

PROJECT DESCRIPTION

GENERAL

THIS PORTION OF THE PROJECT INVOLVES THE INSTALLATION OF A TEMPORARY CONTROL SIGNAL AND STREET LIGHTING ON MD 333 AT THE TRIPPE CREEK BRIDGE (BR. 20017) IN TALBOT COUNTY. MD 333 IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION.

INTERSECTION OPERATION

THE INTERSECTION WILL OPERATE IN A NEMA SIX PHASE, FULL-TRAFFIC-ACTUATED MODE, WITH EASTBOUND MD 333, WESTBOUND MD 333, AND THE DRIVEWAY OPERATING AS SEPERATE PHASES. AN ALL RED CLEARANCE PHASE WILL BE PROVIDED AFTER EACH MOVEMENT.

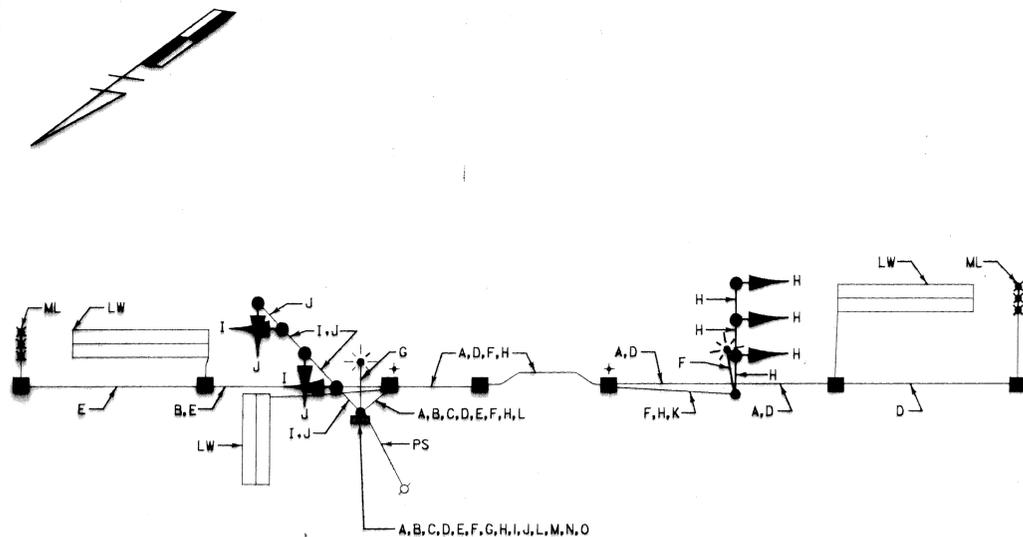
CONTROLLER REQUIREMENTS

INSTALL A FULL-TRAFFIC-ACTUATED, EIGHT-PHASE CONTROLLER WITH THREE (3) TWO-CHANNEL, TIME-DELAY-OUTPUT LOOP DETECTOR AMPLIFIERS, AND INTERSECTION MONITOR WITH BATTERY BACK-UP FOR PHONE DROP, TO BE HOUSED IN A POLE MOUNTED CABINET.

SPECIAL NOTE

- UPON COMPLETION OF THE SIGNAL INSTALLATION, THE CONTRACTOR SHALL NOTIFY MR. ROBERT SNYDER OF SHA AT (410)787-7631 TO ARRANGE FOR THE PHONE LINE INSTALLATION. THE CONTRACTOR IS TO PROVIDE MR. SNYDER WITH THE NEAREST STREET ADDRESS, ZIP CODE AND PHONE NUMBER.
- UPON COMPLETION OF THE BRIDGE CONSTRUCTION, THE CONTRACTOR SHALL REMOVE THE TRAFFIC SIGNAL.

