1 PROJECT DESCRIPTION

THIS PROJECT INVOLVES THE MODIFICATION OF THE EXISTING TRAFFIC CONTROL SIGNAL LOCATED AT THE INTERSECTION OF MD45 AND PENNSYLVANIA AVE IN BALTIMORE COUNTY.

THIS MODIFICATION INCLUDES THE FOLLOWING:
INSTALL AUDIBLE TACTILE PUSHBUTTON STATION SIGNS,
PEDESTAL POLE AND COUNTDOWN PEDESTRIAN SIGNAL HEADS
AND BLACK LED SIGNAL HEADS AT THE INTERSECTION OF MD45 AND PENNSYLVANIA AVE.

1 INTERSECTION OPERATION

THIS INTERSECTION CURRENTLY OPERATES IN A NEMA FIVE PHASE, FULLY ACTUATED MODE. THERE WILL BE EXCLUSIVE/PERMISSIVE LEFT TURN FOR NORTHBOUND MD 45. THE THROUGH MOVEMENTS FOR MD 45 WILL OPERATE CONCURRENTLY. THE SIDE STREET WILL OPERATE ALONE.

AN ALTERNATE PEDESTRIAN MOVEMENT WILL BE PROVIDED FOR NORTH, SOUTH, EAST AND WEST LEGS OF MD 45
AN A EXCLUSIVE MOVEMENT FOR BOTH NORTH AND SOUTHBOND LEGS OF PENNSYLVANIA AVE.

A PRE-EMPTION PHASE IS OPERATING WITH THE THROUGH MOVEMENTS OF MD 45.

1 EQUIPMENT LIST

ADD COUNTDOWN PEDESTRIAN SIGNALS & UPGRADED APS STD.

A. EQUIPMENT TO BE SUPPLIED BY THE STATE OF MARYLAND.

ITEM NO.	QUANTITY	UNIT	DESCRIPTION
9571	6	SF	[UPDATED] SHEET ALUMINUM MAST ARM / POLE MOUNTED SIGN

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

ITEM NO.	QUANTITY	UNIT	DESCRIPTION
1001	1	EA	MAINTENANCE OF TRAFFIC
2002	5	CY	TEST PIT EXCAVATION
6003	16	SF	4 INCH CONCRETE SIDEWALK
8009	6	EA	BREAKAWAY PEDESTAL POLE - ANY SIZE
8013	1	EA	REMOVE AND DISPOSE OF EQUIPMENT
8019	16	LF	DISCONNECT PULL-BACK AND REROUTE CABLE
8023	18	SF	REMOVE AND RESET DECORATIVE BRICK SIDEWALK
8024	6	CY	CONCRETE FOR SIGNAL FOUNDATION
8026	160	LF	NO 6 AWG STRANDED BARE COPPER GROUND WIRE
8032	100	LF	3 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
8045	1	EA	FURNISH AND INSTALL ELECTRICAL HANDHOLE
8059	1210	LF	ELECTRICAL CABLE - 2 CONDUCTOR NO 14 AWG
8061	1300	LF	ELECTRICAL CABLE - 5 CONDUCTOR NO 14 AWG
8072	8	EA	NEG - APPROVED - FURNISH AND INSTALL 16 INCH COUNTDOWN PED SIGNAL
8073	8	EA	NEG - APPROVED - FURNISH AND INSTALL APS CENTRAL CONTROL UNIT
8075	21	EA	NEG - APPROVED - FURNISH AND INSTALL RED OR GREEN LED UNITS FOR TRAFFIC SIGNALS
8076	13	EA	NEG - APPROVED - FURNISH AND INSTALL YELLOW LED FOR HIB, ICB AND CMS FLASHERS
8000	1	EA	TO BE NEGOTIATED - RELOCATE EXISTING PEDESTAL POLE TO NEW FOUNDATION

1 PROJECT CONTACTS

The contact persons for District #4 are as follows:

Mr. Randall Scott
Assistant District Engineer - Traffic
Phone: (410) 321-2781/2785
Mr.
Assistant District Engineer - Construction
Phone: (410) 321-2821
Mr. Steve Marciszewski
Assistant District Engineer - Maintenance
Phone: (410) 321-2761
Mr. Mike Pasquariello
Assistant District Engineer - Utility
Phone: (410) 321-2841

