

SIGNAL DISPLAY CHART

SIGNAL HEAD	#2				#4				FLASH
	R/W	CLEAR			R/W	CLEAR			
A	G	G	Y	R	R	R	R	R	Y
B	G	G	Y	R	R	R	R	R	Y
C	G	G	Y	R	R	R	R	R	Y
D	G	G	Y	R	R	R	R	R	Y
E	R	R	R	R	G	G	Y	R	R
F	R	R	R	R	G	G	Y	R	R
G	R	R	R	R	G	G	Y	R	R
H	R	R	R	R	G	G	Y	R	R
X-X	W	FDW	DW	DW	DW	DW	DW	DW	DARK
Y-Y	DW	DW	DW	DW	W	FDW	DW	DW	DARK
Z-Z	W	FDW	DW	DW	DW	DW	DW	DW	DARK

SIGNAL TIMING

INTERVAL	#2	#4
INITIAL	20	10
PASSAGE	--	4.0
YELLOW	3.6	3.6
RED CLEAR	1.7	1.8
MAX I	50	40
MAX II	50	40
WALK	7	7
PED CLEAR	24	13
RECALL	MIN	NONE
MEMORY	ON	OFF

COORDINATION TIMING

	DIAL 1	DIAL 2	DIAL 3
CYCLE LENGTH	95 SEC	100 SEC	95 SEC
PHASE 2 SPLIT	55%	55%	55%
PHASE 4 SPLIT	45%	45%	45%
PERMISSIVE	15%	15%	15%
OFFSET	29%	28%	23%
TIME OF DAY SCHEDULE	ALL OTHER TIMES	6:30AM TO 9:00AM MON-SAT	3:30PM TO 6:30PM MON-SAT

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 YELLOW

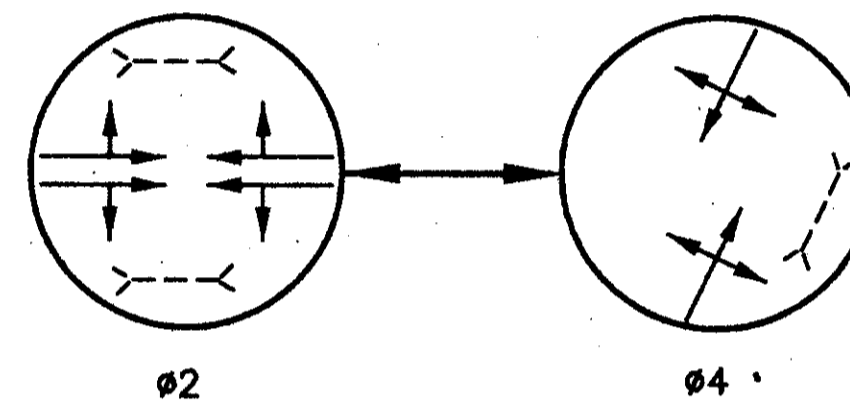
LOOP DETECTOR CHART

LOOP #	SIZE	# TURNS	MODE	DELAY	AMP #	PHASE
L1	1.8m x 9.1m	2	PRESENCE	8	1	4
L2	1.8m x 9.1m	2	PRESENCE	8	2	4
L3	1.8m x 3.0m	3	PRESENCE	8	3	4
L4	1.8m x 3.0m	3	PRESENCE	8	4	4
S11	1.8m x 1.8m	3	PRESENCE		5	SYSTEM
S12	1.8m x 1.8m	3	PRESENCE		6	SYSTEM
S13	1.8m x 1.8m	3	PRESENCE		7	SYSTEM
S14	1.8m x 1.8m	3	PRESENCE		8	SYSTEM

