PROJECT DESCRIPTION

GENERAL

THIS PROJECT INVOLVES REPLACING EXISTING TRAFFIC CONTROL SIGNALS WITH BLACK FACED SIGNAL HEADS. THE PAVEMENT WILL BE RE-STRIPED ON THE NORTH LEG TO PROVIDE A SB DOUBLE LEFT TURN LANE. IN ADDITION, A RIGHT TURN LANE WILL BE CONSTRUCTED. THE EXISTING LEFT TURN LANE ON THE SOUTH LEG WILL BE WIDENED TO ACCOMMODATE A FUTURE DOUBLE LEFT AND LENGTHENED. MD 124 ASSUMED TO RUN IN A NORTH - SOUTH DIRECTION.

INTERSECTION OPERATION

THE INTERSECTION WILL OPERATE IN A NEMA EIGHT-PHASE, FULL-TRAFFIC-ACTUATED MODE WITH EXCLUSIVE LEFT-TURN PHASING FOR ALL LEFT TURN MOVEMENTS.

CONTROLLER REQUIREMENTS

THE EXISTING BASE MOUNTED CONTROLLER AND ASSOCIATED HARNESSES WILL REMAIN. THE EXISTING POLE MOUNTED CONTROLLER AND VIDEO SURVEILLANCE SYSTEM WILL REMAIN. VIDEO DETECTION WILL REPLACE ALL EXISTING LOOP DETECTORS. MONTGOMERY COUNTY WILL INSTALL THE VIDEO INTERFACE IN THE EXISTING CONTROLLER.

THE CONTACT PERSONS FOR DISTRICT #3 ARE AS FOLLOWS:

Mr. Lee Starkloff
Assistant District Engineer - Traffic
Phone: 301-513-7318

Mr. Augie Rabish
District Utility Engineer
Phone: 301-513-7350

Mr. Raleigh Medley
Assistant District Engineer - Maintenance
Phone: 301-513-7304

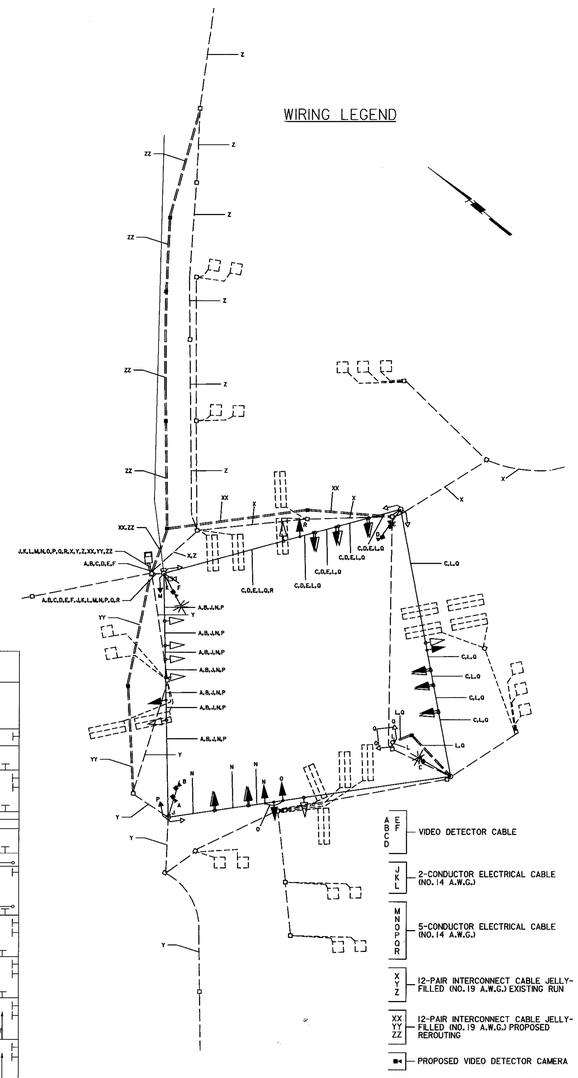
Mr. Richard L. Daff Sr.
Chief, Traffic Operations Division
Phone: 410-787-7630

The Power Company Representative is:
Potomac Electric Power Company
Eliza Hemingway
4061 Powder Mill Road
Suite 600
Calverton, Maryland 20705
Phone: 301-931-2880

