DRILL HOLES

BORDER REV: DATE: June 1, 2004

## PROJECT DESCRIPTION

I. GENERAL

This project involves the modification of an existing Traffic Control Signal with street lighting at the intersection of MD 140 (Taneytown Pike) and Hughes Shop Rd / MD 832 (Old Taneytown Rd) in Carroll County. An Exclusive/Permissive left turn phase shall be installed for westbound MD 140 (Taneytown Pike) . MD 140 (Taneytown Pike) is assumed to run an east-west direction.

II. INTERSECTION OPERATION

1. The intersection is to operate in a NEMA five-phase, fully-actuated mode, with the MD 140 (Taneytown Pike) approaches running concurrently. A new Exclusive/Permissive left turn phase shall be provided for the westbound approach of MD 140 (Taneytown Pike). The Hughes Shop Rd / MD 832 (Old Taneytown Rd) approaches shall continue to operate run concurrently.

2. The existing full-traffic-actuated, eight-phase controller with all necessary equipment housed in a NEMA size "5" pole-mounted cabinet shall be utilized 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.

The contact persons for District #7 are as follows:

Mr. John Concannon
Assistant District Engineer - Traffic
Phone: (310) 624-8141

Mr. Ray Johnson
Assistant District Engineer - Maintenance
Phone: (301) 624-8105

Ms Andrea Abend
District Engineer - Utility
Phone: (301) 624-8116

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

## EQUIPMENT LIST

A. EQUIPMENT TO BE SUPPLIED BY THE SHA.

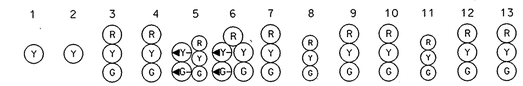
THERE IS NO EQUIPMENT TO BE SUPPLIED BY THE SHA.

## EQUIPMENT LIST

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR

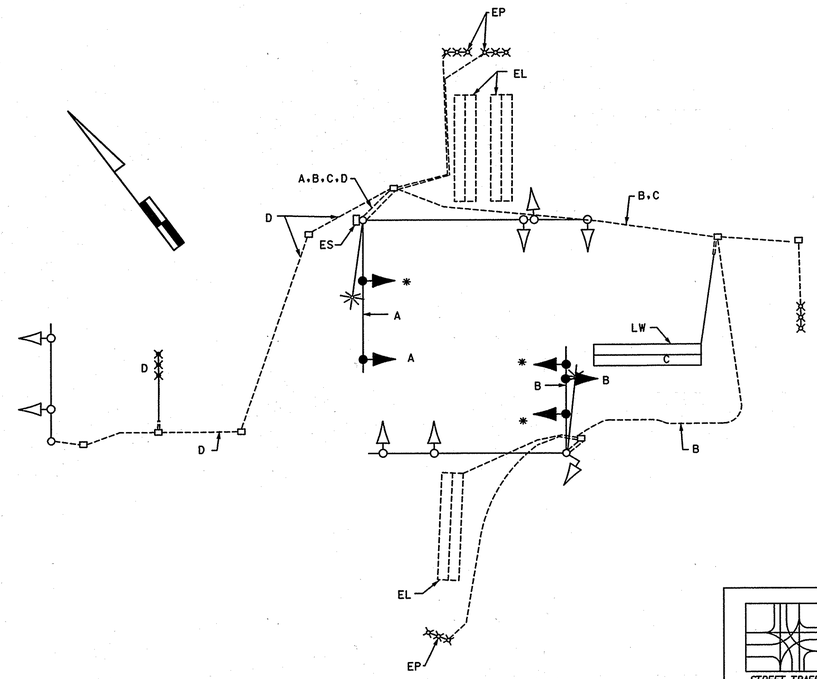
| SPEC. NUMBER | DESCRIPTION | QUANTITY |
|---|---|---|
| 814 | 12", one-way, three-section (R,Y,G) LED traffic signal head with adjustable bracket for mast arm mounting and tunnel visors. | 2 EA |
| 814 | 12", one-way, five-section (R,Y,YA,G,GA) traffic signal head with adjustable bracket for mast arm mounting and tunnel visors. | 1 EA |
| 814 | 12"/8", one-way, five-section 8"(R,Y,G) 12"(YA,GA) traffic signal head with adjustable bracket for mast arm mounting and tunnel visors. | 1 EA |
| 556 | 24" white heat applied permanent preformed thermoplastic pavement marking | 60 L.F. |
| 815 | Saw cut for signal (loop detector). | 130 L.F. |
| 805 | 1" liquid tight flexible non-metallic conduit for detector sleeve. | 15 L.F. |
| 810 | Furnish and install loop wire encased in flexible tubing (No. 14 AWG). | 435 L.F. |
| 810 | Furnish and install electrical cable - 2 conductor (aluminum shielded). | 145 L.F. |
| 863 | 4-channel, rack mount loop detector amplifier. (To be installed into the existing pole-mounted cabinet S.H.A. Signal Shop Forces). | 1 EA |
| 822 | Remove existing traffic signal head. | 4 EA |
| | Furnish and install micro-loop with 500' lead-in. | 1 EA |

## PHASE CHART




| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHASE 2 & 5 | FL/Y | FL/Y | R | R | ◄G-/G | ◄G-/G | G | R | R | R | R | R | R |
| 2 & 5 CHANGE | DARK | DARK | R | R | ◄Y-/G | ◄Y-/G | G | R | R | R | R | R | R |
| PHASE 2 & 6 | DARK | DARK | G | G | G | G | G | R | R | R | R | R | R |
| 2 & 6 CHANGE | FL/Y | FL/Y | Y | Y | Y | Y | Y | R | R | R | R | R | R |
| PHASE 4 & 8 | FL/Y | FL/Y | R | R | R | R | R | G | G | G | G | G | G |
| 4 & 8 CHANGE | FL/Y | FL/Y | R | R | R | R | R | Y | Y | Y | Y | Y | Y |
| FLASHING OPERATION | FL/Y | 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 } 7-CONDUCTOR ELECTRICAL
B } CABLE (NO. 14 A.W.G )

C - 2-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G ) ALUMINUM SHIELDED

D - MICROLOOP LEAD-IN CABLE (500')

EP - EXISTING MICROLOOP

EL - LOOP WIRE (NO. 14 A.W.G.) EXISTING

LW - LOOP WIRE (NO. 14 A.W.G.)

* - USE EXISTING CABLE

ES - EXISTING SERVICE MAINTAINED BY BGE

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

MD 140 AND HUGHES SHOP RD/
MD 832 (OLD TANEYTOWN RD)

WESTMINSTER, MARYLAND

GENERAL INFORMATION SHEET

SCALE NONE DATE 3/24/08 CONTRACT NO.

DESIGNED BY R. ZACHERL
DRAWN BY ROB CICCHINI
CHECKED BY
F.A.P. NO.

COUNTY CARROLL
LOGMILE 06014012.34
TIMS NO. I409
TOD NO.

TS NO.3545BGI | DRAWING NO. 2 OF 2 | SHEET NO. OF

STREET TRAFFIC STUDIES, LTD.
400 Crain Hwy.NW.
Glen Burnie,MD 21061
Ph (410) 590-5500
Fax (410) 590-6537

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