

PROJECT DESCRIPTION

GENERAL

THIS PORTION OF THE PROJECT INVOLVES THE INSTALLATION OF TWO TRAFFIC CONTROL SIGNALS AT THE INTERSECTIONS OF OXON HILL ROAD AND RAMP E-1 AND RAMP E-1 AND PRIVATE ENTRANCE IN PRINCE GEORGES COUNTY, MARYLAND. OXON HILL ROAD IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

INTERSECTION OPERATION

1. OXON HILL ROAD AND RAMP E-1

THE INTERSECTION WILL OPERATE IN A NEMA THREE-PHASE, FULL-TRAFFIC-ACTUATED MODE WITH THE OXON HILL ROAD APPROACHES OPERATING CONCURRENTLY AND THE RAMP E-1 APPROACH ALONE.

2. RAMP E-1 AND PRIVATE ENTRANCE

THE INTERSECTION WILL OPERATE IN A NEMA THREE-PHASE, FULL-TRAFFIC-ACTUATED MODE WITH THE WESTBOUND RAMP E-1 APPROACH OPERATING ALONE AND THE EASTBOUND RAMP E-1 AND PRIVATE ENTRANCE APPROACHES OPERATING CONCURRENTLY. WHEN ACTUATED, THE QUEUE DETECTOR WILL CALL A SPLIT DEMAND.

CONTROLLER REQUIREMENTS

1. OXON HILL ROAD AND RAMP E-1

INSTALL A FULL-TRAFFIC-ACTUATED, EIGHT-PHASE CONTROLLER WITH SYSTEM PACKAGE, AND ONE (1) FOUR-CHANNEL, TIME-DELAY-OUTPUT LOOP DETECTOR AMPLIFIER HOUSED IN A NEMA SIZE "6" BASE MOUNTED CABINET.

2. RAMP E-1 AND PRIVATE ENTRANCE

INSTALL A FULL-TRAFFIC-ACTUATED, EIGHT-PHASE CONTROLLER WITH SYSTEM PACKAGE, AND TWO (2) FOUR-CHANNEL, TIME-DELAY-OUTPUT LOOP DETECTOR AMPLIFIERS HOUSED IN A NEMA SIZE "6" BASE MOUNTED CABINET.

SPECIAL NOTE

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

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-104.04-01 (SHOULDER WORK)
- STANDARD NO. MD-104.02-01 (FLAGGING OPERATION)
- STANDARD NO. MD-104.03-01 (INTERSECTION FLAGGING OPERATION)
- STANDARD NO. MD-104.81-02 (MOBILE SERVICE WORK)

PROJECT CONTACTS

THE CONTACT PERSONS FOR SHA ARE AS FOLLOWS:

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|---|---|
| MR. CHARLES WATKINS
DISTRICT ENGINEER
PHONE: (301) 513-7311 | MR. AUGUSTINE REBISH
DISTRICT UTILITIES ENGINEER
PHONE: (301) 513-7350 |
| MR. MAJIB SHAKIB
ASSISTANT DISTRICT ENGINEER - TRAFFIC
PHONE: (301) 513-7358 | MR. RICHARD L. DAFF, SR.
CHIEF, TRAFFIC OPERATIONS DIVISION
PHONE: (410) 787-7630 |
| MR. RANDY BROWN
ASSISTANT DISTRICT ENGINEER - MAINTENANCE
PHONE: (301) 513-7304 | |

EQUIPMENT LIST "A"

A. EQUIPMENT TO BE SUPPLIED BY THE SHA

CATEGORY CODE NO.	QUANTITY	DESCRIPTION
900000	3 EACH	FOUR-CHANNEL, TIME-DELAY-OUTPUT LOOP DETECTOR AMPLIFIER
971017	2 EACH	EIGHT PHASE, FULL TRAFFIC-ACTUATED CONTROLLER WITH SYSTEM PACKAGE HOUSED IN A NEMA SIZE "6" BASE MOUNTED CABINET
973023	124 S.F.	SHEET ALUMINUM SIGNS TO CONSIST OF : - 3 EACH R3-5(L) SIGN (30 IN. X 36 IN.) - MAST ARM MOUNT - 5 EACH R3-5(R) SIGN (30 IN. X 36 IN.) - MAST ARM MOUNT - 2 EACH R3-1 SIGN (30 IN. X 30 IN.) - MAST ARM MOUNT - 1 EACH R3-2 SIGN (30 IN. X 30 IN.) - MAST ARM MOUNT - 1 EACH R10-11a SIGN (24 IN. X 30 IN.) - MAST ARM MOUNT - 1 EACH D-3(1) SIGN "OXON HILL RD" (VARIABLE X 16") - MAST ARM MOUNT - 1 EACH W3-3 SIGN (48 IN. X 48 IN.) - GROUND MOUNT - 1 EACH R3-1 SIGN (30 IN. X 30 IN.) - POLE MOUNT

EQUIPMENT LIST "C"

