PROJECT DESCRIPTION
GENERAL

THIS PORTION OF THE PROJECT INVOLVES THE INSTALLATION OF A TEMPORARY TRAFFIC SIGNAL AT THE INTERSECTION OF MD 650 (NEW HAMPSHIRE AVENUE) AND MAHAN ROAD/ SCHINDLER DRIVE 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 6 NEMA PHASES.

SPECIAL NOTES

1. THE FOLLOWING CONTACT PERSONS FOR THIS PROJECT ARE:

PROJECT CONTACTS:

MR. LEE STRAKLOFF, ASSISTANT DISTRICT ENGINEER-TRAFFIC
PHONE: (301) 513-7300
MR. ~~RALEIGH MEDLEY~~, ASSISTANT DISTRICT ENGINEER-MAINTENANCE (WAYNE MOWDY)
PHONE: (301) 513-7300
MR. DENNIS MCMAHON, ASSIATANT DISTRICT ENGINEER-CONSTRUCTION
PHONE (301) 513-7336
MR. AUGIE 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) 777-2190

2. MAINTENANCE OF TRAFFIC SHOULD BE HANDLED BY THE CONTRACTOR USING MDSHA 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 SPECIFICATION) WITH ECONOLITE ASC II 2100 CONTROLLER, SSM 12 E CONFLICT MONITOR, VIDEO INTERFACE EQUIPMENT, LAU PANEL AND RELAY PACKAGE WIRED TO MONTGOMERY COUNTY SPECIFICATIONS.	EA	1	
973023	FLAT SHEET ALUMINUM SIGNS CONSISTING OF:	SF	~~205~~ 213	
	R10-12 (36"x42") MAST ARM MOUNT	EA	2	
	R10-4 (MOD) (12"X9")	EA	~~1~~ 4	
	R3-6 (30"x36")	EA	~~1~~ 2	
	R3-5(R) (30"x36")	EA	1	
	~~R3-6 (30"x36")~~	~~EA~~	~~1~~	
	D-3(1) (16" x VAR.)	EA	~~4~~ 7	
	~~D-3(1) (32"x VAR.)~~	~~EA~~	~~4~~	
	GUIDE SHIELD ASSEMBLY (30"X51")	EA	2	
	GUIDE SHIELD ASSEMBLY (48"X75")	EA	2	

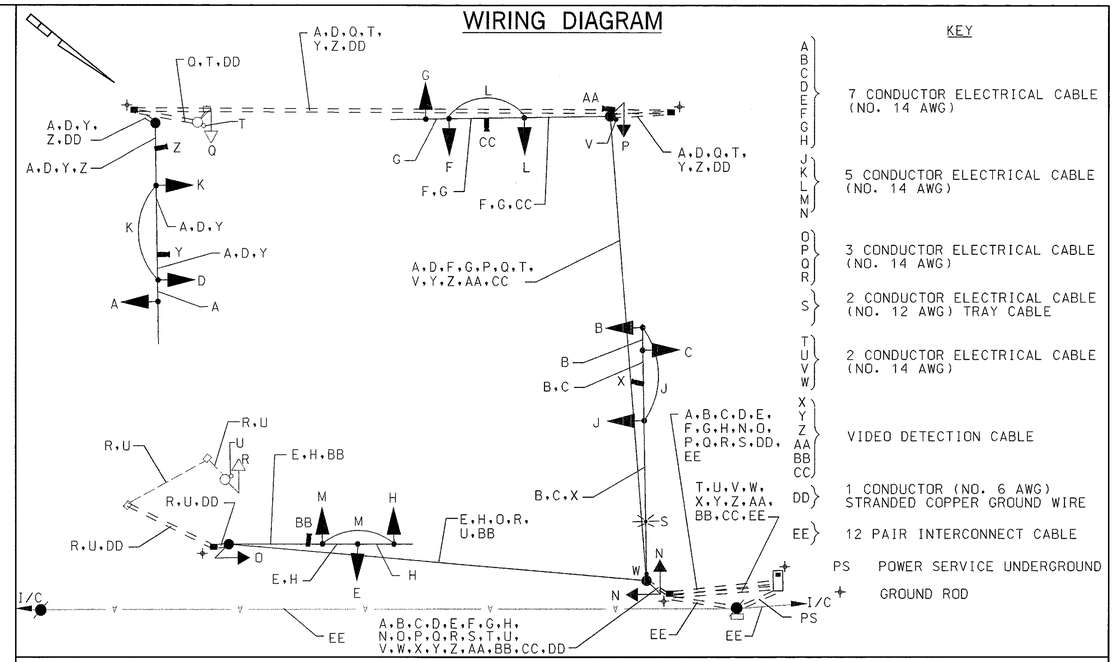
B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR.

