DRILL HOLES

BORDER REV: DATE: June 1, 2004

PROJECT DESCRIPTION

I. GENERAL

This project involves the modification of an existing Traffic Control Signal at the intersection of MD 355 (Wisconsin Ave) and South Park Ave/ Montgomery St in Montgomery County. Countdown pedestrian signals with audible pushbuttons shall be installed across all legs of this intersection. MD 355 (Wisconsin Ave) is assumed to run a north-south direction.

II. INTERSECTION OPERATION

1. The intersection shall continue to operate in a NEMA seven-phase, pre-timed mode, with the MD 355 (Wisconsin Ave) approaches running concurrently. The Exclusive left turn phases for both approaches of MD 355 (Wisconsin Ave) shall remin n operation. The pedestrian phase with pushbutton actuation across the south leg of MD 355 (Wisconsin Ave) shall now be a Countdown pedstrain phase with audible pushbutton actuation. A new Countdown pedestrain phase with audible pushbutton actuation shall be provided across the noth leg of MD 355 (Wisconsin Ave). The pedestrian phases on recall across South Park Ave / Montgomery St shall now be Countdown pedestrain phases with audible pushbuttons. The South Park Ave / Montgomery St approaches shall continue to operate as a side street split phase.

2. The existing full-traffic-actuated, eight-phase controller with all necessary equipment housed in a NEMA size "6" base-mounted cabinet shall be utilized at this intersection.

3. Montgomery County Signal Shop shall install APS control unit into controller cabinet. The Contractor shall deliver the Control Unit and audible pushbuttons to Montgomery County Signal Shop for testing and programming.

III. SPECIAL NOTES

1. The Contractor shall be responsible for terminating all signal cables, to the appropriate terminals and shall properly label each cable.

2. All controller cabinet wiring will be performed by the Montgomery County Signal Shop. Contact Kamal Hamud at (240) 777-8795 seventy-two hours in advance of intended work.

3. All underground and overhead utilities shown on these plans are schematic only and may not be complete. The Contractor shall be responsible for notifying Miss Utility prior to construction so that all utilities may be located in the field. If the Contractor perceives that a conflict between the utilities and the traffic signal will occur, the Contractor shall notify the Project Engineer immediately so that the conflict may be resolved.

4. APS will function as follows:

FOR MD 355 (WISCONSIN AVE)

a When pedestrian locates and presses pushbutton for an extended time, the pushbutton unit will be " Wait to cross Wisconsin Avenue."

b. When WALK phase begins, the message will be a rapid tick which will last for the duration of the WALK phase.

FOR MONTGOMERY ST.

a When pedestrian locates and presses pushbutton for an extended time, the pushbutton unit will be " Wait to cross Montgomery Street."

b. When WALK phase begins, the message will be a rapid tick which will last for the duration of the WALK phase.

FOR SOUTH PARK AVE.

a When pedestrian locates and presses pushbutton for an extended time, the pushbutton unit will be " Wait to cross South Park Avenue."

b. When 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 #3 (Montgomery County) are as follows:

Mr. Jeff Wentz
Assistant District Engineer - Traffic
Phone: (301) 513-7358

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

Mr. Wayne Mowdy
Assistant District Engineer - Maintenance
Phone: (301) 513-7304

Mr. Keith Lord
Montgomery County Signal Shop
(301) 674-8965

Mr. Augie Rebish
District Engineer - Utility
Phone: (301) 513-7350

Mr. Sonny Bailey
Sign Shop
410-787-7676

EQUIPMENT LIST

A. EQUIPMENT TO BE SUPPLIED BY S.H.A..

ITEM NO.	DESCRIPTION	QUANTITY
9571	Sheet aluminum signs to consist of: (mast arm or pole mount)	8 SF
	Pedestrian education R10-3(1) sign. (Note: Sign to read "PUSHBUTTON TO CROSS WISCONSIN AVE") (9"X15")	4 EA
	Pedestrian education R10-3(1) sign. (Note: Sign to read "PUSHBUTTON TO CROSS MONTGOMERY ST.") (9"X15")	2 EA
	Pedestrian education R10-3(1) sign. (Note: Sign to read "PUSHBUTTON TO CROSS SOUTH PARK AVE.") (9"X15")	2 EA

EQUIPMENT LIST (cont.)