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

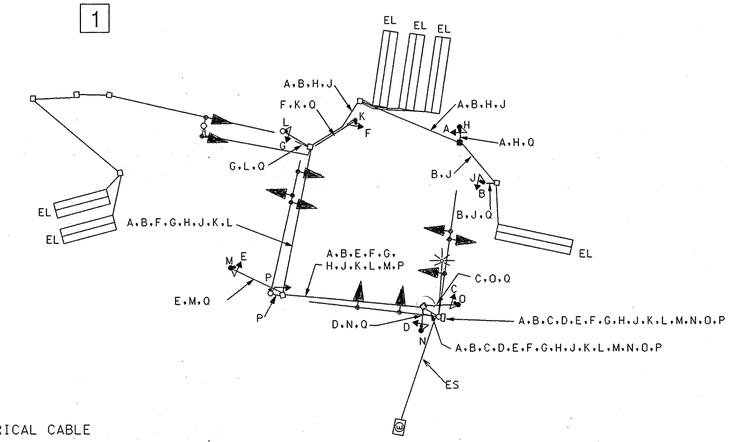
PHASE CHART

1

	1	2	3	4	5	6	7	8	9	10	11-12	13-14	15-16	17-18
Phase 2 & 5	◀G-G	◀G-G	G	FL/Y	FL/Y	R	R	R	R	R	DW	DW	DW	DW
5 Change	◀Y-G	◀Y-G	G	FL/Y	FL/Y	R	R	R	R	R	DW	DW	DW	DW
Phase 2 & 6	G	G	G	FL/Y	FL/Y	G	G	G	R	R	DW	DW	DW	DW
2 & 6 Change	Y	Y	Y	FL/Y	FL/Y	Y	Y	Y	R	R	DW	DW	DW	DW
2 Alt and 6 Alt.	G	G	G	FL/Y	FL/Y	G	G	G	R	R	WK	WK	DW	DW
Ped. Clear	G	G	G	FL/Y	FL/Y	G	G	G	R	R	FL/DW	FL/DW	DW	DW
2 Alt.and 6 Alt. Change	Y	Y	Y	FL/Y	FL/Y	Y	Y	Y	R	R	DW	DW	DW	DW
Phase 4	R	R	R	FL/Y	FL/Y	R	R	R	G	G	DW	DW	DW	DW
4 Change	R	R	R	FL/Y	FL/Y	R	R	R	Y	Y	DW	DW	DW	DW
Phase 3	R	R	R	FL/Y	FL/Y	R	R	R	R	R	DW	DW	WK	WK
Ped. Clear	R	R	R	FL/Y	FL/Y	R	R	R	R	R	DW	DW	FL/DW	FL/DW
3 Change	R	R	R	FL/Y	FL/Y	R	R	R	R	R	DW	DW	DW	DW
Phase 4 Alt.	R	R	R	FL/Y	FL/Y	R	R	R	G	G	DW	DW	WK	WK
Ped. Clear	R	R	R	FL/Y	FL/Y	R	R	R	G	G	DW	DW	FL/DW	FL/DW
4 Alt. Change	R	R	R	FL/Y	FL/Y	R	R	R	Y	Y	DW	DW	DW	DW
PRE-EMPTION	G	G	G	FL/Y	FL/Y	G	G	G	R	R	DW	DW	DW	DW
PRE-EMPTION Change	Y	Y	Y	FL/Y	FL/Y	Y	Y	Y	R	R	DW	DW	DW	DW
Flashing Operation	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	DARK	DARK	DARK	DARK

WIRING DIAGRAM

1



KEY

A - G } 5 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)

H - P } 2 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)

Q } 1 CONDUCTOR (NO. 6 AWG) STRANDED COPPER GROUND WIRE

EL EXISTING LOOP DETECTORS

ES EXISTING SERVICE

NOTE:
PULL BACK ASSOCIATED WIRE WITH THE EXISTING AUDBILE PUSH BUTTON STATION SIGN AND EXISTING PEDESTTRAIN SIGNAL HEADS AND RE-RUN NEW WIRES AS SHOWN.

1 A REDLINE REVISION - MAY 19, 2006
ADD COUNTDOWN PEDESTRIAN
SIGNALS & UPGRADED APS STD.

BAI
BRUDIS & ASSOCIATES, INC.
CONSULTING ENGINEERS
9220 RUMSEY ROAD SUITE 110
COLUMBIA, MARYLAND 21045
410-884-3607 410-884-3609(FAX)

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

MD 45 (YORK ROAD) AND PENNSYLVANIA AVENUE

GENERAL INFORMATION SHEET

SCALE N.T.S. DATE 05/22/06 CONTRACT NO. AT5825185

DESIGNED BY M.A.M. COUNTY BALTIMORE
DRAWN BY LOGMILE
CHECKED BY T.I.M.S. NO. G 723
F.A.P. NO. TOD NO.

DRAWING NO. 2 OF 2 SHEET NO. OF

PLOTTED: $DATETIME$
FILE: $FILE$

BY: $USERNAME$