

**PROJECT DESCRIPTION**

**GENERAL**

THIS PORTION OF THE PROJECT INVOLVES THE INSTALLATION OF ACCESSIBLE PEDESTRIAN SIGNALS (APS) AND LED COUNTDOWN PEDESTRIAN SIGNALS (CPS) FOR THE NORTH AND SOUTH LEGS AS WELL AS MARKED CROSSWALKS FOR ALL LEGS AT THE INTERSECTION OF MD 543 (RIVERSIDE PARKWAY) AND CHURCH CREEK ROAD IN HARFORD COUNTY. SIDEWALK AND ADA RAMPS MODIFICATIONS ARE DETAILED IN THE ROADWAY PLANS. MD 543 IS CONSIDERED TO RUN IN A NORTH-SOUTH DIRECTION.

**INTERSECTION OPERATION**

THE INTERSECTION WILL CONTINUE TO OPERATE IN A NEMA SIX-PHASE, FULL TRAFFIC-ACTUATED MODE. THE EXISTING MAINLINE (MD 543) E/P LEFT TURN, SIDE STREET SPLIT PHASING AND EXISTING NORTH LEG ALTERNATIVE PEDESTRIAN PHASE WILL REMAIN. A SOUTH LEG ALTERNATIVE PEDESTRIAN PHASE IS PROPOSED.

**CONTROLLER REQUIREMENTS**

THE EXISTING BASE MOUNTED SIZE '6' CABINET WILL REMAIN. THE SHA SIGNAL SHOP WILL INSTALL ONE (1) 2 WIRE CENTRAL CONTROL UNIT WITHIN THE CABINET.

**APS WILL FUNCTION AS FOLLOWS:**

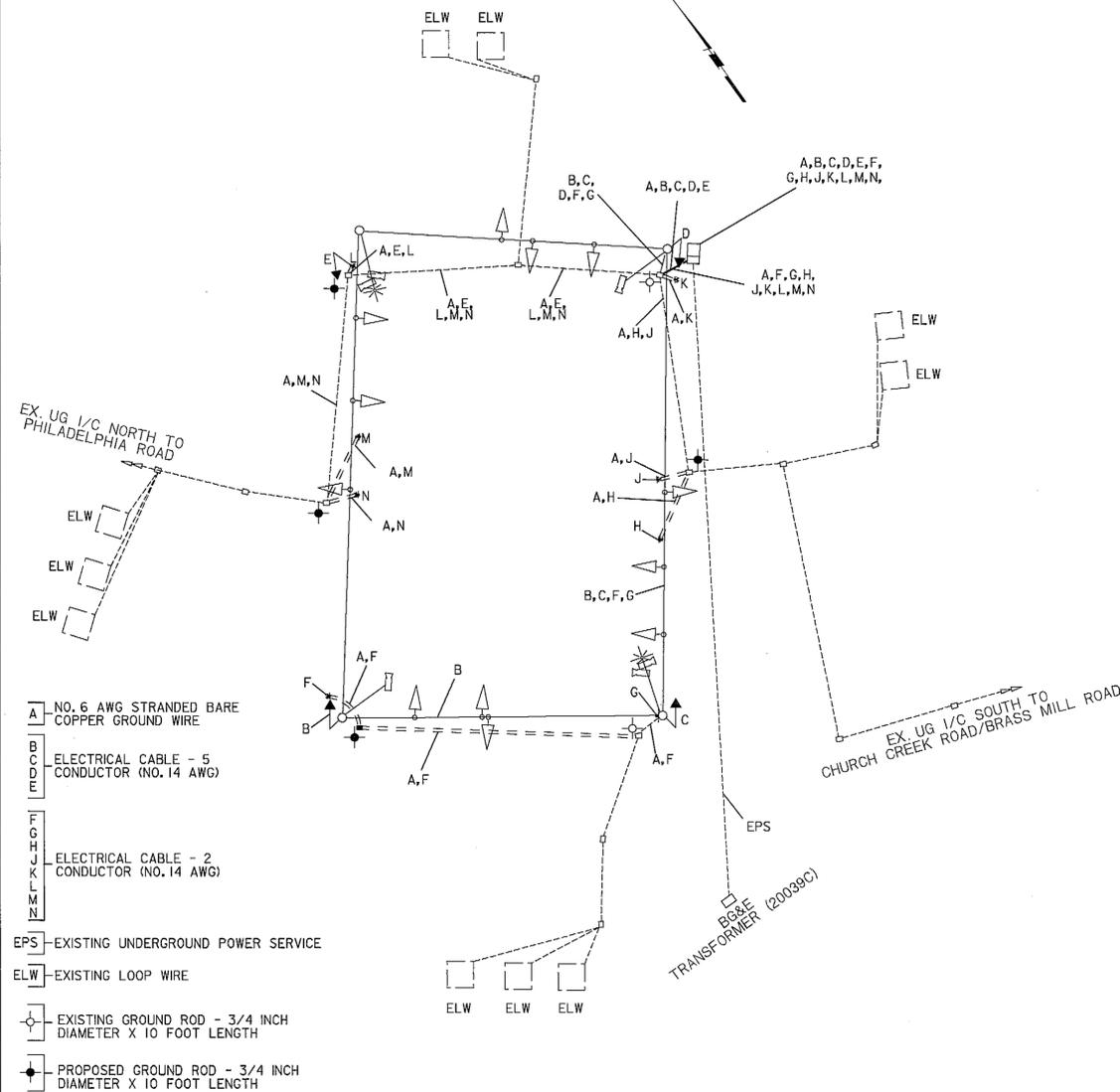
FOR CROSSING RIVERSIDE PARKWAY FROM CURB SIDE:

