

**PROJECT DESCRIPTION**

**I. GENERAL**

This project involves the reconstruction of the existing traffic signal at the intersection of MD 500 (Queens Chapel Rd) at MD 208/Hamilton Street in Hyattsville Prince George's County. Pushbutton activated crossings will be upgraded to pushbuttons with countdown pedestrian signal heads on all approaches.

**II. INTERSECTION OPERATION**

1. The intersection is to operate in a NEMA 8-phase, Fully-actuated mode, with exclusive-permissive left turns on all approaches. Pushbutton activated crossings are to be installed on all approaches.

**PUSHBUTTON MESSAGES**

**NORTH LEG**

WAIT: "WAIT TO CROSS HAMILTON AT QUEENS CHAPEL. CROSSWALK ANGLES LEFT. WAIT."  
WALK: RAPID TICK

**SOUTH LEG**

WAIT: "WAIT TO CROSS HAMILTON AT QUEENS CHAPEL. WAIT."  
WALK: RAPID TICK

**EAST LEG**

WAIT: "PUSHBUTTON TO CROSS QUEENS CHAPEL AT HAMILTON. WAIT."  
WALK: RAPID TICK

**WEST LEG**

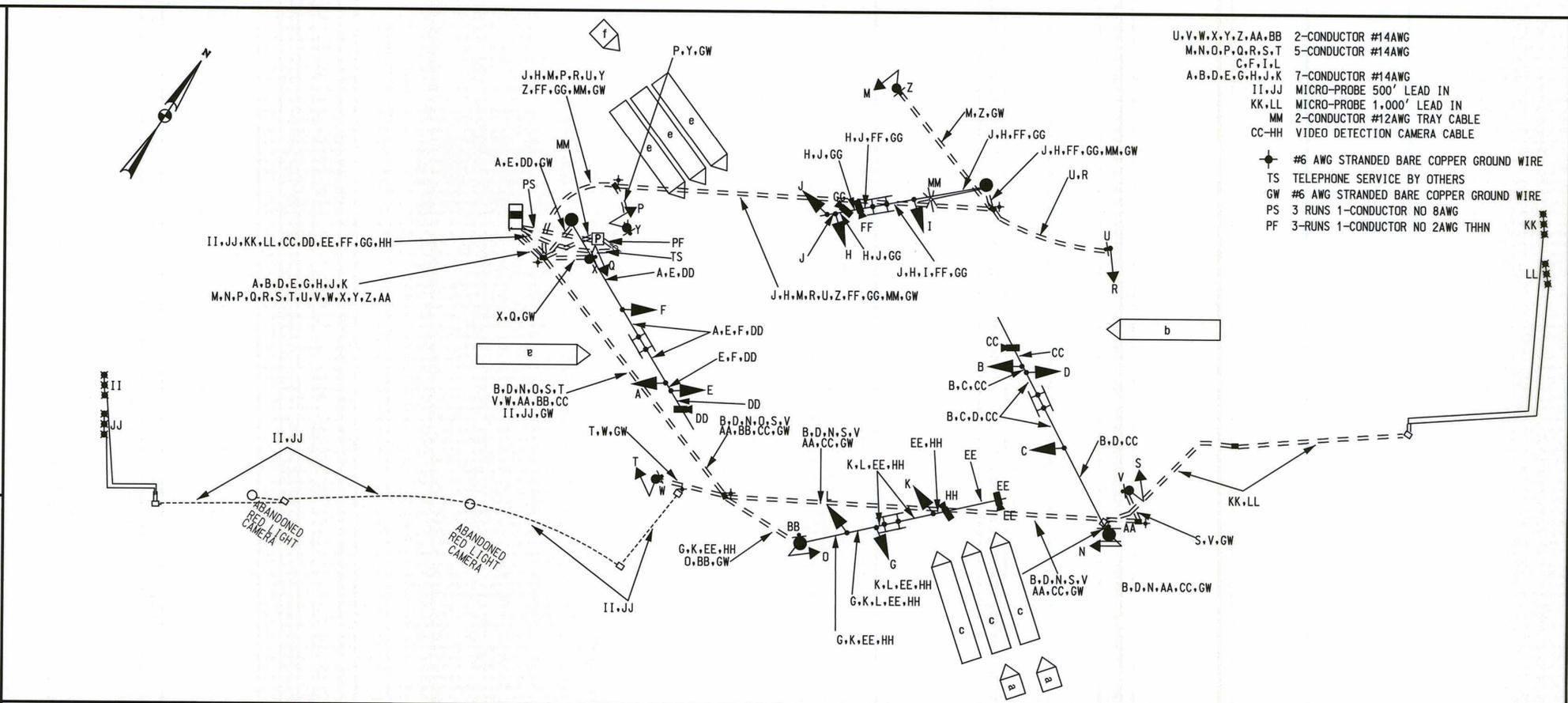
WAIT: "PUSHBUTTON TO CROSS QUEENS CHAPEL AT HAMILTON. WAIT."  
WALK: RAPID TICK

**A. EQUIPMENT TO BE SUPPLIED BY THE ADMINISTRATION**

ITEM #	QUANTITY	ITEM DESCRIPTION
9044	1 EA	CONTROLLER CABINET, NEMA SIZE "S"
9087	1 EA	VIDEO DETECTION INTERFACE 1-8 CAMERAS
9570	75.25 SF	SHEET ALUMINUM SIGN GROUND MOUNTED
9571	100 SF	SHEET ALUMINUM SIGN MAST ARM/POLE MOUNTED

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

ITEM #	QUANTITY	ITEM DESCRIPTION
1003	3 EA	MAINTENANCE OF TRAFFIC
2001	8 CY	CLASS 2 EXCAVATION
2002	2 CY	TEST PIT EXCAVATION
5001	10 EA	REMOVAL OF EXISTING PAVEMENT MARKING SYMBOLS OR LEGENDS
5002	425 LF	5" WHITE OR YELLOW HEAT APPLIED PERMANENT PAVEMENT MARKINGS
5003	425 LF	REMOVAL OF EXISTING PERMANENT PAVEMENT LINE MARKINGS
5004	800 LF	F&I 12" WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES
