

PROJECT DESCRIPTION

GENERAL

THIS PROJECT INVOLVES RE-CONSTRUCTION OF TRAFFIC SIGNAL TO PROVIDE LEFT-TURN LANES ALONG EASTBOUND AND WESTBOUND MD 26, AND ADD EXCLUSIVE/PERMISSIVE LEFT-TURN PHASING FOR EASTBOUND AND WESTBOUND MD 26 ALONG WITH VIDEO DETECTION AT THE INTERSECTION OF MD 26 AT KLEE MILL ROAD/OLD LIBERTY ROAD IN CARROLL COUNTY.

MD 26 IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION.

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 6 NEMA PHASES WITH VIDEO DETECTION INTERFACE MODULES, INTERSECTION MONITOR WITH PHONE DROP, AND ASSOCIATED HARNESSES HOUSED IN A NEMA SIZE 6 BASE MOUNTED CABINET.

EB/WB LEFT TURNS FROM MD 26 WILL OPERATE AS EXCLUSIVE/PERMISSIVE.

SPECIAL NOTES

1. THE FOLLOWING CONTACT PERSONS FOR DISTRICT #7 ARE AS FOLLOWS:

PROJECT CONTACTS:

MR. JOHN CONCANNON, ASSISTANT DISTRICT ENGINEER - TRAFFIC
PHONE: (301) 624-8140

MR. RAYMOND JOHNSON, ASSISTANT DISTRICT ENGINEER- MAINTENANCE
PHONE: (301) 624-8105

MS. ANDREA ABEND, DISTRICT UTILITY ENGINEER -
PHONE: (301) 624-8115

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

MR. ED RODENHIZER, SIGNAL SHOP SUPERVISOR
PHONE: (410) 787-7652

BALTIMORE GAS & ELECTRIC - 7317 PARKWAY DRIVE SOUTH, HANOVER, MD - 21076
PHONE: (410) 859-9062

2. MAINTENANCE OF TRAFFIC INCLUDING LANE CLOSURE HOURS SHALL BE HANDLED ACCORDING TO MOT PLAN SHEET AND SPECIFICATIONS (CATEGORY 100) OF THIS PROJECT.

EQUIPMENT LIST "A"

A. EQUIPMENT TO BE SUPPLIED BY THE ADMINISTRATION.

CATEGORY CODE NO.	DESCRIPTION	UNITS	QUANTITY
971017	EIGHT PHASE (FULLY ACTUATED) CONTROLLER AND CABINET- BASE MOUNT	EA	1.0
973023	SHEET ALUMINUM SIGNS	SF	106.0
	1 EA R3-5(R) (30"x36")	SF	8.0
	2 EA ASSEMBLIES (24"x51")	SF	17.0
	2 EA ASSEMBLIES (36"x75")	SF	38.0
	4 EA D-3(1) DOUBLE FACED (96"x16")	SF	43.0
900000	VIDEO DETECTION INTERFACE EQUIPMENT-1-4 CAMERAS	EA	1.0
963010	4 CHANNEL LOOP DETECTOR AMPLIFIER, RACK MOUNT	EA	1.0

EQUIPMENT LIST "B"

