

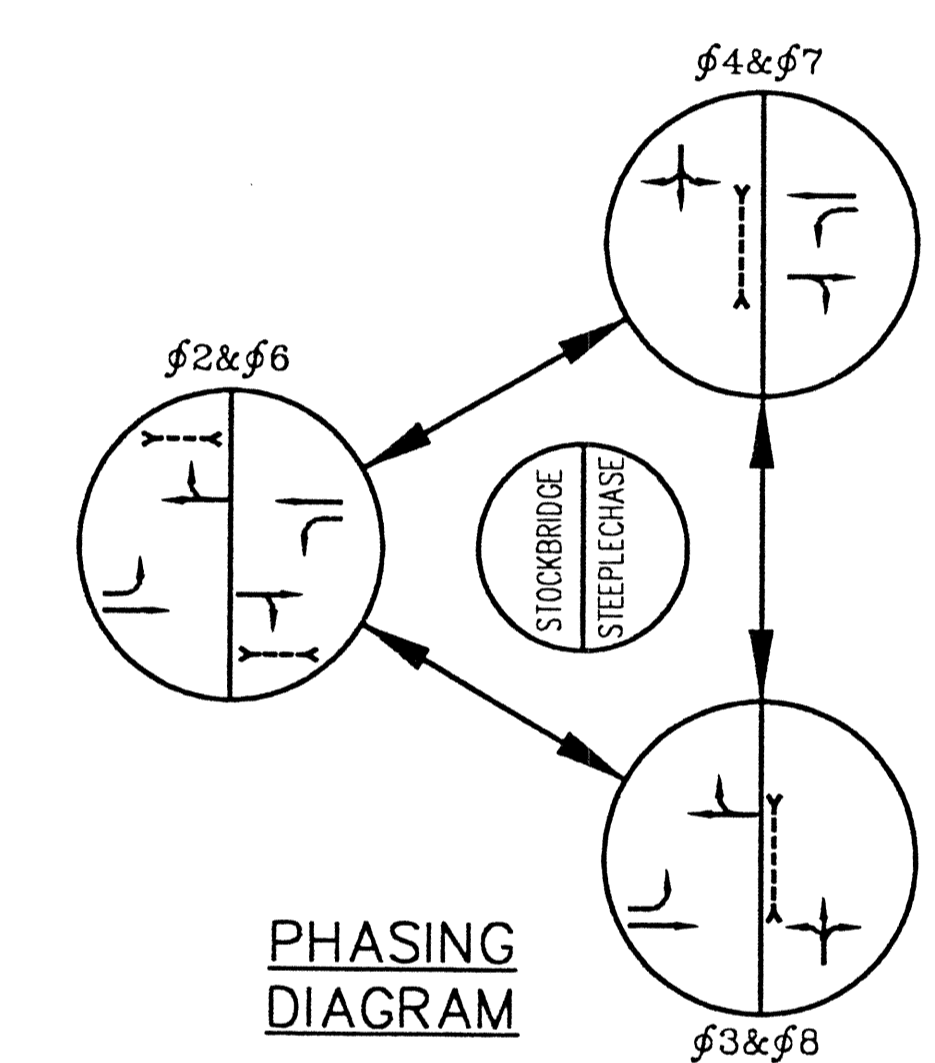
### SIGNAL SUPPORT CHART

COMBINATION POLE	POLE NUMBER	LOCATION		SUPPORT TYPE & DESIGN NUMBER		POLE HEIGHT (Feet)	TOP OF FOUNDATION ELEV.	MAST ARM				SIGNALS		SIGNS		PREEMPT		ORIENTATION ANGLE FROM MAST ARM "A" (DEGREES)												
								ARM "A"		ARM "B"		L1	L2	L3	S1	S2	P1 (DETECTOR)	P2 (CONFIRMATION LIGHT)	MAST ARM "A" ORIENTATION ANGLE (DEGREES)	MAST ARM "B"	HANDHOLE (PED POLE ANGLE REFERENCE)	PEDESTRIAN SIGNALS	PEDESTRIAN PUSHBUTTON	POW. SERV., 1-1/2" BLIND HALF COUPLING 3' FROM BASE	CABLE ENTRANCE	3" CONDUIT ELL	2" CONDUIT ELL	2" CAPPED CONDUIT ELL (FOR FUTURE USE)		
								LENGTH "L"	DESIGN	LENGTH "L"	DESIGN																			
NO	P1	60+71.5	23' LT	-	-	4	22.5'	MATCH EXIST.	30'	3	-	-	19'	29'	-	14'	-	23'	25'	270°	90°	270°	-	-	-	-	-	180°	-	0°
NO	P2	58+75	33.5' LT	YES	-	-	8'	MATCH EXIST.	-	-	-	-	-	-	-	-	-	-	-	-	-	180°	X=270° Z=180°	X=270° Z=180°	-	-	-	211°	90°	
NO	P3	61+23	41' RT	-	-	3	22.5'	MATCH EXIST.	34'	3	-	-	23'	33'	-	28'	-	-	-	0°	-	180°	0°	0°	-	-	-	225°	45°	
NO	P4	60+50	37' RT	YES	-	-	8'	MATCH EXIST.	-	-	-	-	-	-	-	-	-	-	-	-	-	180°	W=270° Y=180°	W=270° Y=180°	-	-	-	170°	330°	
NO	P5	58+54	38' RT	-	5	-	22.5'	MATCH EXIST.	31'	4	-	-	20'	30'	-	15'	-	24'	26'	0°	270°	90°	X=90°	X=90°	-	-	-	90°	270°	
NO	P6	58+75	33.5' LT	-	-	4	22.5'	MATCH EXIST.	32'	4	-	-	21'	31'	-	26'	-	-	-	0°	-	180°	0°	0°	-	-	-	270°	60°	

