

**PROJECT DESCRIPTION**

THIS PROJECT INVOLVES THE INSTALLATION OF INTERSECTION CONTROL BEACONS, STREET LIGHTING AND SIGNING AT THE INTERSECTION OF U.S. 15 AND HAYWARD ROAD IN FREDERICK COUNTY. IT IS ASSUMED THAT U.S. 15 RUNS IN A NORTH-SOUTH DIRECTION.

**INTERSECTION OPERATION**

A TWO CIRCUIT FLASHER WITH DIMMER SWITCH HOUSED IN A BASE MOUNTED FLASHER CABINET WILL BE INSTALLED AT THIS INTERSECTION. BEACONS 1 AND 2 WILL HAVE FLASHING YELLOW INDICATIONS.

**SPECIAL NOTE**

IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CONFIRM GEOMETRICS PRIOR TO PLACING SIGNAL EQUIPMENT.

UPON 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.

**CONTACT PERSONS FOR DISTRICT # 7 ARE AS FOLLOWS:**

MR. DAVE COYNE  
DISTRICT ENGINEER  
PHONE: (301) 624-8102

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

MR. JOHN CONCANNON  
ASSISTANT DISTRICT ENGINEER-TRAFFIC  
PHONE: (301) 624-8141

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

**CONTACT PERSONS FOR OOTS ARE AS FOLLOWS:**

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

MR. ROBERT SNYDER  
ASSISTANT DIVISION CHIEF  
TRAFFIC OPERATIONS  
410-787-7630

MR. ED RODENHIZER  
CHIEF, SIGNAL OPERATIONS  
410-787-7650

MR. EUGENE BAILEY  
CHIEF, SIGN OPERATIONS  
410-787-7676

**THE POWER COMPANY IS:**

ALLEGHENY POWER  
P.O. BOX 1392  
FAIRMONT, WV 26554  
(304) 367-3370

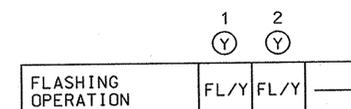
**EQUIPMENT LIST "B"**

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

ITEM NO.	DESCRIPTION	UNIT	QUANTITY
1001	MAINTENANCE OF TRAFFIC	EA	1
2002	TEST PIT EXCAVATION	CY	1
5007	F&I HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING ARROWS	EA	6
8001	F&I 12" LED SIGNAL HEAD SECTION	EA	2
8007	F & I ANY SIZE LIGHTING ARM ON SIGNAL POLE WITH 250 WATT HPS LAMP & LUMINAIRE	EA	1
8017	F&I MAST ARM POLE & 60 FT MAST ARM ANY 'T' DIMENSION	EA	1
8022	REMOVE & DISPOSE OF MATERIAL & EQUIPMENT (PER ASSIGNMENT)	EA	1
8035	F&I SCHEDULE 80 RIGID PVC CONDUIT UP TO 4 INCHES - TRENCHED	LF	370
8039	INSTALL OVERHEAD OR GROUND MOUNTED SIGN (INCLUDING ALL HARDWARE)	SF	22
8041	F&I NO. 6 AWG STRANDED BARE COPPER GROUND WIRE	LF	155
8043	F&I METERED SERVICE PEDESTAL EMBEDDED	EA	1
8045	F&I ELECTRICAL CABLE 1-CONDUCTOR NO. 4 AWG-THHN/THWN	LF	20
8056	F&I ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)	LF	25
8057	F&I ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)	LF	310
8058	F&I ELECTRICAL CABLE - 2 CONDUCTOR (NO. 12 AWG) TC	LF	530
8065	INSTALL CONTROLLER AND CABINET - BASE MOUNT	EA	1



