

PROJECT DESCRIPTION

GENERAL

THIS PROJECT INVOLVES UPDATING THE EXISTING TRAFFIC SIGNAL HEADS TO LED FOR THE EAST- AND WESTBOUND APPROACH AT THE INTERSECTION OF MD 414 (OXON HILL ROAD) AT LIVINGSTON ROAD IN PRINCE GEORGE'S COUNTY. RESTRIPING OF THE EXISTING WESTBOUND PAVEMENT MARKINGS IS PROPOSED TO PROVIDE AN ADDITIONAL WESTBOUND THROUGH LANE. THE EXISTING DETECTION FOR THE WESTBOUND LEFT TURN LANE WILL BE EFFECTED BY THE RESURFACING AND NEW LOOP DETECTOR PRESENCE AND MICROLOOP SETBACK WILL BE INSTALLED. ALL OTHER EXISTING DETECTION AND SIDE STREET TRAFFIC SIGNAL HEADS ALONG WILL REMAIN. MD 414 IS ASSUMED TO RUN IN A EAST-WEST DIRECTION.

INTERSECTION OPERATION

THE INTERSECTION WILL CONTINUE TO OPERATE IN A NEMA SIX (6) PHASE, FULL-TRAFFIC ACTUATED MODE WITH EMERGENCY VEHICLE PRE-EMPTION PHASES ON LIVINGSTON ROAD. THERE WILL CONTINUE TO BE AN EXCLUSIVE/PERMISSIVE LEFT TURN PHASE FOR BOTH THE EAST- AND WESTBOUND MOVEMENTS ON MD 414. THE MD 414 THROUGH MOVEMENTS WILL CONTINUE TO OPERATE CONCURRENTLY. THE LIVINGSTON ROAD THROUGH MOVEMENTS WILL CONTINUE TO OPERATE IN A SIDE STREET SPLIT PHASE MODE.

CONTROLLER REQUIREMENTS

THE EXISTING BASE MOUNTED TRAFFIC SIGNAL CONTROLLER WILL REMAIN AT THE INTERSECTION OF MD 414 AND LIVINGSTON ROAD.

THE CONTACT PERSONS FOR DISTRICT #3 ARE AS FOLLOWS:

Mr. Brian Young
Assistant District Engineer - Traffic
Phone: 301-513-7404

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

Mr. Wayne Mowdy
Assistant District Engineer - Maintenance
Phone: 301-513-7304

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

Mr. Edward Rodenhizer
Chief, SHA Traffic Signal Shop
Phone: 410-787-7652

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

EQUIPMENT LIST 'A'

APPROVED SHA EQUIPMENT TO BE PURCHASED BY THE DEVELOPER AND INSTALLED BY THE CONTRACTOR. ALL EQUIPMENT IN THIS LIST SHALL HAVE CATALOG CUTS SUBMITTED FOR APPROVAL PRIOR TO INSTALLATION.

CAT CODE	QUANTITY	DESCRIPTION
800000	8 SF	FURNISH AND INSTALL SHEET ALUMINUM SIGNS - MAST ARM/GROUND MOUNT
	1 EA	R3-5R (30"x36")
800000	6 EA	8 INCH LED VEHICULAR TRAFFIC SIGNAL HEAD SECTION
810550	2 EA	MICROLOOP PROBE, 500 FOOT LEAD-IN CABLE
860284	24 EA	12 INCH LED VEHICULAR TRAFFIC SIGNAL HEAD SECTION

EQUIPMENT LIST 'B'

EQUIPMENT TO BE PURCHASED BY THE DEVELOPER AND INSTALLED BY THE CONTRACTOR. ALL EQUIPMENT IN THIS LIST SHALL HAVE CATALOG CUTS SUBMITTED FOR APPROVAL PRIOR TO INSTALLATION.

