

**PROJECT DESCRIPTION**

**GENERAL**  
 THIS PROJECT INVOLVES THE INSTALLATION OF ACCESSIBLE PEDESTRIAN SIGNALS (APS), COUNTDOWN PEDESTRIAN SIGNALS (CPS), PEDESTRIAN CROSSWALKS AND ADA COMPLIANT SIDEWALK AND RAMPS FOR THE NORTH AND EAST LEGS AT THE INTERSECTION OF MD 131 (SEMINARY AVENUE) AND THORNTON ROAD.

MD 131 IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION.

**INTERSECTION OPERATION**

THE INTERSECTION WILL CONTINUE TO OPERATE IN A NEMA FOUR-PHASE, FULL TRAFFIC-ACTUATED MODE. THE EXISTING MAINLINE (MD 131) AND SIDE STREET CONCURRENT PHASING WILL REMAIN. A NORTH LEG PEDESTRIAN PHASE AND AN EAST LEG ALTERNATIVE PEDESTRIAN PHASE ARE PROPOSED.

**CONTROLLER REQUIREMENTS**

THE EXISTING BASE MOUNTED SIZE "6" CABINET AND CONTROLLER SHALL REMAIN. THE SHA SIGNAL SHOP WILL INSTALL ONE (1) 2 WIRE CENTRAL CONTROL UNIT AND ONE (1) VIDEO DETECTION INTERFACE EQUIPMENT: I-4 CAMERAS WITHIN THE CABINET.

**APS WILL FUNCTION AS FOLLOWS:**

FOR CROSSING SEMINARY AVENUE:

- A. WHEN A PEDESTRIAN LOCATES AND PRESSES THE PUSHBUTTON FOR AN EXTENDED TIME, THE PUSHBUTTON MESSAGE WILL BE "WAIT TO CROSS SEMINARY AT THORNTON, WAIT".
- B. WHEN THE "WALK" PHASE BEGINS, THE MESSAGE WILL BE A RAPID TICK, WHICH WILL LAST FOR THE DURATION OF THE "WALK" PHASE.

FOR CROSSING THORNTON ROAD:

- A. WHEN A PEDESTRIAN LOCATES AND PRESSES THE PUSHBUTTON FOR AN EXTENDED TIME, THE PUSHBUTTON MESSAGE WILL BE "WAIT TO CROSS THORNTON AT SEMINARY, WAIT".
- B. WHEN THE "WALK" PHASE BEGINS, THE MESSAGE WILL BE A RAPID TICK, WHICH WILL LAST FOR THE DURATION OF THE "WALK" PHASE.

**CONTACTS**

THE CONTACT PERSONS FOR DISTRICT #4 ARE AS FOLLOWS:

Ms. Erin Kuhn  
 Assistant District Engineer - Traffic  
 Phone: 410-229-2381

Mr. Michael Pasquariello  
 District Utility Engineer  
 Phone: 410-229-2421

Mr. Andre Futrell  
 Assistant District Engineer - Maintenance  
 Phone: 410-229-2361

**OFFICE OF TRAFFIC AND SAFETY:**

Chief, Traffic Operations Division  
 Phone: 410-787-7630

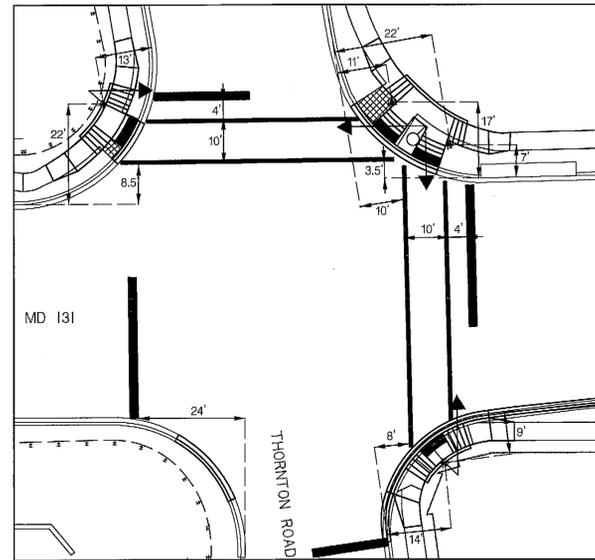
Mr. Robert Snyder  
 Assistant Division Chief, Traffic Operations  
 410-787-7630

