

**PROJECT DESCRIPTION
GENERAL**

THIS PROJECT INVOLVES THE RELOCATION OF THE EXISTING CROSSWALK ACROSS MD 177 FROM THE EASTERN LEG OF THE INTERSECTION TO THE WESTERN LEG OF THE INTERSECTION. THERE WILL ALSO BE A NEW CROSSWALK PLACED AT THE SOUTHERN LEG OF THE INTERSECTION, ALONG WITH NEW PEDESTRIAN SIGNAL HEADS AND PUSH BUTTONS.

INTERSECTION OPERATION

THERE IS NO CHANGE TO INTERSECTION OPERATION.

SPECIAL NOTES

1. THE FOLLOWING CONTACT PERSONS FOR DISTRICT #5 ARE AS FOLLOWS:

PROJECT CONTACTS:

MS. KIMBERLY TRAN, ASSISTANT DISTRICT ENGINEER - TRAFFIC
PHONE: (410) 841 - 1003
MR. CHARLES GEORGE, ASSISTANT DISTRICT ENGINEER - MAINTENANCE
PHONE: (410) 841 - 1002
MR. JOHN MAYES, ASSISTANT DISTRICT ENGINEER - UTILITY
PHONE: (410) 841 - 1005
MR. RICHARD L. DAFF SR., CHIEF TRAFFIC OPERATIONS DIVISION
PHONE: (410) 787 - 7630
MR. ROBERT SNYDER, ASSISTANT CHIEF TRAFFIC OPERATIONS DIVISION
PHONE: (410) 787 - 7631
MR. ED RODENHIZER, CHIEF OF SIGNAL SHOP
PHONE: (410) 787 - 7650

2. MAINTENANCE OF TRAFFIC WILL BE HANDLED BY THE CONTRACTOR FOLLOWING THE STANDARD PLATES FOR TRAFFIC CONTROL:

EQUIPMENT LIST

A. EQUIPMENT TO BE FURNISHED BY STATE HIGHWAY ADMINISTRATION

| ITEM NO. | QUANTITY | DESCRIPTION |
|----------|----------|------------------------------------|
| 9570 | 36 SF | SHEET ALUMINUM GROUND MOUNTED SIGN |

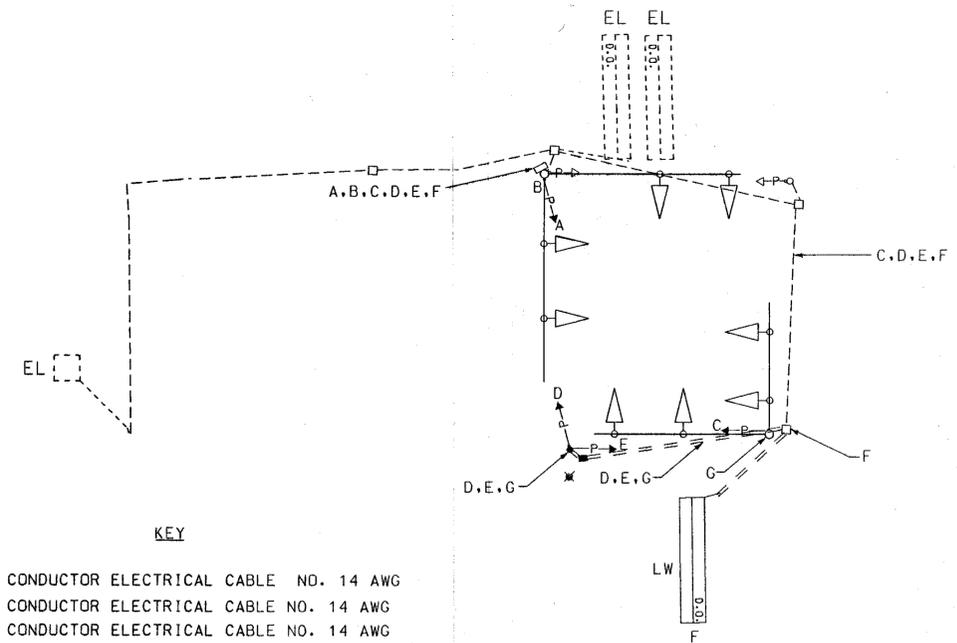
B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY CONTRACTOR