WIRING DIAGRAM



WIRING KEY

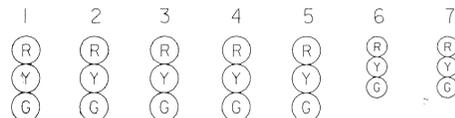
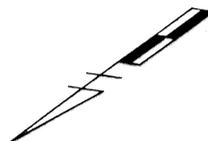
- A, C, D } 2-CONDUCTOR ELECTRICAL CABLE (ALUMINUM SHIELDED)
- E } MICRO-LOOP PROBE LEAD-IN
- F, G } 2-CONDUCTOR ELECTRICAL CABLE (NO. 12 A.W.G.)
- H, J } 5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
- K } STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)
- L } 1-CONDUCTOR ELECTRICAL CABLE (NO. 4 A.W.G.)
- LW - LOOP WIRE (NO. 14 A.W.G.)
- ML - MICRO-LOOP PROBE
- PS - PROPOSED ELECTRICAL SERVICE

EQUIPMENT LIST "C"

C. EXISTING EQUIPMENT TO BE REMOVED BY THE CONTRACTOR AND DELIVERED TO THE STATE HIGHWAY ADMINISTRATION, 7491 CONNELLY DRIVE, HANOVER, MARYLAND 21076. THE CONTRACTOR SHALL NOTIFY THE SHA AT (410) 787-7652 AT LEAST THREE DAYS IN ADVANCE OF DELIVERY

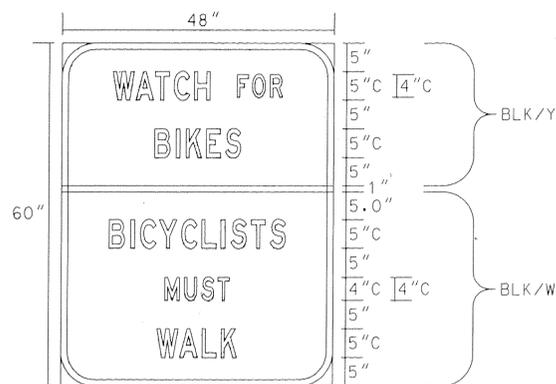
QUANTITY	DESCRIPTION
2 EACH	27 FT. STEEL POLE WITH A 38 FT. MAST ARM AND STREET LIGHTING ARM.
1 EACH	POLE MOUNTED CABINET AND CONTROLLER

PHASE CHART



AT REST OPERATION	1	2	3	4	5	6	7	8
PHASE 1	R	R	R	G	G	R	R	
1 CHANGE	R	R	R	Y	Y	R	R	
PHASE 2 WESTBOUND CLEARANCE	R	R	R	R	R	R	R	
PHASE 3	G	G	G	R	R	R	R	
3 CHANGE	Y	Y	Y	R	R	R	R	
PHASE 4 EASTBOUND CLEARANCE	R	R	R	R	R	R	R	
PHASE 5	R	R	R	R	R	G	G	
5 CHANGE	R	R	R	R	R	Y	Y	
PHASE 6 SIDE STREET CLEARANCE	R	R	R	R	R	R	R	
FLASHING OPERATION	FL/R							

SIGN LAYOUT



WIDTH	HEIGHT	COLOR LEG.	BKGD	BORDER WIDTH	RADIUS	ARROW	SHIELD
4'-0"	5'-0"	BLK	BLK	3/4"	2"	---	---

EQUIPMENT LIST "A"

A. EQUIPMENT TO BE SUPPLIED BY SHA

CATEGORY CODE NO.	QUANTITY	DESCRIPTION
960021	2 EACH	8 IN., ONE-WAY, THREE-SECTION (R,Y,G) SIGNAL HEAD - MAST ARM MOUNT
960022	5 EACH	12 IN., ONE-WAY, THREE-SECTION (R,Y,G) SIGNAL HEAD - MAST ARM MOUNT
963007	3 EACH	TWO CHANNEL LOOP DETECTOR AMPLIFIER (DELAY OUTPUT)
971016	1 EACH	EIGHT PHASE, FULL-TRAFFIC-ACTUATED, SOLID STATE DIGITAL CONTROLLER WITH INTERSECTION MONITOR AND BATTERY BACK-UP FOR PHONE DROP, HOUSED IN A POLE MOUNTED CABINET
973023	61 S.F.	SHEET ALUMINUM SIGNS - 1 EACH W1-3R SIGN (48 IN. X 48 IN.) - 1 EACH MAST ARM MOUNT - 1 EACH R10-11A SIGN (24 IN. X 30 IN.) - 2 EACH MAST ARM MOUNT "WATCH FOR BIKES..." SIGN (48 IN. X 60 IN.) POLE MOUNT
900000	2 EACH	MICROLOOP PROBE SET WITH 1000 FT. LEAD-IN.