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

CATEGORY CODE NO.	DESCRIPTION	UNITS	QUANTITY
203030	TEST PIT EXCAVATION	CY	2.0
585625	24 INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKINGS	LF	98.0
801004	CONCRETE FOR SIGNAL FOUNDATION	CY	11.0
805115	3 INCH SCHEDULE 80 RIGID PVC CONDUIT-BORED	LF	305.0 190.0
805118	4 INCH SCHEDULE 80 RIGID PVC CONDUIT-BORED	LF	173.0 308.0
805125	2 INCH SCHEDULE 80 RIGID PVC CONDUIT-TRENCHED	LF	101.0 132.0
805135	3 INCH SCHEDULE 80 RIGID PVC CONDUIT-TRENCHED	LF	301.0 468.0
805140	4 INCH SCHEDULE 80 RIGID PVC CONDUIT-TRENCHED	LF	54.0 121.0
807202	METERED SERVICE PEDESTAL	EA	1.0
810601	NON INVASIVE DETECTOR, 500 FOOT LEAD IN CABLE	EA	3.0
810605	NON INVASIVE DETECTOR, 1000 FOOT LEAD-IN CABLE	EA	1.0
811001	FURNISH AND INSTALL ELECTRICAL HANDHOLE	EA	12.0
813015	INSTALL OVERHEAD SIGN	SF	106.0
816001	VIDEO DETECTION CAMERA	EA	4.0
816005	CONTROL CABLE, 250 FOOT, VIDEO DETECTION CAMERA TO CONTROLLER	EA	4.0
818030	STEEL POLE WITH A SINGLE 38 FOOT MAST ARM	EA	1.0
818036	STEEL POLE WITH A SINGLE 50 FOOT MAST ARM	EA	1.0
818050	STEEL POLE WITH TWIN 50 FOOT AND 60 FOOT MAST ARMS	EA	1.0
831010	250 WATT HIGH PRESSURE SODIUM LAMP AND LUMINAIRE	EA	2.0
832020	BARE COPPER GROUND WIRE, NO 6 AWG	LF	250.0
837001	GROUND ROD - 3/4 INCH DIAMETER X 10 FOOT LENGTH	EA	4.0
860284	12 INCH LED VEHICULAR TRAFFIC SIGNAL HEAD SECTION	EA	41.0
861107	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)	LF	180.0
861108	ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)	LF	920.0
861116	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 12 AWG)	LF	330.0
866104	20 FOOT LIGHTING ARM ON SIGNAL STRUCTURE	EA	2.0
860296	REMOVE AND DISPOSE OF LIGHTING STRUCTURE	EA	1.0
800000	8 INCH LED VEHICULAR TRAFFIC SIGNAL HEAD SECTION	EA	6.0
800000	REMOVE & DISPOSE OF EX. MATERIALS & EQUIPMENT	LS	1.0

EQUIPMENT LIST "C"

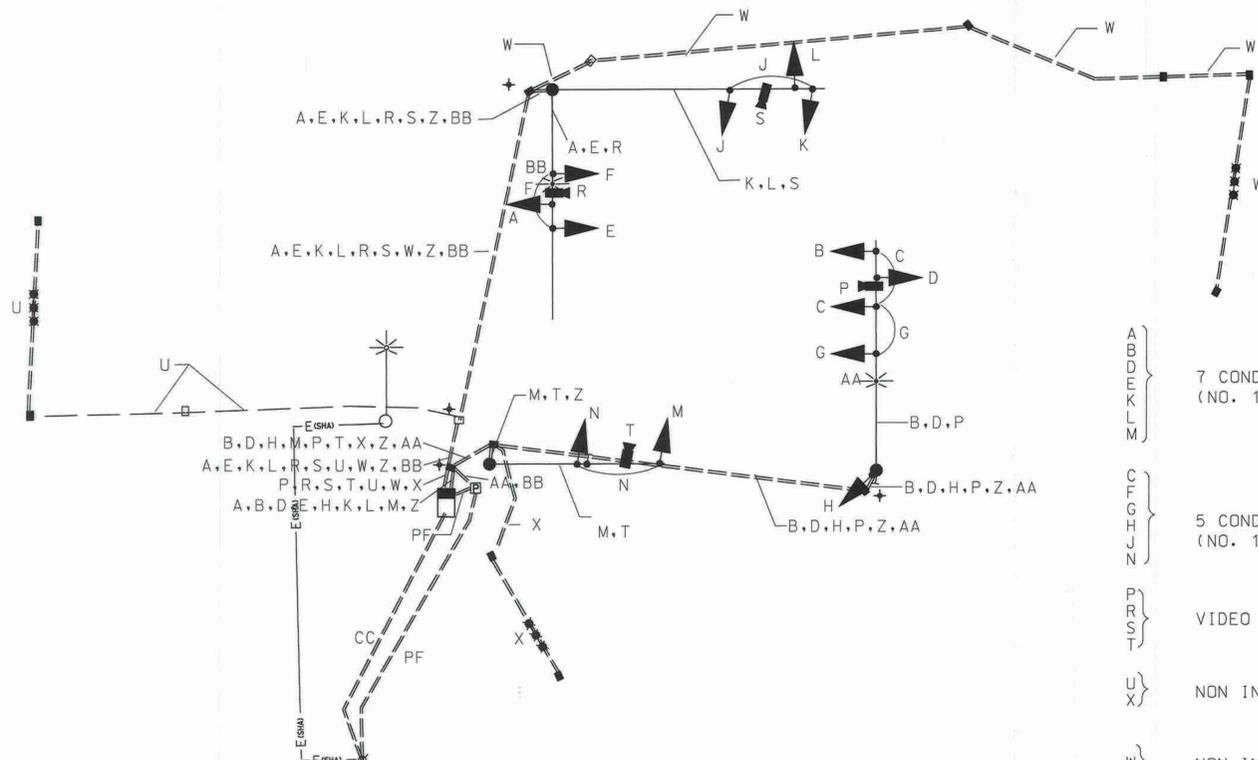
C. MATERIALS TO BE REMOVED BY THE CONTRACTOR.

