

SIGNAL DISPLAYS

SIGNAL HEAD	ø 2 & ø 5		ø 2 & ø 6		ø 4 & ø 7		ø 3 & ø 8		FLASH									
	R/W	CLEAR	R/W	CLEAR	R/W	CLEAR	R/W	CLEAR										
1	R	R	R	R	G	G	Y	R	R	R	R	R	R	R	R	R	R	Y
2	R	R	R	R	G	G	Y	R	R	R	R	R	R	R	R	R	R	Y
3	R	R	R	R	G	G	Y	R	R	R	R	R	R	R	R	R	R	Y
4	R	R	R	R	G	G	Y	R	R	R	R	R	R	R	R	R	R	Y
5	G	G	G	G	G	G	Y	R	R	R	R	R	R	R	R	R	R	Y
6	R	R	R	R	R	R	R	R	R	R	R	R	R	G	G	Y	R	R
7	R	R	R	R	R	R	R	R	R	R	R	R	R	G	G	Y	R	R
8	R	R	R	R	R	R	R	R	R	G	G	Y	R	R	R	R	R	R
9	R	R	R	R	R	R	R	R	R	G	G	Y	R	R	R	R	R	R
A	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	W	FDW	DW	DW	DW	DARK
B	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	W	FDW	DW	DW	DW	DARK
C	DW	DW	DW	DW	W	FDW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DARK
D	DW	DW	DW	DW	W	FDW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DARK
E	DW	DW	DW	DW	W	FDW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DARK
F	DW	DW	DW	DW	W	FDW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DARK

TRAFFIC SIGNAL DETECTOR CHART

LOOP DESIGNATION	SIZE (FT.)	TURNS	PULSE OR PRESENCE	DELAY (SEC.)	EXTENSION (SEC.)	OVERRIDE PHASE	CONNECT TO DETECTOR UNIT (UNIT-CHANNEL)	ASSOCIATED CONTROLLER PHASE
L-1	6' x 40'	3	PRESENCE	-	-	-	1	5
L-2	6' x 40'	3	PRESENCE	10	-	-	2	4
L-3	6' x 40'	3	PRESENCE	-	-	-	3	7
L-4	6' x 40'	3	PRESENCE	-	-	-	4	7
L-5	6' x 40'	3	PRESENCE	-	-	-	5	8
L-6	6' x 40'	3	PRESENCE	10	-	-	6	8

OVERHEAD SIGNS

FROM SHEET NO.	STATION	SIDE	SIGN CODE AND SIZE					ITEM 630				
			R10-4A-9 (9"x12")	R10-7-24 (24"x30")	D3-H2A (72"x18")	D3-H2A (96"x18")	E1-H1 (120"x84")	REMOVAL OF OVERHEAD MOUNTED SIGN AND DISPOSAL	SIGN, FLAT SHEET	SIGN, OVERHEAD EXTRUSHEET	SIGN SUPPORT ASSEMBLY, POLE MOUNTED, AS PER PLAN	SIGN HANGER ASSEMBLY, MAST ARM, AS PER PLAN
							EACH	SO.FT.	SO.FT.	EACH	EACH	
1180	131+35	LT				1		12.0			1	
1180	131+49	LT	1					0.75		1		
1180	131+55.5	RT	1					0.75		1		
1180	131+69	RT			1			9.0			1	
1180	132+51	RT			1			12.0			1	
1180	132+67	LT			1	2		9.0	140.0		1	
TOTAL								43.5	140	2	4	

TIMING CHART

START UP START IN: Y/R FLASH ● ; ALL RED ○
 TIME FOR FLASH OR ALL RED 3 SEC.
 FIRST PHASE(S) ø 2 & ø 6
 COLOR DISPLAYED: GREEN ● ;YELLOW ○

DUAL ENTRY ○
 REST IN RED: RING 1 ○ RING 2 ○

INTERVAL	CONTROLLER PHASE							
	1	2	3	4	5	6	7	8
MOVEMENT	↶	→	↷	↓	↵	←	↶	↑
MINIMUM GREEN (INITIAL)	-	-	-	11	9	-	-	15
ADDED INITIAL	-	-	-	3	3	-	-	3
PASSAGE TIME	-	-	-	3	3	-	-	3
TIME BEFORE REDUCTION	-	-	-	-	-	-	-	-
MINIMUM GAP	-	-	-	-	-	-	-	-
TIME TO REDUCE	-	-	-	-	-	-	-	-
MAXIMUM GREEN I	31	-	-	17	14	-	-	24
MAXIMUM GREEN II	-	-	-	-	-	-	-	-
YELLOW CHANGE	4.5	-	-	4.5	4.4	-	-	4.6
ALL RED CLEARANCE	2	-	-	2	-	-	-	2
WALK	7	-	-	-	-	-	-	4
PEDESTRIAN CLEARANCE	23	-	-	-	-	-	-	20
RECALL	MAXIMUM	-	-	-	-	-	-	-
	MINIMUM	ON	OFF	OFF	-	-	OFF	-
	PEDESTRIAN	-	-	-	-	-	-	-
MEMORY		OFF	OFF	OFF	-	-	OFF	-
CALL TO NON-ACUATED	No. 1	-	-	-	-	-	-	-
	No. 2	-	-	-	-	-	-	-
MAXIMUM CYCLE	110							

