| F.H.W.A. REGION NO. | STATE | FED. AID PROJ. NO. | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|
| 3 | MD | SEE TITLE SHEET | 352 | 465 |

# PROJECT DESCRIPTION

GENERAL

THIS PORTION OF THE PROJECT INVOLVES THE MODIFICATION OF THE EXISTING TRAFFIC CONTROL SIGNAL AT MD 450 (ANNAPOLIS ROAD) AND FORBES BLVD. IN PRINCE GEORGES COUNTY. MD 450 IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION.

INTERSECTION OPERATION

THIS INTERSECTION IS TO CONTINUE TO OPERATE IN A NEMA SIX PHASE, FULLY TRAFFIC-ACTUATED MODE.

CONTROLLER REQUIREMENTS

THE EXISTING CONTROLLER AND CABINET ARE TO BE UTILIZED.

SPECIAL NOTE

72 HOURS PRIOR TO ANY WORK ON THE TRAFFIC SIGNALS, THE CONTRACTOR SHALL NOTIFY THE DISTRICT 3 TRAFFIC SECTION REPRESENTATIVE, MR. RICHARD BUETTNER (301-513-7316) AND THE SIGNAL OPERATIONS SUPERVISOR, MR. EDWARD RODENHIZER (410-787-7652).

ALL UNDERGOUND AND OVERHEAD UTILITIES SHOWN ON THESE PLANS ARE SCHEMATIC AND ARE NOT TO BE CONSIDERED COMPLETE DECAUSE THESE UNDERGROUND AND OVERHEAD UTILITIES MAY BE MODIFIED PRIOR TO AND DURING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING ALL UTILITY COMPANIES 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 EQUIPMENT WILL OCCUR, THE CONTRACTOR SHALL NOTIFY THE APPROPRIATE PROJECT ENGINEER IMMEDIATELY.

# EQUIPMENT LIST "A"

A. EQUIPMENT TO BE SUPPLIED BY THE ADMINISTRATION

| CATEGORY CODE NO. | SPEC. SECTION | QUANTITY | DESCRIPTION |
|---|---|---|---|
| 960015 | 814 | 1 EA. | 12 IN. 1 WAY 3 SECTION (R,Y,G) ADJUSTABLE POLYCARBONATE VEHICLE SIGNAL HEAD WITH SPAN MOUNTING HARDWARE AND TUNNEL VISORS |
| 960020 | 814 | 2 EA. | 12 IN. 1 WAY 5 SECTION (R,Y,G,YA,GA) ADJUSTABLE POLYCARBONATE VEHICLE SIGNAL HEAD WITH SPAN MOUNTING HARDWARE AND TUNNEL VISORS |
| 973023 | 813 | 21 S.F. | SHEET ALUMINUM SIGNS - 2 EACH R 10-12 (36"X42") |
| 900000 | 814 | 2 EA. | 8 IN./12 IN. 1 WAY 5 SECTION (8" R,Y,G - 12" YA,GA) ADJUSTABLE POLYCARBONATE VEHICLE SIGNAL HEAD WITH SPAN MOUNTING HARDWARE AND TUNNEL VISORS |

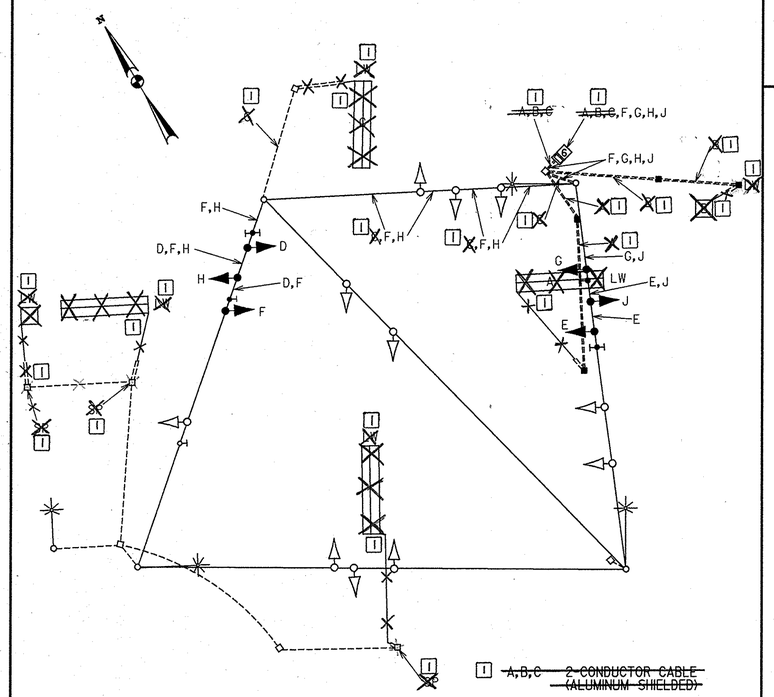
# EQUIPMENT LIST "B"