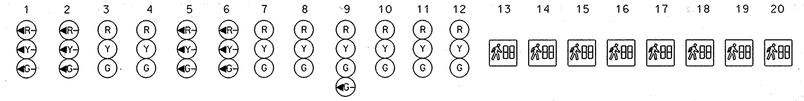
B. EQUIPMENT TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR

ITEM NO.	DESCRIPTION	QUANTITY
1001	Maintenance of traffic per assignment.	1 EA
2002	Test Pit Excavation	6 C.Y.
5003	12" white heat applied permanent preformed thermoplastic pavement marking.	500 L.F.
5004	24" white heat applied permanent preformed thermoplastic pavement marking.	95 L.F.
5005	Removal of existing permanent pavement line markings	445 L.F.
6001	Standard type A combination curb and gutter 12" gutter pan 8" depth.	85 L.F.
6002	4" concrete sidewalk.	850 S.F.
8003	2 wire Central Control unit	1 EA
8009	Adjust existing handhole to grade.	2 EA
8010	Audible/tactile pedestrian pushbutton station & signs.	8 EA
8011	Breakaway Pedestal pole (10').	3 EA
8011	Breakaway Pedestal pole (5').	1 EA
8014	LED 16" countdown pedestrian signal head.	8 EA
8017	Remove and dispose of existing equipment per assignment.	1 EA
8026	Schedule 80 rigid PVC conduit up to 4" - trenched.	45 L.F.
8027	Detectable warning surfaces	108 S.F.
8029	Remove - reset decorative brick sidewalk.	30 SF
8030	Concrete for signal foundation.	2.3 CY
8033	No. 6 AWG stranded bare copper ground wire.	115 L.F.
8046	Install overhead sign.	8 SF
8058	Electrical cable - 2 conductor (No. 14 AWG).	1035 L.F.
8060	Electrical cable - 5 conductor (No. 14 AWG).	1090 L.F.

C. EQUIPMENT TO BE REMOVED

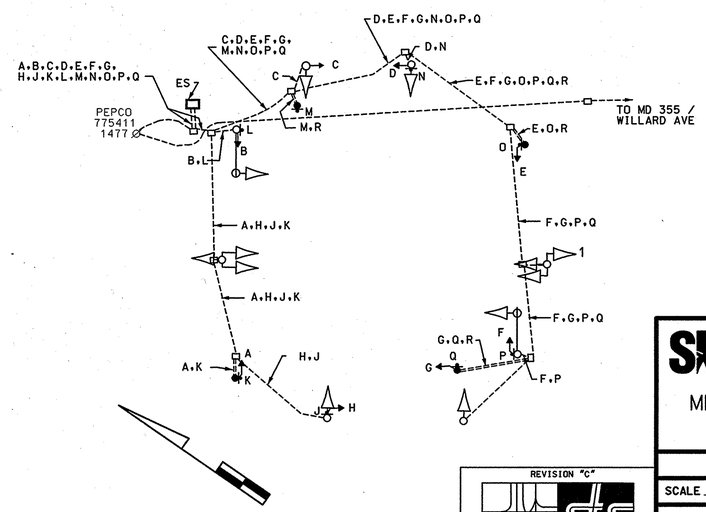
All removed signal materials are to become property of the Contractor.