C. EQUIPMENT TO BE REMOVED AND RETURNED TO SHA

ALL REMOVED SIGNAL MATERIALS SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

EQUIPMENT LIST "B"

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

CATEGORY CODE NO.	QUANTITY	DESCRIPTION
120500	LUMP SUM	MAINTENANCE OF TRAFFIC
120610	7 U.D.	ARROW PANEL
120620	200 S.F.	TEMPORARY TRAFFIC SIGNS
203030	12 C.Y.	TEST PIT EXCAVATION
585624	180 L.F.	24 IN. WHITE THERMOPLASTIC PAVEMENT MARKINGS
801004	22 C.Y.	FURNISH AND INSTALL CONCRETE FOR SIGNAL FOUNDATION
801106	20 L.F.	FURNISH AND INSTALL 4 IN. X 6 IN. WOOD SIGN SUPPORTS
802501	950 L.F.	FURNISH AND INSTALL NO. 6 A.W.G. STRANDED BARE COPPER GROUND WIRE
805011	20 L.F.	FURNISH AND INSTALL 1 IN. ELECTRICAL CONDUIT - GALVANIZED SLEEVE
805160	60 L.F.	FURNISH AND INSTALL 1 IN. LIQUID TIGHT FLEXIBLE NON-METALLIC CONDUIT FOR DETECTOR SLEEVE
806200	1 EACH	FURNISH AND INSTALL METERED SERVICE PEDESTAL
810010	1000 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE 1-CONDUCTOR NO. 4 A.W.G. - THHN/THWN
811001	17 EACH	FURNISH AND INSTALL ELECTRICAL HANDHOLE
813014	16 S.F.	INSTALL GROUND MOUNTED SIGN
813015	108 S.F.	INSTALL OVERHEAD SIGN
822002	450 L.F.	FURNISH AND INSTALL 12 PAIR COMMUNICATION CABLE, JELLY FILLED (UNDERGROUND)
818050	1 EACH	FURNISH AND INSTALL 27 FT. STEEL POLE WITH TWIN 50 FT./60 FT. MAST ARMS
818051	1 EACH	FURNISH AND INSTALL 27 FT. STEEL POLE WITH TWIN 50 FT./70 FT. MAST ARMS
831010	2 EACH	FURNISH AND INSTALL 250 WATT HPS LUMINAIRE WITH PHOTOCELL
837001	11 EACH	FURNISH AND INSTALL GROUND ROD- 3/4 IN. DIAMETER X 10 FT. LENGTH
860272	36 EACH	FURNISH AND INSTALL 12 IN. VEHICULAR TRAFFIC SIGNAL HEAD SECTION
861104	2160 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE- 2 CONDUCTOR (ALUMINUM SHIELDED)
860292	5 EACH	CUT, CLEAN, GALVANIZE AND CAP TRAFFIC
861107	200 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE- 5 CONDUCTOR (NO. 14 A.W.G.)
861108	1600 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE- 7 CONDUCTOR (NO. 14 A.W.G.)
861116	400 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE- 2 CONDUCTOR (NO. 12 A.W.G.)
862101	3100 L.F.	FURNISH AND INSTALL LOOP WIRE ENCASED IN 1/4 IN. FLEXIBLE TUBING
862102	870 L.F.	FURNISH AND INSTALL SAW CUT FOR SIGNAL (LOOP DETECTOR)
866103	2 EACH	FURNISH AND INSTALL 15 FT. STREET LIGHTING ARM ON SIGNAL STRUCTURE
870160	2000 L.F.	FURNISH AND INSTALL 2 IN. SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
870163	450 L.F.	FURNISH AND INSTALL 3 IN. SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
870165	90 L.F.	FURNISH AND INSTALL 3 IN. SCHEDULE 80 RIGID PVC CONDUIT - SLOTTED
870166	590 L.F.	FURNISH AND INSTALL 4 IN. SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
871202	2 EACH	INSTALL CONTROLLER AND CABINET - BASE MOUNT
800000	1 EACH	REMOVAL AND DISPOSAL OF EXISTING MATERIAL AND EQUIPMENT
800000	1 EACH	FURNISH AND INSTALL 27 FT. STEEL POLE WITH A 60 FT. MAST ARM
800000	1 EACH	FURNISH AND INSTALL 27 FT. STEEL POLE WITH TWIN 50 FT./50 FT. MAST ARMS
800000	2 EACH	INSTALL MICROLOOP PROBE SET WITH 500 FT. LEAD-IN
800000	1 EACH	FURNISH AND INSTALL 60 AMP NON-FUSED DISCONNECT

TSP-4



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MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION
GENERAL INFORMATION SHEET
RAMP E-1 INTERSECTIONS

DRAWN BY: S.BLOSS	F.A.P. NO.	TS NO.	SHEET NO.
CHECKED BY: NLEARY	S.H.A. NO.	4080622	
SCALE: NONE	COUNTY: PRINCE GEORGES	T.I.M.S. NO.	
DATE: 3/20/01	LOG MILE:	4 OF	