

**PROJECT DESCRIPTION**

**GENERAL**

THIS PROJECT INVOLVES THE CONSTRUCTION OF AN INTERSECTION CONTROL BEACON SIGNAL AT THE INTERSECTION OF U.S. 1 BUS. (BEL AIR ROAD) AND OLD JOPPA ROAD IN HARFORD COUNTY, MARYLAND. U.S. 1 BUS. (BEL AIR ROAD IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

**INTERSECTION OPERATION**

THE INTERSECTION WILL OPERATE WITH THE U.S. 1 BUS. (BEL AIR ROAD) APPROACHES FLASHING YELLOW AND THE OLD JOPPA ROAD APPROACH FLASHING RED.

**CONTROLLER REQUIREMENTS**

INSTALL A TWO-CIRCUIT FLASHER UNIT WITH PHOTO-CELL, DIMMER SWITCH AND INTERSECTION MONITOR WITH BATTERY BACKUP FOR PHONE DROP HOUSED IN A NEMA SIZE "6" BASE MOUNTED CABINET.

**PHONE DROP**

UPON COMPLETION OF THIS PROJECT, THE CONTRACTOR SHALL NOTIFY MR. ROBERT SNYDER OF SHA AT (410) 787-7635 TO ARRANGE FOR THE PHONE LINE INSTALLATION. THE CONTRACTOR IS TO PROVIDE MR. SNYDER THE NEAREST STREET ADDRESS, ZIP CODE, AND PHONE NUMBER.

**MAINTENANCE OF TRAFFIC**

THE FOLLOWING TRAFFIC CONTROL STANDARDS SHALL BE REFERENCED FOR THE PROJECT. ADDITIONAL TRAFFIC CONTROL STANDARDS MAYBE USED AS DIRECTED BY THE ENGINEER.

- STANDARD NO. MD-104.03-01 (SHOULDER WORK)
- STANDARD NO. MD-104.03-03 (LEFT LANE CLOSURE)
- STANDARD NO. MD-104.03-05 (RIGHT LANE CLOSURE)

**PROJECT CONTACTS**

THE CONTACT PERSONS FOR SHA ARE AS FOLLOWS:

MR. RANDALL SCOTT  
ASSISTANT DISTRICT ENGINEER - TRAFFIC  
PHONE: (410) 321-2781/2785

MR. MIKE PASQUARIELLO  
ASST. DISTRICT UTILITY ENGINEER  
PHONE: (410) 321-2841

MR. STEVE MARCISZEWSKI  
ASSISTANT DISTRICT ENGINEER - MAINTENANCE  
PHONE: (410) 321-2761

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

**EQUIPMENT LIST "A"**

A. EQUIPMENT TO BE SUPPLIED BY THE SHA

ITEM NO.	QUANTITY	DESCRIPTION
9086	1 EACH	TWO CIRCUIT FLASHER UNIT WITH PHOTOCELL, DIMMER SWITCH AND INTERSECTION MONITOR WITH BATTERY BACK-UP FOR PHONE DROP HOUSED IN A NEMA SIZE "6" BASE MOUNTED CABINET.
9571	23 S.F.	SHEET ALUMINUM SIGNS TO CONSIST OF : - 1 EACH D-3(1) SIGN (VARIABLE x 16 IN.) DUAL FACED - MAST ARM MOUNT - 1 EACH M95-2 SIGN - MAST ARM MOUNT

**EQUIPMENT LIST "C"**

NO EQUIPMENT TO BE REMOVED AND RETURNED TO SHA

**PHASE CHART**

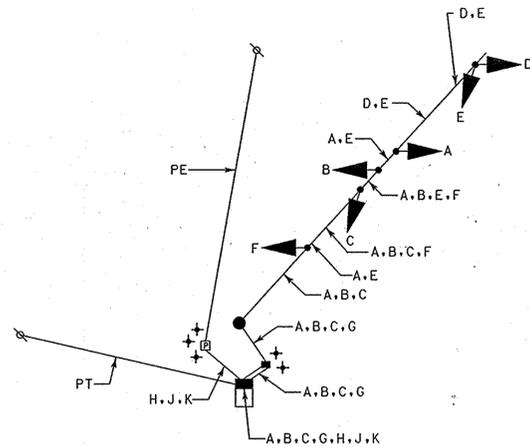
	1	2	3	4	5	6	7	8	
	(Y)	(Y)	(Y)	(Y)	(R)	(R)	(R)	(R)	
FLASHING OPERATION	FLY	FLY	FLY	FLY	FLR	FLR	FLR	FLR	↑ ↓