Mr. Robert Gonzales
(For Video Detection Cameras)
Traffic Engineer
Montgomery County DPWT
Phone: 240-777-8761

Mr. Mike Kinney
(For Surveillance Camera)
Montgomery County DPWT
Phone: 240-777-8760

WIRING LEGEND



NOTE: USE EXISTING WIRING UNLESS NOTED

PHASE CHART

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
PHASE 1 + 5	G	G	G	R	R	G	G	R	R	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 1 + 5 CHANGE	THE CONTROLLER MAY SKIP TO PHASE 1 + 6, 2 + 5 OR 2 + 6																									
PHASE 1 + 6	R	R	R	R	R	G	G	G	G	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 1 + 6 CHANGE	R	R	R	R	R	Y	Y	Y	Y	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 2 + 5	G	G	G	G	G	R	R	R	R	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 2 + 5 CHANGE	Y	Y	Y	Y	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 2 + 6	R	R	R	G	G	R	R	G	G	R	R	R	R	R	R	R	R	R	W	DW	DW	W	W	DW	DW	W
PED CLEARANCE	R	R	R	G	G	R	R	G	G	R	R	R	R	R	R	R	R	R	FDW	DW	DW	FDW	FDW	DW	DW	FDW
PHASE 2 + 6 CHANGE	R	R	R	Y	Y	R	R	Y	Y	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 3 + 7	R	R	R	R	R	R	R	R	R	G	G	G	R	R	G	G	R	R	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 3 + 7 CHANGE	THE CONTROLLER MAY SKIP TO PHASE 3 + 8, 4 + 7 OR 4 + 8																									
PHASE 3 + 8	R	R	R	R	R	R	R	R	R	G	G	G	G	G	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 3 + 8 CHANGE	R	R	R	R	R	R	R	R	R	Y	Y	Y	Y	Y	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 4 + 7	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	G	G	G	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 4 + 7 CHANGE	R	R	R	R	R	R	R	R	R	R	R	R	R	R	Y	Y	Y	Y	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 4 + 8	R	R	R	R	R	R	R	R	R	R	R	R	G	G	R	R	G	G	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 4 + 8 CHANGE	R	R	R	R	R	R	R	R	R	R	R	R	Y	Y	R	R	Y	Y	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 4 ALT + 8	R	R	R	R	R	R	R	R	R	R	R	R	G	G	R	R	G	G	DW	W	W	DW	DW	DW	DW	DW
PED CLEARANCE	R	R	R	R	R	R	R	R	R	R	R	R	G	G	R	R	G	G	DW	FDW	FDW	DW	DW	DW	DW	DW
PHASE 4 ALT + 8 CHANGE	R	R	R	R	R	R	R	R	R	R	R	R	Y	Y	R	R	Y	Y	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 4 + 8 ALT	R	R	R	R	R	R	R	R	R	R	R	R	G	G	R	R	G	G	DW	DW	DW	DW	DW	W	W	DW
PED CLEARANCE	R	R	R	R	R	R	R	R	R	R	R	R	G	G	R	R	G	G	DW	DW	DW	DW	DW	FDW	FDW	DW
PHASE 4 + 8 ALT CHANGE	R	R	R	R	R	R	R	R	R	R	R	R	Y	Y	R	R	Y	Y	DW	DW	DW	DW	DW	DW	DW	DW
FLASHING OPERATION	FL/RA	FL/RA	FL/RA	FL/Y	FL/Y	FL/RA	FL/RA	FL/Y	FL/Y	FL/RA	FL/RA	FL/RA	FL/R	FL/R	FL/RA	FL/RA	FL/R	FL/R	DARK	DARK	DARK	DARK	DARK	DARK	DARK	DARK

EQUIPMENT LIST 'A'

EQUIPMENT TO BE FURNISHED BY THE SHA.

