SEQUENCE OF OPERATION SHEET

MD 28 RUNS IN AN EAST-WEST DIRECTION

TRAFFIC OPERATIONS SECTION
DIVISION OF TRAFFIC ENGINEERING
MONTGOMERY COUNTY, MARYLAND

INTERSECTION: MD 28 (W. MONTGOMERY AVENUE) AND RESEARCH BLVD / CROFTON HILL LN NO.

SIGNAL NO.	3,4,7,8,9 10,13,	1,2, 5,6		11,12, 14,15	16	17-22
TOTAL:	7	4		4	1	6
LEGEND (OPTICALLY LIMITED; R RED; Y YELLOW; G GREEN; ← ARROW; F FLASHING)	R, Y, G, ←G, ←Y, ←R, F	←R, ←Y, ←G, G, Y, R	R, ←Y, ←G, Y, G	R, Y, ←G, G	R, Y, ←Y→, ←G, G, ←G→	F, 9"or12" X
	12"	12"	12"	12"	12"	

PHASING

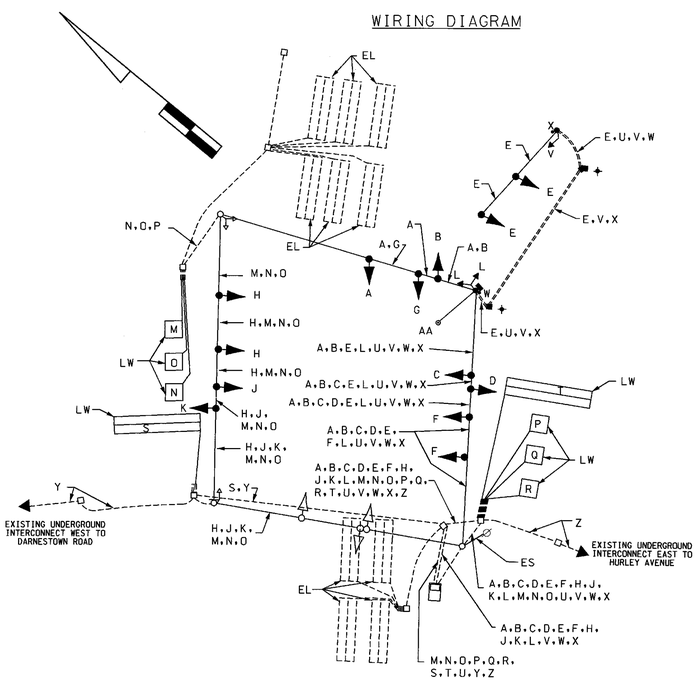
SEQUENCE OF OPERATION

SIGNAL NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	FLASH
1	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←G	←Y	←R	←G	←Y	←R	←R	←R	←R	FL←R
2	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←G	←Y	←R	←G	←Y	←R	←R	←R	←R	FL←R
3	G	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	G	G	G	R	R	R	R	FL/Y
4	G	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	G	G	G	R	R	R	R	FL/Y
5	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←G	←Y	←R	←R	←R	←G	←Y	←R	←R	FL←R
6	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←R	←G	←Y	←R	←R	←R	←G	←Y	←R	←R	FL←R
7	G	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	G	G	G	FL/Y
8	G	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	G	G	G	FL/Y
9	G	G	G	G	G	G	G	Y	R	R	R	R	R	R	R	R	R	R	R	G	G	G	G	FL/R
10	G	G	G	G	G	G	G	Y	R	R	R	R	R	R	R	R	R	R	R	G	G	G	G	FL/R
11	R	R	R	R	R	R	R	R	R	←G	←G	←G	Y	R	R	R	R	R	R	R	R	R	R	FL/R
12	R	R	R	R	R	R	R	R	R	←G	←G	←G	Y	R	R	R	R	R	R	R	R	R	R	FL/R
13	R	R	R	R	R	R	R	R	G	G	G	G	Y	R	R	R	R	R	R	R	R	R	R	FL/R
14	R	R	R	R	←G	←G	←G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	FL/R
15	R	R	R	R	←G	←G	←G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	FL/R
16	R	R	R	R	G	G	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	FL/R
17	WK	FL/DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	WK	WK	WK	DARK
18	WK	FL/DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	WK	WK	WK	DARK
19	DW	DW	DW	DW	WK	FL/DW	DW	DW	DW	DW	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	DW	DW	DW	DW	DW	DARK
21	DW	DW	DW	DW	DW	DW	DW	DW	DW	WK	FL/DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DARK
22	DW	DW	DW	DW	DW	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	3				ALL RED	4				ALL RED	1 & 5		ALL RED	1 & 6			ALL RED	2 & 5		ALL RED	

NOTES:

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

WIRING DIAGRAM



WIRING KEY

- A, B } 7-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G)
- C, D, E, F, G, H, J, K } 5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G)
- L, M, N, O, P, Q, R, S, T } CANOGA 4-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.) SHIELDED
- U - STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)
- V - 3-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G)
- W, X } 2-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G)
- Y - 12-PAIR VOICE GRADE INTERCONNECT CABLE TO DARNESTOWN RD
- Z - 12-PAIR VOICE GRADE INTERCONNECT CABLE TO HURLEY AVE
- AA - TRAFFIC SURVEILLANCE CABLE (TO BE INSTALLED BY MONTGOMERY COUNTY FORCES)
- EL - LOOP WIRE (NO. 14 A.W.G.) (EXISTING)
- LW - LOOP WIRE (NO. 14 A.W.G.)
- ES - EXISTING OVERHEAD SERVICE TO BE MAINTAINED BY PEPCO
- ✦ - GROUND ROD

SEQUENCE OF OPERATION SHEET

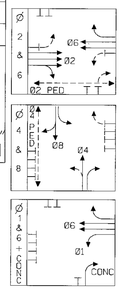
MD 28 RUNS IN AN EAST - WEST DIRECTION

TRAFFIC OPERATIONS SECTION
DIVISION OF TRAFFIC ENGINEERING
MONTGOMERY COUNTY, MARYLAND

INTERSECTION: MD 28 (W. MONTGOMERY AVENUE) AND HURLEY AVENUE NO.

