

**PROJECT DESCRIPTION**

**I. GENERAL**

This project involves the installation of a new half signal at the intersection of MD 124 and Lindbergh Drive in Montgomery County Maryland. The traffic signal will control north-bound MD 124 and the south-bound left turn for MD 124. The side road will be right out only and will not be controlled by the traffic signal.

**II. INTERSECTION OPERATION**

- The intersection is to operate in a NEMA 2-phase, semi-actuated mode. The main line will be Northbound MD 124 (phase 2) the South-bound MD 124 left turn will operate as phase 1 and will operate as a flashing left turn. The side road will not be controlled by the traffic signal.

**NOTES**

- For final pavement markings, refer to the pavement marking plans, as applicable; other than those detailed on the plan. All pavement markings shall be installed in accordance with Administration standards.
- The contractor shall be responsible for terminating all signal cable to the appropriate terminals and properly label each cable.
- All traffic signal foundations shall be installed at the final sidewalk or curb grade for closed sections, highest roadway profile grade for open sections, to meet clearances as specified in the appropriate 800 series Standard Plans. The contractor shall verify ultimate grades prior to the installation of all signal equipment.
- Disconnecting and splicing of interconnect cable shall be performed by Montgomery County Forces. The contractor shall run the interconnect cable into the base of each cabinet and properly tag the cable. Contact Mr. Kamal Hamud at (240) 777-8761 seventy-two hours in advance of intended work.
- All underground and overhead utilities shown on these plans are schematic only and may not be complete. The Contractor shall be responsible for notifying Miss Utility prior to construction so that all utilities may be located in the field. If the Contractor perceives that a conflict between the utilities and the traffic signal will occur, the Contractor shall notify the Project Engineer immediately so that the conflict may be resolved.
- The contractor shall maintain the continuous operation of all interconnect, vehicular, pedestrian detectors, and lighting devices. If any device is damaged by the contractor, it shall be repaired within 72 hours by the contractor at no cost to the Administration after notification by the Engineer.

**CONTACTS**

MR. BRIAN YOUNG  
DISTRICT ENGINEER  
301-513-7311

MS. ANYESHA MOOKHERJEE  
ASSISTANT DISTRICT ENGINEER - TRAFFIC  
301-513-7358

MR. VICTOR GRAFTON  
ASSISTANT DISTRICT ENGINEER - UTILITIES  
301-513-7350

MR. KEVIN NOWAK  
ASSISTANT DISTRICT ENGINEER - CONSTRUCTION  
301-513-7336

MR. VERNON STINNETT  
ASSISTANT DISTRICT ENGINEER - MAINTENANCE  
301-513-7304

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

**MONTGOMERY COUNTY CONTACTS**

MR. KAMAL HAMUD,  
MONTGOMERY COUNTY DPW  
240-777-8761

MR. KEITH LORD  
MONTGOMERY COUNTY SIGNAL SHOP  
301-279-1291

**EQUIPMENT LIST**

**A. EQUIPMENT TO BE FURNISHED BY STATE HIGHWAY ADMINISTRATION**

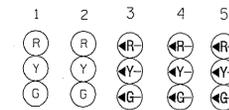
ITEM NO./CAT CODE	QUANTITY	DESCRIPTION
900000	1 EA.	NEMA SIZE 6 BASE MOUNTED CABINET AND CONTROLLER WITH VIDEO INTERFACE EQUIPMENT.
973023	45 SF	SHEET ALUMINUM SIGNS
	1 EA	R1-1 (STOP) SIGN 30"x30"
	1 EA	R3-5(1) (RIGHT TURN ONLY) 24"x30"
	1 EA	R3-2 (NO LEFT TURN- SYMBOLIC) 24"x24"
	1 EA	D3 (1) LINDBERGH DR (ARROW) 16"x VAR. DUAL FACED
	1 EA	R10-12 (2) YIELD ON FLASHING RED ARROW AFTER STOP 48"x36"
	1 EA	SPECIAL (YIELD TO OPPOSING TRAFFIC WHEN TURNING LEFT) 36"x36"

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

ITEM NO./CAT CODE	QUANTITY	DESCRIPTION
120500	LS	MAINTENANCE OF TRAFFIC
203030	2 CY	TEST PIT
585405	80 LF	5 INCH WHITE LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKING
585407	300 LF	5 INCH YELLOW LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKING
585408	250 LF	10 INCH WHITE LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKING
585410	75 LF	10 INCH YELLOW LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKING
585625	60 LF	24 INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES
801106	32 LF	WOOD SIGN SUPPORTS 4 INCH X 6 INCH
801607	45 SF	INSTALL SHEET ALUMINUM SIGN
802501	80 LF	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
805125	20 LF	2 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
805135	50 LF	3 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
805140	50 LF	4 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
807202	1 EA	METERED SERVICE PEDESTAL (100 AMP)
810010	60 LF	ELECTRICAL CABLE 1 - CONDUCTOR NO. 8 AWG THHN/THWN
816001	1 EA	VIDEO DETECTION CAMERA
816005	1 EA	CONTROL CABLE, 250 FOOT, VIDEO DETECTION CAMERA TO CONTROLLER
818052	1 EA	STEEL POLE WITH SINGLE 70 FOOT MAST ARM
822001	1000 LF	12 PAIR COMMUNICATION CABLE, SELF SUPPORTING
831002	1 EA	250 WATT HPS LAMP AND LUMINAIRE WITH PHOTOCCELL
837001	3 EA	GROUND ROD - 3/4 INCH DIAMETER X 10 FOOT LENGTH
860284	15 EA	12 INCH LED VEHICULAR TRAFFIC SIGNAL HEAD SECTION
861107	60 LF	ELECTRICAL CABLE 5 - CONDUCTOR (NO. 14 AWG)
861108	300 LF	ELECTRICAL CABLE 7 - CONDUCTOR (NO. 14 AWG)
861116	120 LF	ELECTRICAL CABLE 2 - CONDUCTOR (NO. 12 AWG) TC
866104	1 EA	20 FOOT LIGHTING ARM ON SIGNAL STRUCTURE
871202	1 EA	INSTALL CABINET AND CONTROLLER - BASE MOUNT
800000	25 LF	3 INCH SCHEDULE 80 PVC RISER WITH WEATHERHEAD
800000	6 EA	LOUVERS FOR 12" SIGNAL HEAD SECTION

