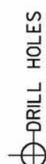
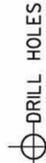


BORDER REV. DATE: JUN 11, 2004



BY: USERNAME

PROJECT DESCRIPTION

GENERAL

THIS PROJECT INVOLVES THE INSTALLATION OF A NEW TRAFFIC SIGNAL AT MD 2-4 AND SOUTHERN CONNECTOR BLVD. IN CALVERT COUNTY.

INTERSECTION OPERATION

A NEW BASE MOUNTED CABINET AND CONTROLLER SHALL BE INSTALLED AT THIS LOCATION. THE INTERSECTION WILL OPERATE IN A FULLY ACTUATED MODE USING 3 NEMA PHASES. PRIOR TO COMPLETION OF THIS PROJECT THE CONTRACTOR SHALL NOTIFY MR. ROBERT SNYDER OF SHA AT 410-787-7631. TO ARRANGE FOR THE PHONE LINE INSTALLATION. THE CONTRACTOR IS TO PROVIDE MR. SNYDER WITH THE NEAREST STREET ADDRESS, ZIP CODE AND TELEPHONE NUMBER.

SPECIAL NOTES

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

PROJECT CONTACTS:

MR. GREG WELKER, DISTRICT ENGINEER
PHONE: (410) 841-1001

MS. KIMBERLY TRAN, ASSISTANT DISTRICT ENGINEER - TRAFFIC
PHONE: (410) 841-1019

MR. JOHN S. MAYS, UTILITY ENGINEER
PHONE: (410) 841-1039

MR. MARK COBLENTZ, ASSISTANT DISTRICT ENGINEER-CONSTRUCTION
PHONE: (410) 841-1031

MR. CHUCK E. GEORGE, ASSISTANT DISTRICT ENGINEER - MAINTENANCE
PHONE: (410) 841-1013

EQUIPMENT LIST

A. EQUIPMENT TO BE SUPPLIED BY THE ADMINISTRATION.

CATEGORY CODE NO.	DESCRIPTION	UNITS	QUANTITY
900000	BASE MOUNTED (SIZE 6) CABINET AND CONTROLLER (MSHA SPECIFICATION)	EA	1
973023	VIDEO DETECTION INTERFACE EQUIPMENT FOR 1-4 CAMERAS	SF	95
	SHEET ALUMINUM SIGNS		
	R3-3(2)(30"x30") MAST ARM MOUNT	EA	1
	R3-5(L)(30"x36") MAST ARM MOUNT	EA	1
	R4-7b(24"x30") POLE MOUNT	EA	1
	D-3(1)(VAR.X16") MAST ARM MOUNT, DUAL FACE	EA	1
	D95-25(24"x24") GROUND MOUNT	EA	1
	W3-3 (48"x48") GROUND MOUNT	EA	1
	D-3(2)(72"x24") GROUND MOUNT	EA	1
	SHIELD ASSEMBLY (48"x75") POLE MOUNT	EA	1
	SHIELD ASSEMBLY (30"x51") GROUND MOUNT	EA	1

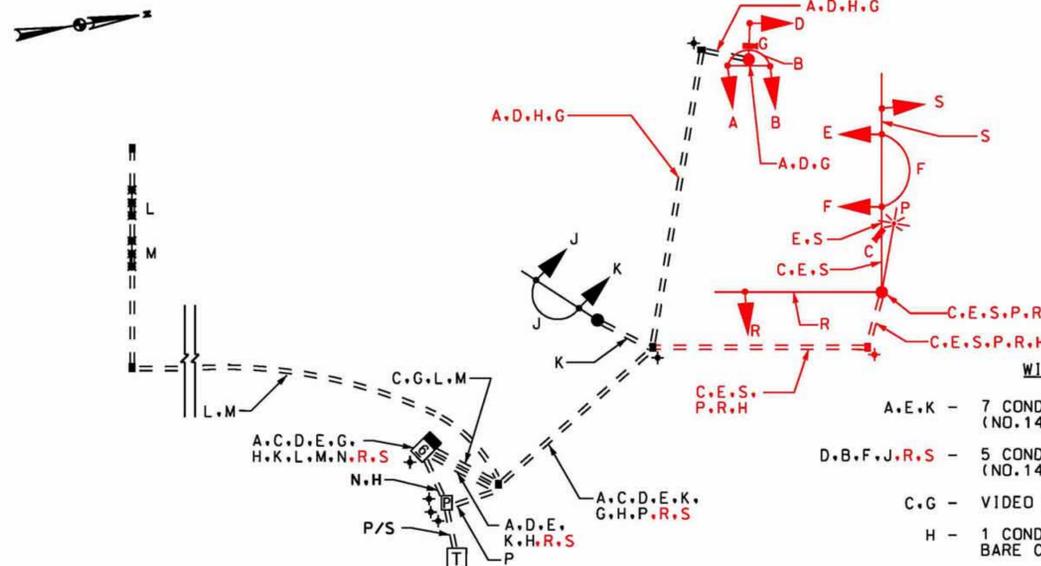
B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR.

