PROJECT DESCRIPTION

THIS PROJECT INVOLVES THE INSTALLATION OF EXCLUSIVE LEFT TURN PHASING ON WESTBOUND MD 704 (MARTIN LUTHER KING JR. HWY) AT ADDISON ROAD IN PRINCE GEORGE'S COUNTY. MICROLOOP PROBE SETS SHALL BE INSTALLED ON THE MD 704 EAST AND WEST APPROACHES. ADDITIONALLY, THE POLE MOUNTED TERMINAL CABINET ON THE SOUTHWEST CORNER SHALL BE REPLACED AND THE ENTIRE INTERSECTION SHALL HAVE THE EXISTING YELLOW FACE TRAFFIC SIGNAL HEADS REPLACED WITH BLACK FACE TRAFFIC SIGNAL HEADS. MD 704 IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION.

INTERSECTION OPERATION

I. NORMAL OPERATION

THE INTERSECTION WILL OPERATE IN A SIX PHASE SEMI-TRAFFIC-ACTUATED MODE WITH THE MD 704 APPROACHES RUNNING CONCURRENTLY AND THE ADDISON ROAD APPROACHES RUNNING CONCURRENTLY. EXCLUSIVE LEFT TURN PHASING IS PROVIDED FOR BOTH APPROACHES OF MD 704 (MARTIN LUTHER KING, JR. HWY). CLEARANCE PHASING IS PROVIDED ON MD 704 TO CLEAR THE INTERSECTION. PEDESTRIAN PHASING IS PROVIDED CROSSING MD 704 AT BOTH INTERSECTIONS OF ADDISON ROAD.

CONTROLLER REQUIREMENTS

THE EXISTING FULLY-TRAFFIC-ACTUATED EIGHT PHASE TRAFFIC SIGNAL CONTROLLER HOUSED IN A NEMA SIZE "6" BASE MOUNTED CABINET WILL BE UTILIZED.

A NEW TYPE "G" POLE MOUNTED CABINET WITH MINI-HUB II VIDEO DETECTION EQUIPMENT SHALL BE USED TO RELAY CALLS TO THE MAIN CABINET. THE EXISTING POLE MOUNTED CABINET SHALL BE REMOVED.

PROJECT CONTACTS

CONTACTS FOR DISTRICT 3:

MR. MAJID SHAKIB
ASSISTANT DISTRICT ENGINEER - TRAFFIC
PHONE: (301) 513-7358

MR. AUGIE REBISH
DISTRICT UTILITIES ENGINEER
PHONE: (301) 513-7350

MR. RALEIGH MEDLEY
ASSISTANT DISTRICT ENGINEER - MAINTENANCE
PHONE: (301) 513-7304

CONTACTS FOR OFFICE OF TRAFFIC AND SAFETY:

MR. RICHARD DAFF SR.
CHIEF, TRAFFIC OPERATIONS
410-787-7630

MR. ROBERT SNYDER
ASSISTANT DIVISION CHIEF, TRAFFIC OPERATIONS
410-787-7630

MR. ED RODENHIZER
TEAM LEADER SIGNAL OPERATIONS
410-787-7650

MR. EUGENE BAILEY
TEAM LEADER SIGN OPERATIONS
410-787-7676

EQUIPMENT LIST "A"

A. EQUIPMENT TO BE SUPPLIED BY THE SHA

QUANTITY	DESCRIPTION
147 S.F.	SHEET ALUMINUM SIGN
	- 1 EACH — ASSOCIATED SHIELD ASSEMBLY (30"X51") - (BANDED TO SIGNAL POLE) M3-4 (24"x12") M1-5 (30"x24") M6-1 (21"x15")
	- 1 EACH — ASSOCIATED SHIELD ASSEMBLY (48"x75") - (BANDED TO SIGNAL POLE) M3-2 (30"x15") M1-5 (48"x36") M6-1 (30"x24")
	- 1 EACH — ASSOCIATED SHIELD ASSEMBLY (30"x51") - (GROUND MOUNTED ON WOOD POST) M3-2 (24"x12") M1-5 (30"x24") M6-1 (21"x15")
	- 1 EACH — ASSOCIATED SHIELD ASSEMBLY (48"x75") - (BANDED TO SIGNAL POLE) M3-4 (30"x15") M1-5 (48"x36") M6-1 (30"x24")
	- 2 EACH — R10-5 (30"x24")
	- 8 EACH — S1-1 (FYG) (30"x30")
	- 7 EACH — W16-7(L) (FYG) 21"x15"
1 EA.	TYPE "G" POLE MOUNTED CABINET
1 EA.	VIDEO INTERFACE EQUIPMENT (MINI-HUB II)

