PROJECT DESCRIPTION

THIS PROJECT INVOLVES THE MODIFICATION OF THE EXISTING TRAFFIC CONTROL SIGNAL LOCATED AT THE INTERSECTION OF MD 650 AND MAHAN ROAD/SCHINDLER DRIVE. MD 650 (New Hampshire Ave.) IS ASSUMED TO RUN IN THE NORTH/SOUTH DIRECTION IN MONTGOMERY COUNTY.

THIS MODIFICATION INCLUDES THE FOLLOWING:
INSTALL AUDIBLE TACTILE PUSHBUTTON STATION, PEDESTRIAN EDUCATION SIGNS, SIGNS, PEDESTAL POLE AND COUNTDOWN PEDESTRIAN SIGNAL HEADS AT THE INTERSECTION OF MD 650 AND MANHAN RD/SCHINDLER DR.

INTERSECTION OPERATION

THIS INTERSECTION CURRENTLY OPERATES IN A NEMA SIX PHASE, FULLY ACTUATED MODE. THERE WILL BE EXCLUSIVE DOUBLE LEFT TURN FOR SOUTHBOUND MD 650 AND THE NORTHBOUND LEFT TURN OF MD 650 WILL OPERATE AS A FLASHING RED. THE THROUGH MOVEMENTS ALONG MD 650 OPERATE CONCURRENTLY. THE SIDE STREETS WILL OPERATE AS A SIDE STREET SPLIT. COUNTDOWN PEDESTRIAN SIGNAL PHASING WITH AN ALTERNATE AUDIBLE PEDESTRIAN MOVEMENT WILL BE ADDED FOR THE NORTH AND EAST LEGS OF THE INTERSECTION.

EQUIPMENT LIST

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

ITEM NO.	QUANTITY	UNIT	DESCRIPTION
9547	33	SF	[UPDATED] SHEET ALUMINUM MAST ARM / POLE MOUNTED SIGN
	1	EA	60"X36" R10-6(1)
	2	EA	30"X36" R3-5(L)
	2	EA	PEDESTRIAN EDUCATION SIGN (NEW HAMPSHIRE AVE.)
	2	EA	PEDESTRIAN EDUCATION SIGN (MAHAN ROAD)

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

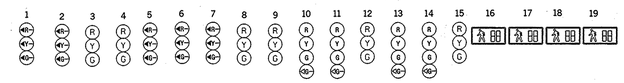
ITEM NO.	QUANTITY	UNIT	DESCRIPTION
1001	1	EA	MAINTENANCE OF TRAFFIC PER ASSIGNMENT
2001	3	CY	CLASS 2 EXCAVATION
2002	3	CY	TEST PIT EXCAVATION
6003	160	SF	4 INCH CONCRETE SIDEWALK
8006	1	EA	2 WIRE CENTRAL CONTROL UNIT
8014	4	EA	AUDIBLE / TACTILE PEDESTRIAN PUSHBUTTON STATION AND SIGN
8015	4	EA	BREAKAWAY PEDESTAL POLE - ANY SIZE
8024	4	EA	LED 16 INCH COUNTDOWN PEDESTRIAN SIGNAL HEAD
8028	1	EA	REMOVE AND DISPOSE OF EQUIPMENT PER ASSIGNMENT
8040	4	CY	CONCRETE FOR SIGNAL FOUNDATION
8043	50	LF	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
8049	30	LF	3 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
8051	20	LF	2 INCH SCHEDULE 80 RIGID PVC CONDUIT-TRENCHED
8062	1	EA	FURNISH AND INSTALL ELECTRICAL HANDHOLE
8064	33	SF	INSTALL OVERHEAD SIGN
8070	1	EA	GROUND ROD - 3/4 INCH DIAMETER X 10 FOOT LENGTH
8076	450	LF	ELECTRICAL CABLE - 2 CONDUCTOR NO. 14 AWG
8078	475	LF	ELECTRICAL CABLE - 5 CONDUCTOR NO 14 AWG

PROJECT CONTACTS

The contact persons for District #3 are as follows:

