

PROJECT DESCRIPTION

GENERAL

THIS PROJECT INVOLVES THE INSTALLATION OF A NEW TRAFFIC CONTROL SIGNAL AND STREET LIGHTING AT THE INTERSECTION OF MD 60 (LEITERSBURG PIKE) AND LONGMEADOW ROAD IN WASHINGTON COUNTY, MARYLAND. MD 60 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

INTERSECTION OPERATION

THE INTERSECTION WILL OPERATE IN A NEMA FIVE-PHASE, FULL-TRAFFIC-ACTUATED MODE WITH THE MD 60 APPROACHES OPERATING CONCURRENTLY AND THE LONGMEADOW ROAD/PRIVATE DRIVEWAY APPROACHES OPERATING IN A SPLIT PHASE MODE.

EXCLUSIVE/PERMISSIVE LEFT-TURN PHASING IS PROVIDED FOR THE NORTHBOUND MD 60 APPROACH.

CONTROLLER REQUIREMENTS

INSTALL A FULL-TRAFFIC-ACTUATED, EIGHT-PHASE CONTROLLER WITH ONE (2) FOUR-CHANNEL, TIME-DELAY-OUTPUT LOOP DETECTOR AMPLIFIER, INTERSECTION MONITOR WITH BATTERY BACKUP FOR PHONE DROP AND ASSOCIATED HARNESSES HOUSED IN A NEMA SIZE "6" BASE MOUNTED CABINET.

PHONE DROP

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 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-104.32-01 (INTERSECTION FLAGGING OPERATION)

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

PROJECT CONTACTS

THE CONTACT PERSONS FOR SHA ARE AS FOLLOWS:

MR. GEORGE H. SMALL
ASSISTANT DISTRICT ENGINEER - TRAFFIC
PHONE: (301) 729-8444

MR. LARRY HUMBERTSON
DISTRICT UTILITY ENGINEER
PHONE: (301) 729-8439

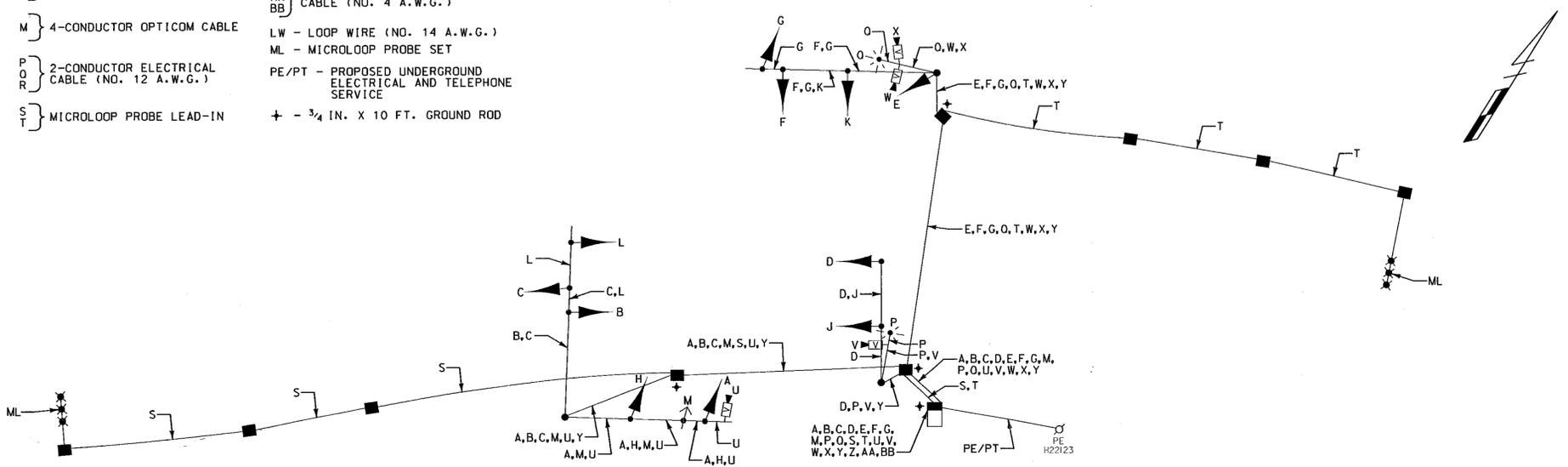
MR. GEORGE FRANKENBERRY
ASSISTANT DISTRICT ENGINEER - MAINTENANCE
PHONE: (301) 729-8457

