DRILL HOLES

BORDER REV: DATE: June 1, 2004

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PROJECT DESCRIPTION

I. GENERAL

This project involves the installation of a new mast arm Traffic Control Signal with street lighting at the intersection of MD 235 (Three Notch Rd) and Clarkes Landing Road in St Mary's County. Video detection shall be used for all approaches. MD 235 (Three Notch Rd) is assumed to run a north-south direction.

II. INTERSECTION OPERATION

1. The intersection is to operate in a NEMA six-phase, fully-actuated mode, with the MD 235 (Three Notch Rd) approaches running concurrently. Exclusive left turn phases shall be provided for both approaches of MD 235 (Three Notch Rd). The Clarkes Landing Road approaches shall also run concurrently.

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

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) 787-7652 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. Upon completion of this project, the Contractor shall notify Mr. Robert Synder at (410) 787-7631 to arrange for the phone line installation. The Contractor is to provide Mr. Robert Snyder with the nearest street address, zip code and phone number.

5. The Signal Contractor shall install the handhole on the east side of MD 235 for the south bound non-invasive probe behind the proposed curb line.

The contact persons for District #5 are as follows:

Ms. Kim Tran
Assistant District Engineer - Traffic
Phone: (410) 841-1819

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

Mr. Joe Horty
Assistant District Engineer - Utility
Phone: (410) 841-1005

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

Mr. Ed Rodenhizer
Chief, Signal Operations Section
410-787-7652

Mr. Sonny Bailey
Chief Sign Shop
410-787-7676

The power company representative is:

Mr. Steve McGee,
SMECO - St Mary's County
Phone: 301 475-1597

EQUIPMENT LIST

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

ITEM NO.	DESCRIPTION	QUANTITY
9042	Controller ASC II with telemetry	1 EA
9044	Controller cabinet, size "6"	1 EA
9086	Video detection interface equipment: 1-4 cameras (To be installed by signal shop).	1 EA
9570	Sheet aluminum signs to consist of: (ground mount)	84 SF
	W3-3 NEW "SIGNAL AHEAD" sign, (36" x 36") with D-3 "Clarkes Landing Rd / NEXT SIGNAL" sign (24"x72")	4 EA
9571	Sheet aluminum signs to consist of: (mast arm or pole mount)	62 SF
	D3-2 "Three Notch RD" sign, (Var." x 16") dual face (mast arm mounted)	1 EA
	D3-2 "Clarkes Landing RD (arrow)" sign, (16" x 108") dual face (mast arm mount)	2 EA
	M95-2 (mod) "NORTH (dog leg arrow)/ MD 235 / SOUTH (arrow)" sign (78"x30") (pole mount)	1 EA
	M95-2 (mod) "SOUTH (dog leg arrow)/ MD 235 / NORTH (arrow)" sign (78"x30") (pole mount)	1 EA
	R3-5R "RIGHT TURN ONLY" sign, (30" x 36") (mast arm mounted.)	1 EA

EQUIPMENT LIST (CON'T.)

B. EQUIPMENT TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR

ITEM NO.	DESCRIPTION	QUANTITY
1003	Maintenance of traffic per assignment.	3 EA
2002	Test Pit Excavation	4 C.Y.
5005	24" white heat applied permanent preformed thermoplastic pavement marking.	175 L.F.
5007	Removal of existing permanent pavement line markings	70 L.F.
8006	Any size lighting arm on signal pole.	1 EA
8015	Mast arm pole & 38' mst arm. any "T" dimension.	1 EA
8020	Noninvasive detector (any length lead-in cable).	4 EA
8022	Twin mast arm pole & 50'/60' mast arms any "T" dimension.	1 EA
8025	Video detection camera and cable up to 500'	4 EA
8033	Schedule 80 rigid PVC conduit up to 4" - bored.	370 L.F.
8035	Schedule 80 rigid PVC conduit up to 4" - trenched.	1540 L.F.
8036	Wood sign supports up to 4"x6"	64 L.F.
8038	Install overhead or ground mounted sign.	146 SF
8040	No. 6 AWG stranded bare copper ground wire.	245 L.F.
8042	Embedded Metered service pedestal.	1 EA
8044	Electrical cable 1-conductor No. 4 AWG THHN/THWN.	60 L.F.
8046	Furnish and install electrical handhole.	10 EA
8050	12" LED signal head section.	36 EA
8056	Electrical cable - 5 conductor (No. 14 AWG).	1235 L.F.
8057	Electrical cable - 7 conductor (No. 14 AWG).	360 L.F.
8058	Electrical cable - 2 conductor (No. 12 AWG). tray cable.	155 L.F.
8065	Install controller and cabinet base mount.	1 EA