- A. WHEN A PEDESTRIAN LOCATES AND PASSES THE PUSHBUTTON FOR AN EXTENDED TIME, THE PUSHBUTTON MESSAGE WILL BE "WAIT TO CROSS RIVERSIDE AT CHURCH CREEK, SECOND PUSH BUTTON IN THE MEDIAN, 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 RIVERSIDE PARKWAY FROM MEDIAN:

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

**WIRING DIAGRAM**



- A NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
- B ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)
- C
- D
- E
- F
- G
- H
- J
- K
- L
- M
- N
- EPS - EXISTING UNDERGROUND POWER SERVICE
- ELW - EXISTING LOOP WIRE
- EXISTING GROUND ROD - 3/4 INCH DIAMETER X 10 FOOT LENGTH
- PROPOSED GROUND ROD - 3/4 INCH DIAMETER X 10 FOOT LENGTH

**CONTACTS**

THE CONTACT PERSONS FOR DISTRICT #4 ARE AS FOLLOWS:

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

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

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

OFFICE OF TRAFFIC AND SAFETY:

Mr. Richard L. Daff Sr.  
Chief, Traffic Operations Division  
Phone: 410-787-7630

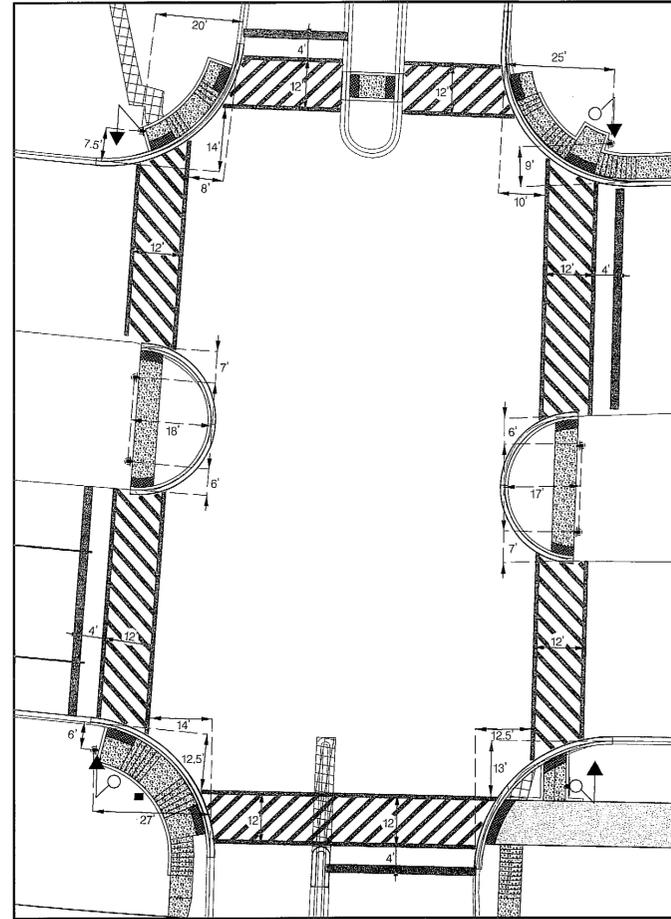
Mr. Robert Snyder  
Assistant Division Chief, Traffic Operations  
410-787-7630

Mr. Edward Radenhlzer  
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'**



**PHASE CHART**

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

**EQUIPMENT LIST 'A'**

EQUIPMENT TO BE FURNISHED BY THE SHA.

