PROJECT DESCRIPTION

THIS PROJECT INVOLVES THE CONSTRUCTION OF ADA COMPLIANT RAMPS, INSTALLATION OF COUNTDOWN PEDESTRIAN SIGNAL HEADS, APS PUSHBUTTONS AND SIGNS ALONG THE EAST LEG OF THE INTERSECTION.
MD 135 IS ASSUMED TO RUN IN A EAST-WEST DIRECTION.

INTERSECTION OPERATION

THIS INTERSECTION WILL OPERATE IN A NEMA FOUR-PHASE FULL-TRAFFIC-ACTUATED MODE WITH AN ALTERNATE PEDESTRIAN PHASE FOR THE EAST LEG OF THE INTERSECTION. THE LEFT TURNS AT THIS INTERSECTION OPERATE IN PERMISSIVE PHASING. A RAILROAD PRE-EMPTION PHASE IS PROVIDED.

CONTROLLER REQUIREMENTS

THE EXISTING FULL-TRAFFIC-ACTUATED EIGHT PHASE TRAFFIC SIGNAL CONTROLLER WITH TELEMETRY CABLE HOUSED IN A BASE MOUNTED CABINET SHALL REMAIN. THE BATTERY BACKUP HOUSED IN A BASE MOUNTED CABINET SHALL ALSO REMAIN. A 2-WIRE APS CENTRAL CONTROL UNIT SHALL BE FURNISHED BY THE CONTRACTOR AND INSTALLED BY SHA.
IP-BASED VIDEO DETECTION INTERFACE EQUIPMENT SHALL BE FURNISHED AND [1] INSTALLED BY SHA.

SPECIAL NOTES

APS WILL FUNCTION AS FOLLOWS:

TO CROSS MD 135 (CHURCH ST):

A. WHEN PEDESTRIAN LOCATES AND PRESSES PUSHBUTTON FOR AN EXTENDED TIME, THE PUSHBUTTON UNIT MESSAGE WILL BE "WAIT TO CROSS CHURCH AT NEW GEORGES CREEK. WAIT."

B. WHEN WALK PHASE BEGINS, THE MESSAGE WILL BE A RAPID TICK WHICH WILL LAST FOR THE DURATION OF THE WALK PHASE.

CONTACT PERSONS FOR DISTRICT #6 ARE AS FOLLOWS:

~~MR. GEORGE SMALL~~
[1] ~~ASSISTANT DISTRICT ENGINEER-TRAFFIC~~
~~PHONE: (301) 729-8444~~

MR. KC KEITH
TEAM LEADER - DISTRICT 6 TRAFFIC
PHONE: (301) 729-8442

MR. DWAYNE BITTNER
ASSISTANT DISTRICT ENGINEER - MAINTENANCE
PHONE: (301) 729-8457

MR. STEPHEN BUCY
ASSISTANT DISTRICT ENGINEER - CONSTRUCTION
PHONE: (301) 729-8411

CONTACT PERSONS FOR OOTS ARE AS FOLLOWS:

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

MR. ED RODENHIZER
CHIEF, SIGNAL OPERATIONS
(410)787-7650

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

EQUIPMENT LIST "A, B & C"

A. EQUIPMENT TO BE SUPPLIED BY THE SHA

ITEM NO.	DESCRIPTION	UNIT	QUANTITY
9570	SHEET ALUMINUM GROUND MOUNTED SIGN 2 - W11-2 FY 30"X30" 2 - M6-2 FY 21"X15" 1 - SPECIAL 48"X48"	SF	33
9571	SHEET ALUMINUM MAST ARM/POLE MOUNTED SIGN 2 - R10-3(1) 9"X15"	SF	2
[1] 9124	VIDEO DETECTION INTERFACE EQUIPMENT: 1-8 CAMERAS	EA	1