PHASE CHART

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
PHASE 1+5	◁G-	◁G-	G	G	R	R	◁G-	◁G-	G	G	R	R	R	R	R	R	R	R	DW	DW	DW	DW
1+5 CHANGE	TO 1+6. 2+5 OR 2+6																					
PHASE 1+6	◁G-	◁G-	G	G	G	G	◁R-	◁R-	G	G	R	R	R	R	R	R	R	R	DW	DW	DW	DW
1+6 CHANGE	◁Y-	◁Y-	G	G	G	G	◁R-	◁R-	G	G	R	R	R	R	R	R	R	R	DW	DW	DW	DW
PHASE 2+5	◁R-	◁R-	G	G	R	R	◁G-	◁G-	G	G	G	G	R	R	R	R	R	R	DW	DW	DW	DW
2+5 CHANGE	◁R-	◁R-	G	G	R	R	◁Y-	◁Y-	G	G	G	G	R	R	R	R	R	R	DW	DW	DW	DW
PHASE 2+6	◁R-	◁R-	G	G	G	G	◁R-	◁R-	G	G	G	G	R	R	R	R	R	R	DW	DW	DW	DW
2+6 CLEAR.	◁R-	◁R-	Y	Y	G	G	◁R-	◁R-	Y	Y	G	G	R	R	R	R	R	R	DW	DW	DW	DW
2+6 CHANGE	◁R-	◁R-	R	R	Y	Y	◁R-	◁R-	R	R	Y	Y	R	R	R	R	R	R	DW	DW	DW	DW
PHASE 4+8	◁R-	◁R-	R	R	R	R	◁R-	◁R-	R	R	R	R	G	G	G	G	G	G	DW	DW	DW	DW
4+8 CHANGE	◁R-	◁R-	R	R	R	R	◁R-	◁R-	R	R	R	R	Y	Y	Y	Y	Y	Y	DW	DW	DW	DW
PHASE 4+8 ALT	◁R-	◁R-	R	R	R	R	◁R-	◁R-	R	R	R	R	G	G	G	G	G	G	WALK	WALK	WALK	WALK
PED CLEAR	◁R-	◁R-	R	R	R	R	◁R-	◁R-	R	R	R	R	G	G	G	G	G	G	FL/DW	FL/DW	FL/DW	FL/DW
4+8 ALT. CHANGE	◁R-	◁R-	R	R	R	R	◁R-	◁R-	R	R	R	R	Y	Y	Y	Y	Y	Y	DW	DW	DW	DW
FLASHING OPERATION	FL/◁R-	FL/◁R-	FL/Y	FL/Y	FL/Y	FL/Y	FL/◁R-	FL/◁R-	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	DARK	DARK	DARK	DARK

EQUIPMENT LIST "B"