CATEGORY CODE	QUANTITY	DESCRIPTION
973023	244 SF	SHEET ALUMINUM SIGNS: 14 EA - S1-1 (36 IN. x 36 IN.) 8 EA - R10-3(I) (9 IN. x 15 IN.) "PUSH BUTTON TO CROSS RIVERSIDE PKWY" 8 EA - W16-7p(L) (24 IN. x 12 IN.) 6 EA - W16-7p(R) (24 IN. x 12 IN.) 3 EA - R5-1 (30 IN. x 30 IN.) 2 EA - M1-5(6) (36 IN. x 72 IN.) 2 EA - M1-5(6) (24 IN. x 48 IN.) 1 EA - R4-7 (24 IN. x 30 IN.) 1 EA - R4-7 (I) (18 IN. x 30 IN.) 1 EA - OMI-3 (18 IN. x 18 IN.)

**EQUIPMENT LIST 'B'**

EQUIPMENT TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR.

CATEGORY CODE	QUANTITY	DESCRIPTION
203030	4 CY	TEST PIT EXCAVATION
585621	1,900 LF	12 INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES
585625	175 LF	24 INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES
585700	720 LF	REMOVAL OF EXISTING PAVEMENT LINE MARKINGS, ANY WIDTH
800000	1 LS	REMOVE AND DISPOSE OF EXISTING SIGNAL EQUIPMENT
800000	4 EA	16 IN. LED COUNTDOWN PEDESTRIAN SIGNAL HEAD SECTION
800000	8 EA	ACCESSIBLE PEDESTRIAN PUSHBUTTON
800000	1 EA	2 WIRE CENTRAL CONTROL UNIT
801004	2 CY	CONCRETE FOR SIGNAL FOUNDATION
801104	90 LF	WOOD SIGN SUPPORTS 4 INCH X 4 INCH
801106	290 LF	WOOD SIGN SUPPORTS 4 INCH X 6 INCH
801711	23 SF	REMOVE EXISTING GROUND MOUNTED SIGNS
802501	450 LF	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
805118	90 LF	4 INCH SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT - BORED
805125	100 LF	2 INCH SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT - TRENCHED
811001	1 EA	FURNISH AND INSTALL ELECTRICAL HANDHOLE
813014	184 SF	INSTALL GROUND MOUNTED SIGN
813015	60 SF	INSTALL OVERHEAD SIGN
818004	7 EA	10 FOOT BREAKAWAY PEDESTAL POLE
837001	4 EA	GROUND ROD - 3/4 INCH DIAMETER X 10 FOOT LENGTH
860292	6 EA	CUT, CLEAN, GALVANIZE AND CAP TRAFFIC SIGNAL STRUCTURE
861105	1,450 LF	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG)
861107	750 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

**SHA** STATE OF MARYLAND  
DEPARTMENT OF TRANSPORTATION  
STATE HIGHWAY ADMINISTRATION  
OFFICE OF TRAFFIC & SAFETY  
TRAFFIC ENGINEERING DESIGN DIVISION  
MD 543 (RIVERSIDE PARKWAY)  
AT CHURCH CREEK ROAD/RIVERSIDE SHOPPING ENTRANCE  
RIVERSIDE, MARYLAND

**GENERAL INFORMATION SHEET**

SCALE 1" = 20' ADVERTISED DATE 06/2012 CONTRACT NO. HA4065188

DESIGNED BY SKG COUNTY HARFORD  
DRAWN BY SKG LOGMILE 04054301.23  
CHECKED BY SDY TMS NO. L433  
F.A.P. NO. TOD NO.

TS NO. 3422A-GI DRAWING SG-02 OF 02 SHEET NO. 02 OF 02

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