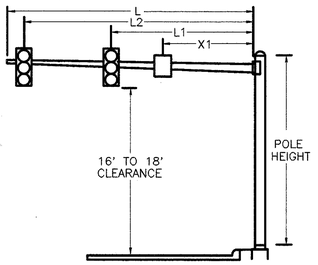
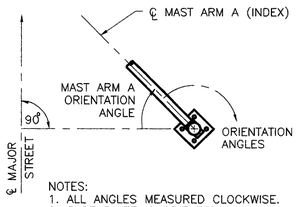
CALC. BY: DATE:	LAKE COUNTY LAK-91-4.56	OHIO
CHKD. BY: DATE:		FHWA REGION 5
		FEDERAL PROJECT

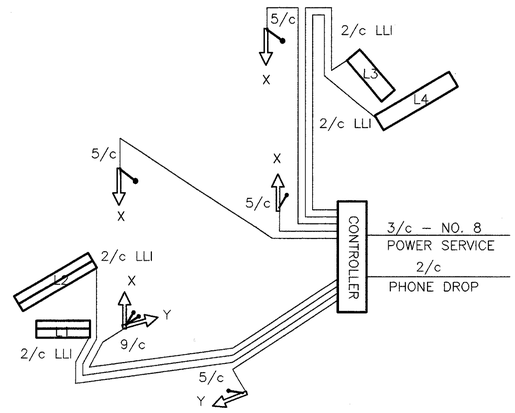




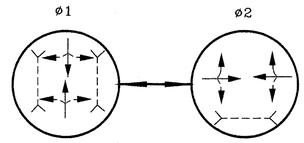
NOTES:
1. ALL ANGLES MEASURED CLOCKWISE.
2. BASE PLATE IS ORIENTED SQUARE TO MAST ARM A (LARGEST ARM) EVEN IF SUPPORT HAS TWO MAST ARMS.

SUPPORT NO.	SIGNAL SUPPORT TC-81.20 TC-12.30												ORIENTATION ANGLES (DEG.) FROM MAST ARM "A"									
	POLE DESIGN NO. TC-81.20	POLE DESIGN NO. TC-12.30	ARM DESIGN NO.	POLE HEIGHT (FT)	FOUNDATION STATION	FOUNDATION OFFSET	L (FT.)	L 1 (FT.)	L 2 (FT.)	L 3 (FT.)	X 1 (FT.)	MAST ARM A ANGLE (DEG.)	MAST ARM B	PEDESTRIAN SIGNALS	PEDESTRIAN PUSH BUTTONS	POWER SERVICE	CONTROLLER	LUMINAIRE BRACKET	HANDHOLE	CABLE ENTRANCE (12" FROM TOP)		
P1	EX.			EX.	102+46	19'R						340		20	20							
P2	PED			8'	102+07	59'R								215	215				180			
P3	PED			8'	101+44	55'R								120 180	120 180				180			
P4	EX.			EX.	101+93	20'L						340		20	20							
P5	PED			8'	102+93	68'L								310	310				180			

ORIENTATION ANGLE CHART



WIRING DIAGRAM



PHASING DIAGRAM

FUNCTION	ø1	ø2
MINIMUM GREEN	29	8
PED WALK	5	7
PED CLEARANCE	24	12
GREEN EXTENSION	3.0	3.0
MAXIMUM GREEN	32	29
YELLOW CLEARANCE	3.1	3.6
ALL RED CLEARANCE	1.6	.7
RECALL	MAX	NONE

SIGNAL TIMING

SIGNAL HEAD	ø1 R/W		ø1 CLEAR		ø2 R/W		ø2 CLEAR		FLASH
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

SIGNAL DISPLAY CHART

LOOP #	SIZE	# TURNS	MODE	DELAY	UNIT #	PHASE
L1	10' x 25'	2–4–2	PRESENCE	8	1	2
L2	10' x 40'	2–4–2	PRESENCE	0	2	2
L3	6' x 20'	2	PRESENCE	8	3	2
L4	6' x 30'	2	PRESENCE	0	4	2

LOOP DETECTOR CHART

N

ITEM	TOTAL	UNIT	DESCRIPTION
202	5	LIN FT	CURB REMOVED
608	50	SQ FT	4" CONCRETE WALK
608	1	EACH	CURB RAMP, TYPE 2
625	4	EACH	GROUND ROD
625	3	EACH	PULLBOX, 18", AS PER PLAN
625	81	LIN FT	CONDUIT, 2", 713.04
625	152	LIN FT	CONDUIT, JACKED OR DRILLED UNDER PAVEMENT, 3"
625	54	LIN FT	TRENCH
632	6	EACH	PEDESTRIAN SIGNAL HEAD, TYPE "D–2"
632	6	EACH	PEDESTRIAN PUSHBUTTON
632	2	EACH	LOOP DETECTOR UNIT, AS PER PLAN
632	2	EACH	LOOP DETECTOR UNIT, DELAY AND EXTENSION TYPE, AS PER PLAN
632	1.17	CU YD	CONCRETE FOR ANCHOR BASE FOUNDATION
632	3	EACH	PEDESTAL, 8', TRANSFORMER BASE
632	474	LIN FT	LOOP DETECTOR PAVEMENT CUTTING
632	410	LIN FT	SIGNAL CABLE, 5 CONDUCTOR, NO. 14 AWG
632	180	LIN FT	SIGNAL CABLE, 9 CONDUCTOR, NO. 14 AWG
632	1154	LIN FT	LOOP DETECTOR WIRE, TYPE E
632	520	LIN FT	LOOP DETECTOR LEAD–IN CABLE
632	69	LIN FT	POWER CABLE, 3 CONDUCTOR, NO. 8 AWG
632	1	EACH	CONDUIT RISER, 2" DIAM.
632	1	EACH	PHONE DROP
633	8.33	SQ FT	CONTROLLER WORK PAD
633	1	EACH	CONTROLLER, ACTUATED, 2 PHASE, SOLID–STATE DIGITAL, MICROPROCESSOR, AS PER PLAN
642	16	LIN FT	STOP LINE, TYPE 2
642	49	LIN FT	REMOVAL OF PAVEMENT MARKING

REVISED 4-26-94

LAKELAND BLVD. & 361st STREET TRAFFIC CONTROL PLAN