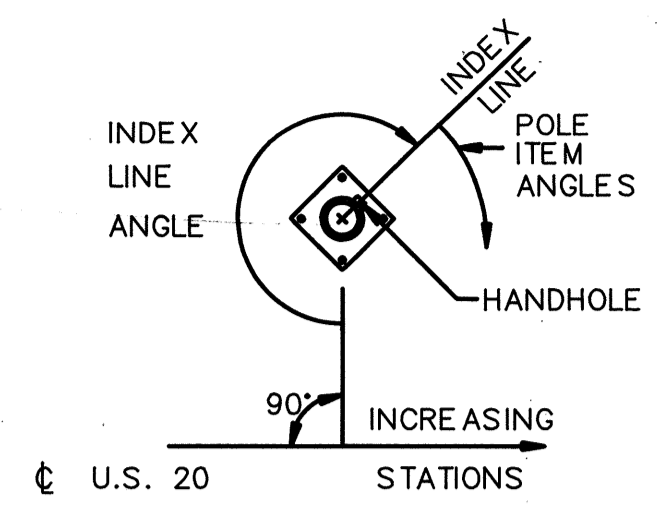


POLE NO.	DESIGN NO.	POLE HEIGHT (FT.)	ANGLES FROM INDEX LINE (DEGREES)			
			INDEX LINE ANGLE (DEGREES)	PEDESTRIAN SIGNALS	PEDESTRIAN PUSHBUTTONS	CABLE ENTRANCE (12" FROM TOP)
P1	7	30	180°	45°	0°	125°
P2	2	24	180°	45°	90°	180°

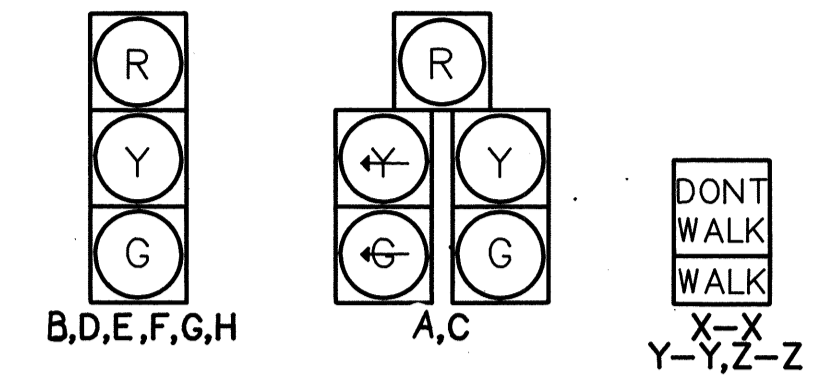
TC-81.10 POLE CHART



ORIENTATION DIAGRAM

ITEMS	ITEMS TO BE STORED FOR THE CITY OF WILLOUGHBY	ITEMS TO BE DISPOSED OF BY THE CONTRACTOR	ITEMS TO BE REUSED
CONTROLLER	X		
POLES	2	P3	
SIGNAL HEADS	X		
WIRE		X	

