PROJECT DESCRIPTION

I. GENERAL

This project involves the modification of an existing Traffic Control Signal with street lighting and interconnect at the intersection of MD 119 (Great Seneca Hwy) and Clopper Mill Rd/Richter Farm Rd in Montgomery County. This signal is being modified to accomodate a new northbound double left turn and a new eastbound right turn lane as a result of widening along MD 119 (Great Seneca Hwy) and along Richter Farm Rd. MD 119 (Great Seneca Hwy) is assumed to run in a north-south direction.

II. INTERSECTION OPERATION

1. The intersection is to continue to operate in a NEMA six-phase, fully-actuated mode, with the MD 119 (Great Seneca Hwy) approaches running concurrently. An Exclusive left turn phase shall be provided for both approaches of MD 119 (Great Seneca Hwy). A pedestrian phase with pushbutton actuation shall remain across both legs of MD 119 (Great Seneca Hwy). The pedestrian phases across Clopper Mill Road and Richter Farm Rd are on recall. Farside sampling stations shall be provided on both legs of MD 119 (Great Seneca Hwy). The Clopper Mill Rd / Richter Farm Rd approaches also run concurrently.

2. The existing controller housed in a NEMA size "6" base-mounted cabinet shall remain in operation at this intersection.

III. SPECIAL NOTES

1. The Contractor shall be responsible for terminating all signal cables, to the appropriate terminals and shall properly label each cable.

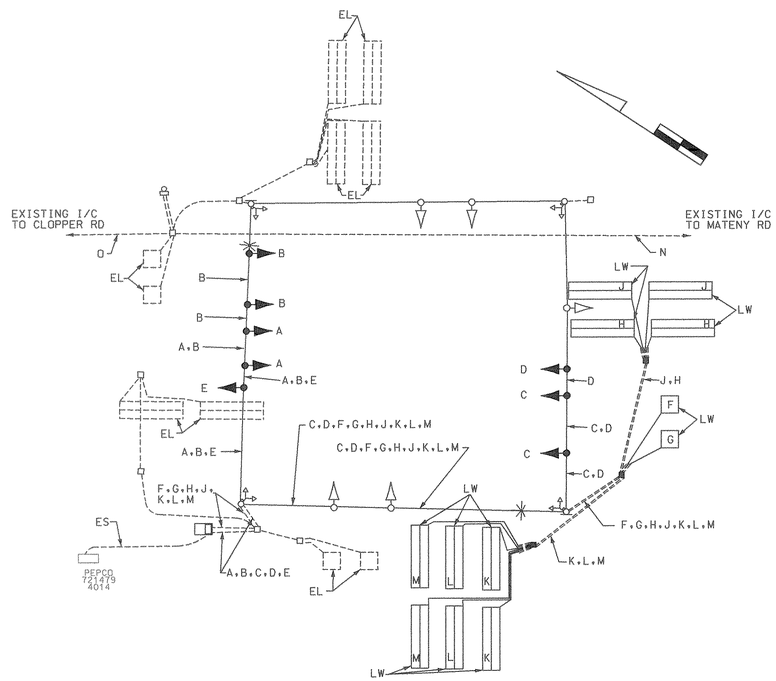
2. All underground and overhead utilities shown on these plans are schematic only and may not be complete. The Contractor shall be responsible for notifying Miss Utility prior to construction so that all utilities may be located in the field. If the Contractor perceives that a conflict between the utilities and the traffic signal will occur, the Contractor shall notify the Project Engineer immediately so that the conflict may be resolved.

EQUIPMENT LISTS

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

SPEC. NUMBER	DESCRIPTION	QUANTITY
814	12", one-way, three-section (R,Y,G) traffic signal head having proper span wire hangers, balance adjusters and tunnel visors. (Black Face)	4 EA
814	12", one-way, three-section (RA,YA,GA) traffic signal head having proper span wire hangers, balance adjusters and tunnel visors. (Black Face)	4 EA
813	Overhead mounted sheet aluminum sign consisting of:	22.5 S.F.
	R3-5L "LEFT TURN ONLY" sign, (30" x 36") span wire mounted.	3 EA
815	Saw cut for signal (loop detector).	1150 L.F.
805	1" liquid tight flexible non-metallic conduit for detector sleeve.	65 L.F.
805	Furnish and install 3" schedule 80 rigid polyvinyl chloride conduit - trenched	75 L.F.
805	Furnish and install 4" schedule 80 rigid polyvinyl chloride conduit - bored.	45 L.F.
811	Furnish and install electrical handhole.	3 EA
810	Furnish and install loop wire encased in flexible tubing (No. 14 AWG).	3850 L.F.
810	Furnish and install 5-conductor electrical cable (No. 14 A.W.G.).	990 L.F.
	Remove existing overhead mounted sign	1 EA
	Remove existing handhole	3 EA
	Furnish and install 3" weatherhead.	1 EA
822	Remove existing traffic signal head.	6 EA
	Canoga 4-conductor electrical cable (No. 14 A.W.G.) (shielded).	2070 L.F.