PHASE CHART



	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
PHASE 1 & 5	◄G-	◄G-	R	R	◄G-	◄G-	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
CHANGES TO PHASES 1 & 6, 2 & 5 OR 2 & 6																				
PHASE 1 & 6	◄R-	◄R-	R	R	◄G-	◄G-	G	G	R	R	R	R	WK	DW	DW	WK	DW	DW	DW	DW
1 & 6 CHANGE	◄R-	◄R-	R	R	◄Y-	◄Y-	G	G	R	R	R	R	WK	DW	DW	WK	DW	DW	DW	DW
PHASE 2 & 5	◄G-	◄G-	G	G	◄R-	◄R-	R	R	R	R	R	R	DW	WK	WK	DW	DW	DW	DW	DW
2 & 5 CHANGE	◄Y-	◄Y-	G	G	◄R-	◄R-	R	R	R	R	R	R	DW	WK	WK	DW	DW	DW	DW	DW
PHASE 2 & 6	◄R-	◄R-	G	G	◄R-	◄R-	G	G	R	R	R	R	WK	WK	WK	WK	DW	DW	DW	DW
PED CLEAR / COUNTDOWN	◄R-	◄R-	G	G	◄R-	◄R-	G	G	R	R	R	R	FL/DW	FL/DW	FL/DW	FL/DW	DW	DW	DW	DW
2 & 6 CHANGE	◄R-	◄R-	Y	Y	◄R-	◄R-	Y	Y	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 3	◄R-	◄R-	R	R	◄R-	◄R-	R	R	G / ◄G-	G	R	R	DW	DW	DW	DW	DW	DW	DW	DW
3 CHANGE	◄R-	◄R-	R	R	◄R-	◄R-	R	R	Y	Y	R	R	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 4	◄R-	◄R-	R	R	◄R-	◄R-	R	R	R	R	G	G	DW	DW	DW	DW	DW	DW	DW	DW
4 CHANGE	◄R-	◄R-	R	R	◄R-	◄R-	R	R	R	R	Y	Y	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 3 & 8 ALT	◄R-	◄R-	R	R	◄R-	◄R-	R	R	G / ◄G-	G	R	R	DW	DW	DW	DW	DW	WK	WK	DW
PED CLEAR / COUNTDOWN	◄R-	◄R-	R	R	◄R-	◄R-	R	R	G / ◄G-	G	R	R	DW	DW	DW	DW	DW	FL/DW	FL/DW	DW
3 & 8 ALT CHANGE	◄R-	◄R-	R	R	◄R-	◄R-	R	R	Y	Y	R	R	DW	DW	DW	DW	DW	DW	DW	DW
4 & 7 ALT	◄R-	◄R-	R	R	◄R-	◄R-	R	R	R	R	G	G	DW	DW	DW	DW	WK	DW	DW	WK
PED CLEAR / COUNTDOWN	◄R-	◄R-	R	R	◄R-	◄R-	R	R	R	R	G	G	DW	DW	DW	DW	FL/DW	DW	DW	FL/DW
4 & 7 ALT CHANGE	◄R-	◄R-	R	R	◄R-	◄R-	R	R	R	R	Y	Y	DW	DW	DW	DW	DW	DW	DW	DW
FLASHING OPERATION	FL/◄R-	FL/◄R-	FL/Y	FL/Y	FL/◄R-	FL/◄R-	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	DARK	DARK	DARK	DARK	DARK	DARK	DARK	DARK

WIRING DIAGRAM



WIRING KEY

A B C D E F G H — 5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G)

J K L M N O P Q — 2-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G)

R - STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)

ES- EXISTING SERVICE TO BE MAINTAINED BY PEPCO

SHA No: MO281A5A/C5A
TOD No: AT925-21
MD 355 @ South Pk/Montgomery Street

REVISION "C"

STREET TRAFFIC STUDIES, LTD.
400 Crain Hwy.-NW.
Glen Burnie, MD 21061
Ph (410) 590-5500
Fax (410) 590-6637

5196gl.dgn T-62

PLOTTED: $DATETIME$
FILE: $FILE$

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

MD 355 @ SOUTH PARK AVE/ MONTGOMERY ST.

GENERAL INFORMATION SHEET

SCALE NONE DATE 7/10/07 CONTRACT NO. AT9255185

DESIGNED BY JWA
DRAWN BY RC
CHECKED BY
F.A.P. NO.

COUNTY MONTGOMERY
LOGMILE 15035500.20
TIMS NO. 1059
TOD NO.

TS NO. 2688C | DRAWING NO. 2 OF 2 | SHEET NO. OF

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