PROJECT DESCRIPTION

I. GENERAL

This project involves the modification of an existing Traffic Control Signal with street lighting at the intersection of MD 940 (Owings Mill Blvd) and Red Run Blvd in Baltimore County. A Countdown pedestrian phase with audible pushbuttons shall be installed at this location. MD 940 (Owings Mill Blvd) is assumed to run a north-south direction.

II. INTERSECTION OPERATION

1. The intersection shall continue to operate in a NEMA eight-phase, fully-actuated mode, with MD 940 (Owings Mill Blvd) approaches running concurrently. The Exclusive left turn phases for both approaches to MD 940 (Owings Mill Blvd) shall remain in operation. A new Countdown pedestrian phase with audible pushbutton actuation shall be provided across the south leg of MD 940 (Owings Mill Blvd). The Exclusive left turn phases for both approaches of Red Run Blvd shall remain in operation. The Red Run Blvd approaches shall also continue to run concurrently.

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

3. SHA signal shop shall install APS control unit into controller cabinet. The Contractor shall deliver the Control Unit and audible pushbuttons to the SHA 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 S.H.A. Signal Shop. Contact Mr. Ed Rodenhizer at (410) 787-7650 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 940 (OWINGS MILLS BLVD)

a When pedestrian locates and presses pushbutton for an extended time, the pushbutton unit will be " Wait to cross Owings Mills Boulverard"

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 #4 are as follows:

Mr. Randall Scott
Assistant District Engineer - Traffic
Phone: (410) 321-2781

Mr. Steve Marciszewski
Assistant District Engineer - Maintenance
Phone: (410) 321-2761

Mr. Michael Pasquariello
District Engineer - Utility
Phone: (410) 321-2841

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

Mr. Ed Rodenhizer
Signal Shop
410-787-7652

Mr. Sonny Bailey
Sign Shop
410-787-7670

EQUIPMENT LIST

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

ITEM NO.	DESCRIPTION	QUANTITY
9571	Sheet aluminum signs to consist of: (pole mount)	2 SF
	Pedestrian education R10-3(1) sign. (Note: Sign to read "PUSHBUTTON TO CROSS OWINGS MILLS BLVD") (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	2 C.Y.
5003	12" white heat applied permanent preformed thermoplastic pavement marking.	200 L.F.
5004	24" white heat applied permanent preformed thermoplastic pavement marking.	55 L.F.
5005	Removal of existing permanent pavement line markings	75 L.F.
6001	Standard type A combination curb and gutter 12" gutter pan 8" depth.	50 L.F.
6002	4" concrete sidewalk.	500 S.F.
8003	2 wire Central Control unit	1 EA
8010	Audible/tactile pedestrian pushbutton station & signs.	2 EA
8011	Breakaway pedestal pole (10')	2 EA
8014	LED 16" countdown pedestrian signal heads.	2 EA
8024	Schedule 80 rigid PVC conduit up to 4" - bored.	110 L.F.
8026	Schedule 80 rigid PVC conduit up to 4" - trenched.	30 L.F.
8027	Detectable warning surfaces	20 S.F.
8030	Concrete for signal foundation.	1.4 CY
8033	No. 6 AWG stranded bare copper ground wire.	45 L.F.
8046	Install overhead sign.	2 SF
8058	Electrical cable - 2 conductor (No. 14 AWG).	190 L.F.
8060	Electrical cable - 5 conductor (No. 14 AWG).	200 L.F.

