PROJECT DESCRIPTION

GENERAL

THIS PROJECT INVOLVES THE CONSTRUCTION OF A TEMPORARY TRAFFIC SIGNAL AT THE INTERSECTION OF MD 273 AT MD 213 IN CECIL 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 4 NEMA PHASES. THE SIDE STREETS SHALL OPERATE USING A SPLIT PHASE MODE.

SPECIAL NOTES

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

PROJECT CONTACTS:

MR. RICHARD LINDSAY, ASSISTANT DISTRICT ENGINEER - TRAFFIC
PHONE: (410) 810-3210
MR. JEFF AMORIELLA, ASSISTANT DISTRICT ENGINEER - CONSTRUCTION
PHONE: (410) 810-3270
MR. TERRY O. WRIGHT, ASSISTANT DISTRICT ENGINEER - MAINTENANCE
PHONE: (410) 810-3250
MR. BARRY CLOTHIER, UTILITY ENGINEER
PHONE: (410) 810-3275
MR. ED RODENHIZER, SIGNAL SHOP[CHIEF
PHONE: (410) 787-7652
MR. SONNY BAILY, SIGN SHOP CHIEF
PHONE: (410) 787-7676
MR. RICHARD L. DAFF, SR. CHIEF TRAFFIC OPERATIONS DIVISION
PHONE: (410) 787-7630

EQUIPMENT LIST

A. EQUIPMENT TO BE SUPPLIED BY THE ADMINISTRATION.

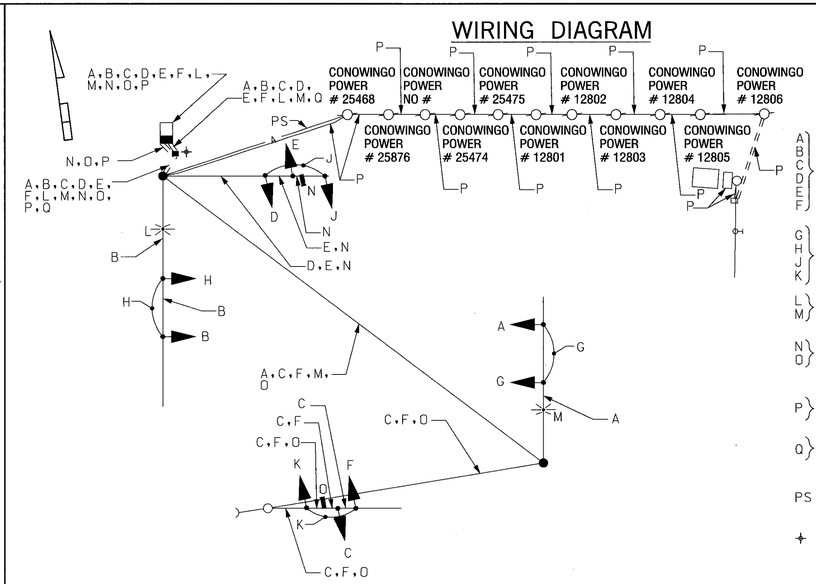
CATEGORY CODE NO.	DESCRIPTION	UNITS	QUANTITY
900000	BASE MOUNTED (SIZE-6) CABINET WITH ECONOLITE POWER SUPPLY FOR RACK MOUNTED DETECTION AND VIDEO DETECTION INTERFACE EQUIPMENT.	EA	1
973023	FLAT SHEET ALUMINUM SIGNS CONSISTING OF:	SF	81
	D-3(2) (VAR.x16") MAST ARM MOUNT (DUAL FACE)	EA	2
	D-3(1) (VAR.x 16") MAST ARM MOUNT	EA	4

