PROJECT DESCRIPTION

GENERAL

THIS PROJECT INVOLVES THE MODIFICATION OF THE EXISTING TRAFFIC SIGNAL AT THE INTERSECTION OF MD 2-4 (SOLOMON'S ISLAND ROAD) AND STOAKLEY ROAD/HOSPITAL ROAD IN CALVERT COUNTY.
MD 2-4 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

INTERSECTION OPERATION

THE INTERSECTION WILL CONTINUE TO OPERATE IN A NEMA SIX-PHASE, FULLY TRAFFIC-ACTUATED MODE. THE EXCLUSIVE LEFT TURN, SIDE STREET SPLIT AND PRE-EMPTION PHASES SHALL REMAIN. MAINLINE AND SIDE STREET ALTERNATIVE PEDESTRIAN PHASES ARE PROPOSED.

CONTROLLER REQUIREMENTS

THE EXISTING BASE MOUNTED CABINET AND CONTROLLER SHALL REMAIN.
THE SHA SIGNAL SHOP SHALL INSTALL ONE (1) 2 WIRE CENTRAL CONTROL UNIT WITHIN THE CABINET.

APS WILL FUNCTION AS FOLLOWS:

TO CROSS STOAKLEY ROAD

A. WHEN A PEDESTRIAN LOCATES AND PRESSES THE PUSHBUTTON FOR AN EXTENDED TIME, THE PUSHBUTTON MESSAGE WILL BE "WAIT TO CROSS STOAKLEY AT SOLOMON'S ISLAND, CROSSWALK ANGLES RIGHT, WAIT".

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

TO CROSS SOLOMON'S ISLAND ROAD

A. WHEN A PEDESTRIAN LOCATES AND PRESSES THE PUSHBUTTON FOR AN EXTENDED TIME, THE PUSHBUTTON MESSAGE WILL BE "WAIT TO CROSS SOLOMON'S ISLAND AT STOAKLEY OR HOSPITAL, WAIT".

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

THE CONTACT PERSONS FOR DISTRICT #5 ARE AS FOLLOWS:

Ms. Kimberly Tran
Assistant District Engineer - Traffic
Phone: 410-841-1019

Mr. Mike Huber
District Utility Engineer
Phone: 410-841-1039

Mr. John S. Mays
Assistant District Engineer - Maintenance
Phone: 410-841-1013

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 Rodenhizer
Chief Signal Operations
Phone: 410-787-7650

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

The Power Company is:
SMECO
901 Dores Beach Road
P.O. Box 37
Prince Frederick, Maryland
Phone: 410-535-4400

EQUIPMENT LIST 'A'

EQUIPMENT TO BE FURNISHED BY THE SHA.

ITEM NO	QUANTITY	DESCRIPTION
9571	4 SF	SHEET ALUMINUM MAST ARM/POLE MOUNTED SIGN: 2 EA - R10-3(1) (9 IN. X 15 IN.) "PUSH BUTTON TO CROSS SOLOMON'S ISLAND ROAD" 2 EA - R10-3(1) (9 IN. X 15 IN.) "PUSH BUTTON TO CROSS STOAKLEY ROAD"

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		

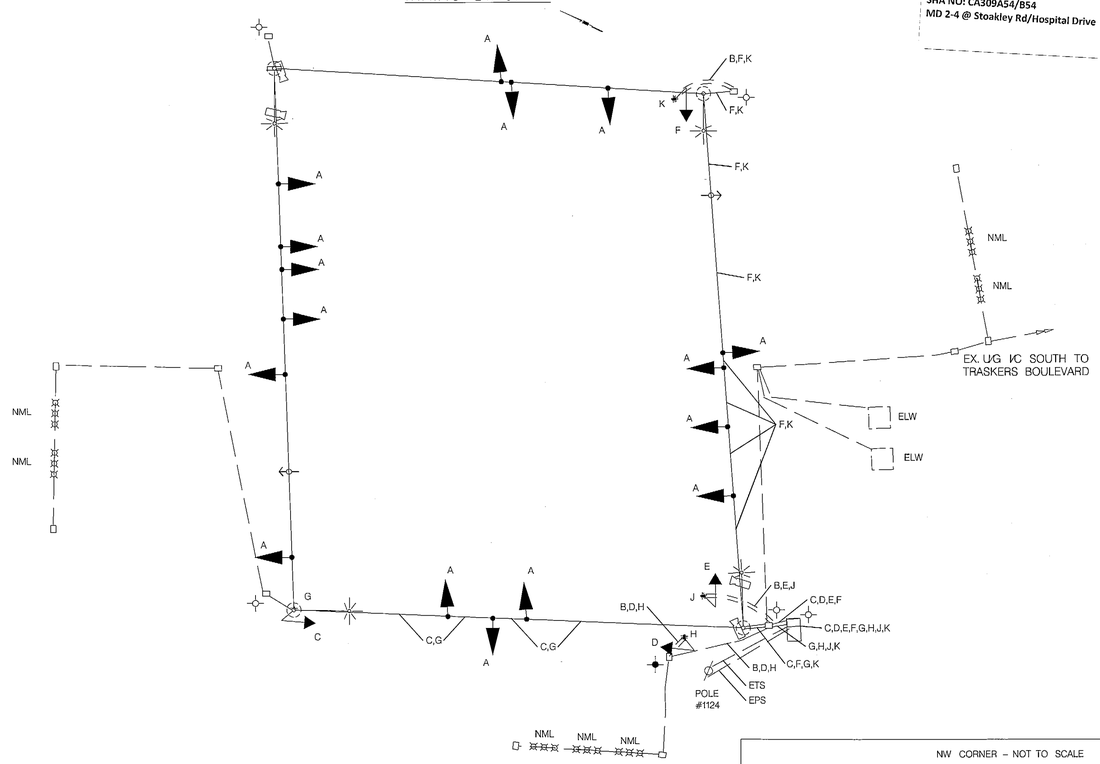
EQUIPMENT LIST 'B'