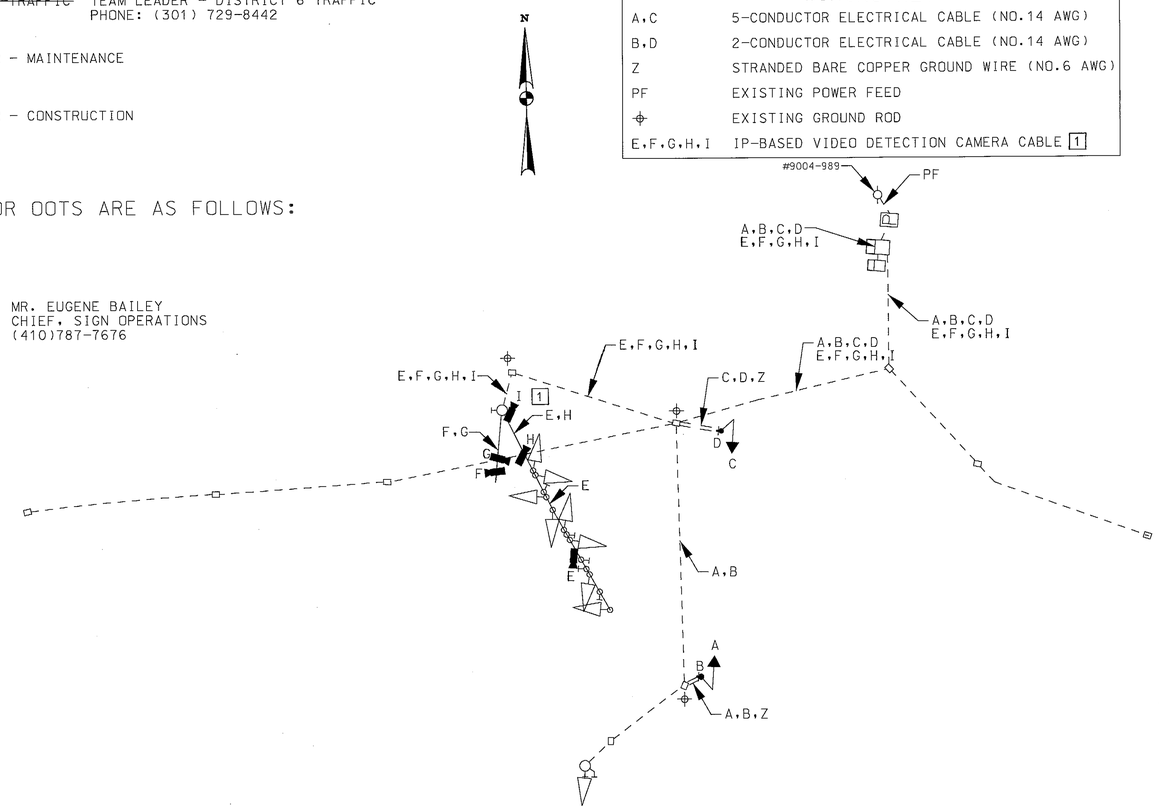
B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR

ITEM NO.	DESCRIPTION	UNIT	QUANTITY
1001	MAINTENANCE OF TRAFFIC	EA	1
5003	REMOVAL OF EXISTING PERMANENT PAVEMENT LINE MARKINGS	LF	190
5004	12 INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES	LF	265
6001	STANDARD TYPE A COMBINATION CURB AND GUTTER 12 INCH GUTTER PAN 8 INCH DEPTH	LF	183
6002	5 INCH CONCRETE SIDEWALK	SF	700
6003	DETECTABLE WARNING SURFACE FOR CURB RAMPS	SF	46
8002	2-WIRE CENTRAL CONTROL UNIT	EA	1
8008	AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON STATION AND SIGNS	EA	2
8009	BREAKAWAY PEDESTAL POLE (ANY SIZE)	EA	2
8015	LED 16 INCH COUNTDOWN PEDESTRIAN SIGNAL HEAD	EA	2
8023	REMOVE & DISPOSE OF EQUIPMENT (PER ASSIGNMENT)	EA	1
8038	UP TO 4 INCH SCHEDULE 80 RIGID PVC CONDUIT-TRENCHED	LF	25
8039	WOOD SIGN SUPPORTS UP TO 4' X 6'	LF	66
8040	INSTALL OVERHEAD OR GROUND MOUNTED SIGN (INCLUDING ALL HARDWARE)	SF	35
8042	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE	LF	35
8053	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG)	LF	400
8055	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)	LF	400
5005	24 INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES	LF	20
[1] 8007	ANY SIZE LIGHTING ARM ON SIGNAL POLE WITH 250 WATT HPS LAMP AND LUMINAIRE	EA	1
8028	VIDEO DETECTION CAMERA AND CABLE ANY LENGTH	EA	5

C. ALL MATERIALS TO BE REMOVED BY THE CONTRACTOR SHALL BECOME THE PROPERTY OF THE CONTRACTOR. EXISTING VIDEO DETECTION CAMERA TO BE REMOVED SHALL BE RETURNED TO THE SHA SIGNAL SHOP

WIRING KEY

A,C	5-CONDUCTOR ELECTRICAL CABLE (NO.14 AWG)
B,D	2-CONDUCTOR ELECTRICAL CABLE (NO.14 AWG)
Z	STRANDED BARE COPPER GROUND WIRE (NO.6 AWG)
PF	EXISTING POWER FEED
⊕	EXISTING GROUND ROD
E,F,G,H,I	IP-BASED VIDEO DETECTION CAMERA CABLE [1]



