PROJECT DESCRIPTION

GENERAL

THIS PROJECT INVOLVES THE RECONSTRUCTION OF A TRAFFIC SIGNAL AT THE INTERSECTION OF MD 586 (VEIRS MILL ROAD) AT FERRARA AVENUE IN MONTGOMERY COUNTY

INTERSECTION OPERATION

A SYSTEM CONTROLLER HOUSED IN A BASE MOUNTED CABINET SHALL BE INSTALLED AT THIS LOCATION. THE INTERSECTION WILL OPERATE IN A FULLY ACTUATED MODE USING 8 NEMA PHASES.

SPECIAL NOTES

1. THE FOLLOWING CONTACT PERSONS FOR FOR THIS PROJECT ARE:

PROJECT CONTACTS:

MR. LEE STARKLOFF, ASSISTANT DISTRICT ENGINEER-TRAFFIC
PHONE: (301) 513-7300
MR. RALEIGH MEDLEY, ASSISTANT DISTRICT ENGINEER-MAINTENANCE
PHONE: (301) 513-7300
MR. DENNIS McMAHON, ASSISTANT DISTRICT ENGINEER-CONSTRUCTION
PHONE: (301) 517-7300
MR. AUDIE REBISH, ASSISTANT DISTRICT ENGINEER-UTILITY
PHONE: (310) 513-7300
MR. RICHARD L. DAFF, Sr., CHIEF TRAFFIC OPERATIONS DIVISION
PHONE: (410) 787-7630
MR. BOBBY GONZALES, TRAFFIC ENGINEER MCDPWT
PHONE: (240) 777-8761

2. MAINTENANCE OF TRAFFIC WILL BE HANDLED BY THE CONTRACTOR USING THE SHA STANDARD PLATES FOR TRAFFIC CONTROL.

EQUIPMENT LIST

A. EQUIPMENT TO BE SUPPLIED BY THE ADMINISTRATION

CATEGORY CODE NO.	DESCRIPTION	UNITS	QUANTITY
900000	BASE MOUNTED (SIZE 6) CABINET (MSHA SPECIFICATIONS) WITH ECONOLITE ASC [I 2100 CONTROLLER. SSM 12 E CONFLICT MONITOR. POWER SUPPLY FOR RACK MOUNTED DETECTION. LAU PANEL AND RELAY PACKAGE WIRED TO MONTGOMERY COUNTY SPECIFICATIONS.	EA	1
973023	FLAT SHEET ALUMINUM SIGNS. (BLUE OR GREEN)	SF	167
	D-3(2) (VAR. X 16")	EA	4
	R10-12 (36"X42")	EA	2
	R3-5(R)(30"X36")	EA	1
	GUIDE SHIELD ASSEMBLY (30"X51")	EA	2
	GUIDE SHIELD ASSEMBLY (48"X75")	EA	2
	R10-4(1) MOD (12"X9")	EA	4

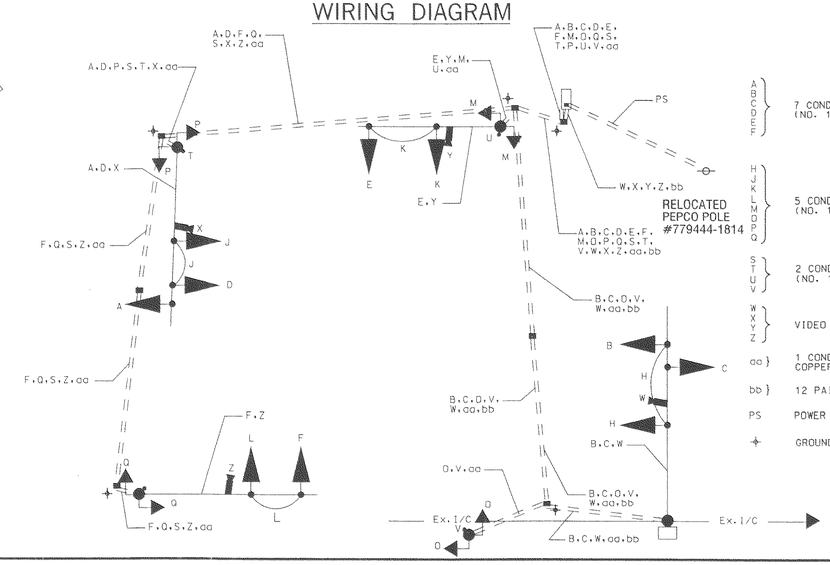
B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR.

