

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-301 (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
817	965001	2 Ea.	PEDESTRIAN PUSHBUTTON AND SIGN
818	968003	2 Ea.	10' BREAKAWAY PEDESTAL POLE WITH ANCHOR BOLTS (1" Dia. x 36")
----	900000	1 Ea.	27' STEEL POLE WITH 50' MAST ARM WITH ANCHOR BOLTS (1 3/4" Dia. x 66")
----	900000	1 Ea.	27' STEEL POLE WITH TWIN 64' / 50' MAST ARM WITH ANCHOR BOLTS (2" Dia. x 72")

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.

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	245 L.F.	12 IN. HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKINGS
556	585624	110 L.F.	24 IN. HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKINGS
801	801004	11 C.Y.	FURNISH AND INSTALL CONCRETE FOR SIGNAL FOUNDATION
804	837001	5 EA.	FURNISH AND INSTALL GROUND RODS - 3/4 IN. DIAMETER X 10 FT. LENGTH
805	805118	147 L.F.	FURNISH AND INSTALL 4" SCHEDULE 80 RIGID PVC CONDUIT - BORED
805	870163	15 L.F.	FURNISH AND INSTALL 3 IN. DIA. POLYVINYL CHLORIDE ELECTRICAL CONDUIT, SCHEDULE 80, TRENCHED
806	831010	2 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	380 L.F.	FURNISH AND INSTALL BARE COPPER GROUND WIRE (NO. 6 AWG)
810	861104	210 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG)
810	861106	260 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 3 CONDUCTOR (NO. 14 AWG)
810	861107	675 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)
810	861108	445 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)
810	861116	300 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 2 CONDUCTOR (NO. 12 AWG)
811	811001	2 EA.	FURNISH AND INSTALL ELECTRICAL HANDHOLE
813	813015	55 S.F.	INSTALL OVERHEAD SIGN
814	860270	30 EA.	INSTALL 12 IN. TRAFFIC SIGNAL HEAD SECTION
814	860278	2 EA.	INSTALL 12 IN. PEDESTRIAN SIGNAL HEAD SECTION POLE MOUNT
814	860282	6 EA.	INSTALL 12 IN. PEDESTRIAN SIGNAL HEAD SECTION PEDESTAL MOUNT
817	865201	2 EA.	INSTALL PUSHBUTTON AND SIGN
818	866104	2 EA.	FURNISH AND INSTALL 20 FOOT LIGHTING ARM ON SIGNAL STRUCTURE
818	866201	1 EA.	INSTALL STEEL POLE AND SINGLE MAST ARM
818	866202	1 EA.	INSTALL STEEL POLE AND TWIN MAST ARM
---	860265	4 EA.	RELOCATE EXISTING SIGNAL HEAD
---	873001	L.S.	REMOVE EXISTING SIGNAL EQUIPMENT TO BE SALVAGED
---	800000	1 EA.	FURNISH AND INSTALL VIDEO DETECTION SYSTEM
---	800000	2 EA.	INSTALL 10 FT. BREAKAWAY PEDESTAL POLE
---	800000	4 EA.	RELOCATE EXISTING SIGN ON SPAN WIRE OR MAST ARM
---	800000	3 EA.	FURNISH AND INSTALL 250' PREMANUFACTURED CAMERA TO CONTROL CABINET CABLE (FOR VIDEO DETECTION)
---	800000	L.S.	REMOVE AND DISPOSAL OF EXISTING MATERIAL AND EQUIPMENT
---	800000	L.S.	DELIVERY OF SALVAGED MATERIALS

