

PROJECT DESCRIPTION

I. GENERAL

This project involves the reconstruction of an existing Traffic Control Signal with interconnect at the intersection of MD 378 (Baltimore Avenue) and 14th Street in Worcester County. MD 378 (Baltimore Avenue) is assumed to run in a north-south direction.

This project involves the replacement of the existing span wire mounted traffic signal with a mast arm mounted traffic signal and the replacement of existing interconnect cable from 14th Street south to 9th Street.

II. INTERSECTION OPERATION

- The intersection will continue to operate in a NEMA three-phase, fixed time mode, with the MD 378 (Baltimore Avenue) approach running alone. The 14th Street approaches shall operate concurrently. A concurrent pedestrian phase shall be provided across the south leg of MD 378.

III. SPECIAL NOTES

- The Contractor shall be responsible for terminating all signal cables, excluding interconnect, 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) 787-7650 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.

EQUIPMENT LIST (CONT.)

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

| ITEM NO. | DESCRIPTION | QUANTITY |
|----------|---|------------|
| 8001 | Furnish and install concrete for signal foundation. | 5 C.Y. |
| 8008 | Furnish and install 3" weatherhead. | 1 EA |
| 8009 | Furnish and install steel span wire, 3/8" diameter. | 25 L.F. |
| 8019 | Install controller and cabinet pole mount. | 1 EA |
| 8027 | Furnish and install 3" schedule 80 rigid polyvinyl chloride conduit - trenched | 10 L.F. |
| 8033 | Furnish and install electrical handhole. | 1 EA |
| 8034 | Furnish and install ground rod - 3/4" x 10'. | 1 EA |
| 8038 | Furnish and install 12-pair communication cable, self-supporting (overhead). | 1750 L.F. |
| 8043 | Furnish and install electrical cable - 3 conductor (No. 14 AWG). | 130 L.F. |
| 8044 | Furnish and install electrical cable - 5 conductor (No. 14 AWG). | 280 L.F. |
| 8048 | Furnish and install No. 6 AWG stranded bare copper ground wire. | 30 L.F. |
| 8053 | Install overhead sign. | 16.75 S.F. |
| 8060 | Remove and dispose of existing material and equipment per assignment. | 1 EA |
| 8066 | Furnish and install control and distribution equipment (120/240 V, 1 phase 3 wire system). | 1 EA |
| 8079 | Furnish and install mast arm pole and 70' mast arm. (Special order with 15' "T" dimension.) | 1 EA |
| 8084 | Furnish and install 12" vehicular traffic signal head section (Green) | 6 EA |
| 8084 | Furnish and install 12" vehicular traffic signal head section (Yellow) | 6 EA |
| 8084 | Furnish and install 12" vehicular traffic signal head section (Red) | 6 EA |
| 8087 | Furnish and install pedestrian signal head section | 2 EA |
| Neg. | Remove existing 12-pair communication cable | 1750 L.F. |
| Neg. | Remove curb and gutter. | 20 L.F. |
| Neg. | Remove concrete sidewalk. | 45 L.F. |
| Neg. | Remove 6"x6" ties. | 32 L.F. |
| Neg. | Furnish and install 6"x6" ties. | 32 L.F. |

PHASE CHART

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | |
|--------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| | (R) (Y) (G) |
| PHASE 2 | G | G | R | R | R | R | DW | DW | ± |
| 2 CHANGE | Y | Y | R | R | R | R | DW | DW | ± |
| PHASE 4 & 8 | R | R | G | G | G | G | WK | WK | ± |
| PED CLEARANCE | R | R | G | G | G | G | FL/DW | FL/DW | ± |
| 4 & 8 CHANGE | R | R | Y | Y | Y | Y | DW | DW | ± |
| FLASHING OPERATION | FL/Y | FL/Y | FL/R | FL/R | FL/R | FL/R | DARK | DARK | ± |

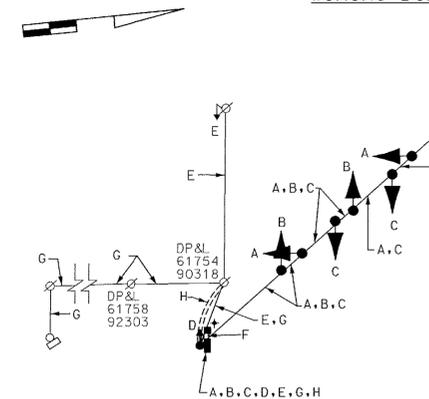
A. EQUIPMENT TO BE SUPPLIED BY S.H.A..