CATEGORY CODE NO.	DESCRIPTION	UNITS	QUANTITY	
203030	TEST PIT EXCAVATION	CY	4	
585620	12" WHITE HEAT APPL. THERMO. PAVEMENT MARK	LF	100	
585624	24" WHITE HEAT APPL. THERMO. PAVEMENT MARK.	LF	50	
655104	INSTALL 4 IN. CONCRETE SIDEWALK	SF	1320	
800000	REMOVE AND DISPOSE OF EXISTING EQUIPMENT	LS	1	
801004	CONCRETE FOR SIGNAL FOUNDATIONS	CY	~~21~~	17
~~805125~~	~~2" SCHED. 80 PVC CONDUIT - TRENCHED~~	~~LF~~	~~40~~	
805135	3" SCHED. 80 PVC CONDUIT - TRENCHED	LF	~~200~~	60
805140	4" SCHED. 80 PVC CONDUIT - TRENCHED	LF	~~30~~	110
805150	3 IN. SCHED. 80 PVC CONDUIT - SLOTTED	LF	35	
807400	ELECTRICAL UTILITY SERVICE EQUIPMENT	EA	1	
811001	HANDHOLE	EA	~~3~~	4
813015	INSTALL OVERHEAD SIGN	SF	~~205~~	213
816001	VIDEO DETECTION CAMERA	EA	6	
816005	CONTROL CABLE FROM CAMERA TO CONTROLLER (250' LENGTH CABLE)	EA	2	
816010	CONTROL CABLE FROM CAMERA TO CONTROLLER (500' LENGTH CABLE)	EA	~~6~~	4
~~818008~~	~~14" X 32' STRAIN POLE (2 PLY)~~	~~EA~~	~~4~~	
818036	STEEL POLE WITH A SIGNLE 50 FOOT MAST ARM	EA	1	
818041	STEEL POLE WITH A SIGNLE 60 FOOT MAST ARM	EA	2	
818052	STEEL POLE WITH A SIGNLE 70 FOOT MAST ARM	EA	1	
831010	250 WATT HPS LAMP AND LUMINAIRE	EA	~~2~~	1
832020	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE	LF	~~150~~	380
837001	GROUND ROD - 3/4" X 10'	EA	~~4~~	5
860272	12" SIGNAL HEAD SECTION	EA	~~48~~	28
860278	12" PEDESTRIAN SIGNAL HEAD SECTION POLE MOUNT	EA	~~2~~	4
860292	CUT CLEAN AND GALVANIZE TRAFFIC SIGNAL STRUCTURE	EA	1	
861105	2-COND.. NO. 14 AWG ELECT. CABLE	LF	~~700~~	1520
861106	3-COND.. NO. 14 AWG ELECT. CABLE	LF	~~700~~	1410
861107	5-COND.. NO. 14 AWG ELECT. CABLE	LF	~~275~~	280
861108	7-COND.. NO. 14 AWG ELECT. CABLE	LF	~~1680~~	2380
861116	2-COND.. NO. 12 AWG ELECT. CABLE	LF	~~250~~	185
861117	ELECTRICAL CABLE - 3 WIRE (NO. 4 AWG)	LF	~~70~~	255
865001	PUSHBUTTON AND SIGN	EA	~~1~~	2
866103	15' LIGHTING ARM	EA	~~3~~	1
869102	STEEL SPAN WIRE 3/8" DIA.	LF	~~800~~	275
871202	INSTALL CONTROLLER AND CABINET - BASE MT	EA	1	