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

CATEGORY CODE NO.	DESCRIPTION	UNITS	QUANTITY
900000	EXISTING CONTROLLER AND CABINET	EA	1.0

WIRING DIAGRAM

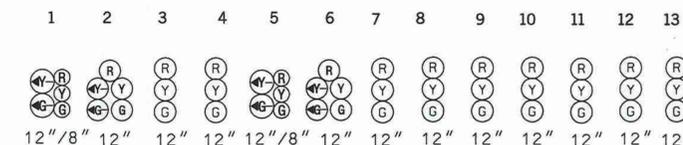
NOTE: MD 26 IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION



KEY

- A B D E K L M } 7 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
- C F G H J N } 5 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
- P R S T } VIDEO DETECTION CABLE (500 FT CONTROL CABLE)
- U X } NON INVASIVE LOOP (500 FT LEAD IN CABLE)
- W } NON INVASIVE LOOP (1000 FT LEAD IN CABLE)
- PF } POWER FEED 3 WIRE 1 CONDUCTOR (NO. 4 AWG)
- + } GROUND ROD
- Z } 1 CONDUCTOR STRANDED COPPER GROUND WIRE (NO. 6 AWG)
- AA } 2 CONDUCTOR ELECTRICAL CABLE (NO. 12 AWG), TC

PHASE CHART



	1	2	3	4	5	6	7	8	9	10	11	12	13	
PHASE 1 AND 5	←G/R	←G/R	R	R	←G/R	←G/R	R	R	R	R	R	R	R	↕
1 AND 5 CHANGE	←Y/R	←Y/R	R	R	←Y/R	←Y/R	R	R	R	R	R	R	R	↕
PHASE 1 AND 6	←G/G	←G/G	G	G	R	R	R	R	R	R	R	R	R	↕
1 AND 6 CHANGE	←Y/G	←Y/G	Y	Y	R	R	R	R	R	R	R	R	R	↕
PHASE 2 AND 5	R	R	R	R	←G/G	←G/G	G	R	R	R	R	R	R	↕
2 AND 5 CHANGE	R	R	R	R	←Y/G	←Y/G	Y	R	R	R	R	R	R	↕
PHASE 2 AND 6	G	G	G	G	G	G	G	R	R	R	R	R	R	↕
2 AND 6 CHANGE	Y	Y	Y	Y	Y	Y	Y	R	R	R	R	R	R	↕
PHASE 4 AND 8	R	R	R	R	R	R	R	G	G	G	G	G	G	↕
4 AND 8 CHANGE	R	R	R	R	R	R	R	Y	Y	Y	Y	Y	Y	↕
FLASHING	FL/Y	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	↕						

SHA STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION
MD 26 AT KLEE MILL RD /MD 850 (OLD LIBERTY RD)

REVISIONS	GENERAL INFORMATION SHEET
1 GREENLINE NO. 1 ON FILE TEDD APPROVAL	SCALE: NTS ADVERTISED DATE: 07-19-88 CONTRACT NO.: CL3145168
1 REDLINE NO. 1 - 01/04/2010 TEDD APPROVAL	DESIGNED BY: DKS COUNTY: CARROLL DRAWN BY: DKS LOGMILE: 06002607.19 CHECKED BY: TCC TMS NO.: J071 F.A.P. NO.: TOD NO.:
	TS NO. 4759C/G1 DRAWING SG - 02 OF 2 SHEET NO. 77 OF 80



BY: syoung2