# PROJECT DESCRIPTION

GENERAL

THIS PROJECT INVOLVES THE MODIFICATION OF THE EXISTING TRAFFIC CONTROL SIGNAL AT THE INTERSECTION OF MD 281 AND MD 781 (DELANCY ROAD) IN CECIL COUNTY. MD 281 IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION.

INTERSECTION OPERATION

THE INTERSECTION WILL OPERATE IN A NEMA THREE-PHASE, FULL-TRAFFIC-ACTUATED MODE WITH THE MD 281 APPROACHES OPERATING CONCURRENTLY AND THE MD 781 APPROACH OPERATING ALONE.

CONTROLLER REQUIREMENTS

INSTALL A FULL-TRAFFIC-ACTUATED, EIGHT-PHASE CONTROLLER WITH ONE (1), FOUR-CHANNEL, TIME-DELAY-OUTPUT LOOP DETECTOR AMPLIFIER AND INTERSECTION MONITOR WITH BATTERY BACK-UP FOR PHONE DROP HOUSED IN THE EXISTING NEMA SIZE "5" POLE MOUNTED CABINET.

SPECIAL NOTE

UPON COMPLETION OF THIS PROJECT, THE CONTRACTOR SHALL NOTIFY MR. ROBERT SNYDER OF SHA AT (410) 787-7635 TO ARRANGE FOR THE PHONE LINE INSTALLATION. THE CONTRACTOR IS TO PROVIDE MR. SNYDER WITH THE NEAREST STREET ADDRESS, ZIP CODE AND PHONE NUMBER.

# MAINTENANCE OF TRAFFIC

THE FOLLOWING TRAFFIC CONTROL STANDARDS SHALL BE REFERENCED FOR THE PROJECT.

STANDARD NO. MD-104.00 - 104.00-30

STANDARD NO. MD-104.31-01 (FLAGGING OPERATION)

STANDARD NO. MD-104.33-01 (SHOULDER WORK)

STANDARD NO. MD-104.35-01 (LANE SHIFT)

STANDARD NO. MD-104.32-01 (INTERSECTION FLAGGING OPERATION)

# PROJECT CONTACTS

THE CONTACT PERSONS FOR SHA ARE AS FOLLOWS:

MR. RICHARD LINDSAY
DISTRICT #2 ENGINEER
PHONE: (410) 778-3061

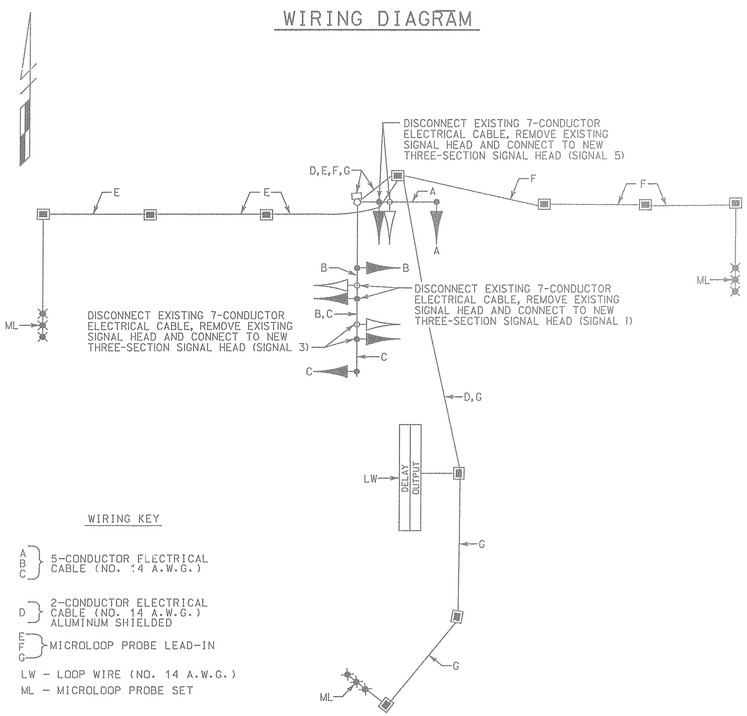
MR. ROBERT KIEL
ASSISTANT DISTRICT ENGINEER - TRAFFIC
PHONE: (410) 778-3061

MR. TERRY WRIGHT
ASSISTANT DISTRICT ENGINEER - MAINTENANCE
PHONE: (410) 778-3061

MR. BARRY CLOTHIER
DISTRICT #2 UTILITIES ENGINEER
PHONE: (410) 778-3061

MR. RICHARD L. DAFF, SR.
CHIEF, TRAFFIC OPERATIONS DIVISION
PHONE: (410) 787-7630

# WIRING DIAGRAM

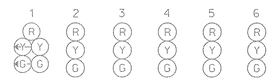



# EQUIPMENT LIST "A"

A. EQUIPMENT TO BE SUPPLIED BY THE SHA

| ITEM NO. | QUANTITY | DESCRIPTION |
|---|---|---|
| 9002 | 1 EACH | FOUR-CHANNEL, TIME-DELAY-OUTPUT, LOOP DETECTOR AMPLIFIER |
| 9087 | 1 EACH | EIGHT-PHASE, FULL-TRAFFIC-ACTUATED CONTROLLER WITH INTERSECTION MONITOR |
| 9089 | 61 S.F. | SHEET ALUMINUM SIGNS TO CONSIST OF : |
| | - 3 EACH | W3-3 SIGN (36 IN. X 36 IN.) WITH "NEW" PANEL (30 IN. X30 IN.) AND FLAG - GROUND MOUNT |
| | - 1 EACH | M95-1 SIGN (78 IN. X 24 IN.) - MAST ARM MOUNT |

# PHASE CHART




| | 1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|
| PHASE 2 + 6 | G | G | G | G | R | R |
| 2 + 6 CHANGE | Y | Y | Y | Y | R | R |
| PHASE 4 | R | R | R | R | G | G |
| 4 CHANGE | R | R | R | R | Y | Y |
| FLASHING OPERATION | FL/Y | FL/Y | FL/Y | FL/Y | FL/R | FL/R |

# EQUIPMENT LIST "B"

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

| CATEGORY CODE NO. | QUANTITY | DESCRIPTION |
|---|---|---|
| 1001 | 1 EACH | MAINTENANCE OF TRAFFIC PER ASSIGNMENT |
| 5004 | 50 L.F. | 24 IN. WHITE HEAT APPLIED PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKINGS |
| 5007 | 60 L.F. | REMOVE EXISTING PAVEMENT MARKING - ANY WIDTH |
| 8016 | 1 EACH | FURNISH AND INSTALL MICROLOOP PROBE SET WITH 500 FT. LEAD-IN |
| 8017 | 2 EACH | FURNISH AND INSTALL MICROLOOP PROBE SET WITH 1000 FT. LEAD-IN |
| 8021 | 170 L.F. | FURNISH AND INSTALL SAW CUT FOR SIGNAL (LOOP DETECTOR) |
| 8023 | 60 L.F. | FURNISH AND INSTALL 1 IN. LIQUID-TIGHT FLEXIBLE NON-METALLIC CONDUIT FOR DETECTOR SLEEVE |
| 8024 | 1230 L.F. | FURNISH AND INSTALL 2 IN. SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED |
| 8026 | 25 L.F. | FURNISH AND INSTALL 2 IN. SCHEDULE 80 RIGID PVC CONDUIT - BORED |
| 8031 | 85 L.F. | FURNISH AND INSTALL 4 IN. SCHEDULE 80 RIGID PVC CONDUIT - SLOTTED |
| 8033 | 10 L.F. | FURNISH AND INSTALL ELECTRICAL HANDHOLE |
| 8040 | 450 L.F. | FURNISH AND INSTALL LOOP WIRE ENCASED IN FLEXIBLE TUBING (NO. 14 A.W.G.) |
| 8041 | 130 L.F. | FURNISH AND INSTALL ELECTRICAL CABLE - 2 CONDUCTOR (ALUMINUM SHIELDED) |
| 8044 | 65 L.F. | FURNISH AND INSTALL ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 A.W.G.) |
| 8051 | 60 L.F. | FURNISH AND INSTALL WOOD SIGN SUPPORTS 4 IN. X 6 IN. |
| 8052 | 48 S.F. | INSTALL GROUND MOUNTED SIGN |
| 8053 | 13 S.F. | INSTALL OVERHEAD SIGN |
| 8060 | 1 EACH | REMOVE AND DISPOSE OF EXISTING MATERIAL AND EQUIPMENT PER ASSIGNMENT |
| 8061 | 1 EACH | INSTALL CONDUIT BEND IN EXISTING BASE |
| 8084 | 18 EACH | FURNISH AND INSTALL 12 IN. VEHICULAR TRAFFIC SIGNAL HEAD SECTION |


WR&A
Whitman, Requardt and Associates, LLP
2315 Saint Paul Street
Baltimore, Maryland 21218
(410) 235-3450


REVISIONS

APPROVALS

ASST. 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 281 AND MD 781 (DELANCY ROAD)

| | | | | | |
|---|---|---|---|---|---|
| DRAWN BY: | S.BLOSS | F.A.P. NO. | CE790A54/B54 | TS NO. TS-3279A | SHEET NO. |
| CHECKED BY: | N.LEARY | S.H.A. NO. | | T.I.M.S. NO. D418 | 2 OF 2 |
| SCALE: | NONE | COUNTY: | CECIL | | |
| DATE: | 9-23-99 | LOG MILE: | 0702810I.81 | | |