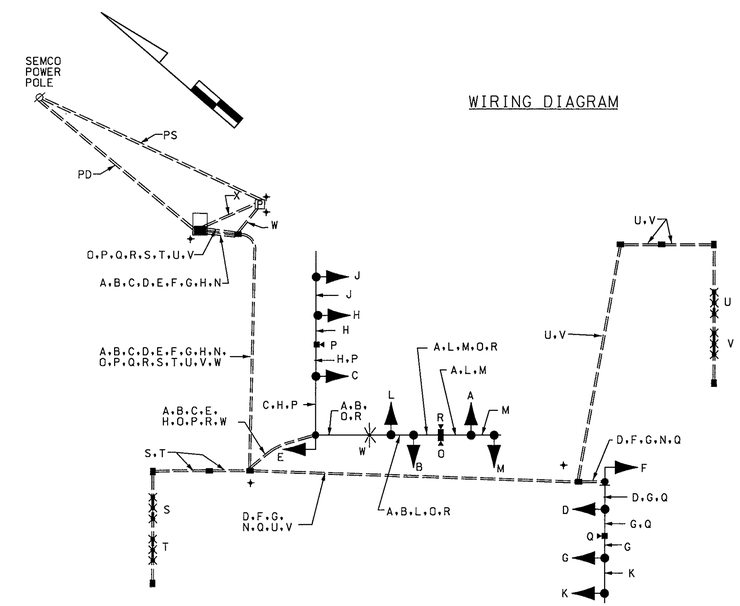
C. EQUIPMENT TO BE REMOVED

There is no signal equipment to be removed for this project.

PHASE CHART

	1	2	3	4	5	6	7	8	9	10	11	12
	◄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	R	R	◄G	◄G	R	R	R	R	R	R
CHANGES TO PHASES 1 & 6, 2 & 5 OR 2 & 6												
PHASE 1 & 6	◄G	◄G	G	G	◄R	◄R	R	R	R	R	R	R
1 & 6 CHANGE	◄Y	◄Y	G	G	◄R	◄R	R	R	R	R	R	R
PHASE 2 & 5	◄R	◄R	R	R	◄G	◄G	G	G	R	R	R	R
2 & 5 CHANGE	◄R	◄R	R	R	◄Y	◄Y	G	G	R	R	R	R
PHASE 2 & 6	◄R	◄R	G	G	◄R	◄R	G	G	R	R	R	R
2 & 6 CHANGE	◄R	◄R	Y	Y	◄R	◄R	Y	Y	R	R	R	R
PHASE 4 & 8	◄R	◄R	R	R	◄R	◄R	R	R	G	G	G	G
4 & 8 CHANGE	◄R	◄R	R	R	◄R	◄R	R	R	Y	Y	Y	Y
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

WIRING DIAGRAM



WIRING KEY

A, B - 7-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G)

C, D, E, F, G, H, J, K, L, M - 5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G)

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

O, P, Q, R - CONTROL CABLE (CAMERA TO CONTROLLER) UP TO 500'

S, T, U, V - NON-INVASIVE MICROLOOP LEAD-IN CABLE

W - 2-CONDUCTOR TRAY CABLE (NO. 12 A.W.G)

X - 3-1 CONDUCTOR ELECTRICAL CABLE (NO. 4 A.W.G.)

+ - GROUND ROD

PS - PROPOSED POWER SERVICE

PD - PROPOSED PHONE DROP

SHA

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

MD 235 (THREE NOTCH ROAD) AND CLARKS LANDING ROAD

HOLLYWOOD, MARYLAND

GENERAL INFORMATION SHEET

SCALE NONE DATE 12/3/08 CONTRACT NO. XX4475185

DESIGNED BY James Allen Jr. COUNTY ST. MARY'S
DRAWN BY James Allen Jr. LOGMILE 18023518.66
CHECKED BY TIMS NO. J074
F.A.P. NO. TOD NO.

STREET TRAFFIC STUDIES, LTD.
400 Crain Hwy. N.W.
Glen Burnie, MD 21061
Ph (410) 590-5500
Fax (410) 590-9637

5574GI.DGN T-180

TS NO. 4700 | DRAWING NO. 2 OF 2 | SHEET NO. OF

PLOTTED: WEDNESDAY, DECEMBER 10, 2008 AT 09:24 AM
FILE: J:\DATA\J074\5574GI.DGN