R-	+R-	R	R	+G-	+G-	G	G	R	R	R	R	R	R	WK	DW	DW	WK	DW	DW	DW	DW
2 & 5 CHANGE	+R-	+R-	R	R	+Y-	+Y-	G	G	R	R	R	R	R	R	WK	DW	DW	WK	DW	DW	DW	DW
PHASE 2 & 6	+R-	+R-	G	G	+R-	+R-	G	G	R	R	R	R	R	R	WK	WK	WK	WK	DW	DW	DW	DW
PED CLEAR	+R-	+R-	G	G	+R-	+R-	G	G	R	R	R	R	R	R	FL/DW	FL/DW	FL/DW	FL/DW	DW	DW	DW	DW
2 & 6 CHANGE	+R-	+R-	Y	Y	+R-	+R-	Y	Y	R	R	R	R	R	R	DW							
PHASE 4 & 7	+R-	+R-	R	R	+R-	+R-	R	R	+GG	+GG	G	R	R	R	DW							
4 & 7 CHANGE	+R-	+R-	R	R	+R-	+R-	R	R	+Y/G	+Y/G	G	R	R	R	DW							
PHASE 4 & 8	+R-	+R-	R	R	+R-	+R-	R	R	G	G	G	G	G	G	DW							
4 & 8 CHANGE	+R-	+R-	R	R	+R-	+R-	R	R	Y	Y	Y	Y	Y	Y	DW							
PHASE 4 & 8 ALT	+R-	+R-	R	R	+R-	+R-	R	R	G	G	G	G	G	G	DW	DW	DW	DW	WK	WK	WK	WK
PED CLEARANCE	+R-	+R-	R	R	+R-	+R-	R	R	G	G	G	G	G	G	DW	DW	DW	DW	FL/DW	FL/DW	FL/DW	FL/DW
4 & 8 ALT CHANGE	+R-	+R-	R	R	+R-	+R-	R	R	Y	Y	Y	Y	Y	Y	DW							
FLASHING OPERATION	FL/R	FL/R	FLY	FLY	FL/R	FL/R	FLY	FLY	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	DARK							

\* MD 118 IS TO OPERATED AS A FLASHING RED ARROW FOR THET LEFT TURNS BETWEEN THE HOURS OF 8:00 PM TO 7:00AM.

**WIRING DIAGRAM**



**KEY**

- A, B } 5-CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
- C, D, E, F } 5-CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
- G } 5-CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
- H, I, J, K, L, M, N, O } 2-CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG) {PUSHBUTTON}
- P } STRANDED BARE COPPER GROUND WIRE (NO. 6 AWG)
- O, R } LOOP WIRE
- S, T } 2-CONDUCTOR ALUMINUM SHIELDED (NO. 14 A.W.G.)
- EL } EXISTING LOOP
- ES } EXISTING SERVICE TO BE MAINTAINED
- + } GROUND ROD

TOD No. XX444-06  
SHA No. MO526A54/B54

**SHA** STATE OF MARYLAND  
DEPARTMENT OF TRANSPORTATION  
STATE HIGHWAY ADMINISTRATION  
OFFICE OF TRAFFIC & SAFETY  
TRAFFIC ENGINEERING DESIGN DIVISION  
MD 118 &  
DAWSON FARM ROAD

**TRAFFIC SIGNAL - GENERAL INFORMATION**

SCALE	NTS	ADVERTISED DATE	05-01-08	CONTRACT NO.	XX4445185
DESIGNED BY	M.E.V.	COUNTY	MONTGOMERY		
DRAWN BY	W.H.J.	LOGMILE	150112.34.68		
CHECKED BY	J.W.H.	TIMS NO.	1755		
F.A.P. NO.	AC-CMG-NHG-000A(27)E	TOD NO.	3589		

TS NO. 2518 DRAWING SG-02 OF 3 SHEET NO. 2 OF 3

WHITNEY BAILEY COX & MAGNANI LLC  
848 Farmount Ave., Suite 100 Baltimore, MD 21206  
Tel. 410-512-4500 Fax: 410-524-4100  
www.wbcm.com

**WBCM**  
ARCHITECTURE ENGINEERING CONSTRUCTION

MD 118 IS ASSUMED TO RUN  
IN A NORTH-SOUTH DIRECTION