CAT CODE	QUANTITY	DESCRIPTION
120500	1 LS	MAINTENANCE OF TRAFFIC
585412	1030 LF	12 INCH WHITE LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKING
585424	140 LF	24 INCH WHITE LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKING
585462	83 LF	REMOVAL OF EXISTING PERMANENT PAVEMENT LINE MARKINGS - ANY WIDTH
800000	1 EA	AS BUILT FOR SHA ON CADD
800000	1 LS	REMOVE AND DISPOSE OF EXISTING TRAFFIC SIGNAL EQUIPMENT
805160	30 LF	1 INCH LIQUID TIGHT FLEXIBLE NON-METALLIC CONDUIT FOR DETECTOR SLEEVE
861104	115 LF	ELECTRICAL CABLE - 2 CONDUCTOR (ALUMINUM SHEILDED)
861108	320 LF	ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)
862101	540 LF	LOOP WIRE ENCASED IN FLEXIBLE TUBING (NO. 14 AWG)
862102	250 LF	SAW CUT FOR SIGNAL (LOOP DETECTOR)

PHASE CHART

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
PHASE 1 AND 5	G	R	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW
PHASE 1 AND 5 CHANGE TO 1 AND 6, 2 AND 5 OR, 2 AND 6	G	R	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW
PHASE 1 AND 6	G	G	G	R	R	R	R	R	R	R	R	DW	DW	DW	DW
1 CHANGE	G	G	G	R	R	R	R	R	R	R	R	DW	DW	DW	DW
PHASE 2 AND 5	R	R	R	G	G	G	R	R	R	R	R	DW	DW	DW	DW
5 CHANGE	R	R	R	G	G	G	R	R	R	R	R	DW	DW	DW	DW
PHASE 2 AND 6	G	G	G	R	R	R	R	R	R	R	R	DW	DW	DW	DW
2 AND 6 CHANGE	Y	Y	Y	Y	Y	Y	R	R	R	R	R	DW	DW	DW	DW
PHASE 3	R	R	R	R	R	R	G	G	R	R	R	DW	DW	DW	DW
3 CHANGE	R	R	R	R	R	R	Y	Y	R	R	R	DW	DW	DW	DW
PHASE 3 ALT	R	R	R	R	R	R	G	G	R	R	R	W	W	DW	DW
PED CLEAR	R	R	R	R	R	R	G	G	R	R	R	FL/DW	FL/DW	DW	DW
3 ALT CHANGE	R	R	R	R	R	R	Y	Y	R	R	R	DW	DW	DW	DW
PHASE 4	R	R	R	R	R	R	R	R	G	G	G	DW	DW	DW	DW
4 CHANGE	R	R	R	R	R	R	Y	Y	Y	Y	Y	DW	DW	DW	DW
PHASE 4 ALT	R	R	R	R	R	R	R	R	G	G	G	DW	DW	W	W
PED CLEAR	R	R	R	R	R	R	R	R	G	G	G	DW	DW	FL/DW	FL/DW
4 ALT CHANGE	R	R	R	R	R	R	Y	Y	Y	Y	Y	DW	DW	DW	DW
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	FL/R	DARK	DARK	DARK	DARK