WIRING DIAGRAM



SEQUENCE OF OPERATION SHEET

MD 119 (GREAT SENECA HWY) RUNS IN AN NORTH-SOUTH DIRECTION

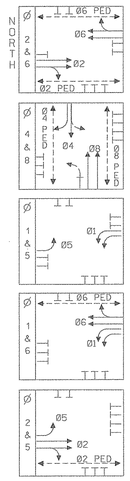
TRAFFIC OPERATIONS SECTION
DIVISION OF TRAFFIC ENGINEERING
MONTGOMERY COUNTY, MARYLAND

INTERSECTION: MD 119 (GREAT SENECA HWY) AND CLOPPER MILL RD / RICHTER FARM RD

NO. _____

SIGNAL HEAD INDICATIONS						
SIGNAL NO.	3,4,7,8, 9,10,11,12				1,2, 5,6	13-20
TOTAL:	8				4	4
LEGEND	R	Y	R / Y / G	R / Y / G	R	
OPTICALLY LIMITED						
R RED						
Y YELLOW						
G GREEN						
◄ ARROW						
F FLASHING	12"	12"	12"	12"	9" or 12"	X

PHASING



SIGNAL NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	FLASH
	SEQUENCE OF OPERATION — INTERVAL																		
1	◄R-	◄R-	◄R-	◄R-	◄R-	◄R-	◄R-	◄R-	◄R-	◄G-	◄Y-	◄R-	◄G-	◄Y-	◄R-	◄R-	◄R-	◄R-	◄R-
2	◄R-	◄R-	◄R-	◄R-	◄R-	◄R-	◄R-	◄R-	◄R-	◄G-	◄Y-	◄R-	◄G-	◄Y-	◄R-	◄R-	◄R-	◄R-	◄R-
3	G	G	Y	R	R	R	R	R	R	R	R	R	G	G	G	R	R	R	Y
4	G	G	Y	R	R	R	R	R	R	R	R	R	G	G	G	R	R	R	Y
5	◄R-	◄R-	◄R-	◄R-	◄R-	◄R-	◄R-	◄R-	◄R-	◄G-	◄Y-	◄R-	◄R-	◄R-	◄R-	◄G-	◄Y-	◄R-	◄R-
6	◄R-	◄R-	◄R-	◄R-	◄R-	◄R-	◄R-	◄R-	◄R-	◄G-	◄Y-	◄R-	◄R-	◄R-	◄R-	◄G-	◄Y-	◄R-	◄R-
7	G	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	G	G	G	Y
8	G	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	G	G	G	Y
9	R	R	R	R	G	G	G	Y	R	R	R	R	R	R	R	R	R	R	R
10	R	R	R	R	G	G	G	Y	R	R	R	R	R	R	R	R	R	R	R
11	R	R	R	R	G	G	G	Y	R	R	R	R	R	R	R	R	R	R	R
12	R	R	R	R	G	G	G	Y	R	R	R	R	R	R	R	R	R	R	R
13	WK	FL DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	WK	WK	WK	DARK
14	WK	FL DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	WK	WK	WK	DW	DW	DW	DARK
15	WK	FL DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	WK	WK	WK	DW	DW	DW	DARK
16	WK	FL DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	WK	WK	WK	DARK
17	DW	DW	DW	DW	WK	FL DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DARK
18	DW	DW	DW	DW	WK	FL DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DARK
19	DW	DW	DW	DW	WK	FL DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DARK
20	DW	DW	DW	DW	WK	FL DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DARK
PHASE	2 & 6			ALL RED	4 & 8				ALL RED	1 & 5		ALL RED	1 & 6		ALL RED	2 & 5		ALL RED	

NOTES:

SUBMITTED:	CHECKED:	APPROVED:
IN SERVICE BY:	DATE:	TIME:

WIRING KEY

- A, B, C, D, E — 5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G)
- F, G, H, J, K, L, M — CANOGA 4-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.) SHIELDED
- N, O — EXISTING 50-PAIR VOICE GRADE INTERCONNECT CABLE
- EL – LOOP WIRE (NO. 14 A.W.G.) EXISTING
- LW – LOOP WIRE (NO. 14 A.W.G.)
- ES – EXISTING UNDERGROUND SERVICE TO BE MAINTAINED BY PEPCO
- ✦ – GROUND ROD

REVISION "A"

STREET TRAFFIC STUDIES, LTD.
400 Crain Hwy. NW.
Glen Burnie, MD 21061
Ph (410) 590-5500
Fax (410) 590-6637

3942GI.DGN

MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION
MD 119 (GREAT SENECA HWY) AT CLOPPER MILL RD/ RICHTER FARM RD

DRAWN BY: R R ZACHERL	F.A.P. NO.		TS NO. 4109	SHEET NO. 2 OF 2
CHECKED BY: W J NIES	S.H.A. NO.			
SCALE: 1"=20'	COUNTY:	MONTGOMERY	T.I.M.S. NO. E-654X	
DATE: 6-6-01	LOG MILE:			