EQUIPMENT TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR.

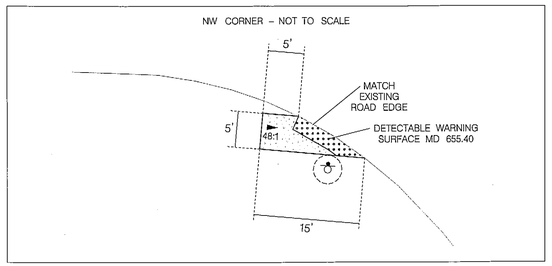
ITEM NO	QUANTITY	DESCRIPTION
1003	2 EA	MAINTENANCE OF TRAFFIC
2001	1 CY	CLASS 2 EXCAVATION
2002	2 CY	TEST PIT EXCAVATION
5004	550 LF	12 INCH HEAT APPLIED WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKINGS
5005	100 LF	24 INCH HEAT APPLIED WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKINGS
5007	110 LF	REMOVAL OF EXISTING PERMANENT LINE MARKINGS ANY WIDTH
6001	75 LF	STANDARD TYPE A COMBINATION CURB AND GUTTER 12 INCH GUTTER PAN 8 INCH DEPTH
6002	630 SF	5 INCH CONCRETE SIDEWALK
6007	40 SF	DETECTABLE WARNING SURFACES
8001	1 EA	2-WIRE CENTRAL CONTROL UNIT
8004	1 EA	ADJUST EXISTING HANDHOLE TO GRADE INCLUDING COLLAR
8007	4 EA	AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON STATION AND SIGNS
8008	3 EA	BREAKAWAY PEDESTAL POLE (ANY SIZE)
8013	4 EA	LED 16 INCH COUNTDOWN PEDESTRIAN SIGNAL HEAD
8014	52 EA	LED SIGNAL HEAD MODULES (ANY SIZE)
8021	1 EA	REMOVE & DISPOSE OF EQUIPMENT (PER ASSIGNMENT)
8035	45 LF	SCHEDULE 80 RIGID PVC CONDUIT UP TO 4 INCH-TRENCHED
8038	4 SF	INSTALL OVERHEAD OR GROUND MOUNTED SIGN (INCLUDING ALL HARDWARE)
8040	50 LF	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
8054	550 LF	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG)
8056	550 LF	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)

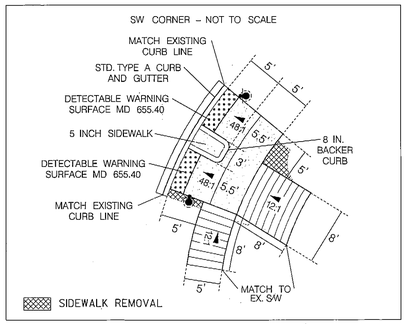
TOD NO: XX347-12
SHA NO: CA309A54/B54
MD 2-4 @ Stoakley Rd/Hospital Drive