Mr. Edward Rodenhizer  
 Chief Signal Operations  
 Phone: 410-787-7650

Mr. Eugene Bailey  
 Chief Sign Operations  
 410-787-7670

The Power Company Inc.  
 BG&E CO.  
 7317 Parkway Dr. South  
 Hanover, MD  
 Phone: 410-859-9062

**PROPOSED SIGNAL EQUIPMENT AND PAVEMENT MARKING LAYOUT - 1"=20'**



**EQUIPMENT LIST 'A'**

EQUIPMENT TO BE FURNISHED BY THE SHA.

ITEM NO	QUANTITY	DESCRIPTION
9086	1 EA	VIDEO DETECTION INTERFACE EQUIPMENT: I-4 CAMERAS
9571	4 SF	SHEET ALUMINUM POLE MOUNTED SIGNS:
	2 EA	- R10-3(I) (9 IN. X 15 IN.) "PUSH BUTTON TO CROSS SEMINARY AVE"
	2 EA	- R10-3(I) (9 IN. X 15 IN.) "PUSH BUTTON TO CROSS THORNTON ROAD"

**EQUIPMENT LIST 'B'**

EQUIPMENT TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR.

ITEM NO	QUANTITY	DESCRIPTION
1001	1 EA	MAINTENANCE OF TRAFFIC
2002	2 CY	TEST PIT EXCAVATION
5003	90 LF	REMOVAL OF EXISTING PERMANENT PAVEMENT LINE MARKINGS
5004	300 LF	12 INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES
5005	100 LF	24 INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES
6001	200 LF	STANDARD TYPE A COMBINATION CURB AND GUTTER 12 INCH GUTTER PAN 8 INCH DEPTH
6002	850 SF	5 INCH CONCRETE SIDEWALK
6003	50 SF	DETECTABLE WARNING SURFACE FOR CURB RAMPS (TYPE 3 BRICK PAVERS)
8002	1 EA	2-WIRE CENTRAL CONTROL UNIT
8005	1 EA	ADJUST HANDHOLE TO GRADE WITH NEW FRAME AND COVER
8008	4 EA	AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON STATION AND SIGNS
8009	4 EA	BREAKAWAY PEDESTAL POLE (ANY SIZE)
8016	4 EA	LED 16 INCH COUNTDOWN PEDESTRIAN SIGNAL HEAD
8024	1 EA	REMOVE AND DISPOSE OF EQUIPMENT (PER ASSIGNMENT)
8029	2 EA	VIDEO DETECTION CAMERA AND CABLE (ANY LENGTH)
8040	50 LF	UP TO 4 INCH SCHEDULE 80 RIGID PVC CONDUIT-TRENCHED
8042	4 SF	INSTALL OVERHEAD OR GROUND MOUNTED SIGN (INCLUDING ALL HARDWARE)
8044	50 LF	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
8055	400 LF	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG)
8057	390 LF	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)

