

PROJECT DESCRIPTION

THIS PROJECT INVOLVES THE MODIFICATION OF THE EXISTING TRAFFIC CONTROL SIGNAL AT THE INTERSECTION OF MD 178 AND CROWNSVILLE ROAD/FAIRFIELD LOOP ROAD IN ANNE ARUNDEL COUNTY. MD 178 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

INTERSECTION OPERATION

THE INTERSECTION OPERATES IN A NEMA FOUR-PHASE, FULL-TRAFFIC-ACTUATED MODE WITH A EXCLUSIVE-PERMISSIVE LEFT TURN PHASE FOR N.B. MD 178 AND SIDE STREET SPLIT PHASES FOR CROWNSVILLE ROAD AND FAIRFIELD LOOP ROAD.

CONTROLLER REQUIREMENTS

THE EXISTING EIGHT-PHASE, FULL-TRAFFIC ACTUATED CONTROLLER HOUSED IN A POLE MOUNTED CABINET IS BEING USED. INSTALL ONE (1) FOUR-CHANNEL, TIME-DELAY-OUTPUT LOOP DETECTOR AMPLIFIER.

PHASING CHART

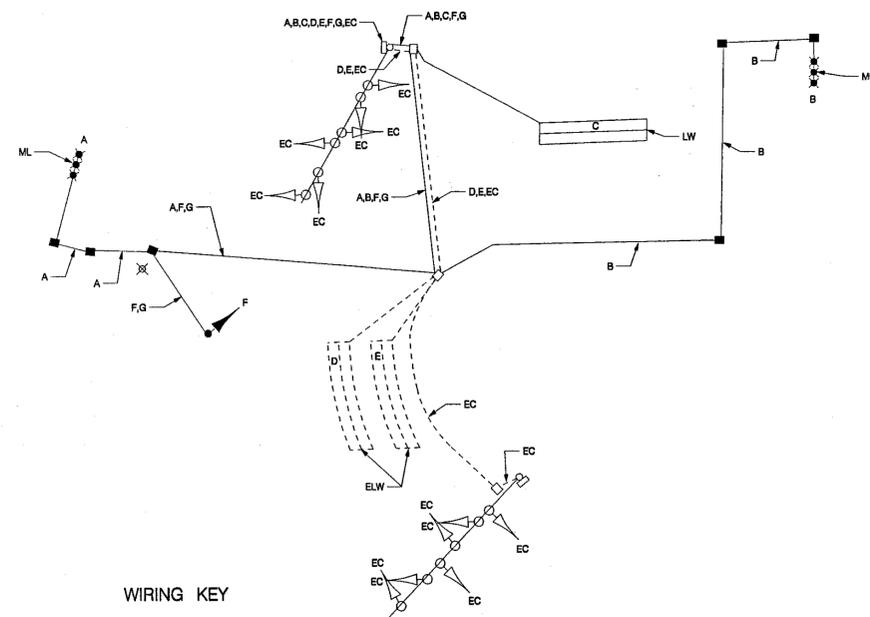
PHASING WILL REMAIN THE SAME

EQUIPMENT LIST "B"

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
8004	3 EA	ADJUST EXISTING HANDHOLE TO GRADE INCLUDING COLLAR
8011	2 EA	FURNISH AND INSTALL 12 IN. VEHICULAR SIGNAL HEAD SECTION
8019	3 EA	FURNISH AND INSTALL 8 IN. VEHICULAR SIGNAL HEAD SECTION
8029	2 EA	FURNISH AND INSTALL MICRO-LOOP PROBE SET 500 FT. LEAD-IN
8030	1 EA	FURNISH AND INSTALL PEDESTAL POLE (ANY SIZE)
8042	1 EA	INSTALL CONDUIT BEND IN EXISTING FOUNDATION
8051	40 LF	FURNISH AND INSTALL 3 IN. SCHEDULE 80 RIGID ELECTRICAL PVC CONDUIT - TRENCHED
8057	1 CY	FURNISH AND INSTALL CONCRETE FOR SIGNAL FOUNDATION
8060	200 LF	FURNISH AND INSTALL NO. 6 A.W.G. STRANDED BARE COPPER GROUND WIRE
8064	200 LF	FURNISH AND INSTALL 3 IN. SCHEDULE 80 RIGID ELECTRICAL PVC CONDUIT - BORED
8068	15 LF	FURNISH AND INSTALL 1 IN. LIQUID TIGHT FLEXIBLE NON-METALLIC CONDUIT FOR DETECTOR SLEEVE
8072	6 EA	FURNISH AND INSTALL ELECTRICAL HANDHOLE
8080	1 EA	FURNISH AND INSTALL GROUND ROD 3/4 IN. DIAMETER X 10 FT. LENGTH
8081	20 LF	FURNISH AND INSTALL ELECTRICAL CABLE 2-CONDUCTOR (ALUMINUM SHIELDED)
8085	220 LF	FURNISH AND INSTALL ELECTRICAL CABLE 7-CONDUCTOR (NO. 14 A.W.G.)
8087	480 LF	FURNISH AND INSTALL LOOP WIRE ENCASED IN FLEXIBLE TUBING (NO. 14 A.W.G.)
8088	175 LF	FURNISH AND INSTALL SAW CUT FOR SIGNAL (LOOP DETECTOR)
8091	650 LF	FURNISH AND INSTALL 2 IN. DIAMETER POLYVINYL CHLORIDE ELECTRICAL CONDUIT SCHEDULE 80 - TRENCHED