PRE EMPTION 1

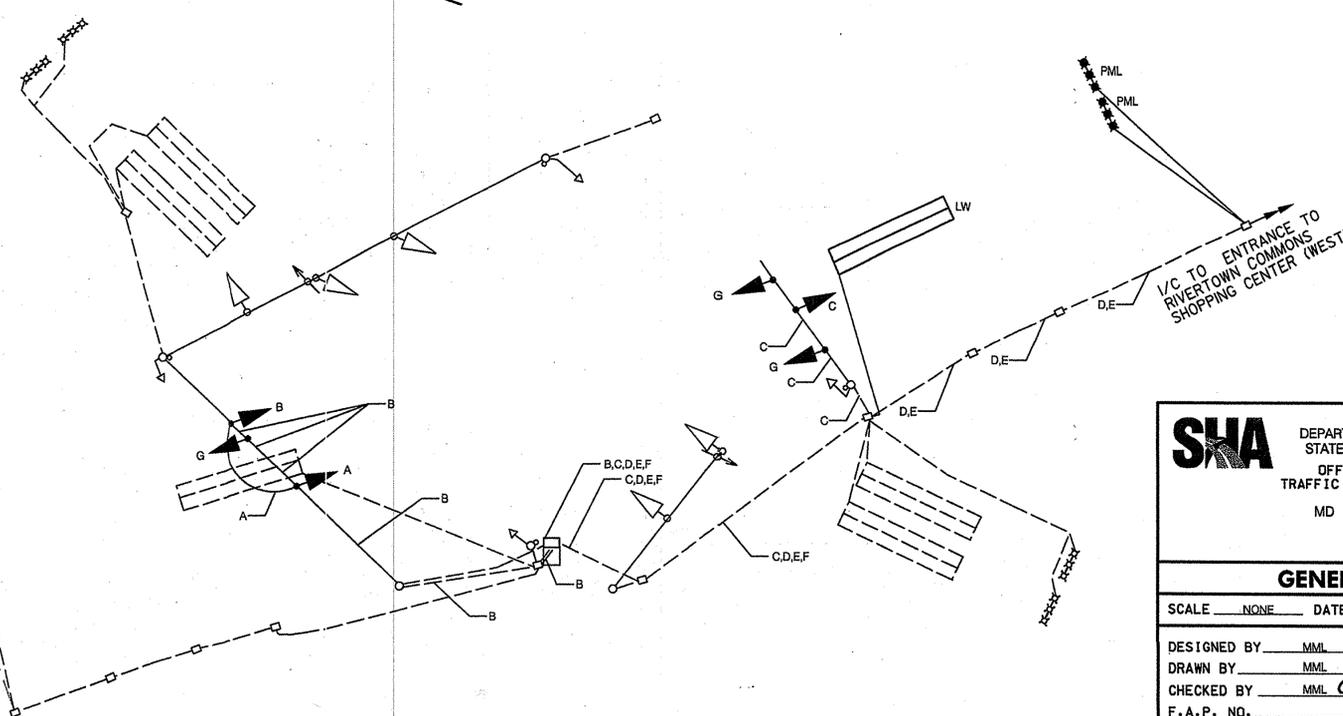
PRE EMPTION 1	R	R	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW
PRE EMPTION 1 CHANGE	R	R	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW
NORMAL OPERATION PHASE 2 & 6	G	G	G	G	G	G	R	R	R	R	R	DW	DW	DW	DW

PRE EMPTION 2

PRE EMPTION 2	R	R	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW
PRE EMPTION 2 CHANGE	R	R	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW
NORMAL OPERATION PHASE 2 & 6	G	G	G	G	G	G	R	R	R	R	R	DW	DW	DW	DW

- A - ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)
- B - MICROLOOP PROBE LEAD-IN CABLE
- C - ELECTRICAL CABLE - 2 CONDUCTOR (ALUMINUM SHEILDED)
- D - USE EXISTING WIRING
- E - PROPOSED MICROLOOP PROBE
- F - PROPOSED LOOP WIRE

WIRING DIAGRAM



EQUIPMENT LIST 'C'

EQUIPMENT TO BE REMOVED AND RETURNED TO SHA.

CAT CODE	QUANTITY	DESCRIPTION
800000	1 EA	DYNAMIC ICS LANE CONTROL SIGN

SHA STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION
MD 414 (OXON HILL ROAD) AT
LIVINGSTON ROAD

GENERAL INFORMATION

SCALE	NONE	DATE	SEPTEMBER 2007	CONTRACT NO.	BW998M82
DESIGNED BY	MML	COUNTY	PRINCE GEORGE'S		
DRAWN BY	MML	LOGMILE	16041400.95		
CHECKED BY	MML C3W	T.I.M.S. NO.	1507		
F.A.P. NO.		TOD NO.			
DRAWING NO.	TS-993G-GI OF	SHEET NO.	2 OF 2		

LENHART TRAFFIC CONSULTING
TRAFFIC ENGINEERING & TRANSPORTATION PLANNING
331 Redwood Grove Court Millersville, Maryland 21108
Tel: (410) 987-3888 Fax: (443) 782-2288

BORDER REV. DATE: JUNE 1, 2004