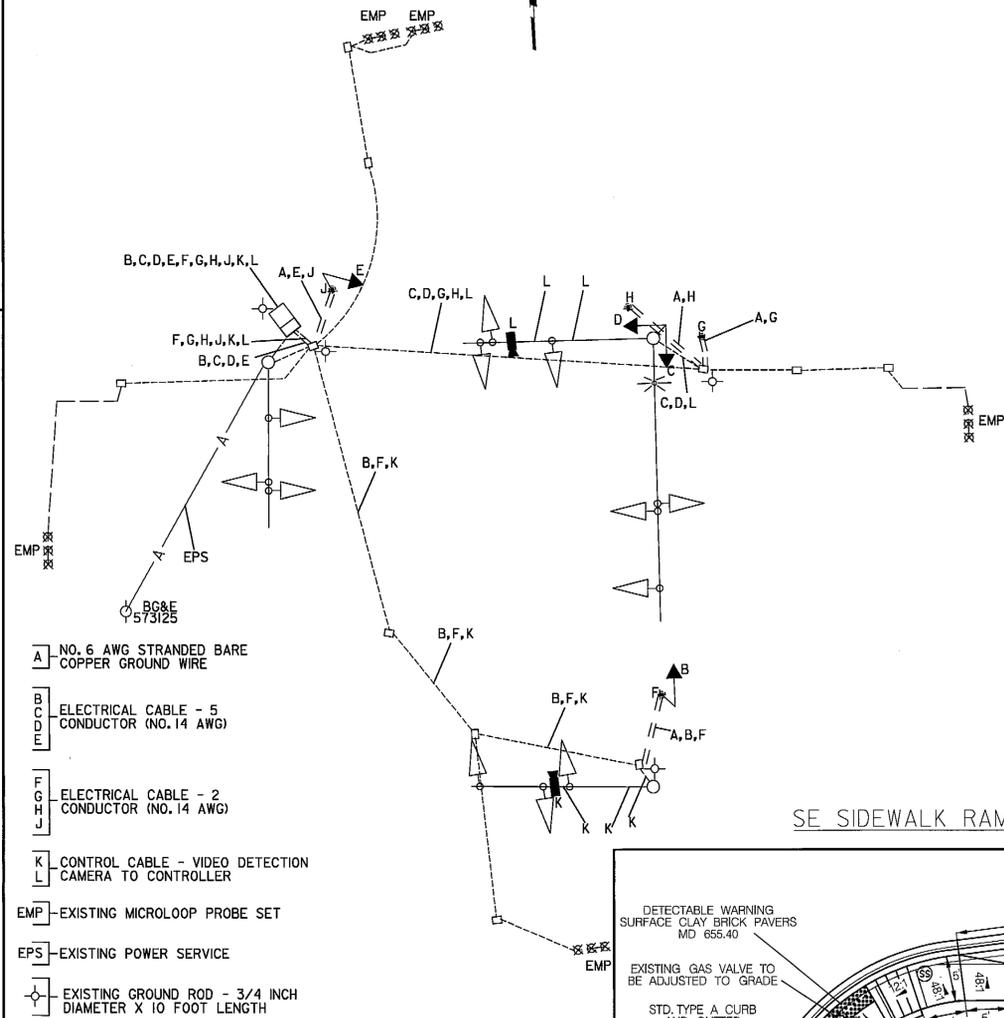
**EQUIPMENT LIST 'C'**

EQUIPMENT TO BE REMOVED AND RETURNED TO SHA

ITEM NO. QUANTITY DESCRIPTION

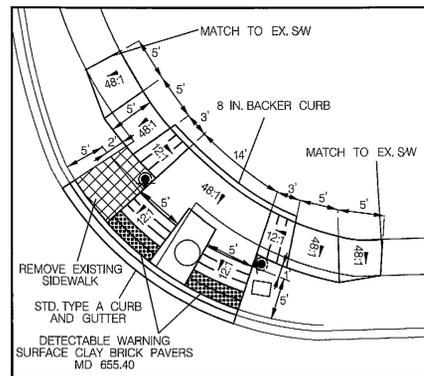
NONE - ALL REMOVED EQUIPMENT SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

