PROJECT DESCRIPTION

I. GENERAL

THIS PROJECT INVOLVES THE MODIFICATION OF AN EXISTING TRAFFIC CONTROL SIGNAL AT THE INTERSECTION OF MD ROUTE 28 (DARNESTOWN ROAD) AND RIFFLE FORD ROAD/SEURAT DRIVE IN MONTGOMERY COUNTY. MD ROUTE 28 (DARNESTOWN ROAD) IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION.

II. INTERSECTION OPERATION

THE INTERSECTION WILL OPERATE IN A NEMA, SIX (6) PHASE, SEMI-TRAFFIC-ACTUATED MODE. THERE WILL BE AN EXCLUSIVE/PERMISSIVE LEFT TURN PHASE FOR BOTH EASTBOUND AND WESTBOUND MD 28 MOVEMENTS. THE MD 28 THROUGH MOVEMENTS WILL OPERATE CONCURRENTLY. THE RIFFLE FORD ROAD/SEURAT DRIVE MOVEMENTS WILL OPERATE CONCURRENTLY. AN ALTERNATE PEDESTRIAN PHASE WILL BE PROVIDED ALONG THE WEST LEG OF MD 28. A CONCURRENT PEDESTRIAN PHASE WILL BE PROVIDED ALONG THE NORTH AND SOUTH LEGS OF RIFFLE FORD ROAD/SEURAT DRIVE.

AN EIGHT (8) PHASE, FULL-TRAFFIC-ACTUATED, SOLID STATE DIGITAL CONTROLLER WITH ~~THREE (3), TWO CHANNEL LOOP DETECTOR AMPLIFIERS WITH DELAY OUTPUT~~ VIDEO TRAFFIC DETECTION SYSTEM HOUSED IN A BASE MOUNTED CABINET EXISTS AT THIS LOCATION. [4]

III. INTERCONNECTION

THE EXISTING 50 PAIR VOICE GRADE INTERCONNECT CABLE BETWEEN THE INTERSECTIONS OF MD 28 @ RIFFLE FORD ROAD/SEURATDRIVE AND MD 28 @ SAFEWAY DRIVEWAY IS TO BE MAINTAINED.

IV. PROJECT CONTACTS

THE CONTACT PERSONS FOR DISTRICT THREE ARE AS FOLLOWS:

MR. CHARLIE WATKINS
DISTRICT ENGINEER
PHONE (301) 513-7311

MR. AUGUSTINE REBISH
UTILITY ENGINEER
PHONE: (301) 513-7350

MR. MAJID SHAKIB
ASSISTANT DISTRICT
ENGINEER-TRAFFIC
PHONE: (301) 513-7358

MR. RICHARD L. DAFF, SR.
CHEIF, TRAFFIC OPERATIONS DIVISION
PHONE: (410) 787-7630

THE POWER COMPANY REPRESENTATIVE IS
POTOMAC ELECTRIC POWER COMPANY
MR. JIM SLAYTON
PHONE: (202) 872-2000

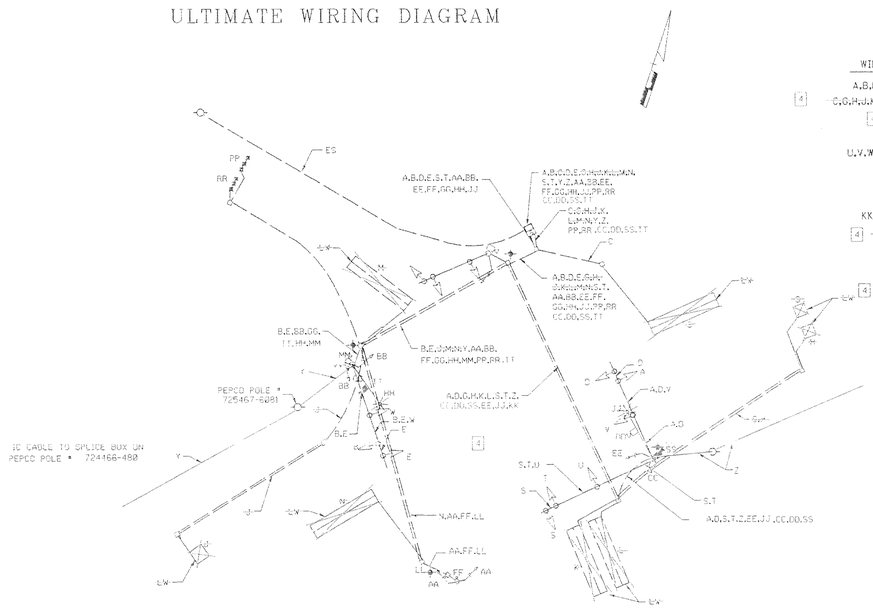
THE CONTACT PERSON FOR
MONTGOMERY COUNTY DPW-T IS:
MR. ROBERT GONZALES
PHONE: (240) 777-8761

