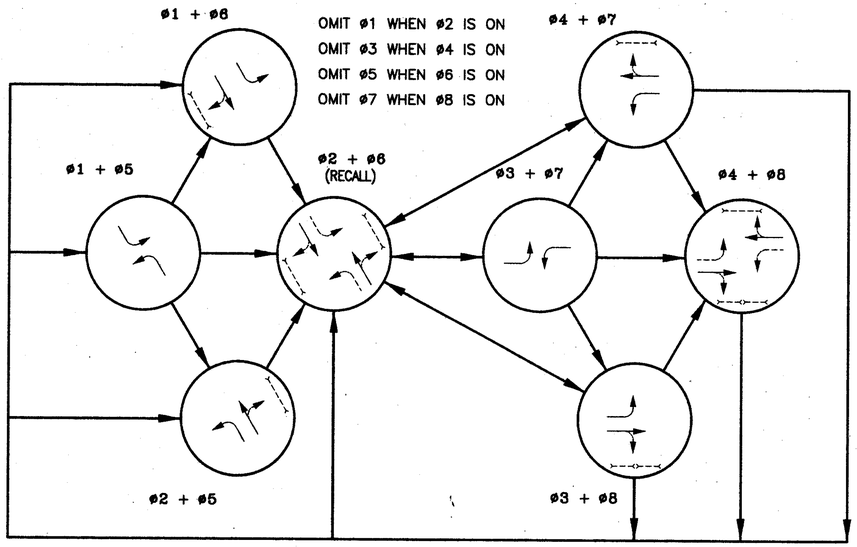
PHASING DIAGRAM



ESTIMATED QUANTITIES

ITEM	QUANT	UNIT	DESCRIPTION
202	57.4	SQ. METER	WALK REMOVED, AS PER PLAN
608	57.4	SQ. METER	100mm CONCRETE WALK
625	39	METER	CONDUIT, 51 mm, 713.04
625	31.7	METER	CONDUIT, 76 mm, 713.04
625	2	METER	CONDUIT, 102 mm, 713.04
625	78.7	METER	CONDUIT, JACKED OR DRILLED, SIZE: 76 mm
625	72.7	METER	TRENCH
625	9	EACH	PULLBOX, 713.08, 450 mm
625	7	EACH	GROUND ROD
632	4	EACH	VEHICULAR SIGNAL HEAD, 3-SECT., 300 mm LENS, 1-WAY, AS PER PLAN
632	4	EACH	VEHICULAR SIGNAL HEAD, 5-SECT., 300 mm LENS, 1-WAY, AS PER PLAN
632	10	EACH	PEDESTRIAN SIGNAL HEAD, TYPE D2, AS PER PLAN
632	8	EACH	COVERING OF VEHICULAR SIGNAL HEAD
632	10	EACH	PEDESTRIAN PUSHBUTTON, AS PER PLAN
632	8	EACH	DETECTOR LOOP
632	2	EACH	LOOP DETECTOR UNIT, AS PER PLAN
632	6	EACH	LOOP DETECTOR UNIT, DELAY & EXTENSION TYPE, AS PER PLAN
632	238.7	METER	SIGNAL CABLE, 3 CONDUCTOR, NO. 14 AWG
632	59.7	METER	SIGNAL CABLE, 5 CONDUCTOR, NO. 14 AWG
632	439.2	METER	SIGNAL CABLE, 7 CONDUCTOR, NO. 14 AWG
632	238.7	METER	SIGNAL CABLE, MISC.: PREEMPT DETECTOR CABLE
632	1	EACH	PHONE DROP
632	4	EACH	SIGNAL SUPPORT FOUNDATION
632	2	EACH	PEDESTAL FOUNDATION
632	789.2	METER	LOOP DETECTOR LEAD-IN CABLE
632	13.4	METER	POWER CABLE, 3 CONDUCTOR, NO. 6 AWG
632	2	EACH	CONDUIT RISER, 51mm DIAMETER
632	1	EACH	SIGNAL SUPPORT, TYPE TC-81.20M, DES. 1
632	1	EACH	SIGNAL SUPPORT, TYPE TC-81.20M, DES. 2
632	2	EACH	SIGNAL SUPPORT, TYPE TC-81.20M, DES. 4
632	2	EACH	PEDESTAL, 2.4M, TRANSFORMER BASE
632	1	EACH	REMOVAL OF TRAFFIC SIGNAL INSTALLATION
633	1	EACH	CONTROLLER, ACTUATED, 8 PHASE, SOLID-STATE DIGITAL MICROPROCESSOR, AS PER PLAN
633	1	EACH	CONTROLLER, MASTER, SOLID-STATE, MICROPROCESSOR, TRAFFIC RESPONSIVE, AS PER PLAN
633	1.4	CU. METER	CONCRETE FOR CABINET FOUNDATION
633	1.04	SQ. METER	CONTROLLER WORK PAD
633	4	EACH	CONTROLLER ITEM, MISC.: PREEMPT DETECTORS
633	1	EACH	CONTROLLER ITEM, MISC.: PREEMPT PHASE SELECTOR
633	4	EACH	CONTROLLER ITEM, MISC.: CONFIRMATION LIGHT