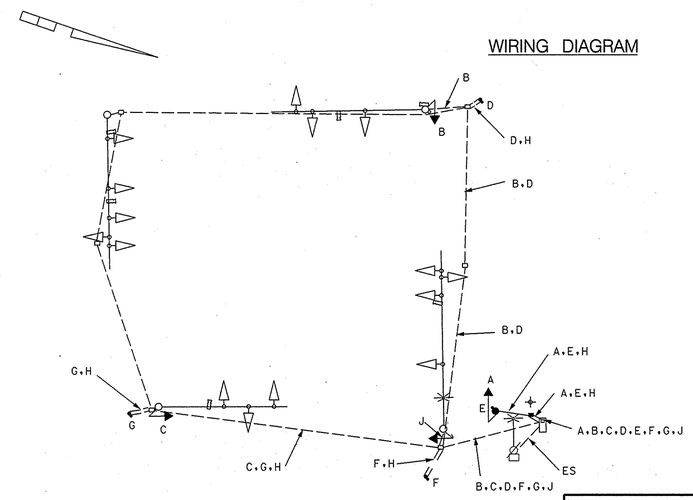
Mr. Jeff Wentz (MO)
Assistant District Engineer - Traffic
Phone: (301 513-7318
Mr. Wayne Mowdy
Assistant District Engineer - Maintenance
Phone: (301) 513-7304
Mr. Augie Rebish
Utility Engineer
Phone: (301) 513-7350
Mr. Richard L. Daff, Sr.
Chief, Traffic Operations Division
Phone: (410) 787-7630
Mr. Ed Rodenhizer
Supervisor, Signal Operations
Phone: 410-787-7650
Mr. Kamal Hamud
Montgomery County
Phone: 240-777-8795

PHASE CHART



	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
PHASE 1 AND 5	←R–	←R–	R	R	←G–	←G–	←G–	R	R	R	R	R	R	R	R	DW	DW	DW	DW
1 AND 5 CHANGE	←R–	←R–	R	R	←Y–	←Y–	←Y–	R	R	R	R	R	R	R	R	DW	DW	DW	DW
PHASE 1 AND 6	←R–	←R–	G	G	←R–	←R–	←R–	R	R	R	R	R	R	R	R	WK	WK	DW	DW
1 AND 6 CHANGE	←R–	←R–	G	G	←R–	←R–	←R–	R	R	R	R	R	R	R	R	WK	WK	DW	DW
PHASE 2 AND 5	←R–	←R–	R	R	←G–	←G–	←G–	G	G	R	R	R	R	R	R	DW	DW	DW	DW
2 AND 5 CHANGE	←R–	←R–	R	R	←Y–	←Y–	←Y–	G	G	R	R	R	R	R	R	DW	DW	DW	DW
PHASE 2 AND 6	FL/R	FL/R	G	G	←R–	←R–	←R–	G	G	R	R	R	R	R	R	WK	WK	DW	DW
PED COUNTDOWN CLEAR.	FL/R	FL/R	G	G	←R–	←R–	←R–	G	G	R	R	R	R	R	R	FL/DW	FL/DW	DW	DW
2 AND 6 CHANGE	FL/R	FL/R	Y	Y	←R–	←R–	←R–	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	R	R	R	DW	DW	DW	DW
3 CHANGE	←R–	←R–	R	R	←R–	←R–	←R–	R	R	Y	Y	Y	R	R	R	DW	DW	DW	DW
PHASE 4	←R–	←R–	R	R	←R–	←R–	←R–	R	R	R	R	R	G ←G–	G ←G–	G	DW	DW	DW	DW
4 CHANGE	←R–	←R–	R	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–	←R–	R	R	R	R	R	G ←G–	G ←G–	G	DW	DW	WK	WK
PED COUNTDOWN CLEAR.	←R–	←R–	R	R	←R–	←R–	←R–	R	R	R	R	R	G ←G–	G ←G–	G	DW	DW	FL/DW	FL/DW
4 ALT CHANGE	←R–	←R–	R	R	←R–	←R–	←R–	R	R	R	R	R	Y	Y	Y	DW	DW	DW	DW
FLASHING OPERATION	FL/R	FL/R	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	DARK	DARK	DARK	DARK

WIRING DIAGRAM



KEY

A, B, C, J } 5 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)

D, E, F, G } 2 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)

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

+ GROUND ROD

ES EXISTING SERVICE

NOTE:
REMOVE EXISTING 3-CONDUCTOR WIRE FOR EXISTING PEDESTRIAN SIGNAL HEADS AND RECONNECT NEW 5-CONDUCTOR WIRE TO THE PROPOSED COUNTDOWN SIGNAL HEADS.

BAI
BRUDIS & ASSOCIATES, INC.
CONSULTING ENGINEERS
9220 RUMSEY ROAD SUITE 110
COLUMBIA, MARYLAND 21045

TOD No.: AT782-37
SHA No.: MO574A5A/B5A

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

MD 650 (NEW HAMPSHIRE AVENUE) AND MAHAN ROAD /SCHINDLER DRIVE

GENERAL INFORMATION SHEET

SCALE N.T.S. DATE 06/05/06 CONTRACT NO. AT782518S

DESIGNED BY M. A. MEARS COUNTY MONTGOMERY
DRAWN BY M. A. MEARS LOGMILE 15065002.04
CHECKED BY T.I.M.S. NO. H517
F.A.P. NO. TOD NO.

DRAWING NO. 701C-GI OF SHEET NO. 2 OF 2

PLOTTED: $DATETIME$
FILE: $FILE$

BY: $USERNAME$