SIGNAL DIRECTION	SIGNAL HEAD	φ2 & φ6			φ3 & φ8			φ4 & φ7			FLASH	DWELL		
		R/W	CLEAR	R/W	CLEAR	R/W	CLEAR	R/W	CLEAR					
NORTHBOUND	A	R	R	R	R	G	G	Y	R	R	R	R	R	R
	B	R	R	R	R	G	G	Y	R	R	R	R	R	R
EASTBOUND	C	G	G	Y <sup>(a)</sup>	R <sup>(b)</sup>	G	G	Y <sup>(a)</sup>	R <sup>(b)</sup>	R	R	R	R	Y
	D	G	G	Y <sup>(a)</sup>	R <sup>(b)</sup>	G	G	Y <sup>(a)</sup>	R <sup>(b)</sup>	R	R	R	R	Y
	K	G	G	Y <sup>(a)</sup>	R <sup>(b)</sup>	R	R	R	R	G	G	Y <sup>(a)</sup>	R <sup>(b)</sup>	Y
	L	G	G	Y <sup>(a)</sup>	R <sup>(b)</sup>	R	R	R	R	G	G	Y <sup>(a)</sup>	R <sup>(b)</sup>	Y
SOUTHBOUND	E	R	R	R	R	R	R	R	R	G	G	Y	R	
	F	R	R	R	R	R	R	R	R	G	G	Y	R	
WESTBOUND	G	G	G	Y <sup>(a)</sup>	R <sup>(b)</sup>	G	G	Y <sup>(a)</sup>	R <sup>(b)</sup>	R	R	R	R	Y
	H	G	G	Y <sup>(a)</sup>	R <sup>(b)</sup>	G	G	Y <sup>(a)</sup>	R <sup>(b)</sup>	R	R	R	R	Y
	I	G	G	Y <sup>(a)</sup>	R <sup>(b)</sup>	R	R	R	R	G	G	Y <sup>(a)</sup>	R <sup>(b)</sup>	Y
	J	G	G	Y <sup>(a)</sup>	R <sup>(b)</sup>	R	R	R	R	G	G	Y <sup>(a)</sup>	R <sup>(b)</sup>	Y
EAST	W-W	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW
WEST	X-X	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW
SOUTH	Y-Y	W	FDW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW
NORTH	Z-Z	W	FDW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW