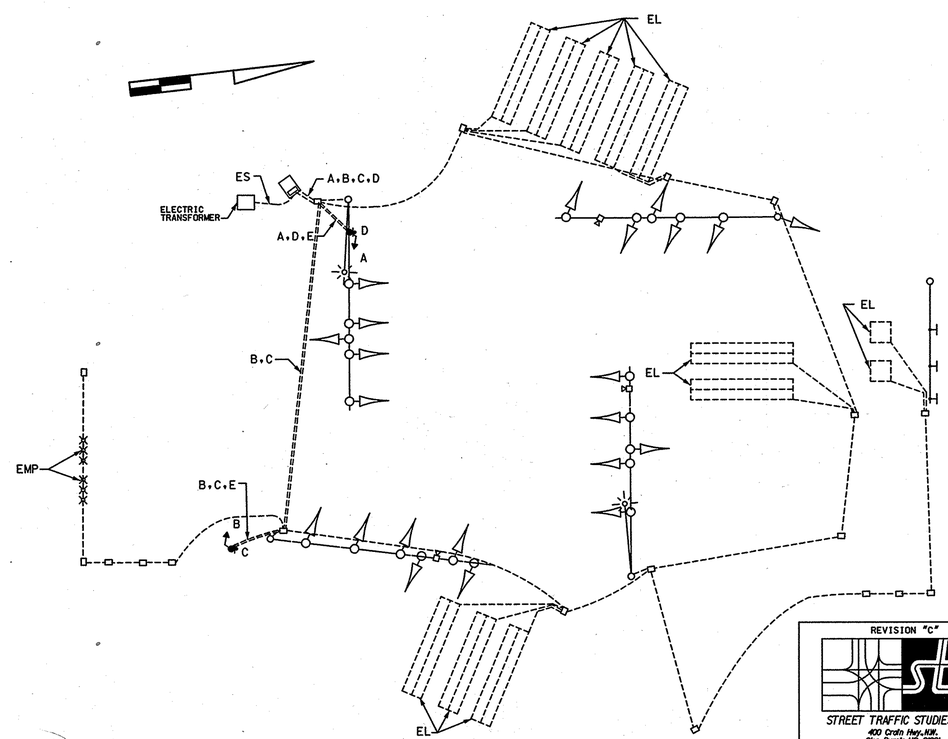
C. EQUIPMENT TO BE REMOVED

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	21	22	23
	◄R- ◄Y- ◄G-	◄R- ◄Y- ◄G-	◄R- ◄Y- ◄G-	R Y G	R Y G	◄R- ◄Y- ◄G-	◄R- ◄Y- ◄G-	◄R- ◄Y- ◄G-	R Y G	R Y G	◄R- ◄Y- ◄G-	R Y G	◄R- ◄Y- ◄G-	◄R- ◄Y- ◄G-	R Y G	R Y G	◄R- ◄Y- ◄G-	R Y G	◄R- ◄Y- ◄G-	R Y G	R Y G		
PHASE 1 & 5	◄G-	◄G-	◄G-	R	R	◄G-	◄G-	◄G-	R	R	◄R-	R	◄R-	◄R-	R	R	◄R-	R	◄R-	R	R	DW	DW
CHANGES TO PHASES 1 & 6, 2 & 5 OR 2 & 6																							
PHASE 1 & 6	◄G-	◄G-	◄G-	G	G	◄R-	◄R-	◄R-	R	R	◄R-	R	◄R-	◄R-	R	R	◄R-	R	◄R-	R	R	DW	DW
1 & 6 CHANGE	◄Y-	◄Y-	◄Y-	G	G	◄R-	◄R-	◄R-	R	R	◄R-	R	◄R-	◄R-	R	R	◄R-	R	◄R-	R	R	DW	DW
PHASE 2 & 5	◄R-	◄R-	◄R-	R	R	◄G-	◄G-	◄G-	G	G	◄R-	R	◄R-	◄R-	R	R	◄R-	R	◄R-	R	R	DW	DW
2 & 5 CHANGE	◄R-	◄R-	◄R-	R	R	◄Y-	◄Y-	◄Y-	G	G	◄R-	R	◄R-	◄R-	R	R	◄R-	R	◄R-	R	R	DW	DW
PHASE 2 & 6	◄R-	◄R-	◄R-	G	G	◄R-	◄R-	◄R-	G	G	◄R-	R	◄R-	◄R-	R	R	◄R-	R	◄R-	R	R	DW	DW
2 & 6 CHANGE	◄R-	◄R-	◄R-	Y	Y	◄R-	◄R-	◄R-	Y	Y	◄R-	R	◄R-	◄R-	R	R	◄R-	R	◄R-	R	R	DW	DW
PHASE 3 & 7	◄R-	◄R-	◄R-	R	R	◄R-	◄R-	◄R-	R	R	◄G-	R	◄G-	◄G-	R	R	◄G-	R	◄G-	R	R	DW	DW
CHANGES TO PHASES 3 & 8, 4 & 7, 4 & 8																							
PHASE 3 & 8	◄R-	◄R-	◄R-	R	R	◄R-	◄R-	◄R-	R	R	◄R-	R	◄R-	◄R-	R	R	◄G-	G	◄G-	G	G	DW	DW
3 & 8 CHANGE	◄R-	◄R-	◄R-	R	R	◄R-	◄R-	◄R-	R	R	◄R-	R	◄R-	◄R-	R	R	◄Y-	G	◄Y-	G	G	DW	DW
PHASE 4 & 7	◄R-	◄R-	◄R-	R	R	◄R-	◄R-	◄R-	R	R	◄G-	G	◄G-	◄G-	G	G	◄R-	R	◄R-	R	R	DW	DW
4 & 7 CHANGE	◄R-	◄R-	◄R-	R	R	◄R-	◄R-	◄R-	R	R	◄Y-	G	◄Y-	◄Y-	G	G	◄R-	R	◄R-	R	R	DW	DW
PHASE 4 & 8	◄R-	◄R-	◄R-	R	R	◄R-	◄R-	◄R-	R	R	◄R-	G	◄R-	◄R-	G	G	◄R-	G	◄R-	G	G	DW	DW