CATEGORY CODE NO.	DESCRIPTION	UNITS	QUANTITY
203030	TEST PIT EXCAVATION	CY	5
585452	24" WHITE HEAT APPL. THERMO. PAVEMENT MARK.	LF	110
585620	12" WHITE HEAT APPL. THERMO. PAVEMENT. MARK.	LF	390
860272	12" VEHICULAR TRAFFIC SIGNAL HEAD SECTION	EA	38
818041	STEEL POLE WITH A SINGLE 60' MAST ARM	EA	1
818036	STEEL POLE WITH A SINGLE 50' MAST ARM	EA	2
818030	STEEL POLE WITH A SINGLE 38' MAST ARM	EA	1
805125	2" SCHED. 80 PVC CONDUIT - TRENCHED	LF	50
805140	4" SCHED. 80 PVC CONDUIT - TRENCHED	LF	20
805135	3" SCHED. 80 PVC CONDUIT - TRENCHED	LF	50
805155	4" SCHED. 80 PVC CONDUIT - SLOTTED	LF	310
801004	CONCRETE FOR SIGNAL FOUNDATIONS	CY	18
802501	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE	LF	620
811001	HANDHOLE	EA	7
813015	INSTALL OVERHEAD SIGN	SF	167
818004	10 FOOT BREAKAWAY BASE PEDESTAL POLE	EA	1
822002	12 PAIR COMMUNICATION CABLE (JELLY FILLED)	LF	160
837001	GROUND ROD-3/4 INCH DIAMETER X 10 FOOT	EA	5
807400	ELEC. UTILITY SER. EQUIP. 120/240V 60 AMP	EA	1
861105	2-COND., NO.14 AWG ELECT. CABLE	LF	500
861107	5-COND., NO. 14 AWG ELECT. CABLE	LF	740
861108	7-COND., NO. 14 AWG ELECT. CABLE	LF	1570
871202	INSTALL CONTROLLER AND CABINET - BASE MT	EA	1
816001	VIDEO DETECTION CAMERA	EA	4
816010	CONTROL CABLE FROM CARMERA TO CONTROLLER (500' LENGTH CABLE)	EA	4
860282	12" PEDESTRIAN SIGNAL HEAD SECTION PED. POLE MT.	EA	4
860278	12" PEDESTRIAN SIGNAL HEAD SECTION MAST ARM POLE MOUNT	EA	12
865001	PUSHBUTTON AND SIGN	EA	4
800000	REMOVE AND DISPOSE OF EXIST. EQUIPMENT	LS	1
860292	CUT. CLEAN. GALVANIZE AND CAP TRAFFIC SIGNAL STRUCTURE	EA	4
861117	3 WIRE NO. 4 AWG ELECTRICAL CABLE POWER SERVICE	LF	180
805050	3" WEATHER HEAD	EA	1
801106	4" X 6" WOOD SUPPORT	LF	40

C. MATERIALS TO BE REMOVED BY THE CONTRACTOR.

SHA FORCES SHALL REMOVE THE CONTROLLER AND ALL AUXILIARY EQUIPMENT FROM THE CONTROLLER CABINET. THE CABINET AND ALL OTHER MATERIALS TO BE REMOVED BY THE CONTRACTOR SHALL BECOME THE PROPERTY OF THE CONTRACTOR

WIRING DIAGRAM



KEY

A B C D E	7 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
H J K L M O P Q	5 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
S T U V	2 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
W X Y Z	VIDEO DETECTION CABLE
aa	1 CONDUCTOR (NO. 6 WAG) STRANDED COPPER GROUND WIRE
bb	12 PAIR INTERCONNECT CABLE
PS	POWER SERVICE UNDERGROUND
	GROUND ROD

PHASE CHART

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
PHASE 1 AND 5	←G/R	←G/R	R	←G/R	←G/R	R	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
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	DW	DW	DW	DW	DW	DW	DW	DW
1 AND 6 CHANGE	←Y/G	←Y/G	G	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 2 AND 5	R	R	R	←G/G	←G/G	G	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
2 AND 5 CHANGE	R	R	R	←Y/G	←Y/G	R	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 2 AND 6	G	G	G	G	G	G	R	R	R	R	WK	WK	WK	WK	DW	DW	DW	DW
PED CLEARANCE	G	G	G	G	G	G	R	R	R	R	FL/DW	FL/DW	FL/DW	FL/DW	DW	DW	DW	DW
2 AND 6 CHANGE	Y	Y	Y	Y	Y	Y	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 4 AND 8	R	R	R	R	R	R	G	G	G	G	DW	DW	DW	DW	DW	DW	DW	DW
4 AND 8 CHANGE	R	R	R	R	R	R	Y	Y	Y	Y	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 4 AND 8 ALT	R	R	R	R	R	R	G	G	G	G	DW	DW	DW	DW	WK	WK	WK	WK
PED CLEARANCE	R	R	R	R	R	R	G	G	G	G	DW	DW	DW	DW	FL/DW	FL/DW	FL/DW	FL/DW
PHASE 4 AND 8 CHANGE	R	R	R	R	R	R	Y	Y	Y	Y	DW	DW	DW	DW	DW	DW	DW	DW
FLASHING OPERATION	FL /Y	FL /Y	FL /Y	FL /Y	FL /Y	FL /Y	FL /R	FL /R	FL /R	FL /R	DARK	DARK	DARK	DARK	DARK	DARK	DARK	DARK

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MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION
GENERAL INFORMATION PLAN

MD 586 (VEIRS MILL ROAD) AND FERRARA AVENUE

DRAWN BY: S. SMITH	F.A.P. NO. SEE TITLE SHEET	TS NO. 2077B	SHEET NO.
CHECKED BY: K. RINIKER	S.H.A. NO. M081517I		
SCALE: NTS	COUNTY: MONTGOMERY	T.I.M.S. NO. E905	87 OF 136
DATE: MARCH 2003	LOG MILE: 15058603.86		