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

CATEGORY CODE NO.	DESCRIPTION	UNITS	QUANTITY
203030	TEST PIT EXCAVATION	CY	2
585462	REMOVAL OF EXISTING PERMANENT PAVEMENT LINE MARKINGS - ANY WIDTH	LF	110
585624	24 INCH HEAT APPL. WHITE PERMANENT PREFORMED THERMO. PAVEMENT MARKING	LF	55
800000	GUY ANCHOR ASSEMBLY	EA	1
801004	CONCRETE FOR SIGNAL FOUNDATIONS	CY	11
805050	WEATHER HEAD, 3 INCH	EA	2
805135	3 INCH SCHED. 80 PVC CONDUIT-TRENCHED	LF	55
805140	4 INCH SCHED. 80 PVC CONDUIT-TRENCHED	LF	30
807400	ELECTRICAL UTILITY SERVICE EQUIPMENT 120/240 VOLTS, 60 AMPS	EA	1
810010	CABLE 1-CONDUCTOR, NO. 4 AWG-THHN/THWN	LF	340
811001	FURNISH AND INSTALL ELECTRICAL HANDHOLE	EA	1
813015	INSTALL OVERHEAD SIGN	SF	81
816001	VIDEO DETECTION CAMERA	EA	2
816005	CONTROL CABLE, 250 FOOT VIDEO DETECTION CAMERA TO CONTROLLER	EA	1
816010	CONTROL CABLE, 500 FOOT VIDEO DETECTION CAMERA TO CONTROLLER	EA	1
818036	STEEL POLE WITH A SINGLE 50 FOOT MAST ARM	EA	1
818051	STEEL POLE WITH TWIN 50 FOOT AND 70 FOOT MAST ARMS	EA	1
822001	12-PAIR COMMUNICATION CABLE, SELF SUPPORTING (OVERHEAD)	LF	1485
831010	250 WATT HPS LAMP AND LUMINAIRE	EA	2
833060	3 INCH DIAMETER POLYVINYL CHLORIDE CONDUIT, SCHEDULE 80 RISER	LF	50
837001	GROUND ROD - 3/4 INCH DIA. X 10 FOOT LENGTH	EA	1
860270	8 INCH VEHICULAR TRAFFIC SIGNAL HEAD SECTION	EA	6
860272	12 INCH VEHICULAR TRAFFIC SIGNAL HEAD SECTION	EA	28
861107	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)	LF	90
861108	ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)	LF	1385
861116	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 12 AWG)	LF	260
866103	15 FOOT LIGHTING ARM ON SIGNAL STRUCTURE	EA	2
869102	STEEL SPAN WIRE - 3/8 INCH DIAMETER	LF	250
871202	INSTALL CONTROLLER AND CABINET - BASE MOUNT	EA	1

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

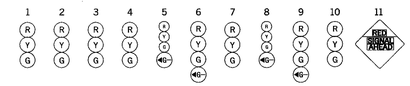
WIRING DIAGRAM



KEY

A B C D E F	7 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
G H J K	5 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
L M	2 CONDUCTOR ELECTRICAL CABLE (NO. 12 AWG) TRAY CABLE
N O	VIDEO DETECTION CABLE
P	12 PAIR COMMUNICATION CABLE
Q	1 CONDUCTOR (NO. 6 AWG) STRANDED COPPER GROUND WIRE
PS	POWER SERVICE 1 CONDUCTOR, (NO. 4 AWG THHN/THWN)
⏚	GROUND ROD

PHASE CHART



	1	2	3	4	5	6	7	8	9	10	11
PHASE 2 AND 6	G	G	G	G	R	R	R	R	R	R	DARK/RED SIGNAL AHEAD
2 AND 6 CHANGE	Y	Y	Y	Y	R	R	R	R	R	R	FL/RED SIGNAL AHEAD
PHASE 3	R	R	R	R	R	R	R	G	G	G	FL/RED SIGNAL AHEAD
3 CHANGE	R	R	R	R	R	R	R	Y	Y	Y	FL/RED SIGNAL AHEAD
PHASE 4	R	R	R	R	G	G	G	R	R	R	FL/RED SIGNAL AHEAD
4 CHANGE	R	R	R	R	Y	Y	Y	R	R	R	FL/RED SIGNAL AHEAD
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	DARK

M.O.T. PHASE 1

SABRA, WANG & ASSOCIATES, INC.
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MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION
GENERAL INFORMATION PLAN

MD 273 (TELEGRAPH ROAD) AT MD 213 (LEWISVILLE /SINGERLY ROAD)

DRAWN BY: S. SMITH	F.A.P. NO.		TS NO. TS-838 E	SHEET NO.	
CHECKED BY: S. RENZI	S.H.A. NO.	CE4415176			
SCALE: 1" = 20'	COUNTY:	CECIL	T.I.M.S. NO. F246	24 OF 28	
DATE: AUGUST, 2004	LOG MILE:	07021326.20			

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DATE:16-Jul-03 13:09