4 & 8 CHANGE	◄R-	◄R-	◄R-	R	R	◄R-	◄R-	◄R-	R	R	◄R-	Y	◄R-	◄R-	Y	Y	◄R-	Y	◄R-	Y	Y	DW	DW
PHASE 4 & 7 ALT	◄R-	◄R-	◄R-	R	R	◄R-	◄R-	◄R-	R	R	◄G-	G	◄G-	◄G-	G	G	◄R-	R	◄R-	R	R	WK	WK
4 & 7 ALT CHANGE	◄R-	◄R-	◄R-	R	R	◄R-	◄R-	◄R-	R	R	◄Y-	G	◄Y-	◄Y-	G	G	◄R-	R	◄R-	R	R	WK	WK
PHASE 4 & 8 ALT	◄R-	◄R-	◄R-	R	R	◄R-	◄R-	◄R-	R	R	◄R-	G	◄R-	◄R-	G	G	◄R-	G	◄R-	G	G	WK	WK
PED CLEAR / COUNTDOWN	◄R-	◄R-	◄R-	R	R	◄R-	◄R-	◄R-	R	R	◄R-	G	◄R-	◄R-	G	G	◄R-	G	◄R-	G	G	FL/DW	FL/DW
4 & 8 ALT CHANGE	◄R-	◄R-	◄R-	R	R	◄R-	◄R-	◄R-	R	R	◄R-	Y	◄R-	◄R-	Y	Y	◄R-	Y	◄R-	Y	Y	DW	DW
FLASHING OPERATION	FL/◄R-	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	FL/◄R-	FL/R	FL/◄R-	FL/R	FL/R	DARK	DARK

WIRING DIAGRAM



WIRING KEY

A, B - 5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G)
C, D - 2-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G)
E - STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)
EMP - EXISTING NON-INVASIVE MICROLOOP
EL - LOOP WIRE (NO. 14 A.W.G.) EXISTING
ES - EXISTING UNDERGROUND SERVICE TO BE INSTALLED BY BGE

REVISION "C"

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

5317G1.dgn T-93

PLOTTED: @DATETIME@
FILE: @FILE@

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

MD 940 (OWINGS MILLS BLVD) AND RED RUN BLVD

GENERAL INFORMATION SHEET

SCALE NONE DATE 7/10/07 CONTRACT NO. AT9365185

DESIGNED BY JWA COUNTY BALTIMORE
DRAWN BY RC LOGMILE 03094000.00
CHECKED BY TIMS NO. I191
F.A.P. NO. TOD NO.

TS NO. 3467C | DRAWING NO. 2 OF 2 | SHEET NO. OF

BORDER REV: DATE: June 1, 2004

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