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

| CATEGORY CODE NO. | SPEC. SECTION | QUANTITY | DESCRIPTION |
|---|---|---|---|
| 114210 | 104 | 78 L.F. | 6 IN. YELLOW REMOVABLE PREFORMED PAVEMENT MARKING TAPE |
| 114245 | 104 | 78 L.F. | 24 IN. WHITE REMOVABLE PREFORMED PAVEMENT MARKING TAPE |
| [1] ~~805011~~ | ~~805~~ | ~~30 L.F.~~ | ~~FURNISH AND INSTALL 1 IN. ELECTRICAL CONDUIT - GALVANIZED SLEEVE~~ |
| 805125 | 805 | 350 L.F. | FURNISH AND INSTALL 2 IN. SCHEDULE 40 RIGID PVC CONDUIT - TRENCHED |
| [1] ~~805160~~ | ~~805~~ | ~~20 L.F.~~ | ~~FURNISH AND INSTALL 1 IN. LIQUID-TIGHT NON-METALLIC CONDUIT FOR DETECTOR SLEEVE~~ |
| 811001 | 811 | [1] ~~4~~ 4 EA. | FURNISH AND INSTALL ELECTRICAL HANDHOLE |
| 813015 | 813 | 21 S.F. | INSTALL OVERHEAD SIGN |
| 860015 | 814 | 1 EA. | INSTALL 12 IN. 1 WAY 3 SECTION (R,Y,G) POLYCARBONATE SIGNAL HEAD - SPAN MOUNT |
| 860020 | 814 | 2 EA. | INSTALL 12 IN. 1 WAY 5 SECTION (R,Y,G,YA,GA) POLYCARBONATE SIGNAL HEAD - SPAN MOUNT |
| 860265 | 814 | 3 EA. | RELOCATE EXISTING SIGNAL HEAD |
| [1] ~~861104~~ | ~~810~~ | ~~629 L.F.~~ | ~~FURNISH AND INSTALL ELECTRICAL CABLE - 2 CONDUCTOR (ALUMINUM SHIELDED)~~ |
| 861107 | 810 | 58 L.F. | FURNISH AND INSTALL ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 A.W.G.) |
| 861108 | 810 | 629 L.F. | FURNISH AND INSTALL ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 A.W.G.) |
| [1] ~~862101~~ | ~~810~~ | ~~1371 L.F.~~ | ~~FURNISH AND INSTALL LOOP WIRE ENCASED IN FLEXIBLE TUBING (NO. 14 A.W.G.)~~ |
| [1] ~~862102~~ | ~~815~~ | ~~580 L.F.~~ | ~~FURNISH AND INSTALL SAWCUT FOR SIGNAL (LOOP DETECTOR)~~ |
| 800000 | 805 | 53 L.F. | FURNISH AND INSTALL 2 IN. SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED |
| 800000 | 813 | 2 EA. | RELOCATE EXISTING OVERHEAD SIGN |
| 800000 | 814 | 2 EA. | INSTALL 8 IN./12 IN. 1 WAY 5 SECTION (8" R,Y,G - 12" YA,GA) POLYCARBONATE SIGNAL HEAD - SPAN MOUNT |
| 800000 | XXX | LUMP SUM | REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT |

[1] RED LINE REV. NO. 1
7-14-97

# WIRING DIAGRAM




[1] ~~A,B,C — 2-CONDUCTOR CABLE (ALUMINUM SHIELDED)~~

D,E — 5-CONDUCTOR CABLE (NO. 14 A.W.G.)

F,G,H,J — 7-CONDUCTOR CABLE (NO. 14 A.W.G.)

[1] ~~LW — LOOP WIRE (NO. 14 A.W.G.) IN FLEXIBLE TUBING~~

[1] ~~SP — SPLICE EXISTING ALUMINUM SHIELDED CABLE TO NEW LOOP WIRE~~

# PHASE DIAGRAM

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHASE 1 + 5 | R G | R G | R | R G | R G | R | R | R | R | R | R | R |
| 1 + 5 CHANGE TO PHASE 1 + 6, PHASE 2 + 5 OR PHASE 2 + 6 | | | | | | | | | | | | |
| PHASE 1 + 6 | G G | G G | G | R | R | R | R | R | R | R | R | R |
| 1 CHANGE | G Y | G Y | 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 |
| 5 CHANGE | R | R | R | G Y | G Y | 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 |
| FLASHING OPERATION | F/Y | F/Y | F/Y | F/Y | F/Y | F/Y | F/R | F/R | F/R | F/R | F/R | F/R |

| TEMPORARY SIGNAL PHASE IV | DWG. NO. TS-6 |
|---|---|

THE WILSON T. BALLARD CO.
CONSULTING ENGINEERS
OWINGS MILLS, MARYLAND

REVISIONS

(A) AUGUST 1996 - WTB
MODIFY EXISTING SIGNAL
SHA NO. PG9005171

JDM

APPROVALS

ASST. DIVISION CHIEF, TEDD

ASST. DISTRICT ENGINEER, TRAFFIC

CHIEF, TRAFFIC ENGINEERING DESIGN DIVISION

DIRECTOR, OFFICE OF TRAFFIC & SAFETY

MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
*Office of Traffic & Safety*
TRAFFIC ENGINEERING DESIGN DIVISION

MD 450 (ANNAPOLIS ROAD) AT FORBES BLVD.

LOG MILE NO. 16045006.59 DATE 8 /- /96

| | | | | | |
|---|---|---|---|---|---|
| DRAWN BY: S. BLOSS | F.A.P. NO. N/A | PLAN SHEET NO.: | SHEET NO. |
| CHECK BY: T. HANNAN | S.H.A. NO. N/A | | |
| SCALE: NONE | COUNTY PRINCE GEORGES | TS-3600-X4-GI | 352 OF 465 |

FILE NO.S9815450.DGN
09-30-96 TOD/AS