5005	120 LF	F&I 24" WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES
6001	500 LF	F&I STANDARD TYPE A COMBINATION CURB AND GUTTER 12" PAN 8" DEPTH
6002	3000 SF	F&I 5" CONCRETE SIDEWALK
6003	155 SF	F&I DETECTABLE WARNING SURFACE FOR CURB RAMPS
8001	40 EA	F&I 12" LED SIGNAL HEAD SECTION
8002	1 EA	F&I 2-WIRE CENTRAL CONTROL UNIT
8004	12 EA	F&I 8" LED SIGNAL HEAD SECTION
8007	1 EA	ANY SIZE LIGHTING ARM ON SIGNAL POLE WITH 250W HPS LAMP AND LUMINAIRE
8008	8 EA	F&I AUDIBLE TACTILE PEDESTRIAN PUSHBUTTON
8009	6 EA	F&I BREAKAWAY PEDESTAL POLE ANY SIZE
8012	1 EA	F&I EMBEDDED METERED SERVICE PEDESTAL
8015	8 EA	F&I 16" LED COUNTDOWN PEDESTRIAN SIGNAL HEAD
8018	1 EA	F&I MAST ARM POLE AND 50' MAST ARM ANY T-DIMENSION
8019	1 EA	F&I MAST ARM POLE AND 60' MAST ARM ANY T-DIMENSION
8020	2 EA	F&I MAST ARM POLE AND 70' MAST ARM ANY T-DIMENSION
8021	4 EA	F&I MICRO LOUPE PROBE ANY LENGTH LEAD IN
8023	1 EA	REMOVE AND DISPOSE OF EQUIPMENT-PER ASSIGNMENT
8028	6 EA	F&I VIDEO DETECTION CAMERA AND CABLE ANY LENGTH
8030	150 LF	F&I ELECTRICAL CABLE 1-CONDUCTOR NO 2 AWG THHN
8034	250 LF	F&I ELECTRICAL CABLE 2-CONDUCTOR NO 12AWG-TRAY CBAL
8037	765 LF	F&I UP TO 4" SCH 80 RIGID PVC CONDUIT-BORED
8039	255 LF	F&I UP TO 4" SCH 80 RIGID PVC CONDUIT-TRENCHED
8040	156.75 LF	F&I WOOD SIGN SUPPORTS UP 4"x6"
8041	175.25 SF	INSTALL OVERHEAD OR GROUND MOUNTED SIGN
8042	24 SF	REMOVE AND RESET DECORATIVE BRICK
8043	700 LF	F&I NO 6AWG STRANDED BARE COPPER GROUND WIRE
8046	75 LF	F&I ELECTRICAL CABLE NO 8AWG THHN/THWN
8047	6 EA	F&I ELECTRICAL HANDHOLE
8054	1500 LF	F&I ELECTRICAL CABLE-2 CONDUCTOR NO 14AWG
8056	1700 LF	F&I ELECTRICAL CABLE-5 CONDUCTOR NO 14AWG
8057	2200 LF	F&I ELECTRICAL CABLE-7 CONDUCTOR NO 14AWG
8063	1 EA	INSTALL CONTROLLER AND CABINET -BASE MOUNT
8070	10 LF	FURNISH AND INSTALL 10 LF STEEL RAILING PAINTED GLOSS BLACK