ESTIMATED QUANTITIES

ITEM	QUANT	UNIT	DESCRIPTION
202	4.4	SQ. METER	WALK REMOVED, AS PER PLAN
608	4.4	SQ. METER	100mm CONCRETE WALK
625	49.5	METER	CONDUIT, 51 mm, 713.04
625	5.4	METER	CONDUIT, 102 mm, 713.04
625	87.2	METER	CONDUIT, JACKED OR DRILLED, SIZE: 76 mm
625	54.9	METER	TRENCH
625	6	EACH	PULLBOX, 713.08, 450 mm
625	1	EACH	PULLBOX, MISC.: 330 mm X 600 mm, AS PER PLAN
625	5	EACH	GROUND ROD
632	6	EACH	VEHICULAR SIGNAL HEAD, 3-SECT., 300 mm LENS, 1-WAY, AS PER PLAN
632	1	EACH	VEHICULAR SIGNAL HEAD, 3-SECT., 300 mm LENS, 2-WAY, AS PER PLAN
632	6	EACH	PEDESTRIAN SIGNAL HEAD, TYPE D2, AS PER PLAN
632	8	EACH	COVERING OF VEHICULAR SIGNAL HEAD
632	6	EACH	PEDESTRIAN PUSHBUTTON, AS PER PLAN
632	8	EACH	DETECTOR LOOP
632	4	EACH	LOOP DETECTOR UNIT, AS PER PLAN
632	4	EACH	LOOP DETECTOR UNIT, DELAY & EXTENSION TYPE, AS PER PLAN
632	78.4	METER	MESSENGER WIRE, 7 STRAND, 6 mm DIAMETER WITH ACCESSORIES
632	174.6	METER	SIGNAL CABLE, 3 CONDUCTOR, NO. 14 AWG
632	300.4	METER	SIGNAL CABLE, 5 CONDUCTOR, NO. 14 AWG
632	64.8	METER	SIGNAL CABLE, 7 CONDUCTOR, NO. 14 AWG
632	174.6	METER	SIGNAL CABLE, MISC.: PREEMPT DETECTOR CABLE
632	3	EACH	SIGNAL SUPPORT FOUNDATION
632	1	EACH	PEDESTAL FOUNDATION
632	756.3	METER	LOOP DETECTOR LEAD-IN CABLE
632	13.1	METER	POWER CABLE, 3 CONDUCTOR, NO. 6 AWG
632	5	EACH	CONDUIT RISER, 51mm DIAMETER
632	1	EACH	SIGNAL SUPPORT, TYPE TC-81.20M, DES. 2
632	2	EACH	SIGNAL SUPPORT, TYPE TC-81.20M, DES. 4
632	1	EACH	PEDESTAL, 2.4M, TRANSFORMER BASE
632	1	EACH	REMOVAL OF TRAFFIC SIGNAL INSTALLATION
633	1	EACH	CONTROLLER, ACTUATED, 4 PHASE, SOLID-STATE DIGITAL MICROPROCESSOR, AS PER PLAN
633	.72	CU. METER	CONCRETE FOR CABINET FOUNDATION
633	.80	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

PHASING DIAGRAM



PREEMPT CHANNELS

CHANNEL 1 = #2 (EASTBOUND ONLY) CHANNEL 3 = #4 (NORTHBOUND ONLY)
 CHANNEL 2 = #2 (WESTBOUND ONLY) CHANNEL 4 = #4 (SOUTHBOUND ONLY)

