

**PROJECT DESCRIPTION**

THIS PROJECT INVOLVES THE INSTALLATION OF A TEMPORARY TRAFFIC SIGNAL AT CHERRY HILL ROAD AND PROSPERITY DRIVE IN MONTGOMERY COUNTY, CHERRY HILL ROAD IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION. INTERSECTION LIGHTING WILL BE PROVIDED AND EXISTING INTERCONNECT WILL BE MAINTAINED

**INTERSECTION OPERATION**

**I. NORMAL OPERATION**

THE INTERSECTION WILL OPERATE IN A FOUR PHASE SEMI-TRAFFIC-ACTUATED MODE WITH EASTBOUND AND WESTBOUND DETOUR ROAD APPROACHES OPERATING CONCURRENTLY. THE PROSPERITY DRIVE APPROACH WILL OPERATE EXCLUSIVELY. EXCLUSIVE/PERMISSIVE LEFT TURN PHASING WILL BE PROVIDED FOR THE WESTBOUND CHERRY HILL ROAD APPROACH WITH A CONCURRENT RIGHT TURN FOR PROSPERITY DRIVE.

**CONTROLLER REQUIREMENTS**

THE EXISTING FULLY-TRAFFIC-ACTUATED EIGHT PHASE TRAFFIC SIGNAL CONTROLLER WITH LAU AND ASSOCIATED HARNESSES HOUSED IN A NEMA SIZE \*6" BASE MOUNTED CABINET. WILL BE UTILIZED.

**PROJECT CONTACTS**

**CONTACTS FOR DISTRICT 3:**

MR. CHARLIE WATKINS  
DISTRICT ENGINEER  
PHONE: (301) 513-7300

MR. MAJID SHAKIB  
ASSISTANT DISTRICT ENGINEER - TRAFFIC  
PHONE: (301) 513-7358

MR. AUGIE REBISH  
DISTRICT UTILITIES ENGINEER  
PHONE: (301) 513-7350

MR. RALEIGH MEDLEY  
ASSISTANT DISTRICT ENGINEER - MAINTENANCE  
PHONE: (301) 513-7304

THE POWER COMPANY REPRESENTATIVE:  
MS. ELIZA HEMINGWAY  
POTOMAC ELECTRIC POWER COMPANY  
PHONE: (301) 931-2880

**CONTACTS FOR OFFICE OF TRAFFIC AND SAFETY:**

MR. RICHARD DAFF SR.  
CHIEF, TRAFFIC OPERATIONS  
410-787-7630

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

MR. ED RODENHIZER  
TEAM LEADER SIGNAL OPERATIONS  
410-787-7650

MR. EUGENE BAILEY  
TEAM LEADER SIGN OPERATIONS  
410-787-7676

MR. DAVE SCHWARTZ  
SUPPLY OFFICER IV (SIGNAL SHOP WAREHOUSE)  
410-787-7668

**CONTACTS FOR MONTGOMERY COUNTY:**

MR. BOB GONZALES  
MONTGOMERY COUNTY DPW-ATMS  
PHONE: (240) 777-8761

MR. MIKE KINNEY  
MONTGOMERY COUNTY DPW-ATMS  
PHONE: (240) 777-8760

**EQUIPMENT LIST "A"**

**A. EQUIPMENT TO BE SUPPLIED BY THE SHA**

SPEC. NO.	CATEGORY CODE NO.	QUANTITY	DESCRIPTION
803	973001	55 S.F.	SHEET ALUMINUM SIGNS TO CONSIST OF: - 3 EACH D-3(1) (96"x16") MAST ARM MOUNT - 1 EACH R3-5(R) (30"x36") MAST ARM MOUNT - 1 EACH R10-1 (12"x9") POLE MOUNT - 1 EACH R10-1 (12"x9") PEDESTAL MOUNT - 2 EACH R10-12 (30"x36") MAST ARM MOUNT
816	971017	1 Ea.	EIGHT PHASE (FULLY ACTUATED) CONTROLLER AND CABINET-BASE MOUNT W/LAU
817	965001	2 Ea.	PEDESTRIAN PUSHBUTTON AND SIGN
818	968003	1 Ea.	10' PEDESTAL POLE WITH BREAKAWAY BASE WITH ANCHOR BOLTS (1" Dia. x 36")
----	900000	1 Ea.	27' STEEL POLE WITH 70' MAST ARM WITH ANCHOR BOLTS (2" Dia. x 72")
----	900000	1 Ea.	21' STEEL POLE WITH 70' MAST ARM WITH ANCHOR BOLTS (2" Dia. x 72")
----	900000	1 Ea.	21' STEEL POLE WITH 40' MAST ARM WITH ANCHOR BOLTS (1 3/4" Dia. x 66")