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

WIRING DIAGRAM

WIRING KEY

- A B C D E F G } 7-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
- H J K L } 5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
- M } 4-CONDUCTOR OPTICOM CABLE
- P O R } 2-CONDUCTOR ELECTRICAL CABLE (NO. 12 A.W.G.)
- S T } MICROLOOP PROBE LEAD-IN
- U V W X } VIDEO CAMERA DETECTION LEAD-IN CABLE
- Y } STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)
- Z } 1-CONDUCTOR ELECTRICAL CABLE (NO. 4 A.W.G.)
- AA BB } 1-CONDUCTOR ELECTRICAL CABLE (NO. 4 A.W.G.)
- LW - LOOP WIRE (NO. 14 A.W.G.)
- ML - MICROLOOP PROBE SET
- PE/PT - PROPOSED UNDERGROUND ELECTRICAL AND TELEPHONE SERVICE
- + - 3/4 IN. X 10 FT. GROUND ROD



EQUIPMENT LIST "A"

A. EQUIPMENT TO BE SUPPLIED BY THE SHA

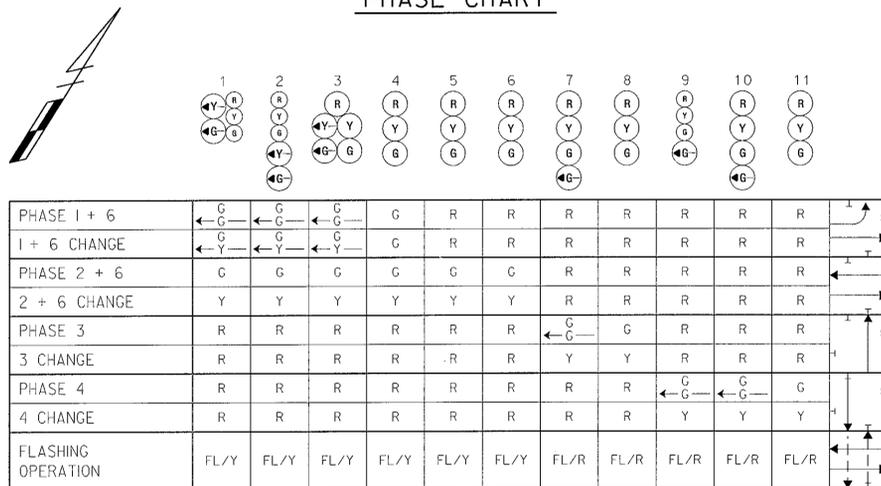
ITEM NO.	QUANTITY	DESCRIPTION
9000	1 EACH	21 FT. STEEL POLE WITH TWIN 50/50 FT. MAST ARMS
9000	1 EACH	27 FT. STEEL POLE WITH SINGLE 34 FT. MAST ARM
9106	1 EACH	27 FT. STEEL POLE WITH SINGLE 50 FT. MAST ARM
9000	1 EACH	VIDEO INTERFACE EQUIPMENT
9016	1 EACH	FOUR-CHANNEL, TIME-DELAY-OUTPUT, LOOP DETECTOR AMPLIFIER
9044	1 EACH	EIGHT-PHASE, FULL-TRAFFIC-ACTUATED CONTROLLER WITH INTERSECTION MONITOR HOUSED IN A NEMA SIZE "6" BASE MOUNTED CABINET
9571	109 S.F.	SHEET ALUMINUM SIGNS TO CONSIST OF : - 1 EACH R10-12 SIGN (36 IN. x 42 IN.) - MAST ARM MOUNT - 2 EACH D-3(1) SIGN (VARIABLE x 16 IN.) DUAL FACED - MAST ARM MOUNT - 1 EACH M95-1 (72 IN. x 24 IN.) - MAST ARM MOUNT - 2 EACH R3-5(R) (30 IN. x 36 IN.) - MAST ARM MOUNT - 3 EACH W3-3 SIGN (36 IN. x 36 IN.) WITH "NEW" PANEL (30 IN. X 30 IN.) AND FLAG - GROUND MOUNT

EQUIPMENT LIST "C"

C. EQUIPMENT TO BE REMOVED AND RETURNED TO SHA

ALL REMOVED SIGNAL MATERIALS SHALL BECOME PROPERTY OF THE CONTRACTOR.