**WIRING DIAGRAM**

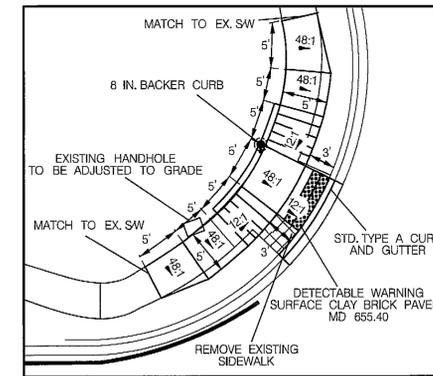


- A - NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
- B - ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)
- C - ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG)
- D - CONTROL CABLE - VIDEO DETECTION CAMERA TO CONTROLLER
- E - EXISTING MICROLOOP PROBE SET
- F - EXISTING POWER SERVICE
- G - EXISTING GROUND ROD - 3/4 INCH DIAMETER X 10 FOOT LENGTH

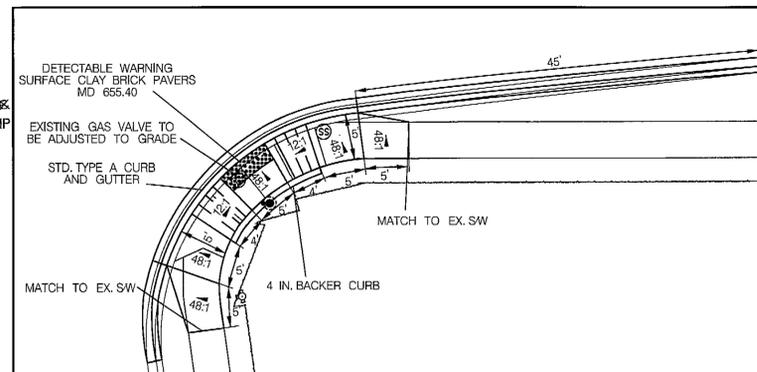
**NE SIDEWALK RAMP DETAIL - 1"=10'**



**NW SIDEWALK RAMP DETAIL - 1"=10'**



**SE SIDEWALK RAMP DETAIL - 1"=10'**



**PHASE CHART**

PHASE CHART	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
PHASE 2 & 6	G	G	G	G	G	R	R	R	R	R	R	R	WK	WK	DW	DW
PED CLEARANCE	G	G	G	G	G	R	R	R	R	R	R	R	FL/DW	FL/DW	DW	DW
2 & 6 CHANGE	Y	Y	Y	Y	Y	R	R	R	R	R	R	R	DW	DW	DW	DW
PHASE 4 & 8	R	R	R	R	R	G	G	G	G	G	G	G	DW	DW	DW	DW
4 & 8 CHANGE	R	R	R	R	R	Y	Y	Y	Y	Y	Y	Y	DW	DW	DW	DW
PHASE 4 & 8 ALT	R	R	R	R	R	G	G	G	G	G	G	G	DW	DW	WK	WK
PED CLEARANCE	R	R	R	R	R	G	G	G	G	G	G	G	DW	DW	FL/DW	FL/DW
PED CHANGE	R	R	R	R	R	Y	Y	Y	Y	Y	Y	Y	DW	DW	DW	DW
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	DARK	DARK	DARK	DARK						

**STV Incorporated**  
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**SHA** STATE OF MARYLAND  
 DEPARTMENT OF TRANSPORTATION  
 STATE HIGHWAY ADMINISTRATION  
 OFFICE OF TRAFFIC & SAFETY  
 TRAFFIC ENGINEERING DESIGN DIVISION  
 MD 131 (SEMINARY AVENUE)  
 AT THORNTON ROAD  
 SPARKS, MD

**GENERAL INFORMATION SHEET**

SCALE 1" = 20' ADVERTISED DATE 08/20/12 CONTRACT NO. XY1255185

DESIGNED BY SKG COUNTY BALTIMORE  
 DRAWN BY SKG LOGMILE 03013101.28  
 CHECKED BY SDY TMS NO. L354  
 F.A.P. NO. TOD NO.

TS NO. 3758A-GI DRAWING SG-02 OF 02 SHEET NO. 02 OF 02