**EQUIPMENT LIST "B"**

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

SPEC. SECTION	CATEGORY CODE NO.	QUANTITY	DESCRIPTION
104	120500	L.S.	MAINTENANCE OF TRAFFIC
205	203030	2 C.Y.	TEST PIT EXCAVATION
556	585620	176 L.F.	12 IN. HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKINGS
556	585624	33 L.F.	24 IN. HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKINGS
801	801004	15 C.Y.	FURNISH AND INSTALL CONCRETE FOR SIGNAL FOUNDATION
804	837001	3 EA.	FURNISH AND INSTALL GROUND RODS - 3/4 IN. DIAMETER x 10 FT. LENGTH
805	805H15	69 L.F.	FURNISH AND INSTALL 3" SCHEDULE 80 RIGID PVC CONDUIT - BORED
805	805H18	126 L.F.	FURNISH AND INSTALL 4" SCHEDULE 80 RIGID PVC CONDUIT - BORED
805	870163	277 L.F.	FURNISH AND INSTALL 3 IN. DIA. POLYVINYL CHLORIDE ELECTRICAL CONDUIT, SCHEDULE 80, TRENCHED
805	870166	14 L.F.	FURNISH AND INSTALL 4 IN. DIA. POLYVINYL CHLORIDE ELECTRICAL CONDUIT, SCHEDULE 80, TRENCHED
806	831010	1 EA.	FURNISH AND INSTALL 250 WATT HIGH PRESSURE SODIUM LAMP AND LUMINAIRE
807	807205	1 EA.	FURNISH AND INSTALL CONTROL AND DISTRIBUTION EQUIPMENT
810	802501	290 L.F.	FURNISH AND INSTALL BARE COPPER GROUND WIRE (NO. 6 AWG)
810	861104	186 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 2 CONDUCTOR (ALUMINUM) SHIELDED
810	861105	230 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG)
810	861106	314 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 3 CONDUCTOR (NO. 14 AWG)
810	861107	360 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)
810	861108	760 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)
810	861116	220 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 2 CONDUCTOR (NO. 12 AWG)
811	811001	5 EA.	FURNISH AND INSTALL ELECTRICAL HANDHOLE
813	813015	55 S.F.	INSTALL OVERHEAD SIGN
814	860270	27 EA.	INSTALL 12 IN. TRAFFIC SIGNAL HEAD SECTION
814	860278	4 EA.	INSTALL 12 IN. PEDESTRIAN SIGNAL HEAD SECTION POLE MOUNT
814	860282	4 EA.	INSTALL 12 IN. PEDESTRIAN SIGNAL HEAD SECTION PEDESTAL MOUNT
816	871117	1 EA.	INSTALL 8 PHASE (FULLY ACTUATED) CONTROLLER AND CABINET - BASE MOUNTED W/LAU
817	865201	2 EA.	INSTALL PUSHBUTTON AND SIGN
818	866104	1 EA.	FURNISH AND INSTALL 20 FOOT LIGHTING ARM ON SIGNAL STRUCTURE
818	866201	3 EA.	INSTALL STEEL POLE WITH A SINGLE MAST ARM
---	585450	272 L.F.	REMOVE EXISTING PAVEMENT MARKINGS - ANY WIDTH
---	873001	L.S.	REMOVE EXISTING SIGNAL EQUIPMENT TO BE SALVAGED
---	800000	1 EA.	INSTALL 10 FT. BREAKAWAY PEDESTAL POLE
---	800000	L.S.	REMOVE AND DISPOSAL OF EXISTING MATERIAL AND EQUIPMENT
---	800000	L.S.	DELIVERY OF SALVAGED MATERIALS