CATEGORY CODE NO.	DESCRIPTION	UNITS	QUANTITY
203030	TEST PIT EXCAVATION	CY	2 3 [2]
800000	CONTROL CABLE 300 FT. VIDEO DETECTION CAMERA TO CONTROLLER	EA	2
801004	CONCRETE FOR SIGNAL FOUNDATION	CY	8 9 [2]
801104	WOOD SIGN SUPPORT 4 IN. X 4 IN.	LF	34
801106	WOOD SIGN SUPPORT 4 IN. X 6 IN.	LF	46 86 [2]
801607	INSTALL SHEET ALUMINUM	SF	65
802501	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE	EA	180-250 [2]
805115	3 IN. SCHEDULE 80 PVC CONDUIT - BORED	LF	60
805118	4 IN. SCHEDULE 80 PVC CONDUIT - BORED	LF	90-150 [2]
805125	2 IN. SCHEDULE 80 PVC CONDUIT - TRENCHED	LF	840
805135	3 IN. SCHEDULE 80 PVC CONDUIT - TRENCHED	LF	460
805140	4 IN. SCHEDULE 80 PVC CONDUIT - TRENCHED	LF	140-160 [2]
807202	METERED SERVICE PEDESTAL - BASE MOUNTED	EA	1
810601	NON-INVASIVE DETECTOR, 500 FOOT LEAD IN CABLE	EA	2 [2]
811001	ELECTRICAL HANDHOLE	EA	10-11 [2]
813015	INSTALL OVERHEAD SIGN	SF	30
816001	VIDEO DETECTION CAMERA	EA	2
818021	STEEL POLE WITH TWIN 50 FOOT MAST ARMS	EA	1
818036	STEEL POLE WITH A SINGLE 50 FOOT MAST ARM	EA	1
2 818006	20 FOOT BREAKAWAY PEDESTAL POLE	EA	1 [2]
831010	250 WATT HIGH PRESSURE SODIUM LAMP AND LUMINAIRE	EA	1
837001	GROUND ROD - 3/4 IN. DIA. X 10 FT. LENGTH	EA	6 7 [2]
860284	12 INCH LED VEHICULAR TRAFFIC SIGNAL HEAD SECTION	LF	27 27 [2]
860292	CUT, CLEAN, GALVANIZE AND CAP TRAFFIC SIGNAL STRUCTURE	EA	2 3 [2]
861107	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)	LF	250-660 [2]
861108	ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)	LF	520-500 [2]
861116	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 12 AWG)	LF	200-185 [2]
861117	ELECTRICAL CABLE - 2 WIRE (NO. 4 AWG)	LF	20
866102	15 FOOT LIGHTING ARM ON SIGNAL STRUCTURE	EA	1
871202	INSTALL CONTROLLER AND CABINET- BASE MOUNT	EA	1
885620	24 INCH HEAT APPLIED WHITE PERM PREF THERM MARKINGS	LF	60 [2]
800000	TELECOMMUNICATIONS SERVICE PEDESTAL	EA	1 [2]

C. EQUIPMENT TO BE REMOVED BY THE CONTRACTOR AND DELIVERED TO THE STATE HIGHWAY ADMINISTRATION, 7491 CONNELLY DRIVE, HANDOVER, MARYLAND 21076. THE CABINET AND ALL OTHER MATERIALS TO BE REMOVED BY THE CONTRACTOR SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

CATEGORY CODE NO.	DESCRIPTION	UNITS	QUANTITY
	NONE		

WIRING DIAGRAM



WIRING KEY

- A.E.K - 7 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG) FOR TRAFFIC SIGNALS
- D.B.F., J., R., S - 5 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG) FOR TRAFFIC SIGNALS
- C.G - VIDEO DETECTION CABLE
- H - 1 CONDUCTOR (NO. 6 AWG) STRANDED BARE COPPER GROUND WIRE
- L.M - NON-INVASIVE PROBE 500 FOOT LEAD IN CABLE
- N - 3 WIRE, 1 CONDUCTOR NO. 4 AWG
- P - 2 CONDUCTOR ELECTRICAL CABLE (NO. 12 AWG) TRAY CABLE
- P/S - POWER SERVICE, BY SMECO
- + - GROUND ROD

PROPOSED 20 FT. PEDESTAL LAYOUT



PHASE CHART

	1	2	3	4	5	6	7	
	(R)	(R)	(R)	(R)	(R)	(R)	(R)	
	(Y)	(Y)	(Y)	(Y)	(Y)	(Y)	(Y)	
	(G)	(G)	(G)	(G)	(G)	(G)	(G)	
PHASE 4	R	R	R	R	G	G		↑
4 CHANGE	R	R	R	R	Y	Y		↑
PHASE 5	R	R	R	R	R	R		↓
5 CHANGE	R	R	R	R	R	R		↓
PHASE 6	G	G	R	R	R	R		↓
6 CHANGE	Y	Y	R	R	R	R		↓
FLASHING OPERATION	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R		↓

2 REDLINE REVISION NO. 2
MARCH 18, 2008
TEDD APPROVAL *W. Hand* 3/27/08

ADDENDUM NO. 1
APRIL, 2007

SABRA, WANG & ASSOCIATES, INC.
1604 JOH AVENUE
SUITE 100
BALTIMORE, MD 21287
(410) 737-8584
WWW.SABRA-WANG.COM



STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION
MD 24 AT
SOUTHERN CONNECTOR BLVD
LUSBY, MARYLAND

GENERAL INFORMATION SHEET

SCALE NONE DATE FEBRUARY, 2007 CONTRACT NO. CA3255170

DESIGNED BY P. SUNKARI COUNTY CALVERT
DRAWN BY P. SUNKARI LOGMILE 2.18 to 2.83
CHECKED BY K. RINKER TMS NO.
FAP NO. TOD NO.

TS NO. 4554 DRAWING PSG OF N001 SHEET NO. 91 OF

PLOTTED: 04/27/08
FILE: 0118