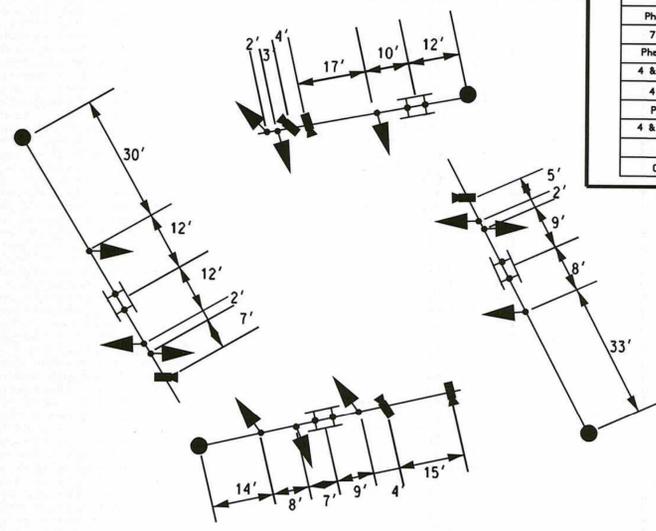
- U,V,W,X,Y,Z,AA,BB 2-CONDUCTOR #14AWG
- M,N,O,P,Q,R,S,T 5-CONDUCTOR #14AWG
- C,F,I,L 7-CONDUCTOR #14AWG
- A,B,D,E,G,H,J,K II,JJ MICRO-PROBE 500' LEAD IN
- KK,LL MICRO-PROBE 1,000' LEAD IN
- MM 2-CONDUCTOR #12AWG TRAY CABLE
- CC-HH VIDEO DETECTION CAMERA CABLE
- TS #6 AWG STRANDED BARE COPPER GROUND WIRE
- TS TELEPHONE SERVICE BY OTHERS
- GW #6 AWG STRANDED BARE COPPER GROUND WIRE
- PS 3 RUNS 1-CONDUCTOR NO 8AWG
- PF 3-RUNS 1-CONDUCTOR NO 2AWG THHN

**CONTACTS**

DISTRICT	OFFICE OF TRAFFIC AND SAFETY
MS. FELECIA MURPHY ASSISTANT DISTRICT ENGINEER - TRAFFIC 301-513-7350	MR. RICHARD DAFF SR. CHIEF, TRAFFIC OPERATIONS 410-787-7650
MR. VICTOR GRAFTON ASSISTANT DISTRICT ENGINEER - UTILITIES 301-513-7350	MR. ROBERT SHYDER ASSISTANT DIVISION CHIEF, TRAFFIC OPERATIONS 410-787-7650
MR. VERNON STINNET ASSISTANT DISTRICT ENGINEER - MAINTENANCE 301-513-7304	MR. ED RODENHIZER TEAM LEADER SIGNAL OPERATIONS 410-787-7650
	MR. EUGENE BAILEY TEAM LEADER SIGN OPERATIONS 410-787-7670
	MR. MIKE STOCKER SUPPLY OFFICER IV (SIGNAL SHOP WAREHOUSE) 410-787-7668