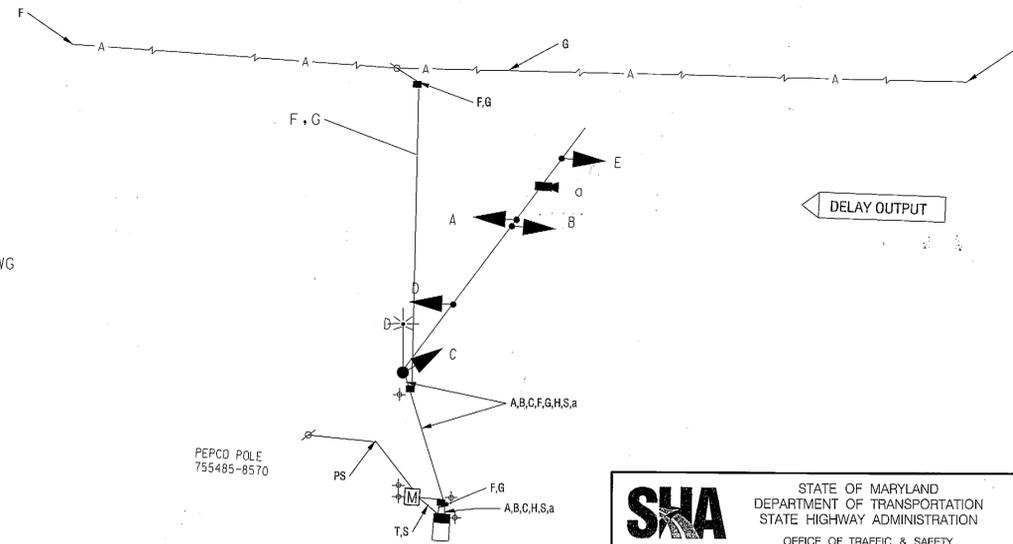
C. ALL MATERIALS TO BE REMOVED BY THE CONTRACTOR SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

**PHASE CHART**



PHASE	1	2	3	4	5
PHASE 1	R	R	G	G	G
PHASE 1 CHANGE	R	R	Y	Y	Y
PHASE 2	G	G	FL/R	FL/R	FL/R
PHASE 2 CHANGE	Y	Y	FL/R	FL/R	FL/R
Flashing	FL/Y	FL/Y	FL/R	FL/R	FL/R
Operation					

**WIRING DIAGRAM**



**WIRING KEY**

- a - VIDEO DETECTION CAMERA LEAD-IN CABLE 3 CONDUCTOR NO. 18 AWG
- A,B,C } 7-CONDUCTOR NO. 14 AWG ELECTRICAL CABLE
- D,E } 5-CONDUCTOR NO. 14 AWG ELECTRICAL CABLE
- F - EXISTING 12 PAIR INTERCONNECT RE-ROUTED FROM LINDBERG SOUTH
- G - PROPOSED 12 PAIR INTERCONNECT TO SIGNAL CABINET AT AIRPARK ROAD
- H - 2-CONDUCTOR NO. 12 AWG (TC) ELECTRICAL CABLE
- S - NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
- T - 1-CONDUCTOR NO. 8 AWG THHN/THWN ELECTRICAL CABLE
- PS - PROPOSED SERVICE FEED 3 RUNS OF 250 KCMIL
- + - GROUND ROD (3/4" DIA. X 10 FT. LENGTH)

GREENLINE INSTALL HALF SIGNAL 3/1/2010

JOH 3/5/10

**SHA** STATE OF MARYLAND  
DEPARTMENT OF TRANSPORTATION  
STATE HIGHWAY ADMINISTRATION  
OFFICE OF TRAFFIC & SAFETY  
TRAFFIC ENGINEERING DESIGN DIVISION

MD 124 AT LINDBERGH DRIVE (NORTH)

APPROVALS	REVISIONS	SIGNALIZATION PLAN	
TEAM LEADER		SCALE	DATE
ASST. DIR. CHIEF		DESIGNED BY	COUNTY
DIVISION CHIEF		DRAWN BY	LOGMILE
OFFICE DIRECTOR		CHECKED BY	TIMS NO.
		FAP NO.	TOD NO.
		TS NO. 4733	DRAWING - OF SHEET NO. 02 OF 02

PLOTTED: Friday, March 05, 2010 AT 10:58 AM  
FILE: J:\DATA\H079\124\_Lindbergh\Files\_From\_Project\tes\H079GG02.dgn

BY: Jhenkel