CHERRY HILL AT PROSPERITY DRIVE

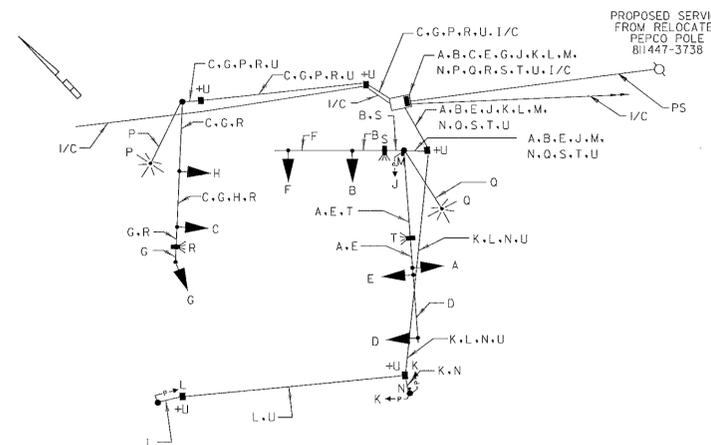
CHERRY HILL ROAD PHASE CHART

	1	2	3	4	5	6	7	8	9	10	11
PHASE 2+5	R	R	*G-/G	*G-/G	G	R	R/-G*	DW	DW	DW	DW
5 CHANGE	R	R	*Y-/G	*Y-/G	G	R	R/-Y*	DW	DW	DW	DW
PHASE 2+6	G	G	G	G	G	R	R	WALK	WALK	DW	DW
2+6 CHANGE	Y	Y	Y	Y	Y	R	R	DW	DW	DW	DW
PHASE 4	R	R	R	R	R	G	G	DW	DW	DW	DW
4 CHANGE	R	R	R	R	R	Y	Y	DW	DW	DW	DW
PHASE 4 ALT	R	R	R	R	R	G	G	DW	DW	WALK	WALK
PED CLEAR	R	R	R	R	R	G	G	DW	DW	FL/DW	FL/DW
4 ALT CHANGE	R	R	R	R	R	Y	Y	DW	DW	DW	DW
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	DARK	DARK	DARK	DARK

NOTE: FOR OPERATION UNDER PHASE 3

DETOUR ROAD AT PROSPERITY DRIVE

DETOUR ROAD WIRING DIAGRAM



WIRING KEY

A, B, C	7-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)	R, S, T	250' CAMERA TO CONTROL CABINET CABLE
D, E, F, G, H, K	5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)	U	STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)
J, L	3-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)	PS	PROPOSED ELECTRICAL SERVICE
M, N	2-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)	I/C	12 PAIR JELLYFILLED COMMUNICATION CABLE INSTALLED UNDER INTERCONNECT PLANS
P, O	2-CONDUCTOR ELECTRICAL CABLE (NO. 12 A.W.G.)	+ -	3/4 IN. x 10 FT. GROUND ROD

DETOUR ROAD PHASE CHART

	20	21	22	23	24	25	26	27	28	29	30	31
PHASE 2+5	R	R	*G-/G	*G-/G	G	R	R	R/-G*	DW	DW	DW	DW
5 CHANGE	R	R	*Y-/G	*Y-/G	G	R	R	R/-Y*	DW	DW	DW	DW
PHASE 2+6	G	G	G	G	G	R	R	R	WALK	WALK	DW	DW
2+6 CHANGE	Y	Y	Y	Y	Y	R	R	R	DW	DW	DW	DW
PHASE 4	R	R	R	R	R	G	G	G	DW	DW	DW	DW
4 CHANGE	R	R	R	R	R	Y	Y	Y	DW	DW	DW	DW
PHASE 4 ALT	R	R	R	R	R	G	G	G	DW	DW	WALK	WALK
PED CLEAR	R	R	R	R	R	G	G	G	DW	DW	FL/DW	FL/DW
4 ALT CHANGE	R	R	R	R	R	Y	Y	Y	DW	DW	DW	DW
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	DARK	DARK	DARK	DARK

NOTE: FOR OPERATION IN ULTIMATE CONDITION

**PHASE 4
TEMPORARY TRAFFIC SIGNAL**

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

RK & K
RUMMEL, KLEPPER & KAHL, LLP
CONSULTING ENGINEERS

BI 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. 4116A	SHEET NO.
CHECKED BY: BLB	S.H.A. NO. M06145170		
SCALE: NONE	COUNTY: MONTGOMERY	T.I.M.S. NO.	
DATE: JUNE 2001	LOG MILE: 150P000.00		46 OF 77

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