WIRING DIAGRAM



WIRING KEY

- A-B MICRO-LOOP PROBE
- C 2-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.) ALUMINUM SHIELDED
- D-E EXISTING 2-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.) ALUMINUM SHIELDED
- F 7 CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
- G STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)
- EC EXISTING CABLE
- LW LOOP WIRE (NO. 14 A.W.G.)
- ELW EXISTING LOOP WIRE (NO. 14 A.W.G.)
- ML MICRO-LOOP PROBE
- X GROUND ROD

EQUIPMENT LIST "A"

A. EQUIPMENT TO BE FURNISHED BY MSHA AND INSTALLED BY THE SIGNAL SHOP.

ITEM NO.	QUANTITY	DESCRIPTION
9016	1 EA	FURNISH AND INSTALL FOUR-CHANNEL, TIME-DELAY-OUTPUT, LOOP DETECTOR AMPLIFIER

CONTACT PERSONS FOR DISTRICT 5 ARE AS FOLLOWS:

- MS. KIM TRAN
ASSISTANT DISTRICT ENGINEER - TRAFFIC
(410) 841-1003
- MR. CHARLES GEORGE
ASSISTANT DISTRICT ENGINEER - MAINTENANCE
(410) 841-1002
- MR. JOHN MAYS
ASSISTANT DISTRICT ENGINEER - UTILITIES
(410) 841-1005

CONTACTS FOR OFFICE OF TRAFFIC AND SAFETY

- MR. RICHARD DAFF, SR.
CHIEF, TRAFFIC OPERATIONS
(410) 787-7630
- MR. EUGENE BAILEY
TEAM LEADER SIGN OPERATIONS
(410) 787-7676
- MR. ROBERT SNYDER
ASSISTANT DIVISION CHIEF,
TRAFFIC OPERATIONS
(410) 787-7631
- MS. DARLENE EIDE
SUPPLY OFFICE
SIGNAL SHOP WAREHOUSE
(410) 787-7668
- MR. ED RODENHIZER
TEAM LEADER SIGNAL OPERATIONS
(410) 787-7652

EQUIPMENT LIST "C"

C. MSHA FORCES SHALL REMOVE CONTROLLER AND ALL AUXILLARY EQUIPMENT, CABINET AND ALL OTHER MATERIAL TO BE REMOVED BY THE CONTRACTOR AND SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

NONE

TRAFFIC CONCEPTS, INC.
325 Gambrills Road
Suite E
Gambrills, MD 21054
(410) 923-7101

FAX (410) 923-6473 EMAIL TRACONCEPT@AOL.COM

DRAWN BY: M.HOWELL
CHECKED BY: T.ZAYDEL
SCALE: 1" = 20'
DATE: 4/2004

F.A.P. NO. XXI065485
S.H.A. NO. 1892-0
COUNTY: ANNE ARUNDEL
LOG MILE: 02017804.20

TS NO. 1892-0
T.I.M.S. NO. F751
SHEET NO. 2 OF 2

MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION
GENERAL INFORMATION
MD 178 AND CROWNSVILLE ROAD/FAIRFIELD LOOP ROAD