PROJECT DESCRIPTION

GENERAL

THIS PROJECT INVOLVES THE INSTALLATION OF A HAZARD IDENTIFICATION BEACON ON WESTBOUND US 340 IN ADVANCE OF THE BRIDGE CROSSING THE POTOMAC RIVER. THE HAZARD IDENTIFICATION BEACONS WILL BEGIN FLASHING WHEN ACTIVATED BY THE QUEUE DETECTOR.

CONTROLLER REQUIREMENTS

INSTALL A FULL-TRAFFIC-ACTUATED, EIGHT-PHASE CONTROLLER WITH VIDEO INTERFACE EQUIPMENT AND INTERSECTION MONITOR HOUSED IN A NEMA SIZE '5' POLE MOUNTED CABINET.

MAINTENANCE OF TRAFFIC

THE FOLLOWING TRAFFIC CONTROL STANDARDS SHALL BE REFERENCED FOR THE PROJECT.

STANDARD NO. MD-104.02-01 (SHOULDER WORK)

STANDARD NO. MD-104.02-13 (FLAGGING OPERATION)

PROJECT CONTACTS

THE CONTACT PERSONS FOR SHA ARE AS FOLLOWS:

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

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

MR. ROBERT ROWAN
DISTRICT UTILITY ENGINEER
PHONE: (301) 729-8420

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

EQUIPMENT LIST "A"

A. EQUIPMENT TO BE SUPPLIED BY THE SHA

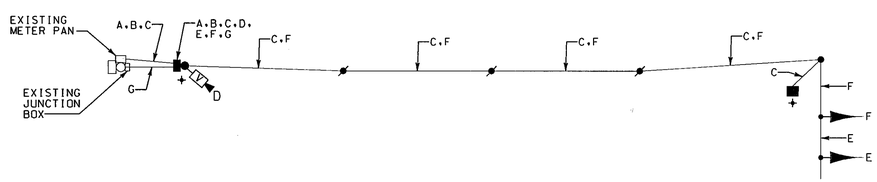
ITEM NO.	QUANTITY	DESCRIPTION
9009	1 EACH	12 IN. x 30 FT. STRAIN POLE (1 3/4 IN. x 90 IN. ANCHOR BOLTS INCLUDED)
9025	1 EACH	23 FT. STEEL TWIN MAST ARM POLE WITH 60 FT. MAST ARM
9045	1 EACH	EIGHT-PHASE, FULL-TRAFFIC-ACTUATED CONTROLLER WITH INTERSECTION MONITOR HOUSED IN A NEMA SIZE "5" POLE MOUNTED CABINET
9086	1 EACH	VIDEO INTERFACE EQUIPMENT: 1-4 CAMERAS
9571	66 S.F.	SHEET ALUMINUM SIGNS TO CONSIST OF :
	- 1 EACH	W3-3(2) SIGN (120 IN. x 60 IN.) - MAST ARM MOUNT
	- 1 EACH	M1-4 SIGN (48 IN. x 36 IN.) - GROUND MOUNT
	- 1 EACH	M3-4 SIGN (30 IN. x 15 IN.) - GROUND MOUNT

EQUIPMENT LIST "B"

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

ITEM NO.	QUANTITY	DESCRIPTION
1001	1 EACH	MAINTENANCE OF TRAFFIC
2001	3 C.Y.	TEST PIT EXCAVATION
6005	225 L.F.	TRAFFIC BARRIER W BEAM
6008	1 EACH	TYPE I TRAFFIC BARRIER END TREATMENT
6009	5 EACH	W BEAM BARRIER REFLECTIVE DELINEATORS
8001	8 C.Y.	CONCRETE FOR SIGNAL FOUNDATION
8008	1 EACH	INSTALL STEEL POLE AND & SINGLE OR TWIN MAST ARM
8018	900 L.F.	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 12 A.W.G)
8020	36 L.F.	WOOD SIGN SUPPORTS 4 IN. x 4 IN.
8022	1000 L.F.	NO. 6 A.W.G. STRANDED BARE COPPER GROUND WIRE
8026	2 EACH	3 IN. WEATHERHEAD
8030	40 L.F.	2 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
8031	20 L.F.	3 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
8039	50 L.F.	ELECTRICAL CABLE - 1 CONDUCTOR NO. 4 A.W.G - THHN/THWN
8045	1 EACH	FURNISH AND INSTALL ELECTRICAL HANDHOLE
8047	16 S.F.	INSTALL GROUND MOUNTED SIGN
8048	50 S.F.	INSTALL OVERHEAD SIGN
8049	1 EACH	VIDEO DETECTION CAMERA
8050	1 EACH	CONTROL CABLE, 250 FT. VIDEO DETECTION CAMERA TO CONTROLLER
8063	25 L.F.	12-PAIR COMMUNICATION CABLE, JELLYFILLED (UNDERGROUND)
8069	2 EACH	GROUND ROD - 3/4 INCH DIAMETER x 10 FOOT LENGTH
8071	2 EACH	12 INCH VEHICULAR TRAFFIC SIGNAL HEAD SECTION
8074	1 EACH	CUT, CLEAN, GALVANIZE AND CAP TRAFFIC SIGNAL STRUCTURE
8078	30 L.F.	ELECTRICAL CABLE - 3 CONDUCTOR (NO. 14 A.W.G)
8086	1 EACH	INSTALL STRAIN POLE (ANY SIZE)
8088	860 L.F.	STEEL SPAN WIRE - 3/8 IN. DIAMETER
8089	1 EACH	INSTALL CONTROLLER AND CABINET - POLE MOUNT
NEG.	1 EACH	30 AMP, 1P SAFETY DISCONNECT SWITCH
~~NEG.~~	~~1 EACH~~	~~TYPE G TRAFFIC BARRIER END TREATMENT~~ (DONE BY OTHERS) DISTRICT FORCES
NEG.	3 EACH	40 FT. CLASS II WOOD POLE

WIRING DIAGRAM



WIRING KEY

A, B } 1-CONDUCTOR ELECTRICAL CABLE (NO. 4 A.W.G.)

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

D } VIDEO CAMERA DETECTION LEAD-IN CABLE

E } 3-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)

F } 5-CONDUCTOR ELECTRICAL CABLE (NO. 12 A.W.G.)

G } 12-PAIR COMMUNICATION CABLE (NO. 19 A.W.G.)

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

WR&A
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Baltimore, Maryland 21231
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MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION
GENERAL INFORMATION SHEET
WESTBOUND US 340 EAST OF POTOMAC RIVER BRIDGE
HAZARD IDENTIFICATION BEACON

DRAWN BY: B. DONOWAY	F.A.P. NO.		TS NO.	SHEET NO.
CHECKED BY: N. LEARY	S.H.A. NO.			
SCALE: 1" = 20'	COUNTY: WASHINGTON		T.I.M.S. NO. G257	2 OF 2
DATE: 9/9/2004	LOG MILE:			

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