SIGNAL NO.	3,4,5,6,7, 8,9,10,12,13	1	2	11	14,15, 16,17
TOTAL:	10	1	1	1	4
LEGEND (OPTICALLY LIMITED; R RED; Y YELLOW; G GREEN; ← ARROW; F FLASHING)	R, Y, G	R, ←Y, ←G	R, ←Y, ←G	R, Y, G	F, 9"or12" X
	12"	12" 8"	12"	12"	

PHASING



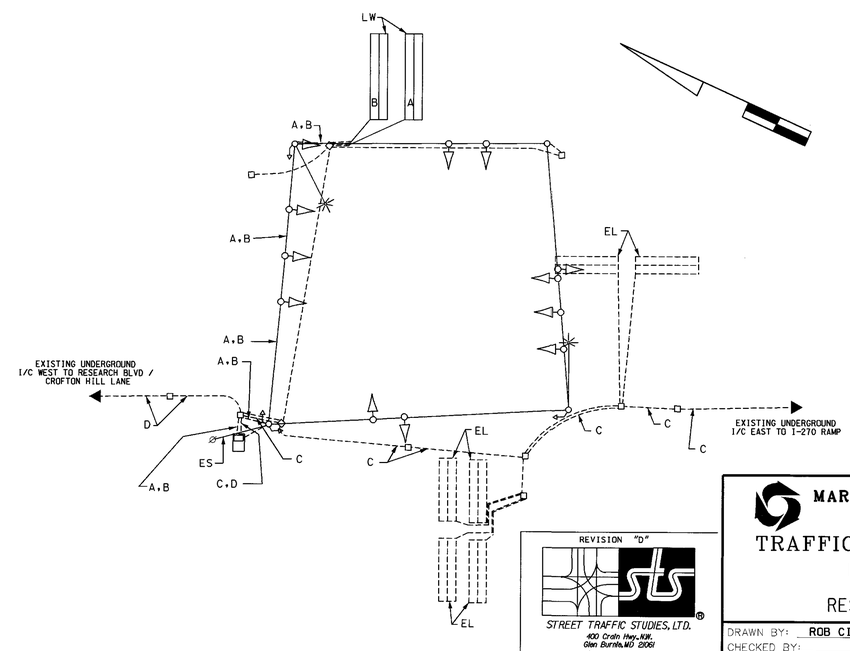
SEQUENCE OF OPERATION

SIGNAL NO.	1	2	3	4	5	6	7	8	9	10	11	12	FLASH
1	G	G	Y	R	R	R	R	R	←G/G	←Y/G	G		FL/Y
2	G	G	Y	R	R	R	R	R	←G/G	←Y/G	G		FL/Y
3	G	G	Y	R	R	R	R	R	G	G	G		FL/Y
4	G	G	Y	R	R	R	R	R	G	G	G		FL/Y
5	G	G	Y	R	R	R	R	R	G	G	G		FL/Y
6	G	G	Y	R	R	R	R	R	R	R	R		FL/Y
7	G	G	Y	R	R	R	R	R	R	R	R		FL/Y
8	G	G	Y	R	R	R	R	R	R	R	R		FL/Y
9	R	R	R	R	G	G	G	Y	R	R	R		FL/R
10	R	R	R	R	G	G	G	Y	R	R	R		FL/R
11	R	R	R	R	G	G	G	Y	R	R/G→	R/Y→		R FL/R
12	R	R	R	R	G	G	G	Y	R	R	R		FL/R
13	R	R	R	R	G	G	G	Y	R	R	R		FL/R
14	WK	FL/DW	DW	DW	DW	DW	DW	DW	DW	DW	DW		DARK
15	WK	FL/DW	DW	DW	DW	DW	DW	DW	DW	DW	DW		DARK
16	DW	DW	DW	DW	WK	FL/DW	DW	DW	DW	DW	DW		DARK
17	DW	DW	DW	DW	WK	FL/DW	DW	DW	DW	DW	DW		DARK
PHASE	2 & 6			ALL RED	4 & 8				ALL RED	1 & 5		ALL RED	

NOTES:

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

WIRING DIAGRAM



WIRING KEY

- A, B } 2-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G) ALUMINUM SHIELDED
- C - EXISTING 12-PAIR VOICE GRADE INTERCONNECT CABLE FROM I-270 RAMP
- D - EXISTING 12-PAIR VOICE GRADE INTERCONNECT CABLE FROM RESEARCH BLVD
- EL - LOOP WIRE (NO. 14 A.W.G.) (EXISTING)
- LW - LOOP WIRE (NO. 14 A.W.G.)
- ES - EXISTING OVERHEAD SERVICE TO BE MAINTAINED BY PEPCO

REVISION "D"

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

4049BGI.dgn

MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION
MD 28 (W. MONTGOMERY AVE) AT:
HURLEY AVE AND
RESEARCH BLVD / CROFTON HILL LANE

DRAWN BY: ROB CICCHINI	F.A.P. NO.		TS NO. 858 GI	SHEET NO. 3 OF 5
CHECKED BY:	S.H.A. NO.			
SCALE: NONE	COUNTY: MONTGOMERY		T.I.M.S. NO. F063	
DATE: 10-17-02	LOG MILE: 15002820.48			

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