**GENERAL NOTES**

- VIDEO CAMERA LOCATION / ALIGNING SHALL BE COORDINATED WITH THE SHA ENGINEER.
- THE CONTRACTOR SHALL VERIFY ALL PROPOSED POLE AND CABINET LOCATIONS PRIOR TO INSTALLATION.
- FOR FINAL PAVEMENT MARKINGS REFER TO THE PAVEMENT MARKING PLANS, OTHER THAN THOSE DETAILED ON THE PLAN. ALL PAVEMENT MARKINGS SHALL BE INSTALLED IN ACCORDANCE WITH MSHA STANDARDS.
- ALL EXISTING TRAFFIC SIGNAL EQUIPMENT REMOVED SHALL BECOME THE PROPERTY OF THE SIGNAL CONTRACTOR UPON COMPLETION OF THE NEW SIGNAL.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR TERMINATING ALL SIGNAL CABLE TO THE APPROPRIATE TERMINALS AND PROPERLY LABEL EACH CABLE.
- THE CONTRACTOR SHALL VERIFY ALL UNDERGROUND UTILITIES PRIOR TO INSTALLING PROPOSED SIGNAL EQUIPMENT. IF ANY UTILITY CONFLICTS SHOULD ARISE THE CONTRACTOR SHALL CONTACT THE PROJECT ENGINEER.
- ALL TRAFFIC SIGNAL FOUNDATIONS SHALL BE INSTALLED AT THE FINAL SIDEWALK OR CURB GRADE FOR CLOSED SECTIONS. HIGHEST ROADWAY PROFILE GRADE FOR OPEN SECTIONS. TO MEET CLEARANCES AS SPECIFIED IN MD 816.03, MD 818.01, MD 818.02, MD 818.04. THE CONTRACTOR SHALL VERIFY ULTIMATE GRADES PRIOR TO THE INSTALLATION OF ALL SIGNAL EQUIPMENT.
- LOCATIONS OF ACCESSIBLE PEDESTRIAN PUSHBUTTONS MUST MEET LOCATION REQUIREMENTS OF MUTCD SECTION 4E-09 AND FIGURE 4E-2 AND THE NCHRP PUBLICATION "ACCESSIBLE PEDESTRIAN SIGNALS: GUIDE TO BEST PRACTICE". IF THESE LOCATIONS CANNOT BE MET THE CONTRACTOR IS TO STOP WORK UNTIL THE CONFLICT IS RESOLVED OR A DESIGN WAIVER, APPROVED BY THE DIRECTOR, OFFICE OF TRAFFIC AND SAFETY, HAS BEEN OBTAINED.
- PUSHBUTTONS ARE TO BE LOCATED SO THAT A PERSON IN A WHEELCHAIR LOCATED ON THE 60"x60" LEVEL LANDING AREA DOES NOT HAVE TO REACH MORE THAN 18". A LEVEL LANDING AREA IS DEFINED AS AN AREA WITH A CROSS SLOPE OF LESS THAN 2%.
- THE 10' SEPARATION BETWEEN PUSHBUTTONS IS TO BE MEASURED FROM THE FACES OF THE PUSHBUTTON, NOT THE CENTERS OF THE POLES.



	1	2	3	4	5	6	7	8	9	10	11	12	13-28
Phase 1 & 5	←G-R	←G-R	R	←G-R	←G-R	R	R	R	R	R	R	R	DW
1 & 5 Change													
Phase 1 & 6	R	R	R	←G-G	←G-G	G	R	R	R	R	R	R	DW
1 Change	R	R	R	←Y-G	←Y-G	G	R	R	R	R	R	R	DW
Phase 2 & 5	←G-G	←G-G	G	R	R	R	R	R	R	R	R	R	DW
5 Change	←Y-G	←Y-G	G	R	R	R	R	R	R	R	R	R	DW
Phase 2 & 6	G	G	G	G	G	G	R	R	R	R	R	R	DW
2 & 6 Change	Y	Y	Y	Y	Y	Y	R	R	R	R	R	R	DW
Phase 3 & 7	R	R	R	R	R	R	←G-R	←G-R	R	←G-R	←G-R	R	DW
3 & 7 Change													
Phase 3 & 8	R	R	R	R	R	R	←G-G	←G-G	G	←G-G	R	R	DW
3 Change	R	R	R	R	R	R	←Y-G	←Y-G	G	←Y-G	R	R	DW
Phase 4 & 7	R	R	R	R	R	R	R	R	R	R	←G-G	G	DW
7 Change	R	R	R	R	R	R	R	R	R	R	←Y-G	G	DW
Phase 4 & 8	R	R	R	R	R	R	R	G	G	G	G	G	DW
4 & 8 Change	R	R	R	R	R	R	R	Y	Y	Y	Y	Y	DW
4 & 8 Alt.	R	R	R	R	R	R	R	G	G	G	G	G	WK
Ped. Clear	R	R	R	R	R	R	R	G	G	G	G	G	FL/DW
4 & 8 Change	R	R	R	R	R	R	R	Y	Y	Y	Y	Y	DW
Flashing	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	Dark
Operation													

**SHA** STATE OF MARYLAND  
DEPARTMENT OF TRANSPORTATION  
STATE HIGHWAY ADMINISTRATION  
OFFICE OF TRAFFIC & SAFETY  
TRAFFIC ENGINEERING DESIGN DIVISION  
MD 500 (QUEENS CHAPEL ROAD) @  
MD 208/HAMILTON STREET

**GENERAL INFORMATION SHEET**

SCALE: NA	ADVERTISED DATE: OCTOBER 2011	CONTRACT NO. XX655185
DESIGNED BY: C STRAIN	COUNTY: PRINCE GEORGES	
DRAWN BY: C STRAIN	LOGMILE: 16020801.86	
CHECKED BY: D DODA	TIMS NO. 1483	
F.A.P. NO.	TOD NO.	
TS NO. 896-D	DRAWING: GI-1	OF: 1 SHEET NO. 3 OF 3

BY: \$USER\$

REDLINE 1 APPROVED 5/9/12: *[Signature]*  
DENNIS DODA, TEAM LEADER, TEDD