

PROJECT DESCRIPTION

I. GENERAL

This project involves the installation of a mast arm Traffic Control Signal at the intersection of MD 45 (York Rd) and Corbett Rd / Piney Hill Rd in Baltimore County. Video detection shall be used for all approaches. M MD 45 (York Rd) is assumed to run a north-south direction.

II. INTERSECTION OPERATION

- The intersection is to operate in a NEMA five-phase, fully-actuated mode, with the MD 45 (York Rd) approaches running concurrently. An Exclusive/Permissive left turn phase shall be provided for the southbound approach of MD 45 (York Rd). The Corbett Rd / Piney Hill Rd approaches shall also run concurrently.
- 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

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

The contact persons for District #4 are as follows:

Ms. Erin Kuhn
Assistant District Engineer - Traffic
Phone: (410) 321-2781

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

Mr. Andre Futrell
Assistant District Engineer - Maintenance
Phone: (410) 321-2761

Mr. Ed Rodenhizer
Signal Shop
Phone: (410) 787-7652

Mr. Mike Pasqualello
Assistant District Engineer - Utility
Phone: (410) 321-2841

Mr. Sonny Bailey
Sign Shop
Phone: (410) 787-7676

The power company representative is:
Baltimore Gas and Electric
7317 Parkway Drive South
Hanover, MD 21076
410-850-4620

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) | 41 SF |
| | W3-3 NEW "SIGNAL AHEAD" sign, (36" x 36") ground mounted with hardware. | 2 EA |
| | W3-3 NEW "SIGNAL AHEAD" sign, (48" x 48") ground mounted with hardware. | 2 EA |
| 9571 | Sheet aluminum signs to consist of: (mast arm or pole mount) | 65 SF |
| | D3-2 "Piney Hill RD (arrow)/ (arrow) Piney Hill RD" sign, (variable x 16") | 1 EA |
| | D3-2 "Corbett RD (arrow)/ (arrow) Corbett RD" sign, (variable x 16") | 1 EA |
| | D3-2 "York RD" sign, (variable x 16"). | 2 EA |
| | M95-2 "SOUTH (arrow)/ MD 45 / NORTH (arrow)", sign, (78" x 24") | 1 EA |
| | M95-2 "NORTH (arrow)/ MD 45 / SOUTH (arrow)", sign, (78" x 24") | 1 EA |
| | R3-5R "RIGHT TURN ONLY" sign, (30" x 36"). | 1 EA |

EQUIPMENT LIST (CONT.)

B. EQUIPMENT TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR

| ITEM NO. | DESCRIPTION | QUANTITY |
|----------|--|----------|
| 1001 | Maintenance of traffic per assignment. | 2 EA |
| 2002 | Test Pit Excavation | 4 C.Y. |
| 5001 | 5" heat applied white permanent preformed thermoplastic pavement marking. | 125 L.F. |
| 5001 | 5" heat applied yellow permanent preformed thermoplastic pavement marking. | 850 L.F. |
| 5002 | Removal of existing permanent pavement line markings | 920 L.F. |
| 5005 | 24" heat applied white permanent preformed thermoplastic pavement marking. | 75 L.F. |
| 8001 | 12" LED signal head section. | 31 EA |
| 8004 | 8" LED signal head section. | 3 EA |
| 8007 | Any size lighting arm on signal pole with 250 watt HPS lamp & luminaire. | 1 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 |
| 8025 | Twin mast arm pole and 50'/50' (cut to 38') mast arms any "T" dimension. | 2 EA |
| 8026 | Video detection camera & cable up to 500' | 3 EA |
| 8034 | Schedule 80 rigid PVC conduit up to 4" - trenched. | 840 L.F. |
| 8035 | Schedule 80 rigid PVC conduit up to 4" - bored. | 290 L.F. |
| 8036 | Wood sign supports up to 4"x6". | 96 L.F. |
| 8038 | Install overhead or ground mounted sign (including hardware). | 106 S.F. |
| 8040 | No. 6 AWG stranded bare copper ground wire. | 170 L.F. |
| 8042 | Metered service pedestal embedded. | 1 EA |
| 8044 | Electrical cable 1-conductor No. 4 AWG THHN/THWN. | 60 L.F. |
| 8046 | Furnish and install electrical handhole. | 9 EA |
| 8051 | Cut, clean, galvanize and cap traffic signal structure. | 2 EA |
| 8055 | Electrical cable - 5 conductor (No. 14 AWG). | 120 L.F. |
| 8056 | Electrical cable - 7 conductor (No. 14 AWG). | 785 L.F. |
| 8057 | Electrical cable - 2 conductor (No. 12 AWG) tray cable. | 70 L.F. |
| 8064 | Install controller and cabinet base mount. | 1 EA |

