DRILL HOLES

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BORDER REV. DATE: June 1, 2004

PROJECT DESCRIPTION

I. GENERAL

This project involves the installation of a new mast arm Traffic Control Signal with street lighting and video detection at the intersection of MD 346 (Old Ocean City Rd) and Beaglin Park Dr in Wicomico County. Both Beaglin Park drive approaches shall br restriped to include a left turn bay. A phone drop shall be installed by SHA forces. MD 346 (Old Ocean City Rd) is assumed to run in an east-west direction.

II. INTERSECTION OPERATION

1. The intersection shall operate in a NEMA six-phase, fully-actuated mode, with the MD 346 (Old Ocean City Rd) approaches running concurrently. Exclusive/Permissive left turn phases for both approaches of MD 346 (Old Ocean City Rd) shall be provided. The Beaglin Park Dr approaches shall also run concurrently. Pre-emption shall be provided for the westbound approach of MD 346 and the northbound approach of Beaglin Park Drive.

2. A full-traffic-actuated, eight-phase controller with video interface, opticom module 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) 787-7650 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. Upon completion of this project, the Contractor shall notify Mr. Robert Snyder 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.

The contact persons for District #1 are as follows:

Mr. Gene Cofiell
Assistant District Engineer - Traffic
Phone: (410) 677-4040

Mr. Jimmy Wright
Assistant District Engineer - Maintenance
Phone: (410) 543-6715

Mr. Bruce Poole
Assistant District Engineer - Utility
Phone: (410) 677-4082

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
410-787-7676

The power company representative is:

Rodney Bain
Delmarva
2530 N. Salisbury Blvd
Salisbury, MD 21802
Phone: 410 860-6242

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)	73 SF
	W3-3 NEW "SIGNAL AHEAD" sign, (36" x 36") ground mounted with hardware.	4 EA
	D-3(2) 'Old Ocean City Rd" sign, (72"x12").	2 EA
	R3-7R "RIGHT LANE MUST TURN RIGHT" sign, (36" x 36").	2 EA
9571	Sheet aluminum signs to consist of: (mast arm or pole mount)	154 SF
	D3-2 "Beaglin Park Dr" sign, (variable x 16") (dual faced)	2 EA
	D3-2 "Old Ocean City" sign, (variable x 16") (dual faced) mounted.	2 EA
	R3-5R "RIGHT TURN ONLY" sign, (30" x 36")	2 EA
	R3-5L "LEFT TURN ONLY" sign, (30" x 36")	2 EA
	R3-6R "THRU-RIGHT ONLY" sign, (30" x 36")	1 EA
	GUIDE SHIELD ASSEMBLY (48"x75") pole mounted. M3-4 "WEST"(30"X15") M1-5 "MD 346"(48"X36") M6-1 "left arrow "(30"X24")	1 EA
	GUIDE SHIELD ASSEMBLY (48"x75") pole mounted. M3-1 "EAST"(30"X15") M1-5 "MD 346"(48"X36") M6-1 "left arrow "(30"X24")	1 EA
	GUIDE SHIELD ASSEMBLY (30"x51") pole mounted. M3-1 "EAST"(24"X12") M1-5 "MD 346"(30"X24") M6-1 "right arrow "(21"X15")	1 EA

EQUIPMENT LIST (CONT.)

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

ITEM NO.	DESCRIPTION	QUANTITY
	GUIDE SHIELD ASSEMBLY (30"x51") pole mounted. M3-4 "WEST"(24"X12") M1-5 "MD 346"(30"X24") M6-1 "right arrow "(21"X15")	1 EA

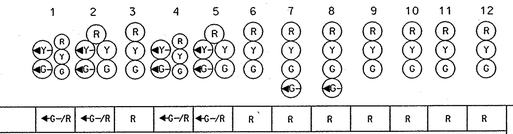
B. EQUIPMENT TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR

ITEM NO.	DESCRIPTION	QUANTITY
1001	Maintenance of traffic per assignment.	3 EA
2002	Test Pit Excavation	6 C.Y.
5002	Removal of existing permanent pavement line markings	2425 L.F.
5003	Removal of existing permanent pavement marking letters, symbols, arrows and numbers.	8 EA
5005	24" heat applied white permanent preformed thermoplastic pavement marking.	190 L.F.
5007	Heat applied white permanent preformed thermoplastic pavement marking letters. (ONLY).	8 EA
5007	Heat applied white permanent preformed thermoplastic pavement marking arrow. (right).	4 EA
8001	12" LED (R,Y,G) signal head section.	38 EA
8004	8" LED signal head section.	9 EA
8007	Any size lighting arm on signal pole with 250 watt HPS lamp & luminaire.	1 EA
8016	Mast arm pole and 38' mast arm any "T" dimension	2 EA
8017	Mast arm pole and 60' mast arm any "T" dimension	2 EA
8021	Non-invasive detector (any length) lead-in cable up to 1000'.	2 EA
8022	Remove and dispose of existing material and equipment per assignment.	1 EA
8026	Video detection camera & cable up to 500'	4 EA
8034	Schedule 80 rigid PVC conduit up tp 4" - trenched.	705 L.F.
8035	Schedule 80 rigid PVC conduit up tp 4" - bored.	375 S.F.
8036	Wood sign supports up to 4"x6".	32 L.F.
8038	Install overhead or ground mounted sign (including hardware).	220 SF
8040	No. 6 AWG stranded bare copper ground wire.	615 L.F.
8042	Metered service pedestal embedded.	1 EA
8044	Electrical cable 1-conductor No. 4 AWG THHN/THWN.	70 L.F.
8046	Furnish and install electrical handhole.	10 EA
8047	Discriminator module, 4 channel #764. (opticom)	1 EA
8049	Opticom #721 detector eye.	2 EA
8050	Furnish and install 4-conductor opticom cable.	570 L.F.
8055	Electrical cable - 5 conductor (No. 14 AWG).	110 L.F.
8056	Electrical cable - 7 conductor (No. 14 AWG).	1720 L.F.
8057	Electrical cable - 2 conductor (No. 12 AWG) tray cable.	305 L.F.
8064	Install controller and cabinet base mount.	1 EA

C. EQUIPMENT TO BE REMOVED

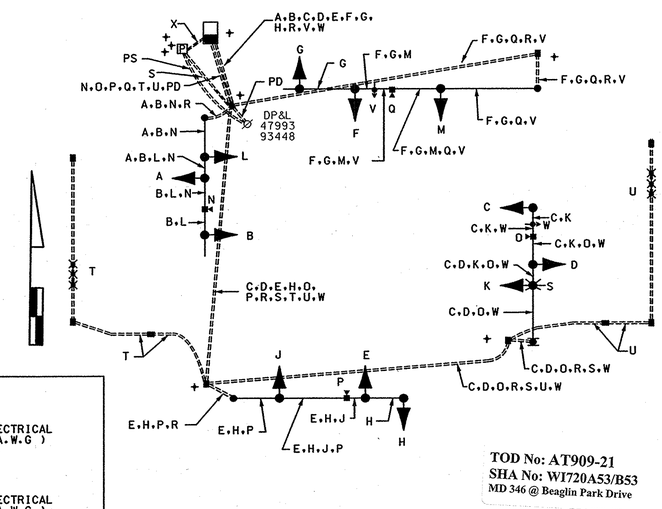
There is no signal equipment to be removed for this project.

PHASE CHART



	1	2	3	4	5	6	7	8	9	10	11	12
PHASE 1 & 5	G-/R	G-/R	R	G-/R	G-/R	R	R	R	R	R	R	R
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
1 & 6 CHANGE	Y-/G	Y-/G	G	R	R	R	R	R	R	R	R	R
PHASE 2 & 5	R	R	R	G-/G	G-/G	G	R	R	R	R	R	R
2 & 5 CHANGE	R	R	R	Y-/G	Y-/G	G	R	R	R	R	R	R
PHASE 2 & 6	G	G	G	G	G	G	R	R	R	R	R	R
2 & 6 CHANGE	Y	Y	Y	Y	Y	Y	R	R	R	R	R	R
PHASE 4 & 8	R	R	R	R	R	R	G	G	G	G	G	G
4 & 8 CHANGE	R	R	R	R	R	R	Y	Y	Y	Y	Y	Y
PRE EMPT 1	G	G	G	G	G	G	R	R	R	R	R	R
PRE EMPT 1 CHANGE	Y	Y	Y	Y	Y	Y	R	R	R	R	R	R
PRE EMPT 2	R	R	R	R	R	R	G G-	G G-	G	R	R	R
PRE EMPT 2 CHANGE	R	R	R	R	R	R	Y	Y	Y	R	R	R
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R

WIRING DIAGRAM



WIRING KEY

A, B, C, D, E, F, G, H } 7-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G)

J, K, L, M } 5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G)

N, O, P, Q } CONTROL CABLE 9CAMERA TO CONTROLLER) UP TO 500'

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

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

T, U } NON INVASIVE MICROLOOP LEAD-IN CABLE (UP TO 1000')

V, W } 4-CONDUCTOR OPTICOM CABLE

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

PD - PHONE DROP BY SHA

PS - UNDERGROUND SERVICE TO BE INSTALLED BY DELMARVA

+ - GROUND ROD

TOD No: AT909-21
SHA No: WI720A53/B53
MD 346 @ Beaglin Park Drive

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

MD 346 AND BEAGLIN PARK DRIVE

GENERAL INFORMATION SHEET

SCALE NONE DATE 7-30-07 CONTRACT NO. AT9095185

DESIGNED BY J W ALLEN
DRAWN BY RC
CHECKED BY Bruce Thompson 8/07
F.A.P. NO.

COUNTY WICOMICO
LOGMILE 22034601.32
TIMS NO. I142
TOD NO.

TS NO. 4581 | DRAWING NO. 2 OF 3 | SHEET NO. OF

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

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