| ITEM NO. | DESCRIPTION | QUANTITY |
|----------|--|-----------------|
| 9000 | Eight-phase, full-traffic actuated, solid state digital controller with associated harnesses housed in a NEMA size "5" pole mounted cabinet. | 1 EA |
| 9089 | Sheet aluminum signs to consist of: R3-2L "NO LEFT TURN" (SYMBOLIC) sign, (30" x 36") mast arm mounted. | 6.25 SF 1 EA |
| 9090 | Sheet aluminum signs to consist of: D3-2 "14TH Street" dual faced sign (variable x 16") mast arm mounted. | 10.5 SF 1 EA |

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

| ITEM NO. | DESCRIPTION | QUANTITY |
|----------|--|----------|
| 1001 | Maintenance of traffic per assignment. | 1 EA |
| 2001 | Test pit excavation. | 1 C.Y. |
| 6001 | 4" concrete sidewalk. | 45 S.F. |
| 6009 | Furnish and install depressed curb and gutter. | 20 L.F. |

WIRING DIAGRAM



WIRING KEY

- A, B, C } 5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
- D, E } 3-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
- F - STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)
- G - 12-PAIR VOICE GRADE INTERCONNECT CABLE
- H - 3-1 CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
- PS - PROPOSED UNDERGROUND SERVICE TO BE INSTALLED BY CONNECTIV
- ± - GROUND ROD

REVISION "C"

TASK48GI.dgn

| REVISIONS | APPROVALS | | | | | | | | | | | | | | | | |
|---|-----------|---|----------------|-----|---------|---------|---|------|---|-----|--|--|---|---|----------------------------------|---|----------------------------|
| <table border="1"> <tr> <td>RRZ</td> <td>8-12-00</td> <td>REBUILD SIGNAL</td> </tr> <tr> <td>CFS</td> <td>5-10-93</td> <td>ASBUILT</td> </tr> <tr> <td>A</td> <td>5-92</td> <td>INSTALL PEDESTRIAN PHASE ACROSS SOUTH LEG OF MD 378</td> </tr> <tr> <td>MAR</td> <td></td> <td></td> </tr> </table> | RRZ | 8-12-00 | REBUILD SIGNAL | CFS | 5-10-93 | ASBUILT | A | 5-92 | INSTALL PEDESTRIAN PHASE ACROSS SOUTH LEG OF MD 378 | MAR | | | <table border="1"> <tr> <td>ASST. CHIEF TRAFFIC ENGINEERING DESIGN DIVISION</td> </tr> <tr> <td>ASST. DISTRICT ENGINEER, TRAFFIC</td> </tr> <tr> <td>CHIEF TRAFFIC ENGINEERING DESIGN DIVISION</td> </tr> <tr> <td>DIRECTOR, TRAFFIC & SAFETY</td> </tr> </table> | ASST. CHIEF TRAFFIC ENGINEERING DESIGN DIVISION | ASST. DISTRICT ENGINEER, TRAFFIC | CHIEF TRAFFIC ENGINEERING DESIGN DIVISION | DIRECTOR, TRAFFIC & SAFETY |
| RRZ | 8-12-00 | REBUILD SIGNAL | | | | | | | | | | | | | | | |
| CFS | 5-10-93 | ASBUILT | | | | | | | | | | | | | | | |
| A | 5-92 | INSTALL PEDESTRIAN PHASE ACROSS SOUTH LEG OF MD 378 | | | | | | | | | | | | | | | |
| MAR | | | | | | | | | | | | | | | | | |
| ASST. CHIEF TRAFFIC ENGINEERING DESIGN DIVISION | | | | | | | | | | | | | | | | | |
| ASST. DISTRICT ENGINEER, TRAFFIC | | | | | | | | | | | | | | | | | |
| CHIEF TRAFFIC ENGINEERING DESIGN DIVISION | | | | | | | | | | | | | | | | | |
| DIRECTOR, TRAFFIC & SAFETY | | | | | | | | | | | | | | | | | |

MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
 Office of Traffic & Safety
 TRAFFIC ENGINEERING DESIGN DIVISION
 GENERAL INFORMATION SHEET
 MD 378 (BALTIMORE AVENUE) AND 14TH STREET

DRAWN BY: EM MILESKY
 CHECKED BY: [Signature]
 SCALE: 1" = 20'
 DATE: 11-11-83

F.A.P. NO.
 S.H.A. NO. 6078A561B8A
 COUNTY: WORCESTER
 LOG MILE: 23037801.40

TS NO. 415C
 T.I.M.S. NO.
 SHEET NO. 2 OF 2