WIRING DIAGRAM



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 AND 5	←G—	←G—	←G—	R	R	FL /Y	FL /Y	←G—	R	←G—	R	R	R	R	R	R	R	R	DW	DW	DW	DW
PHASE 1 AND 5 CHANGE TO 1 AND 6, 2 AND 5, OR 2 AND 6																						
PHASE 1 AND 6	←G—	←G—	←G—	G	G	FL /Y	FL /Y	←R—	R	←R—	R	R	R	R	R	R	R	R	DW	DW	DW	DW
PHASE 1 CHANGE	←Y—	←Y—	←Y—	G	G	FL /Y	FL /Y	←R—	R	←R—	R	R	R	R	R	R	R	R	DW	DW	DW	DW
PHASE 2 AND 5	←R—	←R—	←R—	R	R	FL /Y	FL /Y	←G—	G	←G—	G	G	R	R	R	R	R	R	WK	WK	DW	DW
PHASE 5 CHANGE	←R—	←R—	←R—	R	R	FL /Y	FL /Y	←Y—	G	←Y—	G	G	R	R	R	R	R	R	WK	WK	DW	DW
PHASE 2 AND 6	←R—	←R—	←R—	G	G	FL /Y	FL /Y	←R—	G	←R—	G	G	R	R	R	R	R	R	WK	WK	DW	DW
PED CLEARANCE	←R—	←R—	←R—	G	G	FL /Y	FL /Y	←R—	G	←R—	G	G	R	R	R	R	R	R	FL/DW	FL/DW	DW	DW
2 AND 6 CHANGE	←R—	←R—	←R—	Y	Y	FL /Y	FL /Y	←R—	Y	←R—	Y	Y	R	R	R	R	R	R	DW	DW	DW	DW
PHASE 3	←R—	←R—	←R—	R	R	FL /Y	FL /Y	←R—	R	←R—	R	R	←G/G	←G/G	G	R	R	R	DW	DW	DW	DW
PHASE 3 CHANGE	←R—	←R—	←R—	R	R	FL /Y	FL /Y	←R—	R	←R—	R	R	Y	Y	Y	R	R	R	DW	DW	DW	DW
PHASE 3 ALT.	←R—	←R—	←R—	R	R	FL /Y	FL /Y	←R—	R	←R—	R	R	←G/G	←G/G	G	R	R	R	DW	DW	WK	WK
PED CLEARANCE	←R—	←R—	←R—	R	R	FL /Y	FL /Y	←R—	R	←R—	R	R	←G/G	←G/G	G	R	R	R	DW	DW	FL/DW	FL/DW
PHASE 3 ALT. CHANGE	←R—	←R—	←R—	R	R	FL /Y	FL /Y	←R—	R	←R—	R	R	Y	Y	Y	R	R	R	DW	DW	DW	DW
PHASE 4	←R—	←R—	←R—	R	R	FL /Y	FL /Y	←R—	R	←R—	R	R	R	R	R	←G/G	←G/G	G	DW	DW	DW	DW
PHASE 4 CHANGE	←R—	←R—	←R—	R	R	FL /Y	FL /Y	←R—	R	←R—	R	R	R	R	R	Y	Y	Y	DW	DW	DW	DW
PRE-EMPT 1	←G—	←G—	←G—	G	G	FL /Y	FL /Y	←R—	R	←R—	R	R	R	R	R	R	R	R	DW	DW	DW	DW
PRE-EMPT 1 CHANGE	←Y—	←Y—	←Y—	G	G	FL /Y	FL /Y	←R—	R	←R—	R	R	R	R	R	R	R	R	DW	DW	DW	DW
PRE-EMPT 2	←R—	←R—	←R—	R	R	FL /Y	FL /Y	←G—	G	←G—	G	G	R	R	R	R	R	R	DW	DW	DW	DW
PRE-EMPT 2 CHANGE	←R—	←R—	←R—	R	R	FL /Y	FL /Y	←Y—	Y	←Y—	Y	Y	R	R	R	R	R	R	DW	DW	DW	DW
FLASHING OPERATION	FL/RA	FL/RA	FL/RA	FL/Y	FL/Y	DARK	DARK	FL/RA	FL/Y	FL/RA	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	DARK	DARK	DARK	DARK





A — USE EXISTING CABLE

B — NO. 6 STRANDED BARE COPPER GROUND WIRE

C D E F — ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)

G H J K — ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG)

ELW — EXISTING LOOP WIRE

NML — EXISTING NON-INVASIVE MICROLOOP PROBE

EPS — EXISTING POWER SERVICE

ETS — EXISTING TELEPHONE SERVICE

EXISTING GROUND ROD - 3/4 INCH DIAMETER X 10 FOOT LENGTH

PROPOSED GROUND ROD - 3/4 INCH DIAMETER X 10 FOOT LENGTH

STV
STV Incorporated
7125 Ambassador Road, Suite 200
Baltimore, MD 21244
www.stvinc.com

BY: tarnovk -

SHA
STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION
MD 2-4 (SOLOMON'S ISLAND ROAD) AT
STOAKLEY ROAD /HOSPITAL ROAD
PRINCE FREDERICK, MARYLAND

GENERAL INFORMATION

SCALE NONE ADVERTISED DATE 12/2011 CONTRACT NO. XX3475185

DESIGNED BY MCG
DRAWN BY JAC
CHECKED BY MTS
F.A.P. NO.

COUNTY CALVERT
LOGMILE 04000220.13
TIMS NO. L071
TOD NO.

TS NO.1260M-GI | DRAWING SG-02 OF 02 | SHEET NO. 02 OF 02

PLOTTED: Wednesday, November 30, 2011 AT 09:57 AM
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