PROJECT DESCRIPTION

GENERAL

THIS PROJECT INVOLVES THE RECONSTRUCTION OF A EXISTING TRAFFIC SIGNAL AT THE INTERSECTION OF MD 213 (WASHINGTON AVE) AND MD 291 (MORGNEC ROAD) AND INSTALLATION OF TELEMETRY ON MD 213 FROM WASHINGTON SQUARE SHOPPING CENTER ENTRANCE TO MD 289 (CROSS ST.) IN KENT COUNTY.

INTERSECTION OPERATION

A NEW SYSTEM CONTROLLER AND CABINET WILL BE INSTALLED AT THIS LOCATION. THE INTERSECTION WILL OPERATE IN A FULLY ACTUATED NEMA 8 PHASE MODE. WITH E/P LEFT TURNS FOR ALL APPROACHES TO THE INTERSECTION. VIDEO DETECTORS WILL BE INSTALLED FOR ACTUATION OF ALL FOUR E/P LEFT TURN PHASES. THIS LOCATION WILL BE PLACED INTO A TELEMETRY SIGNAL SYSTEM.

SPECIAL NOTES

1. THE FOLLOWING CONTACT PERSONS FOR DISTRICT #2 ARE AS FOLLOWS:

PROJECT CONTACTS:

MR. ROBERT KIEL, ASSISTANT DISTRICT ENGINEER - TRAFFIC
PHONE: (410) 810-3240
MR. TERRY O. WRIGHT, ASSISTANT DISTRICT ENGINEER- MAINTENANCE
PHONE: (410) 810-3250
MR. BARRY CLOTHIER, ASSISTANT DISTRICT ENGINEER - UTILITY
PHONE:(410) 788-3061
MR. RICHARD L. DAFF, SR. CHIEF TRAFFIC OPERATIONS DIVISION
PHONE:(410) 787-7630

2. MAINTENANCE OF TRAFFIC WILL BE HANDLED BY THE CONTRACTOR FOLLOWING STANDARD PLATES FOR TRAFFIC CONTROL:

EQUIPMENT LIST

A. EQUIPMENT TO BE SUPPLIED BY THE ADMINISTRATOR.

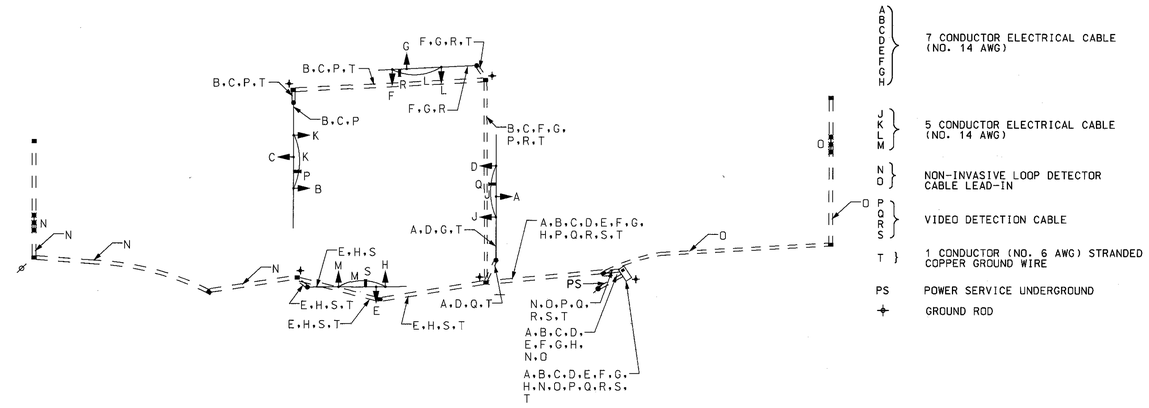
ITEM No.	DESCRIPTION	UNITS	QUANTITY
9086	CABINET W/ TELEMETRY (SYSTEM CAB), SIZE 6" WITH VIDEO DETECTION	EA	1
9087	CONTROLLER ASC II W/ TELEMETRY	EA	1
9088	CONTROLLER, MASTER ASC 10,000 W/ TELEMETRY"	EA	1
9090	Flat Sheet Alum. Sign-Blue or Green	SF	42.67
	R10-12 (36"X42")	EA	4
	M4-5 (24"X12")	EA	2
	M1-5 (24"X24")	EA	2
	GUIDE SHIELD ASSEMBLY (30"X51")	EA	4
	GUIDE SHIELD ASSEMBLY (48"X75")	EA	4