EQUIPMENT LIST "B"

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

CATEGORY CODE NO.	QUANTITY	DESCRIPTION
585445	25 L.F.	24 IN. WHITE PERMANENT PREFORMED PAVEMENT MARKING TAPE
801004	6 C.Y.	FURNISH AND INSTALL CONCRETE FOR SIGNAL FOUNDATION
802501	50 L.F.	FURNISH AND INSTALL NO. 6 A.W.G. STRANDED BARE COPPER GROUND WIRE
805125	490 L.F.	FURNISH AND INSTALL 2 IN. SCHEDULE 40 RIGID PVC CONDUIT-TRENCHED
805160	20 L.F.	FURNISH AND INSTALL 1 IN. LIQUID-TIGHT NON-METALLIC CONDUIT FOR DETECTOR SLEEVE
807205	1 EACH	FURNISH AND INSTALL CONTROL AND DISTRIBUTION EQUIPMENT
810010	45 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE 1-CONDUCTOR NO. 4 A.W.G. THHN/THWN
811011	7 EACH	FURNISH AND INSTALL ELECTRICAL HANDHOLE
813014	40 S.F.	INSTALL GROUND MOUNTED SIGN
813015	21 S.F.	INSTALL OVERHEAD SIGN
837001	2 EACH	FURNISH AND INSTALL GROUND ROD- 3/4 IN. DIAMETER X 10 FT. LENGTH
860021	2 EACH	INSTALL 8 IN., ONE-WAY, THREE-SECTION (R,Y,G) SIGNAL HEAD-MAST ARM MOUNT
860022	5 EACH	INSTALL 12 IN., ONE-WAY, THREE-SECTION (R,Y,G) SIGNAL HEAD-MAST ARM MOUNT
861104	760 L.F.	FURNISH AND INSTALL ELECTRICAL-CABLE - 2 CONDUCTOR (ALUMINUM SHIELDED)
861107	660 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE-5 CONDUCTOR (NO. 14 A.W.G.)
861116	560 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE-2 CONDUCTOR (NO. 12 A.W.G.)
862101	850 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)
866103	2 EACH	FURNISH AND INSTALL 15 FT. LIGHTING ARM ON SIGNAL STRUCTURE
871201	1 EACH	INSTALL CONTROLLER AND CABINET - POLE MOUNT
800000	2 EACH	FURNISH AND INSTALL 250 WATT-HIGH PRESSURE SODIUM VAPOR LUMINAIRE WITH PHOTO-CELL
800000	2 EACH	INSTALL MICROLOOP PROBE SET
800000	2 EACH	FURNISH AND INSTALL 27 FT. STEEL POLE WITH A 38 FT. MAST ARM
800000	370 L.F.	FURNISH AND INSTALL 2 IN. SCHEDULE 80 RIGID PVC CONDUIT - ATTACHED TO BRIDGE
800000	30 L.F.	FURNISH AND INSTALL 2 IN. SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
800000	100 L.F.	FURNISH AND INSTALL 3/4 IN. SCHEDULE 80 RIGID PVC CONDUIT (PVC ENCASED LOOP DETECTOR)
800000	LUMP SUM	REMOVAL OF EXISTING EQUIPMENT
800000	LUMP SUM	DELIVERY OF REMOVED EQUIPMENT
800000	LUMP SUM	REMOVAL AND DISPOSAL OF EXISTING EQUIPMENT

SIGNAL NO.

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

REVISIONS	APPROVALS	REVISIONS
	CHIEF, SIGNAL DESIGN SECTION	
	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 333 AND TRIPPE CREEK (BR. 20017)

DATE: 3-19-96	DRAWN BY: S. BLOSS	F.A.P. NO.	PLAN SHEET NO.:	SHEET NO.
SCALE: NONE	DESIGNED BY: T. ZAYDEL	S.H.A. NO. T-358-201-280	COUNTY: TALBOT	OF
APPROVED BY:	CHECKED BY: T. HANNAN			