# PROJECT DESCRIPTION

GENERAL

THIS PORTION OF THE PROJECT INVOLVES THE INITIAL MODIFICATION AND INSTALLATION OF VIDEO TRAFFIC DETECTION AT THE INTERSECTION OF MD 450 AT BELAIR DRIVE IN PRINCE GEORGE'S COUNTY. MD 450 IS ASSUMED TO RUN IN AN EAST/WEST DIRECTION.

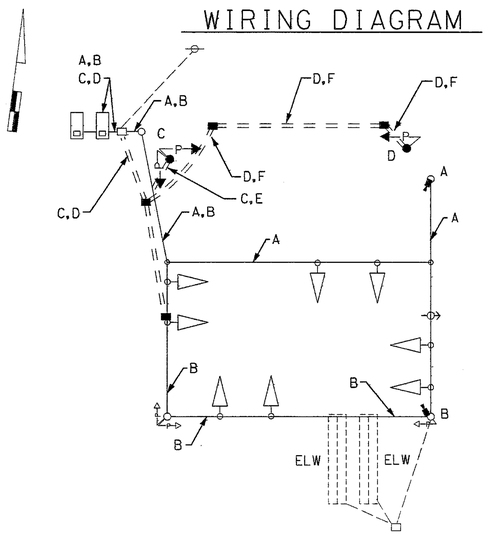
INTERSECTION OPERATION

THE INTERSECTION WILL CONTINUE TO OPERATE IN A NEMA-TWO-PHASE, FULLY ACTUATED MODE. THE EXISTING INTERCONNECT AT THE INTERSECTION OF MD 450 AT BELAIR DRIVE SHALL BE TAKEN OUT OF SERVICE DURING THIS PORTION OF THE PROJECT.

SPECIAL NOTE

ALL UTILITIES SHOWN ON THESE PLANS ARE SCHEMATIC AND ARE NOT TO BE CONSIDERED COMPLETE BECAUSE THESE 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 PROJECT MANAGER IMMEDIATELY.

# WIRING DIAGRAM




A,B VIDEO TRAFFIC DETECTOR CABLE

C,D ELECTRICAL CABLE 5-CONDUCTOR (NO. 14 AWG)

E,F NO. 6 AWG STRANDED BARE COPPER GROUND WIRE

ELW EXISTING LOOP WIRE

# EQUIPMENT LIST "A"

△2 NONE

# PHASE CHART

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 10 | 11 | 12 | 13 | 14 | 15 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHASE 2+6 | G | G | G | G | R | R | R | R | DW | WK | DW | WK | WK | WK |
| | G | G | G | G | R | R | R | R | DW | FL/DW | DW | FL/DW | FL/DW | FL/DW |
| 2+6 CHANGE | Y | Y | Y | Y | R | R | R | R | DW | DW | DW | DW | DW | DW |
| PHASE 4+8 | R | R | R | R | G | G | G | G | WK | DW | WK | DW | DW | DW |
| | R | R | R | R | G | G | G | G | FL/DW | DW | FL/DW | DW | DW | DW |
| 4+8 CHANGE | R | R | R | R | Y | Y | Y | Y | DW | DW | DW | DW | DW | DW |
| FLASHING OPERATION | FL/Y | FL/Y | FL/Y | FL/Y | FL/R | FL/R | FL/R | FL/R | DARK | DARK | DARK | DARK | DARK | DARK |
| | | | | | | | | | △2 | △2 | △2 | △2 | △2 | △2 |

# EQUIPMENT LIST "B"

B. EQUIPMENT TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR

| CAT CODE NUMBER | SPEC. SECTION | QUANTITY | DESCRIPTION |
|---|---|---|---|
| 203030 | 205 | 1 C.Y. | TEST PIT EXCAVATION |
| 585620 | 556 | △2 250 L.F. | 12 IN. HEAT APPLIED THERMOPLASTIC WHITE PAVEMENT MARKING |
| 585624 | 556 | 70 L.F. | 24 IN. HEAT APPLIED THERMOPLASTIC WHITE PAVEMENT MARKING |
| 801004 | 804 | 6 C.Y. | CONCRETE FOR SIGNAL FOUNDATION |
| 802501 | 805 | 125 L.F. | NO. 6 AWG STRANDED BARE COPPER GROUND WIRE |
| 811001 | 811 | 4 EA. | ELECTRICAL HANDHOLE |
| 818010 | 818 | 1 EA. | 14 FT. BREAKAWAY PEDESTAL POLE |
| △2 818050 | 818 | 1 EA. | 27 FT. STEEL POLE WITH TWIN 50/60FT. MAST ARMS |
| △2 837001 | 804 | 2 EA. | GROUND ROD 3/4 IN. X 10 FT. LENGTH |
| 860278 | 814 | 4 EA. | 12 IN. PEDESTRIAN SIGNAL HEAD SECTION (POLE MOUNT) |
| 860282 | 814 | 2 EA. | 12 IN. PEDESTRIAN SIGNAL HEAD SECTION (PEDESTAL MOUNT) |
| 870163 | 805 | 32 L.F. | 3 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT-TRENCHED |
| 870166 | 805 | 44 L.F. | 4 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT-TRENCHED |
| 870167 | 805 | 45 L.F. | 4 IN SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT-BORED |
| 870168 | 805 | 41 L.F. | 4 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT-SLOTTED |
| 800000 | 805 | 1 EA. | VIDEO TRAFFIC DETECTION SYSTEM |
| 800000 | 805 | 2 EA. | △2 VIDEO DETECTOR 500 FT. CABLE |
| 800000 | XXX | 1 L.S. | REMOVE AND DISPOSE OF EXISTING MATERIAL |
| [1] 861107 | 810 | 230 L.F. | ELECTRICAL CABLE 5-CONDUCTOR (NO. 14 AWG) |

# EQUIPMENT LIST "C"

C. ALL REMOVED SIGNAL MATERIALS SHALL BECOME PROPERTY OF THE CONTRACTOR.

[1] REDLINE NO. 1 5/6/02

△2 ADDENDUM #2 10/11 2001

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

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

GENERAL INFORMATION SHEET
MD 450 - MD 193 TO STONYBROOK DRIVE
MD 450 AT BELAIR DRIVE - PHASE I

| | | | | | |
|---|---|---|---|---|---|
| DRAWN BY: MB | F.A.P. NO. SEE TITLE SHEET | TS NO. TS-89C-2PHIA | SHEET NO. |
| CHECKED BY: STB | S.H.A. NO. PG9005571 | | |
| SCALE: NONE | COUNTY: PRINCE GEORGE'S | T.I.M.S. NO. D 538 | 434 OF 545 |
| DATE: OCTOBER 2001 | LOG MILE: 12.36 | | |

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