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

ITEM No.	DESCRIPTION	UNITS	QUANTITY
0	UTILITY UNIT	PA	12000
1001	MAINTENANCE OF TRAFFIC PER ASSIGNMENT	EA	2
2002	TEST PIT EXCAVATION	CY	5
5005	24 IN WHT HEAT APP THERMO PAVE MARK	LF	105
6004	4 INCH CONCRETE SIDEWALK	SF	300
8003	500' VIDEO CABLE TO CONTROLLER	EA	4
8006	"CUT, CLEAN & CAP TRAFFIC SIGNAL STRUCTURE"	EA	2
8011	F&I 12 IN VEH SIG HEAD SECTION	EA	40
8015	F&I 3 IN WEATHERHEAD	EA	1
8021	F&I 8 IN VEH SIG HEAD SECTION	EA	12
8022	F&I ELECTRICAL UTILITY SERVICE EQUIPMENT 120/240 VOLT	EA	1
8024	F&I MAST ARM POLE & 50 FT MAST ARM	EA	4
8047	FURNISH AND INSTALL NON-INVASIVE PROBE W/500' LEAD IN	EA	2
8048	PAINT INSTALLED STRUCTURE	EA	7
8049	PAINT STRUCTURE ON GROUND	EA	4
8051	REMOVE AND DISPOSE MAT. AND EQUIPMENT PER EACH PER ASSIGNMENT	EA	1
8052	VIDEO DETECTION CAMERA	EA	4
8054	3" PVC CONDUIT-TRENCHED	LF	415
8056	4" PVC CONDUIT-TRENCHED	LF	20
8059	F&I 12-PAIR COMMUNICATION CABLE, SELF SUPPORTING (OVERHEAD)	LF	10560
8063	FURNISH AND INSTALL CONCRETE FOR SIGNAL FOUNDATION	CY	17
8066	FURNISH AND INSTALL NO. 6 AWG STRANDED BARE COPPER GROUND WIRE	LF	313
8067	FURNISH AND INSTALL 1 INCH ELECTRICAL CONDUIT-GALVANIZED SLEEVE	LF	20
8069	3" PVC CONDUIT-BORED	LF	90
8071	FURNISH AND INSTALL 3 INCH SCHEDULE 80 RIGID PVC CONDUIT- SLOTTED	LF	2000
8072	FURNISH AND INSTALL 4 INCH SCHEDULE 80 RIGID PVC CONDUIT- SLOTTED	LF	310
8073	FURNISH AND INSTALL 1 INCH LIQUID TIGHT FLEXIBLE NON-METALLIC CONDUIT FOR DETECTOR SLEEVE	LF	25
8074	FURNISH AND INSTALL ELECTRICAL CABLE 1 CONDUCTOR NO. 6 AWG	LF	160
8076	FURNISH AND INSTALL ELECTRICAL HANDHOLE	EA	21
8077	INSTALL 6" X 6" WOOD SIGN POST	EA	1
8079	INSTALL OVERHEAD SIGN	SF	43
8083	FURNISH AND INSTALL GROUND ROD-3/4 INCH DIAMETER X 10 FOOT LENGTH	EA	5
8084	FURNISH AND INSTALL ELECTRICAL CABLE-2 CONDUCTOR (ALUMINUM SHIELDED)	LF	350
8087	FURNISH AND INSTALL ELECTRICAL CABLE- 5 CONDUCTOR (NO 14 AWG)	LF	60
8088	FURNISH AND INSTALL ELECTRICAL CABLE- 7 CONDUCTOR (NO 14 AWG)	LF	1526
8090	FURNISH AND INSTALL LOOP WIRE ENCASED IN FLEXIBLE TUBING (NO 14 AWG)	LF	500
8091	FURNISH AND INSTALL SAW CUT FOR SIGNAL (LOOP DETECTOR)	LF	350
8096	INSTALL CONTROLLER AND CABINET- BASE MOUNT	EA	1
8080	FURNISH AND INSTALL 2 1/2 INCH DIAMETER POLYVINYL CHLORIDE CONDUIT, SCHEDULE 80, RISER	LF	25

C. MATERIALS TO BE REMOVED BY THE CONTRACTOR.
ALL MATERIALS TO BE REMOVED BY THE CONTRACTOR SHALL BECOME PROPERTY OF THE CONTRACTOR.

WIRING DIAGRAM



PHASE CHART

	1	2	3	4	5	6	7	8	9	10	11	12
PHASE 1 AND 5	◄G/R	◄G/R	R	R	R	R	R	R	R	R	R	R
1 AND 5 CHANGE TO 1 AND 6,2 AND 5, OR 2 AND 6												
PHASE 1 AND 6	◄G/G	◄G/G	G	R	R	R	R	R	R	R	R	R
1 AND 6 CHANGE	◄Y/G	◄Y/G	G	R	R	R	R	R	R	R	R	R
PHASE 2 AND 5	R	R	R	◄G/G	◄G/G	G	R	R	R	R	R	R
2 AND 5 CHANGE	R	R	R	◄Y/G	◄Y/G	G	R	R	R	R	R	R
PHASE 2 AND 6	G	G	G	G	G	G	R	R	R	R	R	R
2 AND 6 CHANGE	Y	Y	Y	Y	Y	Y	R	R	R	R	R	R
PHASE 3 AND 7	R	R	R	R	R	R	◄G/R	◄G/R	R	◄G/R	◄G/R	R
3 AND 7 CHANGE TO 3 AND 8, 4 AND 7, OR 4 AND 8												
PHASE 3 AND 8	R	R	R	R	R	R	R	R	R	◄G/G	◄G/G	G
3 AND 8 CHANGE	R	R	R	R	R	R	R	R	R	◄Y/G	◄Y/G	G
PHASE 4 AND 7	R	R	R	R	R	R	◄G/G	◄G/G	G	R	R	R
4 AND 7 CHANGE	R	R	R	R	R	R	◄Y/G	◄Y/G	G	R	R	R
PHASE 4 AND 8	R	R	R	R	R	R	G	G	G	G	G	G
4 AND 8 CHANGE	R	R	R	R	R	R	Y	Y	Y	Y	Y	Y
FLASHING OPERATION	FL /Y	FL /Y	FL /Y	FL /Y	FL /Y	FL /Y	FL /R	FL /R	FL /R	FL /R	FL /R	FL /R

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MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION
GENERAL INFORMATION PLAN
MD 213 (WASHINGTON AVENUE) AT
MD 291 (MORGNEC ROAD)

DRAWN BY:	S.A.S.	F.A.P. NO.	KE413A51 | B57	TS NO. TS-39D	SHEET NO.
CHECKED BY:		S.H.A. NO.			
SCALE:	NTS	COUNTY:	KENT COUNTY	T.I.M.S. NO.	2 OF 2
DATE:	MARCH, 2001	LOG MILE:	14021301.32		

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