

SIGNAL DISPLAY CHART

SIGNAL HEAD	#1		#2		#4		FLASH		
	R/W	CLEAR	R/W	CLEAR	R/W	CLEAR			
A	R	R	R	R	G	G	Y	R	Y
B	R	R	R	R	G	G	Y	R	Y
C	R	R	G	G	Y	R	R	R	Y
D	R	R	G	G	Y	R	R	R	Y
G	G/G	G/G	G	G	Y	R	R	R	R
H	G	G	G	G	Y	R	R	R	R
Y-Y	DW	DW	DW	DW	DW	DW	DW	DW	DW
Z-Z	DW	DW	DW	DW	DW	DW	DW	DW	DW

COORDINATION TIMING

	DIAL 1	DIAL 2	DIAL 3
CYCLE LENGTH	95 SEC.	100 SEC.	95 SEC.
PHASE 1 SPLIT	25%	25%	22%
PHASE 2 SPLIT	37%	38%	45%
PHASE 4 SPLIT	38%	37%	33%
PERMISSIVE	10%	10%	10%
OFFSET	49%	46%	32%
TIME OF DAY SCHEDULE	ALL OTHER TIMES	6:30 AM TO 9:00 AM MON-SAT	3:30 PM TO 6:30 PM 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

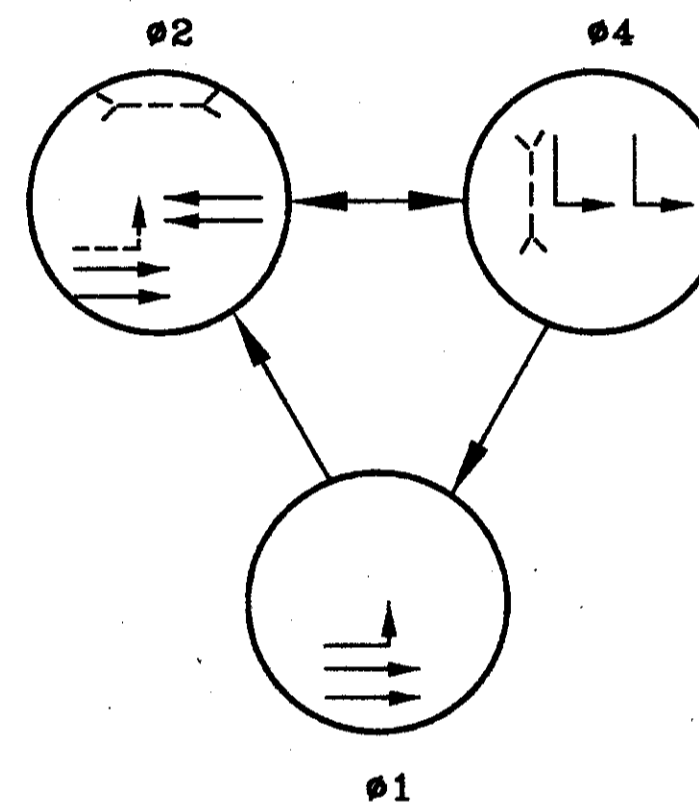
LOOP DETECTOR CHART

LOOP #	SIZE	# TURNS	MODE	DELAY	AMP #	PHASE
L1	1.8m x 12.2m	2-4-2	PRESENCE	0	1	1
L2	1.8m x 12.2m	2-4-2	PRESENCE	0	2	4
L3	1.8m x 12.2m	2-4-2	PRESENCE	0	3	4
S19	1.8m x 2.4m	3	PRESENCE		4	SYSTEM
S20	1.8m x 2.4m	3	PRESENCE		5	SYSTEM
S21	1.8m x 2.4m	3	PRESENCE		6	SYSTEM
S22	1.8m x 2.4m	3	PRESENCE		7	SYSTEM
S23	1.8m x 2.4m	3	PRESENCE		8	SYSTEM

ESTIMATED QUANTITIES

ITEM	QUANT	UNIT	DESCRIPTION
202	2.3	SQ. METER	WALK REMOVED, AS PER PLAN
608	2.3	SQ. METER	100mm CONCRETE WALK
608	1	EACH	CURB RAMP, TYPE 1
608	1	EACH	CURB RAMP, TYPE 2
608	7.1	SQ. METER	CURB RAMP, TYPE 1
608	2.3	SQ. METER	CURB RAMP, TYPE 2
625	134.2	METER	CONDUIT, 51 mm, 713.04
625	2.7	METER	CONDUIT, 102 mm, 713.04
625	19.1	METER	CONDUIT, JACKED OR DRILLED, SIZE: 51 mm
625	69.5	METER	CONDUIT, JACKED OR DRILLED, SIZE: 76 mm
625	136.9	METER	TRENCH
625	7	EACH	PULLBOX, 713.08, 450 mm
625	5	EACH	GROUND ROD
632	5	EACH	VEHICULAR SIGNAL HEAD, 3-SECT., 300 mm LENS, 1-WAY, AS PER PLAN
632	1	EACH	VEHICULAR SIGNAL HEAD, 5-SECT., 300 mm LENS, 1-WAY, AS PER PLAN
632	6	EACH	PEDESTRIAN SIGNAL HEAD, TYPE D2, AS PER PLAN
632	6	EACH	COVERING OF VEHICULAR SIGNAL HEAD
632	6	EACH	PEDESTRIAN PUSHBUTTON, AS PER PLAN
632	8	EACH	DETECTOR LOOP
632	5	EACH	LOOP DETECTOR UNIT, AS PER PLAN
632	3	EACH	LOOP DETECTOR UNIT, DELAY & EXTENSION TYPE, AS PER PLAN
632	142.9	METER	SIGNAL CABLE, 3 CONDUCTOR, NO. 14 AWG
632	241.6	METER	SIGNAL CABLE, 5 CONDUCTOR, NO. 14 AWG
632	96.6	METER	SIGNAL CABLE, 7 CONDUCTOR, NO. 14 AWG
632	142.9	METER	SIGNAL CABLE, MISC.: PREEMPT DETECTOR CABLE
632	1	EACH	INTERCONNECT MISC.: TYPE 84.20 BOX TYPE, SPLICE ENCLOSURE
632	3	EACH	SIGNAL SUPPORT FOUNDATION
632	1	EACH	PEDESTAL FOUNDATION
632	878.3	METER	LOOP DETECTOR LEAD-IN CABLE
632	13.9	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. 2
632	1	EACH	SIGNAL SUPPORT, TYPE TC-81.20M, DES. 3
632	1	EACH	SIGNAL SUPPORT, TYPE TC-81.20M, DES. 11
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