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

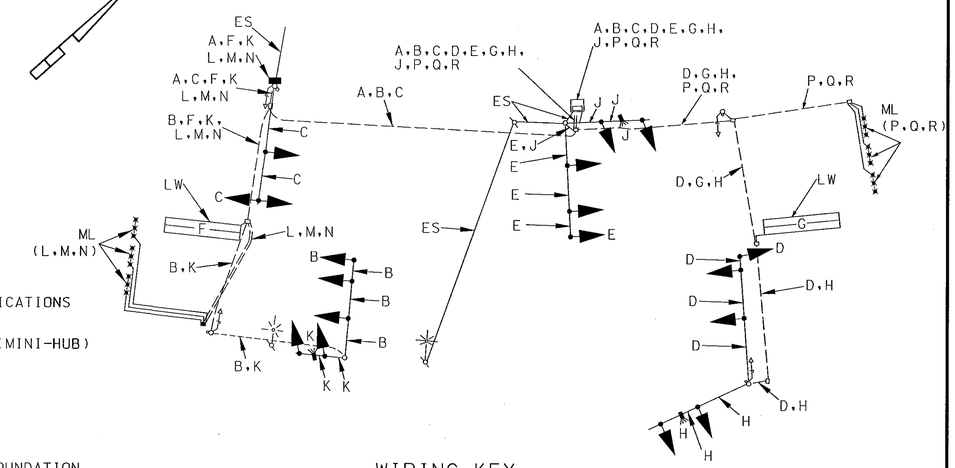
ITEM NO.	QUANTITY	DESCRIPTION
1001	1 EA	MAINTENANCE OF TRAFFIC
2001	2 CY	CLASS 2 EXCAVATION
2002	1 CY	TEST PIT EXCAVATION
5001	1 EA	HEAT APP PERM THERMO PAVE MARK ARROW
5002	4 EA	HEAT APP PERM THERMO PAVE MARK LETTER
5003	5 EA	REMOVE EXISTING PAVEMENT MARKING LETTER OR ARROW
5004	130 LF	12 IN. WHITE HEAT APP THERMO PAVE MARK
5005	130 LF	24 IN. WHITE HEAT APP THERMO PAVE MARK
5008	260 LF	REMOVAL OF EXISTING PAVEMENT MARKING LINE MARKINGS-ANY WIDTH
6004	15 SF	4 INCH CONCRETE SIDEWALK
8000	350 LF	TO BE NEGOTIATED-FURNISH AND INSTALL 12 PAIR COMMUNICATIONS CABLE JELLY FILLED (UNDERGROUND)
8000	1 EA	TO BE NEGOTIATED-INSTALL VIDEO INTERFACE EQUIPMENT (MINI-HUB)
8001	2 EA	250' VIDEO CABLE TO CONTROLLER
8003	1 EA	500' VIDEO CABLE TO CONTROLLER
8009	24 EA	F&I 12 IN OPT PROGRAM SIG HEAD SECTION
8011	36 EA	F&I 12 IN VEH SIG HEAD SECTION
8029	6 EA	F&I MICRO PROBE SET 500 FT LEAD-IN
8042	1 EA	INSTALL CONDUIT (UP TO 4 INCHES) BEND IN EXISTING FOUNDATION
8048	1 EA	REM & DISPOSE MAT & EQUIP PER ASSIGN
8049	3 EA	VIDEO DETECTION CAMERA
8050	1 EA	VIDEO INTERFACE EQUIPMENT
8053	10 LF	4" PVC SCH 80 CONDUIT-TRENCHED
8060	114 LF	FURNISH AND INSTALL WOOD SIGN SUPPORTS 4 INCH X 4 INCH
8069	60 LF	FURNISH AND INSTALL 4 INCH SCHEDULE 80 RIGID PVC CONDUIT-SLOTTED
8070	30 LF	FURNISH AND INSTALL 1 INCH LIQUID TIGHT FLEXIBLE NON-METALLIC CONDUIT FOR DETECTOR SLEEVE
8074	1 EA	FURNISH AND INSTALL ELECTRICAL HANDHOLE
8076	76 SF	INSTALL GROUND MOUNTED SIGN
8077	71 SF	INSTALL OVERHEAD SIGN
8083	300 LF	FURNISH AND INSTALL ELECTRICAL CABLE - 2 CONDUCTOR (ALUMINUM SHIELDED)
8086	1500 LF	FURNISH AND INSTALL ELECTRICAL CABLE - 5 CONDUCTOR (NO 14 AWG)
8089	850 LF	FURNISH AND INSTALL LOOP WIRE ENCASED IN FLEXIBLE TUBING (NO 14 AWG)
8090	500 LF	FURNISH AND INSTALL SAW CUT FOR SIGNAL (LOOP DETECTOR)

EQUIPMENT LIST "C"

C. EQUIPMENT TO BE REMOVED BY THE CONTRACTOR AND DELIVERED TO THE STATE HIGHWAY ADMINISTRATION, 7491 CONNELLEY DRIVE, HANOVER, MARYLAND 21076.

QUANTITY	DESCRIPTION
	ALL REMOVED SIGNAL MATERIALS ARE TO BECOME THE PROPERTY OF THE CONTRACTOR

WIRE DIAGRAM



WIRING KEY

A	12-PAIR COMMUNICATIONS CABLE, JELLY-FILLED (UNDERGROUND)
B,C,D,E	5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
F,G	2-CONDUCTOR ELECTRICAL CABLE (ALUMINUM SHIELDED)
H,J,K	CAMERA TO CONTROL CABINET CABLE
LW	- LOOP WIRE IN 1/4" FLEXIBLE TUBING (NO. 14 A.W.G.)
ML	- MICRO-LOOP PROBE SET (L,M,N,P,Q,R)
ES	- EXISTING SERVICE

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MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION
MD 704 (MARTIN LUTHER KING JR HWY) AND
ADDISON ROAD
SEAT PLEASANT, MARYLAND

DRAWN BY: SMH	F.A.P. NO. N/A	TS NO. TS-584D	SHEET NO.
CHECKED BY: BLB	S.H.A. NO.	T.I.M.S. NO. F344	2 OF 2
SCALE: NONE	COUNTY: PRINCE GEORGE'S		
DATE: JANUARY 2, 2003	LOG MILE: 16070400.22		