PHASE CHART



EQUIPMENT LIST "B"

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

ITEM NO.	QUANTITY	DESCRIPTION
1001	3 EACH	MAINTENANCE OF TRAFFIC
5001	1000 L.F.	REMOVAL OF EXISTING PAVEMENT LINE MARKINGS - ANY WIDTH
5002	5 EACH	REMOVAL OF EXISTING PERMANENT PAVEMENT MARKING LETTERS, SYMBOLS, ARROWS AND NUMBERS
5006	90 L.F.	24 INCH HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING
5008	3 EACH	HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING ARROWS
8001	11 C.Y.	CONCRETE FOUNDATION
8014	1 EACH	REMOVE AND DISPOSE OF EXISTING MATERIAL AND EQUIPMENT AS PER ASSIGNMENT
8021	60 L.F.	FURNISH AND INSTALL WOOD SIGN SUPPORTS 4 IN. x 6 IN.
8022	250 L.F.	FURNISH AND INSTALL NO. 6 A.W.G. STRANDED BARE COPPER GROUND WIRE
8027	100 L.F.	FURNISH AND INSTALL 2 IN. SCHEDULE 80 RIGID PVC CONDUIT - BORED
8029	165 L.F.	FURNISH AND INSTALL 4 IN. SCHEDULE 80 RIGID PVC CONDUIT - BORED
8030	770 L.F.	FURNISH AND INSTALL 2 IN. SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
8031	75 L.F.	FURNISH AND INSTALL 3 IN. SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
8032	60 L.F.	FURNISH AND INSTALL 4 IN. SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
8036	15 L.F.	FURNISH AND INSTALL 1 INCH LIQUID TIGHT FLEXIBLE NON-METALLIC CONDUIT FOR DETECTOR WIRE SLEEVE
8038	1 EACH	ELECTRICAL UTILITY SERVICE EQUIPMENT (120/240 V. 1 PHASE 3 WIRE SYSTEM)
8039	45 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 1 CONDUCTOR NO. 4 A.W.G. - THHN/THWN
8042	2 EACH	FURNISH AND INSTALL MICROLOOP PROBE SET WITH 1,000 FOOT LEAD-IN CABLE
8045	9 EACH	FURNISH AND INSTALL ELECTRICAL HANDHOLE
8047	48 S.F.	INSTALL GROUND MOUNTED SIGN
8048	61 S.F.	INSTALL OVERHEAD SIGN
8049	4 EACH	VIDEO DETECTION CAMERA
8050	4 EACH	CONTROL CABLE, 250 FT., VIDEO DETECTION CAMERA TO CONTROLLER
8052	1 EACH	DISCRIMINATOR MODULE, 4 CHANNEL, NO. 76
8054	1 EACH	OPTICOM NO. 721 DETECTOR EYE
8064	2 EACH	FURNISH AND INSTALL 250 WATT HPS LAMP AND LUMINAIRE
8069	4 EACH	FURNISH AND INSTALL GROUND ROD - 3/4 INCH DIAMETER x 10 FOOT LENGTH
8070	9 EACH	FURNISH AND INSTALL 8 IN. VEHICULAR TRAFFIC SIGNAL HEAD SECTION
8071	33 EACH	FURNISH AND INSTALL 12 IN. VEHICULAR TRAFFIC SIGNAL HEAD SECTION
8073	200 L.F.	FURNISH AND INSTALL 4 CONDUCTOR OPTICOM CABLE
8074	2 EACH	CUT, CLEAN, GALVANIZE AND CAP TRAFFIC SIGNAL STRUCTURE
8079	120 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 A.W.G.)
8080	1100 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 A.W.G.)
8081	320 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 2 CONDUCTOR (NO. 12 A.W.G.) TYPE TC
8085	2 EACH	FURNISH AND INSTALL 15 FOOT LIGHTING BRACKET ARM FOR TRAFFIC SIGNAL STRUCTURE
8090	1 EACH	INSTALL CONTROLLER AND CABINET - BASE MOUNT
8083	30 L.F.	SAW CUT FOR SIGNAL (LOOP DETECTOR)
8008	3 EACH	INSTALL STEEL POLE AND SINGLE OR TWIN MAST ARMS
NEG.	200 L.F.	10 INCH HEAT APPLIED YELLOW PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKINGS

WR&A
Whitman, Reardon
and Associates, LLP
801 South Caroline Street
Baltimore, Maryland 21231
(410) 235-3450

MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION
GENERAL INFORMATION SHEET
MD 60 (LEITERSBURG PIKE) & LONGMEADOW RD.

DRAWN BY: S. BLOSS
CHECKED BY: N. LEARY
SCALE: NONE
DATE: 6/30/2003

F.A.P. NO.
S.H.A. NO.
COUNTY: WASHINGTON
LOG MILE:

TS NO.
T.I.M.S. NO.
F510

SHEET NO.
3 OF 3