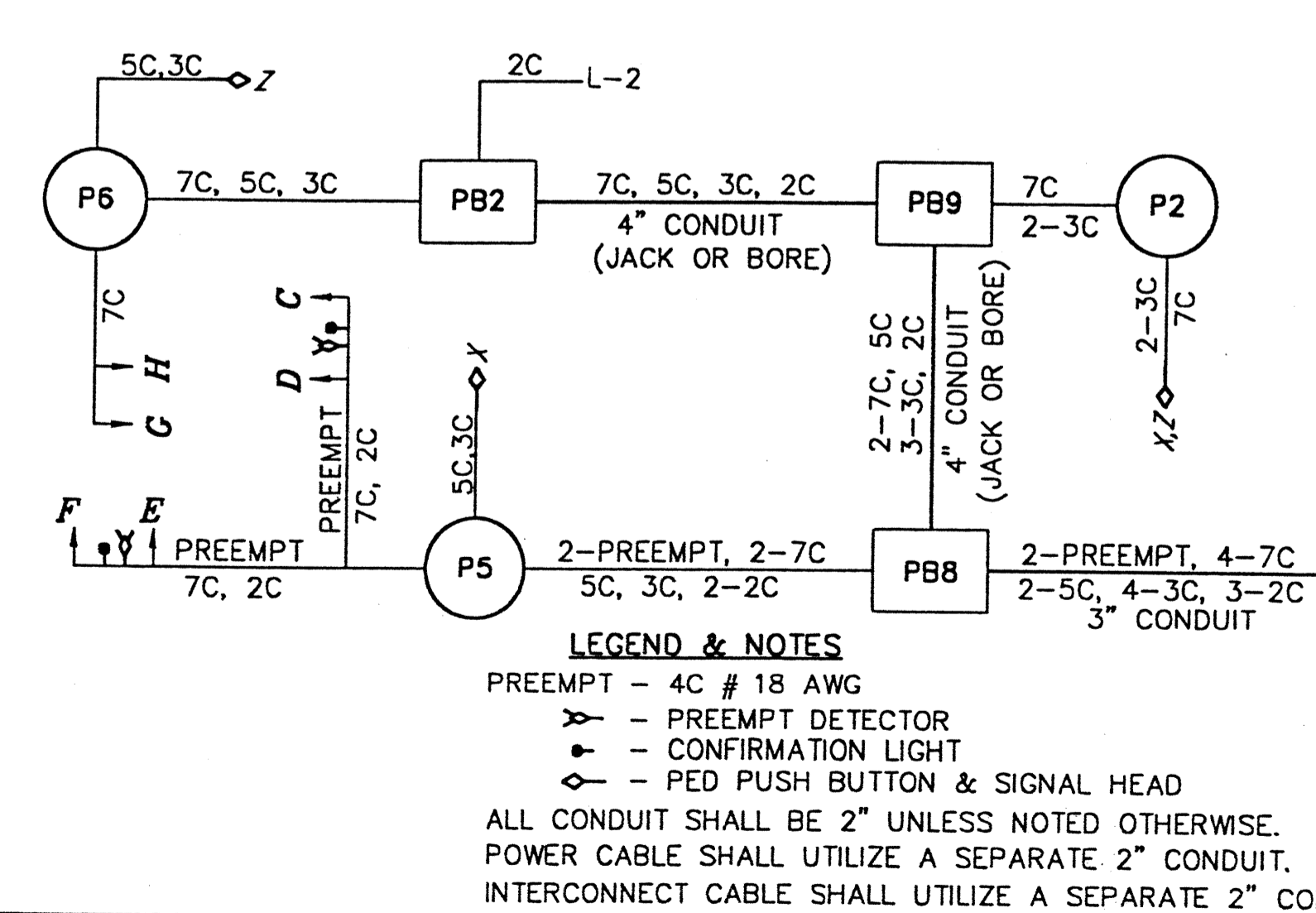
(a) G IF φ2 & φ6 IS NEXT (b) G IF φ3 & φ8 IS NEXT (c) G IF φ4 & φ7 IS NEXT  
 \* ONLY UPON PEDESTRIAN PUSHBUTTON ACTUATION