**EQUIPMENT LIST "B"**

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

ITEM NO.	QUANTITY	DESCRIPTION
1001	1 EACH	MAINTENANCE OF TRAFFIC
2002	1 C.Y.	TEST PIT EXCAVATION
5005	15 L.F.	24 INCH HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKINGS
8001	6 EACH	12 INCH LED SIGNAL HEAD SECTION
8018	1 EACH	MAST ARM POLE & 70 FT MAST ARM ANY 'T' DIMENSION
8033	95 L.F.	SCHEDULE 80 RIGID PVC CONDUIT UP TO 4 INCHES - SLOTTED
8034	95 L.F.	SCHEDULE 80 RIGID PVC CONDUIT UP TO 4 INCHES - TRENCHED
8038	23 S.F.	INSTALL OVERHEAD OR GROUND MOUNTED SIGN
8040	30 L.F.	NO. 6 A.W.G. STRANDED BARE COPPER GROUND WIRE
8042	1 EACH	METERED SERVICE PEDESTAL EMBEDDED
8044	65 L.F.	ELECTRICAL CABLE - 1 CONDUCTOR NO. 4 A.W.G - THHN/THWN
8046	1 EACH	FURNISH AND INSTALL ELECTRICAL HANDHOLE
8055	75 L.F.	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 A.W.G)
8056	265 L.F.	ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 A.W.G)
8064	1 EACH	INSTALL CONTROLLER AND CABINET - BASE MOUNT

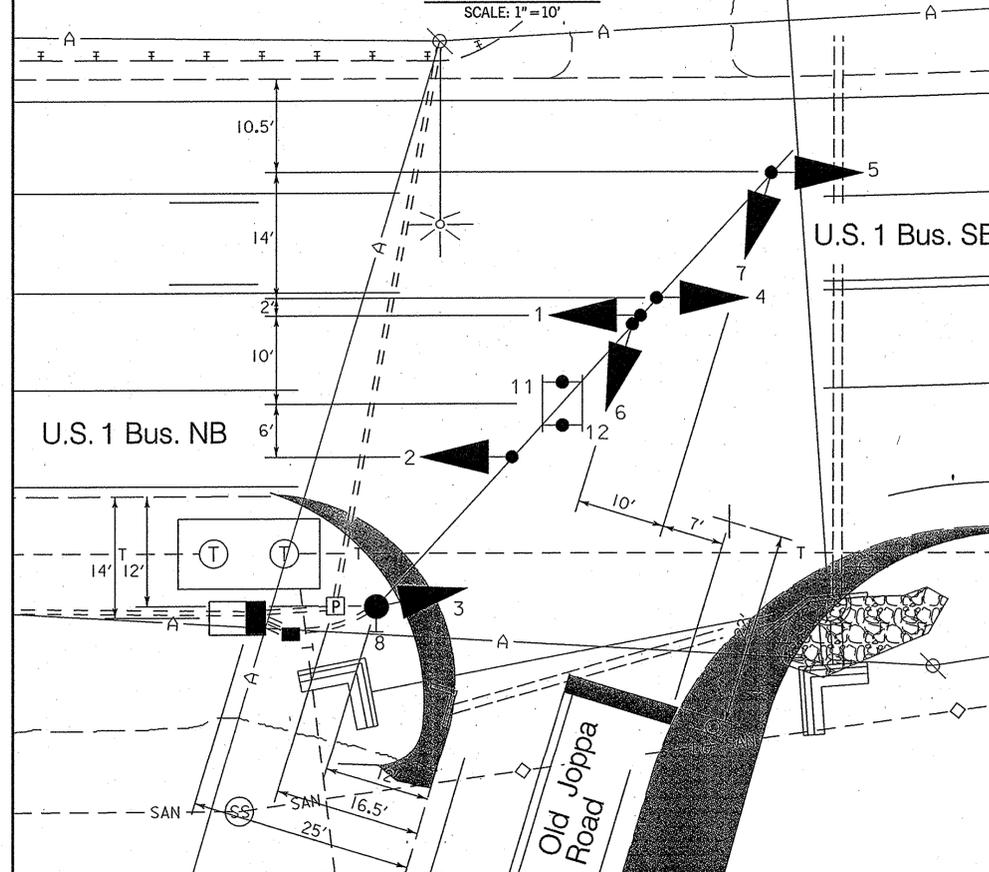
**WIRING DIAGRAM**



**WIRING KEY**

- A, B, C, D, L } 7-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
- E, F, G, H, I, J, K } 1-CONDUCTOR ELECTRICAL CABLE (NO. 4 A.W.G.)
- M } 5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
- N } STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)
- PT - PROPOSED UNDERGROUND TELEPHONE SERVICE
- PE - PROPOSED UNDERGROUND ELECTRICAL SERVICE
- + - 3/4 IN. X 10 FT. GROUND ROD

**DIMENSION DIAGRAM**



**SHA** STATE OF MARYLAND  
DEPARTMENT OF TRANSPORTATION  
STATE HIGHWAY ADMINISTRATION  
OFFICE OF TRAFFIC & SAFETY  
TRAFFIC ENGINEERING DESIGN DIVISION  
U.S. Bus. 1 (Belair Road) and Old Joppa Farm Road

**GENERAL INFORMATION SHEET**

SCALE	NONE	DATE	April 4, 2007	CONTRACT NO.	AT9125185
DESIGNED BY	S. Bloss	COUNTY	Harford		
DRAWN BY	S. Bloss	LOGMILE	1200181000.51		
CHECKED BY	N. Leary	TIMS NO.	1053		
FAP NO.		TOD NO.			
TS NO.	4573	DRAWING	- OF	SHEET NO.	2 OF 2

**WR&A**  
Whitman, Reardon and Associates, LLP  
Engineers, Architects and Planners  
801 South Caroline Street  
Baltimore, Maryland 21231  
410-235-3450

BY: bdonoway