C. MATERIALS TO BE REMOVED BY THE CONTRACTOR.

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

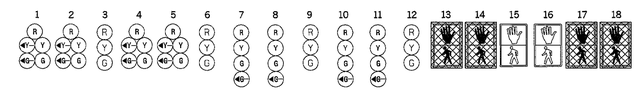
WIRING DIAGRAM



KEY

A B C D E F G H	7 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
J K L M N	5 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
O P Q R	3 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
S	2 CONDUCTOR ELECTRICAL CABLE (NO. 12 AWG) TRAY CABLE
T U V W	2 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
X Y Z AA BB CC	VIDEO DETECTION CABLE
DD	1 CONDUCTOR (NO. 6 AWG) STRANDED COPPER GROUND WIRE
EE	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	G	R	G	G	R	R	R	R	R	R	R			DW	DW		
1 AND 5 CHANGE TO 1 AND 6, 2 AND 5, OR 2 AND 6																		
PHASE 1 AND 6	~~GG~~	~~GG~~	G	R	R	R	R	R	R	R	R	R			DW	DW		
1 AND 6 CHANGE	~~YG~~	~~YG~~	Y	R	R	R	R	R	R	R	R	R			DW	DW		
PHASE 2 AND 5	R	R	R	~~GG~~	~~GG~~	G	R	R	R	R	R	R	B	B	DW	DW	B	B
2 AND 5 CHANGE	R	R	R	~~YG~~	~~YG~~	Y	R	R	R	R	R	R	A	A	DW	DW	A	A
PHASE 2 AND 6	G	G	G	G	G	G	R	R	R	R	R	R	G	G	DW	DW	G	G
2 AND 6 CHANGE	Y	Y	Y	Y	Y	Y	R	R	R	R	R	R	G	G	DW	DW	G	G
PHASE 3	R	R	R	R	R	R	G G	G G	G	R	R	R	E	E	DW	DW	E	E
3 CHANGE	R	R	R	R	R	R	Y	Y	Y	R	R	R	D	D	DW	DW	D	D
PHASE 3 ALT	R	R	R	R	R	R	G G	G G	G	R	R	R			WK	WK		
PED CLEARANCE	R	R	R	R	R	R	G G	G G	G	R	R	R			FL/DW	FL/DW		
3 ALT CHANGE	R	R	R	R	R	R	Y	Y	Y	R	R	R			DW	DW		
PHASE 4	R	R	R	R	R	R	R	R	R	G G	G G	G			DW	DW		
4 CHANGE	R	R	R	R	R	R	R	R	R	Y	Y	Y			DW	DW		
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R			DARK	DARK		

SG. 16

MAINTENANCE OF TRAFFIC PLAN – PHASE 2A

SABRA, WANG & ASSOCIATES, INC.
1504 JOH AVENUE
SUITE 160
BALTIMORE, MD 21227
(410) 737-6564
WWW.SABRA-WANG.COM

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

MD 650 (NEW HAMPSHIRE AVENUE) AND
MAHAN ROAD /SCHINDLER DRIVE

DRAWN BY:	S. SMITH	F.A.P. NO.	SEE TITLE SHEET	TS NO. 701B	SHEET NO.
CHECKED BY:	K. RINIKER	S.H.A. NO.	M0900517I		
SCALE:	1" = 20'	COUNTY:	MONTGOMERY	T.I.M.S. NO. E966	173 OF 223
DATE:	JUNE 2004	LOG MILE:	I5065002.04		

F:\E\70-99-51\public\dgns\signals\greenlinn\sgmo12a.dgn
DATE: 07-Jun-04 14:42