| ITEM NO. | QUANTITY | DESCRIPTION |
|----------|----------|--|
| 1001 | 1 ea | MAINTENANCE OF TRAFFIC |
| 2002 | 1 CY | TEST PIT EXCAVATION |
| 5004 | 800 LF | FURNISH AND INSTALL 12 INCH WHITE LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKINGS |
| 5005 | 60 LF | FURNISH AND INSTALL 24 INCH WHITE LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKINGS |
| 5007 | 60 LF | FURNISH AND INSTALL 5 INCH YELLOW HEAT APPLIED THERMOPLASTIC PAVEMENT MARKING |
| 5008 | 750 LF | REMOVAL OF EXISTING PERMANENT PAVEMENT LINE MARKINGS - ANY WIDTH |
| 6004 | 50 SF | FURNISH AND INSTALL 4 INCH CONCRETE SIDEWALK |
| 8010 | 8 EA | FURNISH AND INSTALL 12 INCH PEDESTRIAN SIGNAL HEAD |
| 8030 | 1 EA | FURNISH AND INSTALL BREAKAWAY PEDESTAL POLE (ANY SIZE) |
| 8032 | 2 EA | FURNISH AND INSTALL PUSHBUTTON AND SIGN |
| 8048 | 1 EA | REMOVE & DISPOSE OF EQUIPMENT (PER ASSIGNMENT) |
| 8057 | 1 CY | FURNISH AND INSTALL CONCRETE FOR SIGNAL FOUNDATION |
| 8058 | 40 LF | FURNISH AND INSTALL WOOD SIGN SUPPORTS 4 INCH X 4 INCH |
| 8060 | 75 LF | FURNISH AND INSTALL NO.6 AWG STRANDED BARE COPPER GROUND WIRE |
| 8062 | 25 LF | FURNISH AND INSTALL 1 RIGID FLEXIBLE GALVANIZED CONDUIT FOR DETECTOR SLEEVE |
| 8065 | 50 LF | FURNISH AND INSTALL 2 INCH SCHEDULE 80 RIGID PVC CONDUIT-SLOTTED |
| 8072 | 1 EA | FURNISH AND INSTALL ELECTRICAL HANDHOLE |
| 8074 | 36 SF | INSTALL GROUND MOUNTED SIGN |
| 8080 | 1 EA | FURNISH AND INSTALL GROUND ROD-3/4 INCH DIAMETER X 10 FOOT LENGTH |
| 8081 | 135 LF | FURNISH AND INSTALL ELECTRICAL CABLE-2 CONDUCTOR (ALUMINUM SHIELDED) |
| 8082 | 200 LF | FURNISH AND INSTALL ELECTRICAL CABLE-2 CONDUCTOR (NO. 14 AWG) |
| 8084 | 215 LF | FURNISH AND INSTALL ELECTRICAL CABLE-5 CONDUCTOR (NO. 14 AWG) |
| 8087 | 400 LF | FURNISH AND INSTALL LOOP WIRE ENCASED IN FLEXIBLE TUBING (NO. 14 AWG) |
| 8088 | 110 LF | FURNISH AND INSTALL SAW CUT FOR SIGNAL (LOOP DETECTOR) |

C. MATERIALS TO BE REMOVED BY THE CONTRACTOR

ALL MATERIALS TO BE REMOVED BY THE CONTRACTOR SHALL BECOME THE PROPERTY OF CONTRACTOR.

WIRING DIAGRAM



KEY

- A.C - 3 CONDUCTOR ELECTRICAL CABLE NO. 14 AWG
- E - 5 CONDUCTOR ELECTRICAL CABLE NO. 14 AWG
- B.D - 2 CONDUCTOR ELECTRICAL CABLE NO. 14 AWG
- F - USE EXISTING WIRE
- G - STANDED BARE COPPER GROUND WIRE
- EL - EXISTING LOOP
- LW - LOOP WIRE
- ✱ - GROUND WIRE

PHASE CHART

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
|---------------------|------|------|------|------|------|------|------|------|-------|-------|-------|------|-------|-------|
| Phase 2 & 6 | G | G | G | G | R | R | R | R | WK | WK | DW | DW | WK | WK |
| 2 & 6 Ped Clear | G | G | G | G | R | R | R | R | FL/DW | FL/DW | DW | DW | FL/DW | FL/DW |
| 2 & 6 Change | Y | Y | Y | Y | R | R | R | R | DW | DW | DW | DW | DW | DW |
| Phase 3 | R | R | R | R | G-G | G | R | R | DW | DW | DW | DW | DW | DW |
| Phase 3 Change | R | R | R | R | Y | Y | R | R | DW | DW | DW | DW | DW | DW |
| Phase 4 | R | R | R | R | R | G | G-G | G | DW | DW | DW | DW | DW | DW |
| Phase 4 Change | R | R | R | R | R | G | Y | Y | DW | DW | DW | DW | DW | DW |
| Phase 4 Alt. | R | R | R | R | R | R | G-G | G | DW | WK | WK | DW | DW | DW |
| 4 Ped Clear | R | R | R | R | R | R | G-G | G | DW | FL/DW | FL/DW | DW | DW | DW |
| Phase 4 Alt. Change | R | R | R | R | R | R | Y | Y | DW | DW | DW | DW | DW | DW |
| Fleshing | FL/Y | FL/Y | FL/Y | FL/Y | FL/R | FL/R | FL/R | FL/R | DARK | DARK | DARK | DARK | DARK | DARK |
| Operation | FL/Y | FL/Y | FL/Y | FL/Y | FL/R | FL/R | FL/R | FL/R | DARK | DARK | DARK | DARK | DARK | DARK |

MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION
MD 177 & OUTING AVENUE

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| DRAWN BY: CEDRIC WARD | F.A.P. NO.: | TS NO. 3369B | SHEET NO. |
| CHECKED BY: NTS | S.H.A. NO. XX1065485 | | |
| SCALE: NTS | COUNTY: ANNE ARUNDEL | T.I.M.S. NO. G087 | |
| DATE: MARCH, 2004 | LOG MILE: 02017702.77 | | 2 OF 2 |