PHASING CHART

	1	2	3	4	5	6	7	8	9	10	11	12	13
PHASE 2 AND 6	G	G	G	G	R	R	R	R	R	DW	DW	DARK	DARK
2 AND 6 CHANGE	Y	Y	Y	Y	R	R	R	R	R	DW	DW	DARK	DARK
PHASE 4 AND 8	R	R	R	R	G	G	G	G	G	DW	DW	DARK	DARK
4 AND 8 CHANGE	R	R	R	R	Y	Y	Y	Y	Y	DW	DW	DARK	DARK
PHASE 4 AND 8 ALT	R	R	R	R	G	G	G	G	G	WK	WK	DARK	DARK
PED CLEARANCE	R	R	R	R	G	G	G	G	G	FL/DW	FL/DW	DARK	DARK
4 AND 8 ALT CHANGE	R	R	R	R	Y	Y	Y	Y	Y	DW	DW	DARK	DARK
RAILROAD PRE-EMPTION	G	G	G	G	R	R	R	R	R	DW	DW		
RAILROAD PRE-EMPTION CLEARANCE	Y	Y	Y	Y	R	R	R	R	R	DW	DW		
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	FL/R	DARK	DARK	DARK	DARK

GENERAL NOTES

1. THE CONTRACTOR SHALL VERIFY ALL PROPOSED POLE LOCATIONS PRIOR TO INSTALLATION.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TERMINATING ALL SIGNAL CABLE TO THE APPROPRIATE TERMINALS AND PROPERLY LABELING EACH CABLE.
3. ALL UNUSED CABLE SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR.
4. UNDERGROUND UTILITIES SHOWN ON THESE PLANS ARE SCHEMATIC ONLY AND MAY NOT BE COMPLETE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING "MISS UTILITY" PRIOR TO CONSTRUCTION SO THAT ALL UTILITIES MAY BE LOCATED IN THE FIELD. IF THE CONTRACTOR PERCEIVES THAT A CONFLICT BETWEEN THE UTILITIES AND THE TRAFFIC SIGNAL WILL OCCUR, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER IMMEDIATELY SO THAT THE CONFLICT MAY BE RESOLVED.
5. ALL PEDESTAL FOUNDATION TOPS SHALL BE INSTALLED FLUSH WITH SIDEWALK GRADE.
6. LOCATION OF ACCESSIBLE PEDESTRIAN SIGNAL PUSHBUTTONS MUST MEET LOCATION REQUIREMENTS OF MDMUTCD CHAPTER 4E "PEDESTRIAN CONTROL FEATURES" AND FIGURES 4E-3 AND 4E-4, AND THE LATEST NCHRP PUBLICATION, "ACCESSIBLE PEDESTRIAN SIGNALS: GUIDE TO BEST PRACTICE." IF NOT MET,THE CONTRACTOR IS TO STOP WORK ON PUSHBUTTON LOCATIONS UNTIL A DESIGN WAIVER IS OBTAINED, APPROVED BY THE DIRECTOR, OFFICE OF TRAFFIC AND SAFETY.
7. PUSHBUTTONS ARE TO BE LOCATED SO THAT THEY CAN BE ACTIVATED BY A PERSON IN A WHEELCHAIR REACHING LESS THAN 18" FROM A 60" X 60" LEVEL LANDING AREA WITH A CROSS SLOPE OF LESS THAN OR EQUAL TO 2%.
8. PUSHBUTTON ARROWS AND SIGNS ARE TO BE ORIENTED PARALLEL TO THE CROSSING FOR WHICH THEY ARE INTENDED.
9. THE CONTRACTOR SHALL CAP AND ABANDON CONDUITS FEEDING EXISTING SIGNAL EQUIPMENT THAT IS REMOVED.
10. THE CONTRACTOR SHALL CONTACT ED RODENHIZER AT THE SIGNAL SHOP (410) 787-7652 TO DELIVER APS EQUIPMENT FOR TESTING.

[1] 11. VIDEO DETECTION CAMERA ALIGNMENT SHALL BE COORDINATED WITH THE ENGINEER.

BY: BJG

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REVISIONS
[1] REDLINE NO. 1
JULY 2013
ADD VIDEO DETECTION
7-29-13

SHA
STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION

MD 36 (NEW GEORGES CREEK ROAD)
AT MD 135 (CHURCH ST)
WESTERNPORT, MARYLAND

GENERAL INFORMATION SHEET

SCALE NONE DATE MARCH 2013 CONTRACT NO. XX6505185

DESIGNED BY GS COUNTY ALLEGANY
DRAWN BY GS LOGMILE 0100 3600.06
CHECKED BY BJG TIMS NO. L651
FAP NO. TOD NO.

TS NO. 3221B-01 DRAWING SP-2 OF 8 SHEET NO. 2 OF 10

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