SIGNAL TIMING

INTERVAL	#1	#2	#4
INITIAL	8	20	10
PASSAGE	2.5	3.0	2.5
YELLOW	3.6	3.6	3.1
RED CLEAR	1.2	1.2	1.6
MAX I	21	38	33
MAX II	21	38	33
WALK		7	7
PED CLEAR		12	13
RECALL	NONE	MIN	NONE
MEMORY	ON	ON	OFF

PREEMPT CHANNELS

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

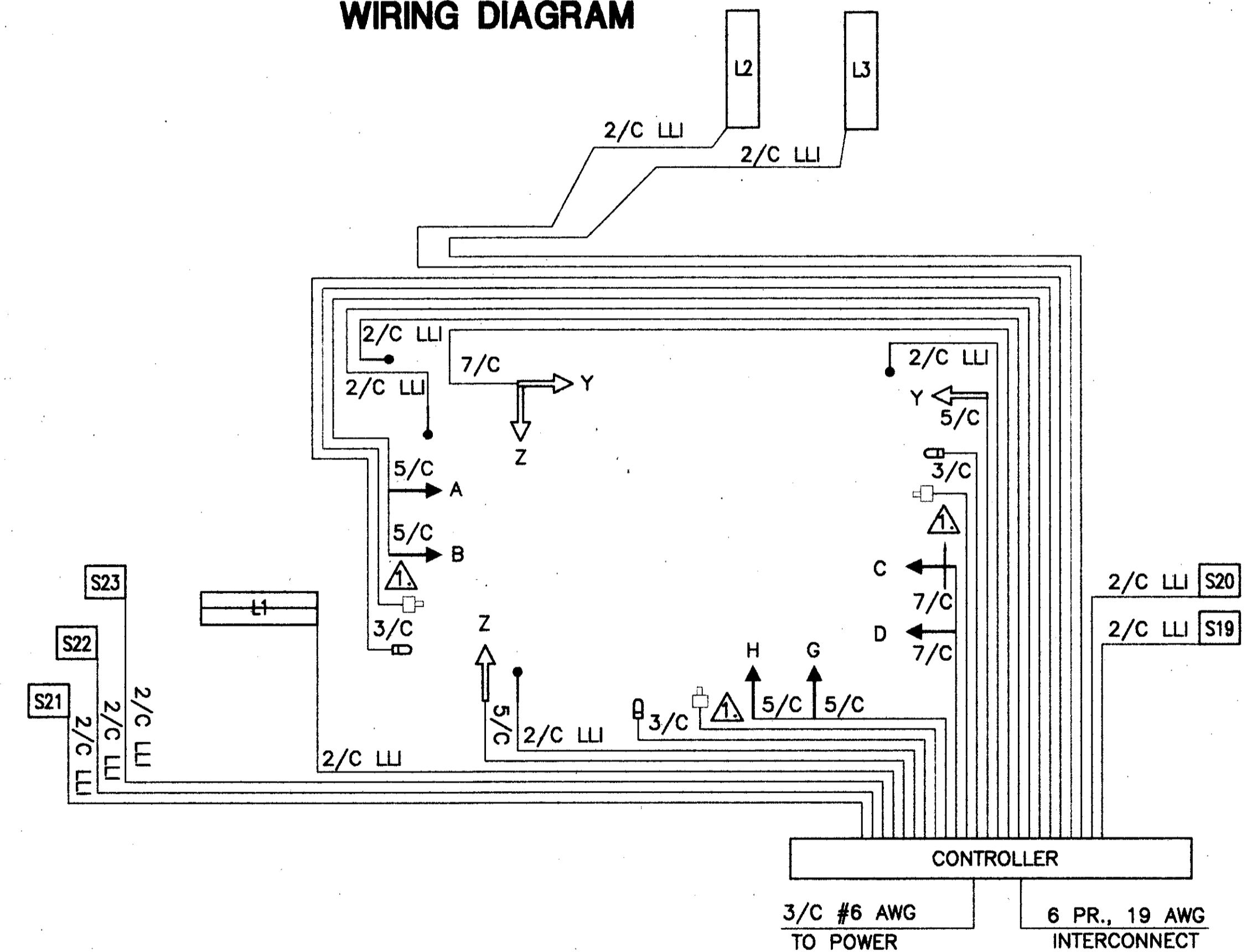
PREEMPT NOTES:

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. CONTRACTOR SHALL HOOK UP DRAW WIRE OF CABLE TO GROUND TERMINAL IN CONTROLLER.

WIRING DIAGRAM



SYMBOL

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