F.H.W.A. REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	MD	SEE TITLE SHEET	10	11

PROJECT DESCRIPTION

GENERAL

THIS PORTION OF THE PROJECT INVOLVES THE MODIFICATION TO THE EXISTING TRAFFIC SIGNAL AT THE INTERSECTION OF MD 77 AND MD 550/WATER STREET IN FREDERICK COUNTY. WORK WILL INCLUDE THE INSTALLATION OF A NEW MAST ARM ON THE NORTHWEST CORNER OF THE INTERSECTION AND THE REPLACEMENT OF THE EXISTING DETECTOR ON THE NORTH APPROACH OF MD 550 AND THE WEST APPROACH OF MD 77.

MD 77 RUNS IN AN EAST-WEST DIRECTION.

INTERSECTION OPERATION

THE EXISTING EIGHT PHASE CONTROLLER HOUSED IN A POLE MOUNTED CABINET WILL BE USED. THE CONTROLLER SHOULD BE ROTATED TO THE EAST FACE OF THE POLE. THE INTERSECTION OPERATION WILL REMAIN THE SAME. THE PROPOSED SIGNAL HEADS WILL BE WIRED TO PHASE 2.

PROJECT CONTACTS

THE CONTACT PERSONS FOR DISTRICT #7 ARE AS FOLLOWS:

MR. ROBERT FISHER
DISTRICT ENGINEER
PHONE: (301) 694-2145

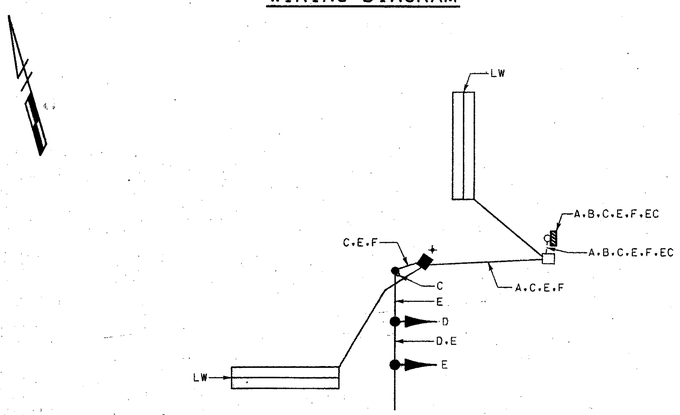
MR. JOHN CONCANNON
ACTING ASSISTANT DISTRICT ENGINEER - TRAFFIC
PHONE: (301) 694-2595

MR. LEON KERNS
ASSISTANT DISTRICT ENGINEER - MAINTENANCE
PHONE: (301) 694-1966

MR. JIM BROWN
UTILITY ENGINEER
PHONE: (301) 694-2025

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

WIRING DIAGRAM



WIRING KEY

A, B } 2-CONDUCTOR ELECTRICAL CABLE (ALUMINUM SHIELDED; NO. 14 A.W.G.)

C } 2-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)

D } 5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)

E } 7-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)

F } STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)

LW - LOOP WIRE (NO. 14 A.W.G.)

EC - EXISTING CABLE

+ - 3/4 IN. X 10 FT. GROUND ROD

EQUIPMENT LIST "A"

A. EQUIPMENT TO BE SUPPLIED BY THE SHA

CATEGORY CODE	QUANTITY	DESCRIPTION
900000	2 EACH	8 IN., ONE-WAY, 3-SECTION (R,Y,G) SIGNAL HEAD MAST ARM MOUNT
900000	1 EACH	PEDESTRIAN BUTTON AND R10-3G SIGN (NOTE: SIGN TO READ "PUSH BUTTON TO CROSS W. MAIN ST.")

EQUIPMENT LIST "B"

B. EQUIPMENT TO BE FURNISHED AND/ORINSTALLED BY THE CONTRACTOR

CATEGORY CODE	QUANTITY	DESCRIPTION
585414	252 L.F.	12 IN. REFLECTIVE WHITE THERMOPLASTIC PAVEMENT MARKING
585416	142 L.F.	24 IN. REFLECTIVE WHITE THERMOPLASTIC PAVEMENT MARKING
801004	3 C.Y.	FURNISH AND INSTALL CONCRETE FOR SIGNAL FOUNDATION
802501	70 L.F.	FURNISH AND INSTALL NO. 6 A.W.G. STRANDED BARE COPPER GROUND WIRE
805145	40 L.F.	FURNISH AND INSTALL 2 IN. SCHEDULE 80 RIGID PVC CONDUIT - SLOTTED
805160	20 L.F.	FURNISH AND INSTALL 1 IN. LIQUIT-TIGHT NON-METALLIC CONDUIT FOR DETECTOR SLEEVE
811011	1 EACH	FURNISH AND INSTALL ELECTRICAL HANDHOLE
837001	1 EACH	FURNISH AND INSTALL GROUND ROD - 3/4 IN. DIAMETER X 10 FT. LENGTH
861104	70 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 2 CONDUCTOR (ALUMINUM SHIELDED)
861105	80 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 A.W.G.)
861107	25 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 A.W.G.)
861108	125 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 A.W.G.)
862101	900 L.F.	FURNISH AND INSTALL LOOP WIRE ENCASED IN FLEXIBLE TUBING (NO. 14 A.W.G.)
862102	260 L.F.	FURNISH AND INSTALL SAWCUT FOR SIGNAL (LOOP DETECTOR)
800000	2 EACH	CUT, CLEAN, GALVANIZE AND CAP TRAFFIC SIGNAL STRUCTURE
800000	1 EACH	3 IN. WELDED BLIND COUPLING
800000	1 EACH	RELOCATE EXISTING POLE MOUNTED CABINET AND CONTROLLER
800000	1 EACH	PAINT NEW STRUCTURE
800000	1 EACH	FURNISH AND INSTALL 27 FT. POLE WITH 38 FT. MAST ARM
800000	5 EACH	RELOCATE EXISTING SIGN
800000	1 EACH	INSTALL PEDESTRIAN BUTTON AND SIGN
800000	2 EACH	INSTALL SIGNAL HEADS
800000	LUMP SUM	REMOVE AND DISPOSE OF EXISTING EQUIPMENT
800000	10 L.F.	FURNISH AND INSTALL 2 IN. SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED

SIGNAL NO.

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

REVISIONS	APPROVALS	REVISIONS
	ASSISTANT DIVISION CHIEF	
	ASST. DISTRICT ENGINEER, TRAFFIC	
	CHIEF, TRAFFIC ENGINEERING DESIGN DIVISION	
	DIRECTOR, OFFICE OF TRAFFIC & SAFETY	

MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION
GENERAL INFORMATION SHEET
MD 77 AND MD 550/WATER ST.

DATE:	DRAWN BY: S. BLOSS	F.A.P. NO. SEE TITLE SHEET	PLAN SHEET NO.: 10	SHEET NO. 10 OF 11
SCALE: NONE	DESIGNED BY: T. ZAYDEL	S.H.A. NO. FR2465177		
APPROVED BY:	CHECKED BY: T. HANNAN	COUNTY FREDERICK		

M:\94002\30690GIS.DGN