QUANTITY	CATEGORY CODE	DESCRIPTION
1 EA	900000	VIDEO INTERFACE EQUIPMENT FOR 5-8 CAMERAS
96.2 SF	973023	SHEET ALUMINUM SIGNS:
		2 EACH - R3-5L SIGN (30 IN. X 36 IN.) SPAN WIRE MOUNT
		2 EACH - D3-2 SIGN (16 IN. X 120 IN.) (DUAL FACED) SPAN WIRE MOUNT
		1 EACH - ASSOCIATED SHIELD ASSEMBLY "NORTH, MD 124, LEFT ARROW" (36 IN. X 75 IN.) POLE MOUNT
		1 EACH - ASSOCIATED SHIELD ASSEMBLY "NORTH, MD 124, RIGHT ARROW" (24 IN. X 51 IN.) POLE MOUNT
		1 EACH - ASSOCIATED SHIELD ASSEMBLY "SOUTH, MD 124, RIGHT ARROW" (24 IN. X 51 IN.) POLE MOUNT
		1 EACH - ASSOCIATED SHIELD ASSEMBLY "SOUTH, MD 124, LEFT ARROW" (36 IN. X 75 IN.) POLE MOUNT

EQUIPMENT LIST 'B'

EQUIPMENT TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR.

QUANTITY	CATEGORY CODE	DESCRIPTION
1 LS	120500	MAINTENANCE OF TRAFFIC
825 LF	585620	FURNISH AND INSTALL 12 IN. WHITE HEAT APPLIED THERMOPLASTIC PERMANENT PREFORMED PAVEMENT MARKING (FOR CROSSWALKS)
220 LF	585624	FURNISH AND INSTALL 24 IN. WHITE HEAT APPLIED THERMOPLASTIC PERMANENT PREFORMED PAVEMENT MARKING (FOR STOP LINE)
1 LS	800000	REMOVE AND DISPOSE OF EXISTING SIGNAL EQUIPMENT
6 EA	816001	FURNISH AND INSTALL VIDEO DETECTOR CAMERA
5 EA	816005	FURNISH AND INSTALL CONTROL CABLE, 250 FT., VIDEO DETECTION CAMERA TO CONTROLLER
1 EA	816010	FURNISH AND INSTALL CONTROL CABLE, 500 FT., VIDEO DETECTION CAMERA TO CONTROLLER
1200 LF	800000	PULL AND RE-ROUTE 12-PAIR COMMUNICATION CABLE, JELLY FILLED (NO. 19 A.W.G.)
62 SF	801706	REMOVE SIGNS FROM EXISTING OVERHEAD STRUCTURE
1 EA	860265	RELOCATE EXISTING SIGNAL HEAD
39 EA	860272	FURNISH AND INSTALL 12 IN. VEHICULAR TRAFFIC SIGNAL HEAD SECTION
4 EA	860278	FURNISH AND INSTALL 12 IN. PEDESTRIAN TRAFFIC SIGNAL HEAD SECTION
740 LF	805135	FURNISH AND INSTALL 3 IN. DIAMETER RIGID PVC ELECTRICAL CONDUIT (SCHEDULE 80) - TRENCHED
290 LF	805155	FURNISH AND INSTALL 4 IN. DIAMETER RIGID PVC ELECTRICAL CONDUIT (SCHEDULE 80) - SLOTTED
7 EA	811001	FURNISH AND INSTALL ELECTRICAL HANDHOLE
96.2 SF	813015	INSTALL OVERHEAD SIGNS
650 LF	861105	FURNISH AND INSTALL ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 A.W.G.)
1075 LF	861107	FURNISH AND INSTALL ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 A.W.G.)
2 EA	865001	FURNISH AND INSTALL PUSH BUTTONS AND SIGNS

SS-3

STV Incorporated
engineers / architects / planners / scientists / construction managers
7125 Ambassador Road Baltimore, MD 21244-2722 (410) 944-9112

MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION
MD 119 (GREAT SENECA HIGHWAY) AND
MD 124 (QUINCE ORCHARD ROAD)
GENERAL INFORMATION

DRAWN BY:	B. BIDDLE	F.A.P. NO.	SEE TITLE SHEET	TS NO.	SHEET NO.
CHECKED BY:	M. STORCK	S.H.A. NO.	MO 6315176	3523-E	
SCALE:	NONE	COUNTY:	MONTGOMERY	T.I.M.S. NO.	
DATE:	NOVEMBER 2002	LOG MILE:		F255	10 OF 14

FILE: N:\PROJECTS\0880\08\Signal\ss03mil9.dgn
DATE: 22-Nov-02 12:20