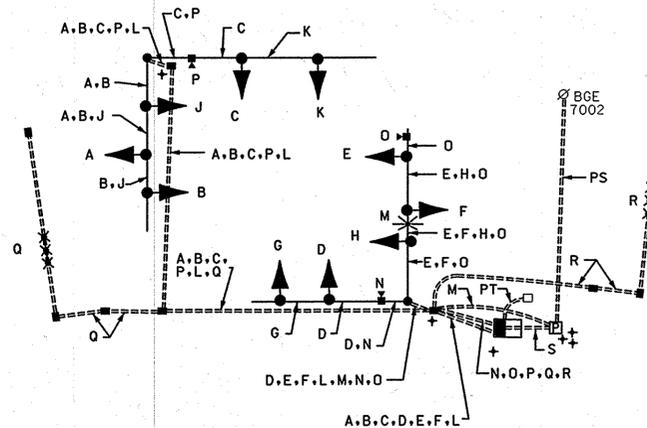
C. EQUIPMENT TO BE REMOVED

There are no signal materials to be removed by the Contractor.

PHASE CHART

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | |
|--------------------|------|------|------|------|------|------|------|------|------|---|
| PHASE 1 & 6 | R | R | ←G-G | ←G-G | G | R | R | R | R | ↓ |
| 1 & 6 CHANGE | R | R | ←Y-G | ←Y-G | G | R | R | R | R | ↓ |
| PHASE 2 & 6 | G | G | G | G | G | R | R | R | R | ↓ |
| 2 & 6 CHANGE | Y | Y | Y | Y | Y | R | R | R | R | ↓ |
| PHASE 4 & 8 | R | R | R | R | R | G | G | G | G | ↓ |
| 4 & 8 CHANGE | R | R | R | R | R | Y | Y | Y | Y | ↓ |
| FLASHING OPERATION | FL/Y | FL/Y | FL/Y | FL/Y | FL/Y | FL/R | FL/R | FL/R | FL/R | ↓ |

WIRING DIAGRAM



WIRING KEY

| |
|---|
| 7-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.) |
| 5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.) |
| L - STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.) |
| M - 2-CONDUCTOR TRAY CABLE (NO. 12 A.W.G.) |
| N - CONTROL CABLE (CAMERA TO CONTROLLER) UP TO 250' |
| O - NONINVASIVE MICROLOOP LEAD-IN CABLE (500') |
| S - 3-1 CONDUCTOR ELECTRICAL CABLE (NO. 4 A.W.G.) |
| PT - PROPOSED TELEPHONE DROP |
| PS - PROPRIETARY |
| + - GROUND |

SHA STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

MD 45 (YORK ROAD) AND CORBETT ROAD / PINEY HILL ROAD
HEREFORD, MARYLAND

GENERAL INFORMATION SHEET

SCALE NONE DATE 4-28-08 CONTRACT NO. AT9125185

DESIGNED BY RR ZACHERL COUNTY BALTIMORE
DRAWN BY R.C. LOGMILE 03004514.72
CHECKED BY [Signature] TMS NO. 1921
F.A.P. NO. TOD NO.

TS NO. 4656 DRAWING NO. 2 OF 3 SHEET NO. OF

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