### SIGNAL SEQUENCE CHART

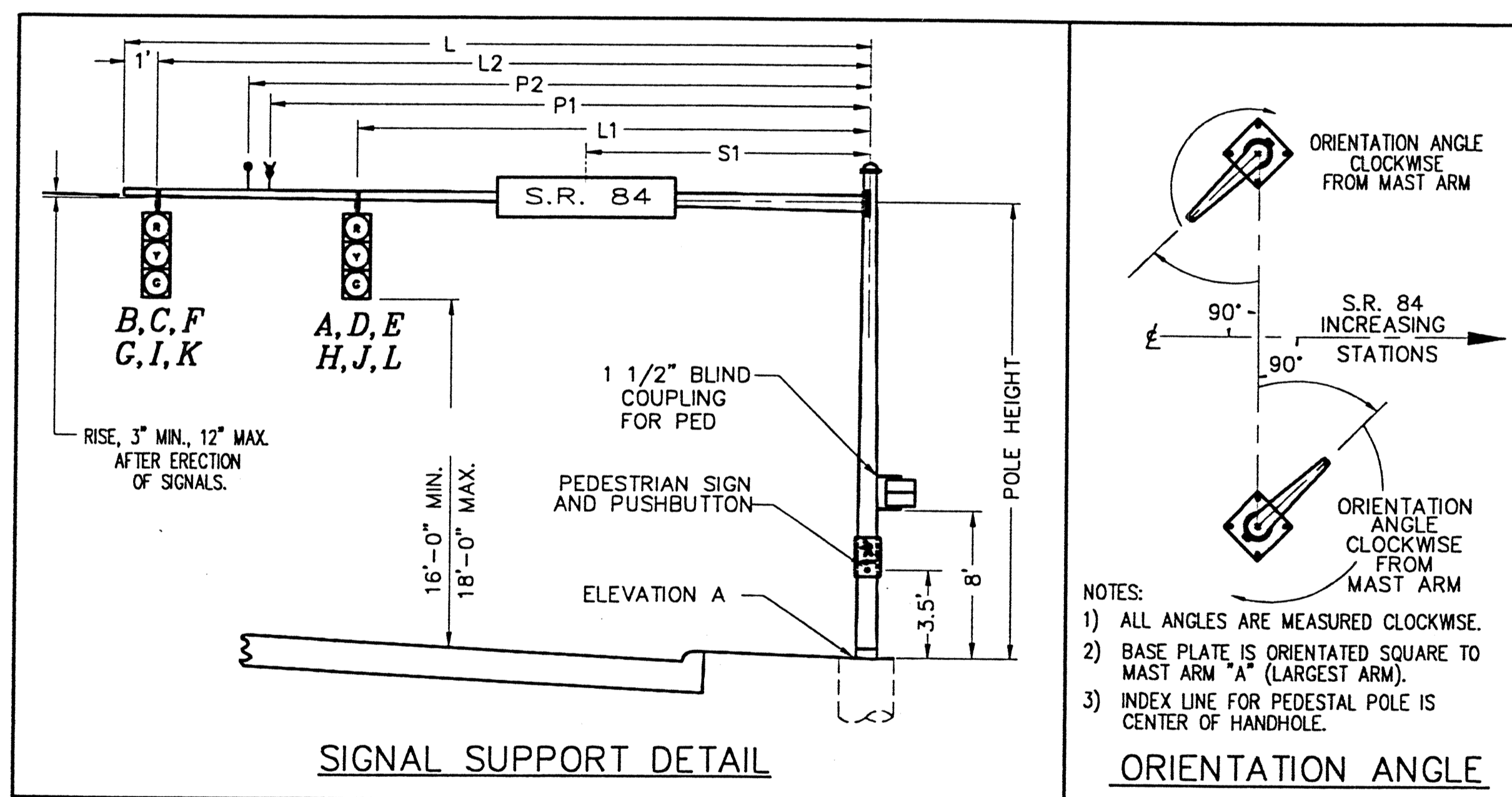


FUNCTION	φ1	φ2	φ3	φ4	φ5	φ6	φ7	φ8
INITIAL GREEN	-	20	15	15	-	20	15	15
MINIMUM GREEN	-	-	-	-	-	-	-	-
VEHICLE EXTENSION	-	3.0	3.0	3.0	-	3.0	3.0	3.0
MAXIMUM GREEN	-	40	25	25	-	40	25	25
PEDESTRIAN WALK	-	7.0	7.0	7.0	-	7.0	7.0	7.0
PEDESTRIAN CLEARANCE	-	16	14	15	-	16	15	14
VEHICLE YELLOW CLEARANCE	-	3.5	3.0	3.0	-	3.5	3.0	3.0
VEHICLE ALL RED CLEARANCE	-	2.0	3.0	3.0	-	2.0	3.0	3.0
RECALL	-	OFF	OFF	OFF	-	OFF	OFF	OFF
MEMORY	-	N.L.	N.L.	N.L.	-	N.L.	N.L.	N.L.

### SIGNAL TIMING CHART



**LEGEND & NOTES**  
 PREEMPT - 4C # 18 AWG  
 X - PREEMPT DETECTOR  
 Y - CONFIRMATION LIGHT  
 Z - PED PUSH BUTTON & SIGNAL HEAD  
 ALL CONDUIT SHALL BE 2" UNLESS NOTED OTHERWISE.  
 POWER CABLE SHALL UTILIZE A SEPARATE 2" CONDUIT.  
 INTERCONNECT CABLE SHALL UTILIZE A SEPARATE 2" CONDUIT.



**NOTES:**  
 1) ALL ANGLES ARE MEASURED CLOCKWISE.  
 2) BASE PLATE IS ORIENTATED SQUARE TO MAST ARM "A" (LARGEST ARM).  
 3) INDEX LINE FOR PEDESTAL POLE IS CENTER OF HANDHOLE.

### WIRING DIAGRAM

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REV. NO.	DESCRIPTION	DATE	BY	CHK'D.

**STATE ROUTE 84  
 INTERIM WIDENING & RESURFACING  
 IMPROVEMENTS**  
 CITY OF MENTOR, LAKE COUNTY, OHIO

DATE: AUGUST, 2000  
 DRAWN BY: T.E.B.  
 CHECKED BY: A.E.P.  
 APPROVED BY: C.C.H./M.H.  
 F.B. No. PG.

**SIGNALIZATION PLAN**  
 S.R. 84 / STOCKBRIDGE DRIVE INTERSECTION  
 &  
 S.R. 84 / STEEPLCHASE DRIVE INTERSECTION

SCALE	
HOR. 1" = 20'	VERT. N.T.S.
CONTRACT No. <b>00123</b>	
SHEET No. <b>70</b>	OF <b>74</b>