EQUIPMENT LIST 'B'

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

QUANTITY	UNIT	SPECIFICATION SECTION	DESCRIPTION
1	CY	225	TEST PIT EXCAVATION
400	LF	556	12 INCH HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKINGS
120	LF	556	24 INCH HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKINGS
[4] ~~5~~	~~LF~~	~~825~~	~~FURNISH AND INSTALL 1" LIQUID TIGHT FLEXIBLE NON-METALLIC CONDUIT FOR DETECTOR SLEEVE~~
[4] ~~37~~	~~LF~~	~~825~~	~~FURNISH AND INSTALL 1 ELECTRICAL CONDUIT GALVANIZED SLEEVE~~
275	LF	825	FURNISH AND INSTALL 4" SCHEDULE 80 RIGID PVC CONDUIT-BORED
170	LF	825	FURNISH AND INSTALL 3" SCHEDULE 80 RIGID PVC CONDUIT-TRENCHED
[4] ~~1480~~	~~LF~~	~~813~~	~~FURNISH AND INSTALL ELECTRICAL CABLE- 2 CONDUCTOR (ALUMINUM SHIELDED) (NO 14 AWG)~~
1350	LF	810	FURNISH AND INSTALL ELECTRICAL CABLE- 7 CONDUCTOR (NO 14 AWG)
[4] ~~1460~~	~~LF~~	~~813~~	~~FURNISH AND INSTALL LOOP WIRE ENGAGED IN FLEXIBLE TUBING (NO 14 AWG)~~
[4] ~~405~~	~~LF~~	~~915~~	~~FURNISH AND INSTALL SAWCUT FOR SIGNAL & LOOP DETECTOR~~
450	LF	SP	FURNISH AND INSTALL STRANDED BARE COPPER GROUND WIRE (NO 6 AWG)
820	LF	810	FURNISH AND INSTALL ELECTRICAL CABLE- 2 CONDUCTOR (NO 14 AWG)
250	LF	810	FURNISH AND INSTALL ELECTRICAL CABLE- 3 CONDUCTOR (NO 14 AWG)
420	LF	810	FURNISH AND INSTALL ELECTRICAL CABLE- 5 CONDUCTOR (NO 14 AWG)
1	LS	SP	REMOVE AND DISPOSE OF EXISTING EQUIPMENT
2	EA	811	FURNISH AND INSTALL ELECTRICAL HANDHOLE
[4] 2	EA	SP	FURNISH AND INSTALL VIDEO TRAFFIC DETECTION SYSTEM
[4] 950	LF	SP	FURNISH AND INSTALL VIDEO TRAFFIC DETECTION CABLE

ULTIMATE WIRING DIAGRAM



WIRING LEGEND:

A,B,D,E,S,T — 7 CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
[4] ~~C,G,H,J,K,L,M,N — 2 CONDUCTOR ELECTRICAL CABLE (ALUMINUM SHIELDED)~~
[4] ~~LW — LOOP WIRE ENGAGED IN FLEXIBLE TUBING (NO. 14 A.W.G.)~~
Y,Z — 50 PAIR COMMUNICATION CABLE, JELLY FILLED
U,V,W,AA,BB — 5 CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
EE — 3 CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
FF,GG — 2 CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
HH,JJ — 2 CONDUCTOR ELECTRICAL CABLE (NO. 12 A.W.G.)
KK,LL,MM — STRANDED BARE COPPER GROUND WIRE (NO. 6AWG)
[4] ~~PP,RR — MICROLOOP PROBE LEAD IN CABLE~~
⏚ — 3/4" x 10' GROUND ROD
ES — EXISTING SERVICE
[4] CC,DD — VIDEO TRAFFIC DETECTION SYSTEM (NO. 18 A.W.G.)
SS,TT,
VV

PHASE CHART

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
PHASE 1 & 5	←G/R	←G/R	R	←G/R	←G/R	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW
1 & 5 CHANGE	TO PHASE 1 & 6, OR PHASE 2 & 5, OR PHASE 2 & 6																	
PHASE 1 & 6	←G/G	←G/G	G	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW
1 CHANGE	←Y/G	←Y/G	G	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW
PHASE 2 & 5	R	R	R	←G/G	←G/G	G	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW
5 CHANGE	R	R	R	←Y/G	←Y/G	G	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW
PHASE 2 & 6	G	G	G	G	G	G	R	R	R	R	R	R	W	W	W	W	DW	DW
PED CLEAR	G	G	G	G	G	G	R	R	R	R	R	R	FL/DW	FL/DW	FL/DW	FL/DW	DW	DW
2 & 6 CHANGE	Y	Y	Y	Y	Y	Y	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW
PHASE 4 & 8	R	R	R	R	R	R	G	G	G	G	G	G	DW	DW	DW	DW	DW	DW
4 & 8 CHANGE	R	R	R	R	R	R	Y	Y	Y	Y	Y	Y	DW	DW	DW	DW	DW	DW
ALT PHASE 4	R	R	R	R	R	R	G	G	G	G	G	G	DW	DW	DW	DW	W	W
PED CLEAR	R	R	R	R	R	R	G	G	G	G	G	G	DW	DW	DW	DW	FL/DW	FL/DW
ALT 4 CHANGE	R	R	R	R	R	R	Y	Y	Y	Y	Y	Y	DW	DW	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	FL/R	DARK	DARK	DARK	DARK	DARK	DARK

TSP 8

REVISION 'A'
KCI TECHNOLOGIES INC.
ENGINEERS AND PLANNERS
10 NORTH PARK DRIVE
HUNT VALLEY, MARYLAND
21030-1388
(410) 316-7800

KCI TECHNOLOGIES

REVISIONS	APPROVALS
Ⓐ 10-00 NEW MD 28 GEOMETRICS SHA CONT. NO. M05285271	PROJECT MANAGER, SIGNAL DESIGN DIVISION: ORIGINALS
△1 ADDENDUM NO. 3 NEW SHEET 12/19/2000	ASST. CHIEF, TRAFFIC ENGINEERING DESIGN DIVISION: ON
[4] REDLINE NO. 4 REPLACEMENT SHEET 9/27/2001	CHIEF, TRAFFIC ENGINEERING DESIGN DIVISION: FILE
A.H. M.P.	DIRECTOR, TRAFFIC & SAFETY

MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION

GENERAL INFORMATION SHEET ULTIMATE
MD 28 (DARNESTOWN RD) AND RIFFLE FORD RD / SEURAT DRIVE

DRAWN BY: S. CHERNAK	F.A.P. NO. STPG-0005 (301) E	TS NO. 3302A-GI	SHEET NO.
CHECKED BY: M. RUCKER	S.H.A. NO. AW 791-479-385		
SCALE: NONE	COUNTY: MONTGOMERY	T.M.S. NO. D107	287 OF 434
DATE: 4-18-96	LOG MILE: 6002815.21		

SR\1997\G197029\MD28\

/22/01 5:17:24 PM G:\PLOTTING\PS2\OCP\MYLAR_HP.dgl McSendy Pierre Division: Transportation n:\1997\0197029\md28\RIFFLE\SP02Rfu1.PRF