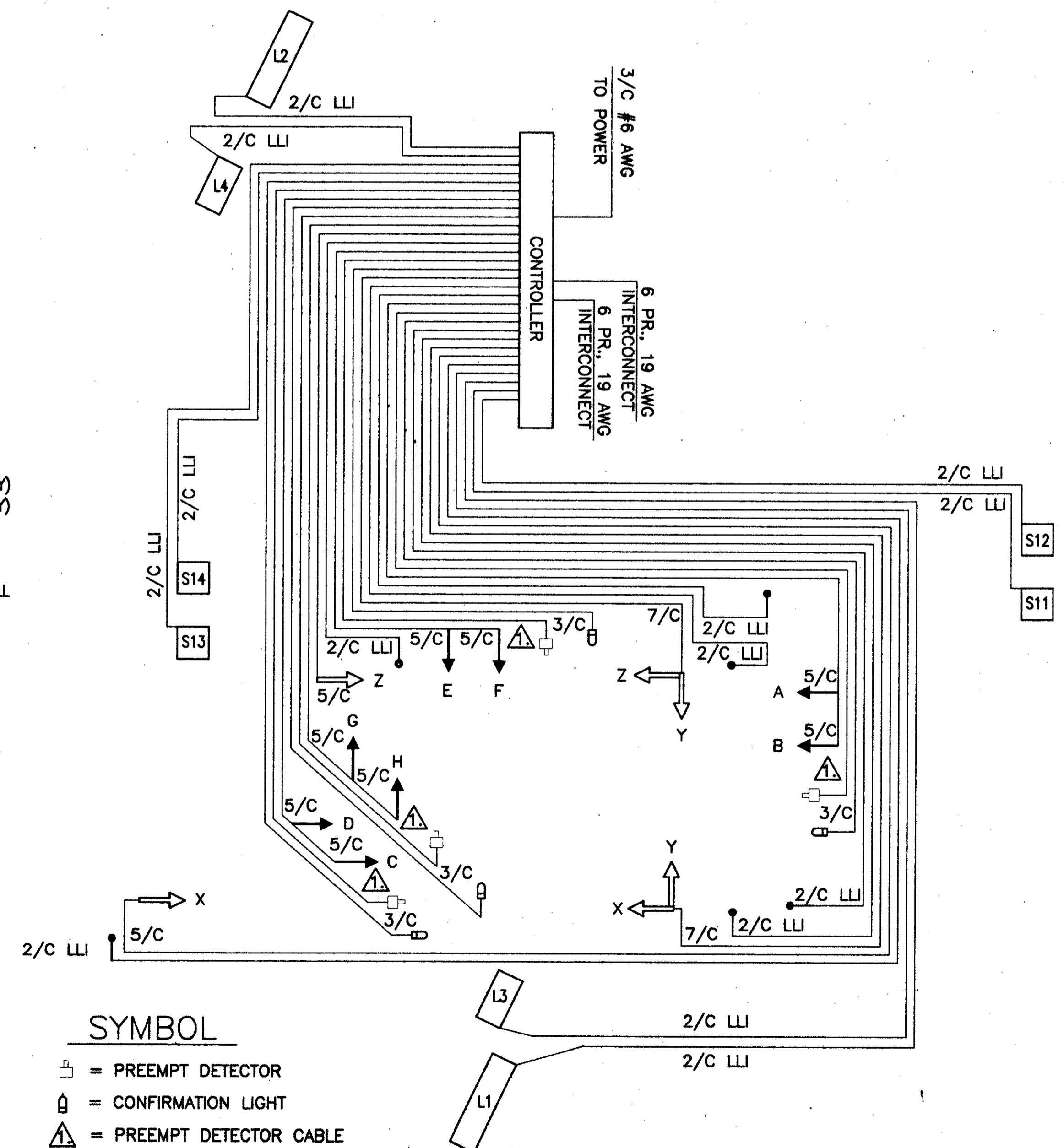
PREEMPT NOTES:

1. ACTIVE WALK INDICATIONS SHALL IMMEDIATELY GO TO "DON'T WALK" UPON RECEIVING PREEMPTION SIGNAL.
2. IF PHASE ACTIVE CONFLICTS WITH PREEMPT PHASE CALLED, IT SHALL IMMEDIATELY TIME ITS YELLOW AND ALL RED CLEARANCES.
3. IF ACTIVE PHASE = THE PREEMPT PHASE, THEN THE PHASE SHALL HOLD FOR THE DURATION OF THE PREEMPT SIGNAL.
4. AFTER RELEASE FROM PREEMPT, YELLOW AND ALL RED CLEARANCE SHALL BE DISPLAYED AND RETURN PHASE SHALL BE #2.
5. IF PREEMPT PHASES = RETURN PHASE #2 THEN YELLOW AND ALL RED CLEARANCE AFTER PREEMPT SHALL NOT BE DISPLAYED.

NOTES:

ALL PUSHBUTTONS SHALL BE WIRED WITH 2 CONDUCTOR LOOP LEAD-IN CABLE (2/C LL). CONTRACTOR SHALL HOOK UP THE DRAIN WIRE TO THE CONTROLLER GROUND.

WIRING DIAGRAM



SYMBOL

- = PREEMPT DETECTOR
- △ = CONFIRMATION LIGHT
- △ = PREEMPT DETECTOR CABLE



CALCULATED
CHECKED

TRAFFIC CONTROL PLAN
RICHMOND STREET & PROSPECT STREET

LAKE COUNTY
LAK-20-22.916/VARIOUS