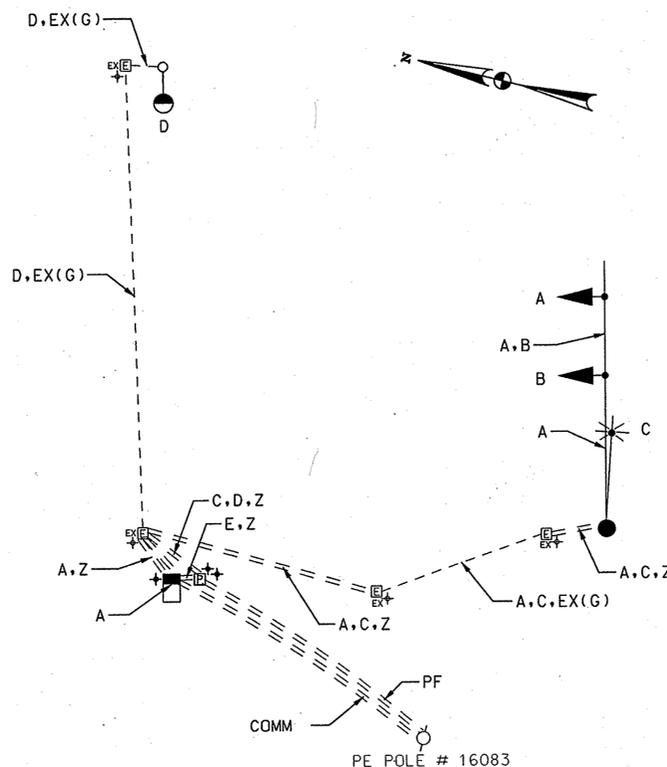
**PHASE CHART**



**EQUIPMENT LIST "C"**

ALL UNUSED EQUIPMENT AND MATERIAL REMOVED BY THE CONTRACTOR SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

**WIRING DIAGRAM**



**WIRING KEY**

- A ELECTRICAL CABLE 7-CONDUCTOR (NO. 14 A.W.G.)
- B ELECTRICAL CABLE 5-CONDUCTOR (NO. 14 A.W.G.)
- C,D ELECTRICAL CABLE 2-CONDUCTOR (NO. 12 A.W.G.)
- E ELECTRICAL CABLE 1-CONDUCTOR NO. 4 A.W.G. (3 RUNS)
- Z STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)
- PF UNDERGROUND POWER SERVICE TO BE INSTALLED BY ALLEGHANY POWER
- COMM TELEPHONE CABLE (BY VERIZON)
- + PROPOSED GROUND ROD
- +EX EXISTING GROUND ROD
- EX(G) EXISTING GROUND WIRE

TOD No.: AT783-08  
SHA No.: FR558A53/B53

**EQUIPMENT LIST "A"**

A. EQUIPMENT TO BE FURNISHED BY SHA

ITEM NO.	DESCRIPTION	UNIT	QUANTITY
9012	2 CIRCUIT FLASHER	EA	1
9043	CONTROLLER CABINET, SIZE 5	EA	1
9571	SHEET ALUMINUM SIGNS - MAST ARM MOUNT 2 EACH D-3(2) (VAR. " X 24")	SF	22

STATE OF MARYLAND  
DEPARTMENT OF TRANSPORTATION  
STATE HIGHWAY ADMINISTRATION  
OFFICE OF TRAFFIC & SAFETY  
TRAFFIC ENGINEERING DESIGN DIVISION  
**U.S. 15 AND HAYWARD ROAD**  
FREDERICK, MARYLAND

**GENERAL INFORMATION SHEET**

SCALE 1" = 20'	DATE 06/01/2006	CONTRACT NO. AT7835185
DESIGNED BY TC	COUNTY FREDERICK	
DRAWN BY TC	LOGMILE 10001516.18	
CHECKED BY DAE	TMS NO. H022	
FAP NO. N/A	TOD NO. N/A	
TS NO.	DRAWING - OF -	SHEET NO. 2 OF 2

**RK & K**  
**RUMMEL, KLEPPER & KAHL, LLP**  
CONSULTING ENGINEERS  
81 MOSHER STREET  
BALTIMORE, MARYLAND 21217  
TEL: (410) 728-2900 FAX: (410) 383-3270

BY: \$USER\$