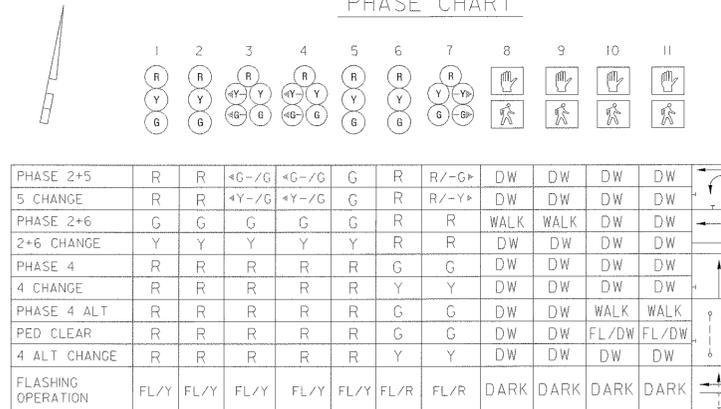
**EQUIPMENT LIST "C"**

**C. EQUIPMENT TO BE REMOVED BY THE CONTRACTOR AND DELIVERED TO THE STATE HIGHWAY ADMINISTRATION, 7491 CONNELLEY DRIVE, HANOVER, MARYLAND 21076.**

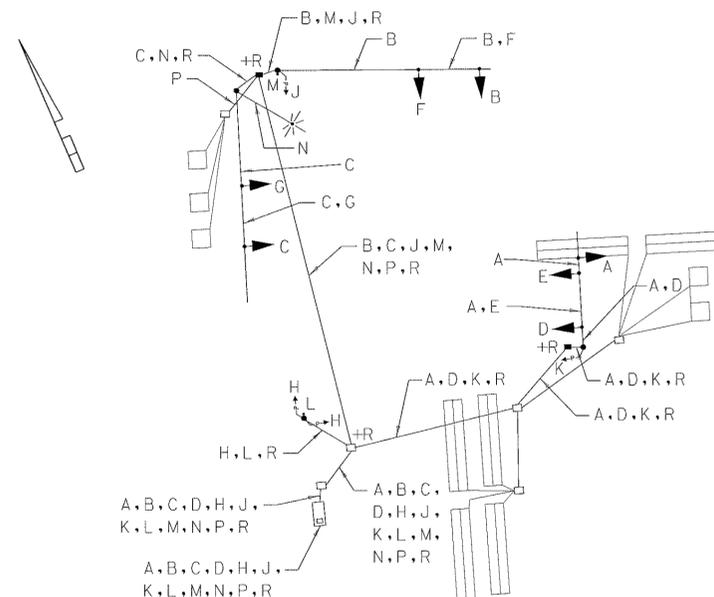
QUANTITY	DESCRIPTION
NONE	

NOTES: 1. THE CONTRACTOR SHALL NOTIFY THE SHA AT 410-787-7652 AT LEAST THREE DAYS IN ADVANCE OF DELIVERY.  
2. ALL EQUIPMENT TO BE REMOVED AND NOT LISTED ABOVE SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

**PHASE CHART**



**WIRING DIAGRAM**



**WIRING KEY**

- A, B, C } 7-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
- D, E, F, G, H } 5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
- J, K } 3-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
- L, M } 2-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
- N } 2-CONDUCTOR ELECTRICAL CABLE (NO. 12 A.W.G.)
- P } 2-CONDUCTOR ELECTRICAL CABLE (ALUMINUM SHIELDED)
- R } STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)
- + - 3/4 IN. x 10 FT. GROUND ROD

**PHASE I  
TEMPOARY TRAFFIC SIGNAL**

**MARYLAND DOT - STATE HIGHWAY ADMINISTRATION**  
Office of Traffic & Safety  
**TRAFFIC ENGINEERING DESIGN DIVISION**  
CHERRY HILL AT PROSPERITY DRIVE  
GENERAL INFORMATION SHEET

**RUMMEL, KLEPPER & KAHL, LLP**  
CONSULTING ENGINEERS

81 MOSHER STREET  
BALTIMORE, MARYLAND 21217  
TEL: (410) 728-2900 FAX: (410) 383-3270

DESIGNED BY: JCR	F.A.P. NO. SEE TITLE SHEET	TS NO. 4116	SHEET NO.
CHECKED BY: BLB	S.H.A. NO. MO6145170	T.I.M.S. NO.	44 OF 77
SCALE: NONE	COUNTY: MONTGOMERY	LOG MILE: 150P000.00	
DATE: JUNE 2001			

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