SIGNAL DISPLAY CHART

SIGNAL HEAD	ø1 + ø5			ø1 + ø6			ø2 + ø5			ø2 + ø6				ø3 + ø7			ø3 + ø8			ø4 + ø7			ø4 + ø8				FLASH
	R/W	CLEAR		R/W	CLEAR		R/W	CLEAR		R/W		CLEAR		R/W	CLEAR		R/W	CLEAR		R/W	CLEAR		R/W		CLEAR		
A	↻ R	↺R①	R①	R	R	R	↻ G	↺G	G	G	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	Y
B	R	R	R	R	R	R	G	G	G	G	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	Y
C	↻ R	↺R②	R②	↻ G	↺G	G	R	R	R	G	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	Y
D	R	R	R	G	G	G	R	R	R	G	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	Y
E	R	R	R	R	R	R	R	R	R	R	R	R	R	↻ R	↺R④	R④	R	R	R	G	G	G	G	G	G	Y	R	R
F	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	G	G	G	G	Y	R	R	R
G	R	R	R	R	R	R	R	R	R	R	R	R	R	↻ R	↺R③	R③	↻ G	↺G	G	R	R	R	G	G	Y	R	R	R
H	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	G	G	R	R	R	G	G	Y	R	R	R
W-W	DW	DW	DW	DW	DW	DW	W	W	W	W	FDW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DARK
X-X	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	W	W	W	W	FDW	DW	DW	DW	DARK
Y-Y	DW	DW	DW	W	W	W	DW	DW	DW	W	FDW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DARK
Z-Z	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	FDW	DW	DW	DW	DW	DW	W	W	W	DW	DW	DW	W	FDW	DW	DW	DW	DARK

NOTES:

① REMAINS ↻ R IF ø2+ø5 IS NEXT.
② REMAINS ↻ R IF ø1+ø6 IS NEXT.
③ REMAINS G R IF ø3+ø8 IS NEXT.
④ REMAINS G R IF ø4+ø7 IS NEXT.

SIGNAL TIMING

INTERVAL	ø1	ø2	ø3	ø4	ø5	ø6	ø7	ø8
MINIMUM INITIAL	7	26	7	10	7	26	7	10
PASSAGE	2.5	5.5	3.5	3.5	2.5	5.5	2.5	5.5
YELLOW CLEAR	3.1	3.6	3.6	3.6	3.1	3.6	3.1	3.6
RED CLEAR	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
MAX I	9	49	9	23	9	49	9	23
MAX II	9	49	9	23	9	49	9	23
WALK	0	7	0	7	0	7	0	7
PEDESTRIAN CLEAR	0	19	0	13	0	19	0	11
RECALL	NONE	MIN	NONE	NONE	NONE	MIN	NONE	NONE
MEMORY	OFF	ON	ON	ON	OFF	ON	OFF	ON

COORDINATION TIMING

	DIAL 1	DIAL 2	DIAL 3
CYCLE LENGTH	95 SEC.	95 SEC.	110 SEC.
PHASE 1 SPLIT	15%	14%	13%
PHASE 2 SPLIT	40%	45%	50%
PHASE 3 SPLIT	15%	14%	13%
PHASE 4 SPLIT	30%	27%	24%
PHASE 5 SPLIT	15%	14%	13%
PHASE 6 SPLIT	40%	45%	50%
PHASE 7 SPLIT	15%	14%	13%
PHASE 8 SPLIT	30%	27%	24%
PERMISSIVE	5%	5%	5%
OFFSET	100%	100%	100%
TIME OF DAY SCHEDULE	ALL OTHER TIMES	6:30AM TO 9:00AM MON-SAT	6:30PM MON-SAT 3:30PM TO

NOTES:

1. PHASE SPLITS SHALL INCLUDE ALL GREEN PLUS YELLOW & ALL RED
2. PERMISSIVES SHALL START AT THE ZERO POINT OF THE CYCLE
3. OFFSETS SHALL BE REFERENCED TO THE BEGINNING OF PHASE 2 & 6 YELLOW

LOOP DETECTOR CHART

LOOP #	SIZE	# TURNS	MODE	DELAY	AMP #	PHASE
L1	1.8m X 10.7m	2-4-2	PRESENCE	2	1	1
L2	1.8m X 7.6m	2-4-2	PRESENCE	2	2	7
L3	1.8m X 7.6m	2-4-2	PRESENCE	8	3	8
L4	1.8m X 10.7m	2-4-2	PRESENCE	2	4	5
L5	1.8m X 7.6m	2-4-2	PRESENCE	2	5	3
L6	1.8m X 7.6m	2-4-4	PRESENCE	8	6	4
S1	1.8m X 1.8m	3	PRESENCE	0	7	SYSTEM
S2	1.8m X 1.8m	3	PRESENCE	0	8	SYSTEM

CALCULATED
CHECKED

TRAFFIC CONTROL PLAN
ST. CLAIR STREET & ERIE STREET

LAKE COUNTY
LAK-20-14.35/VARIOUS