SUB-SUMMARY OF TRAFFIC SIGNAL ITEMS

ITEM	QUANTITY	UNIT	ITEM DESCRIPTION	REFERENCE
625	249	FT	CONDUIT, 2", 725.05	
625	144	FT	CONDUIT, 3", 725.04	
625	22	FT	CONDUIT, 3", 725.05	
625	222	FT	CONDUIT, JACKED OR DRILLED UNDER PAVEMENT, 3"	
625	404	FT	TRENCH	
625	3	EACH	PULL BOX, 725.08, 18"	
625	2	EACH	PULL BOX, 725.08, 24"	
625	1	EACH	PULL BOX, 725.08, 36"	
625	4	EACH	GROUND ROD	
625	1	EACH	GROUND ROD, AS PER PLAN	1038
625	404	FT	PLASTIC CAUTION TAPE	1038
630	4	EACH	SIGN HANGER ASSEMBLY, MAST ARM, AS PER PLAN	1038
630	2	EACH	SIGN SUPPORT ASSEMBLY, POLE MOUNTED, AS PER PLAN	1038
630	44	SF	SIGN, FLAT SHEET	
630	140	SF	SIGN, OVERHEAD EXTRUSHEET	
632	7	EACH	VEHICULAR SIGNAL HEAD WITH LED LAMP UNITS, 3-SECTION, 12" LENS, 1-WAY, AS PER PLAN	1038
632	2	EACH	VEHICULAR SIGNAL HEAD WITH LED LAMP UNITS, 5-SECTION, 12" LENS, 1-WAY, AS PER PLAN	1038
632	6	EACH	PEDESTRIAN SIGNAL HEAD WITH LED LAMP UNITS, TYPE A2	
632	2	EACH	PEDESTRIAN PUSHBUTTON	
632	6	EACH	DETECTOR LOOP	
632	6	EACH	LOOP DETECTOR UNIT, DELAY AND EXTENSION TYPE, AS PER PLAN	1038
632	1	EACH	DISCONNECT SWITCH WITH ENCLOSURE	
632	1,277	FT	SIGNAL CABLE, 2 CONDUCTOR, NO. 14 AWG	
632	1,347	FT	SIGNAL CABLE, 5 CONDUCTOR, NO. 14 AWG	
632	1,050	FT	SIGNAL CABLE, 7 CONDUCTOR, NO. 14 AWG	
632	4	EACH	SIGNAL SUPPORT FOUNDATION	
632	6	EACH	PEDESTAL FOUNDATION	
632	3,325	FT	LOOP DETECTOR LEAD-IN CABLE	
632	65	FT	POWER CABLE, 2 CONDUCTOR, NO. 6 AWG	
632	40	FT	POWER CABLE, 3 CONDUCTOR, NO. 6 AWG	
632	155	FT	SERVICE CABLE, 3 CONDUCTOR, NO. 6 AWG	
632	1	EACH	POWER SERVICE, AS PER PLAN	1039
632	1	EACH	CONDUIT RISER, 2" DIAMETER	
632	1	EACH	SIGNAL SUPPORT, TYPE TC-81.20, DESIGN 3	
632	1	EACH	SIGNAL SUPPORT, TYPE TC-81.20, DESIGN 11	
632	1	EACH	SIGNAL SUPPORT, TYPE TC-81.20, DESIGN 12	
632	1	EACH	COMBINATION SIGNAL SUPPORT, MISC.: TYPE TC-12.30 DESIGN 6 POLE, WITH MAST ARM TC-81.20 DESIGN 4 AND SIGN SUPPORT TC-12.30 DESIGN 6	1038
632	2	EACH	PEDESTAL, 5', TRANSFORMER BASE	
632	2	EACH	PEDESTAL, 8', TRANSFORMER BASE	
632	1	EACH	REMOVAL OF TRAFFIC SIGNAL INSTALLATION	
633	1	EACH	CONTROLLER UNIT, TYPE TS2/A2, WITH CABINET, TYPE TS1	1040
633	1	EACH	CABINET RISER	
633	1	EACH	CABINET FOUNDATION	
633	1	EACH	TELEPHONE SERVICE	
633	1	EACH	UNINTERRUPTIBLE POWER SUPPLY (UPS), 1000 WATT	1039
633	4	EACH	CONTROLLER ITEM, MISC.: PREEMPTION RECEIVING UNIT	1039
633	1	EACH	CONTROLLER ITEM, MISC.: PREEMPT PHASE SELECTOR	1039
633	4	EACH	CONTROLLER ITEM, MISC.: PREEMPT CONFIRMATION LIGHT	1040
633	1	EACH	CONTROLLER ITEM, MISC.: PREEMPTION	1040
633	1,277	FT	CONTROLLER ITEM, MISC.: PREEMPTION DETECTOR CABLE	1040

**TRAFFIC SIGNAL DETAILS AND SUB-SUMMARY
VINE STREET AND EASTBOUND RAMPS**

LAK - 2 - 3.32