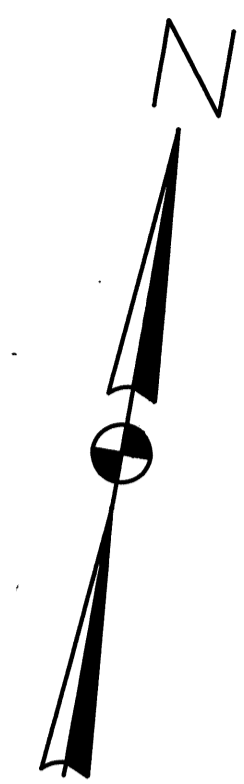
632 REMOVAL OF TRAFFIC SIGNAL INSTALLATION, AS PER PLAN



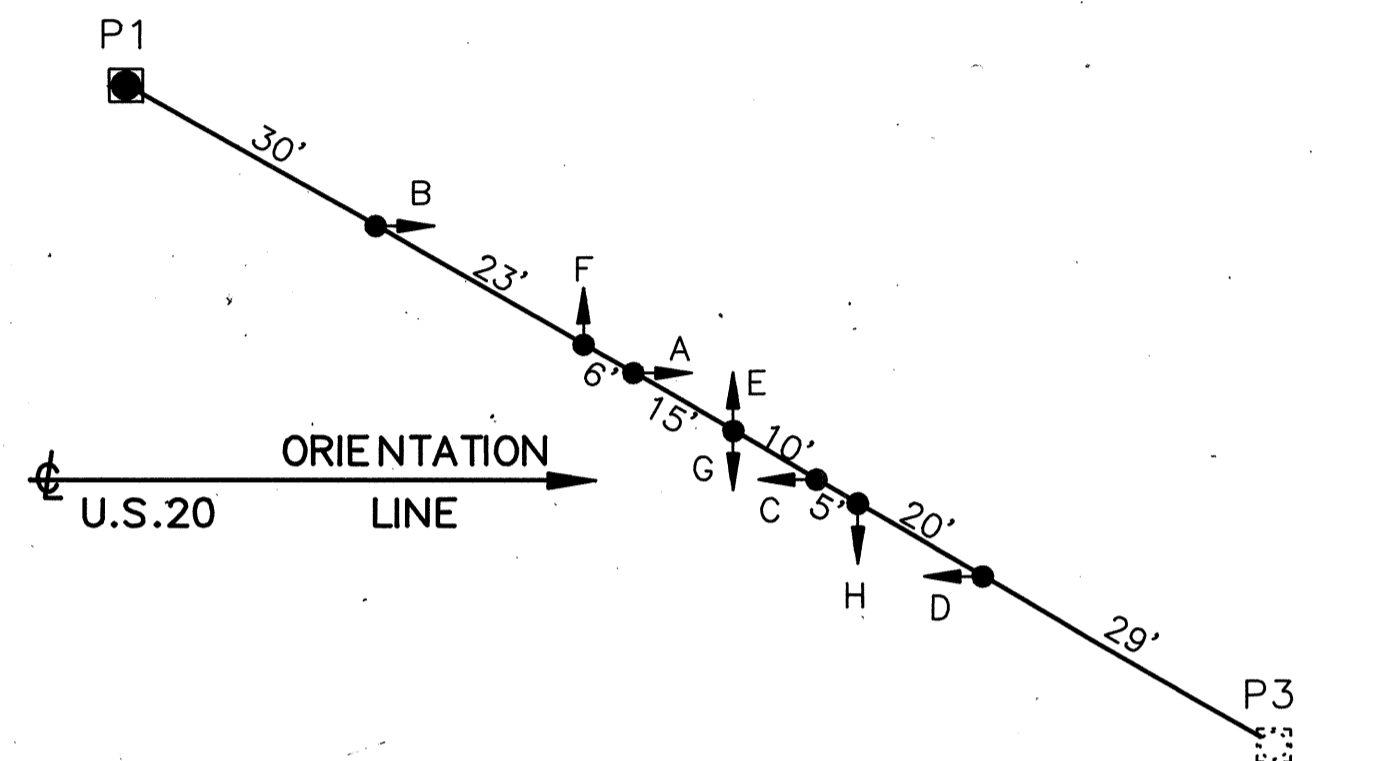
12" SIGNAL HEADS

SIGNAL HEAD	φ1		φ2		φ3		FLASH	DWELL
	R/W	CLE AR	R/W	CLE AR	R/W	CLE AR		
A	G	Y	R	R	R	R	Y	G
B	G	Y	R	R	R	R	Y	G
C	G	Y	R	R	R	R	Y	G
D	G	Y	R	R	R	R	Y	G
E	R	R	R	R	G	G	Y	R
F	R	R	R	R	R	R	Y	R
G	R	R	R	R	R	R	Y	R
H	R	R	R	R	R	R	Y	R
X-X	W	FDW	DW	DW	DW	DW	DW	DW
Y-Y	DW	DW	DW	DW	DW	W	FDW	DW
Z-Z	W	FDW	DW	DW	DW	DW	DW	DW

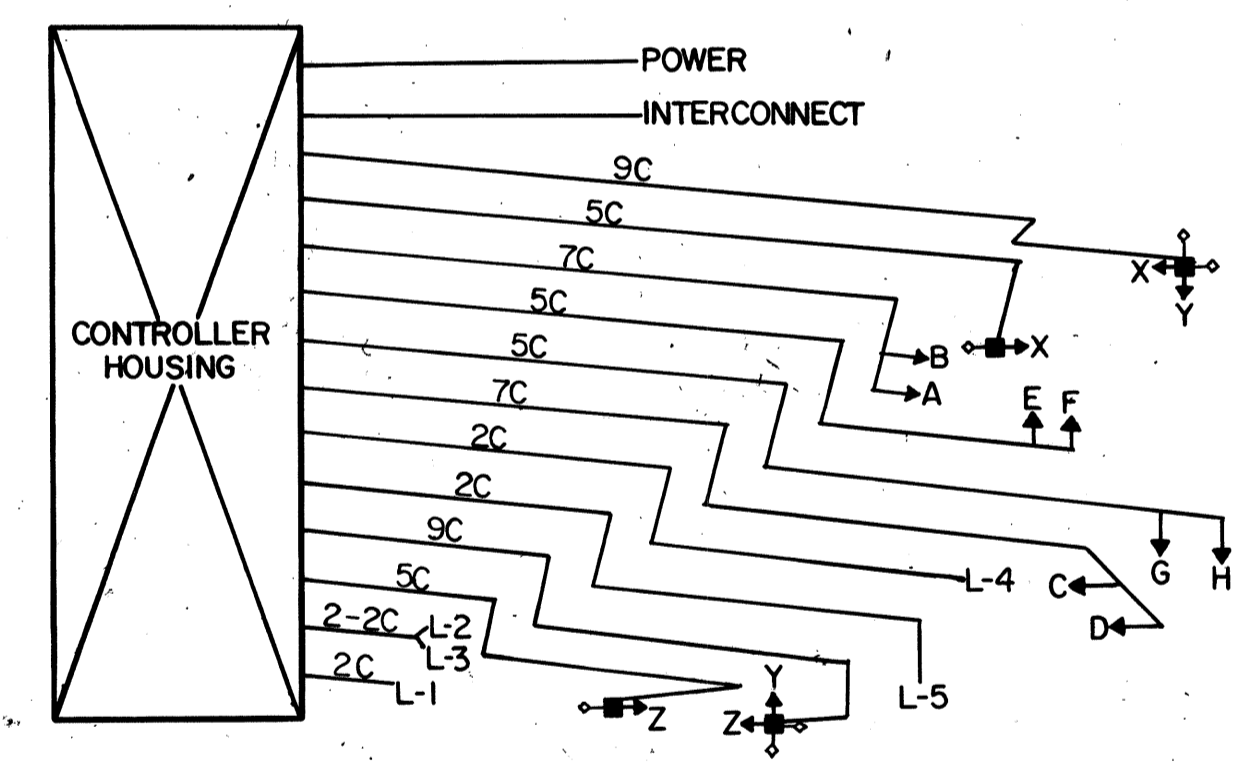
SIGNAL SEQUENCE CHART



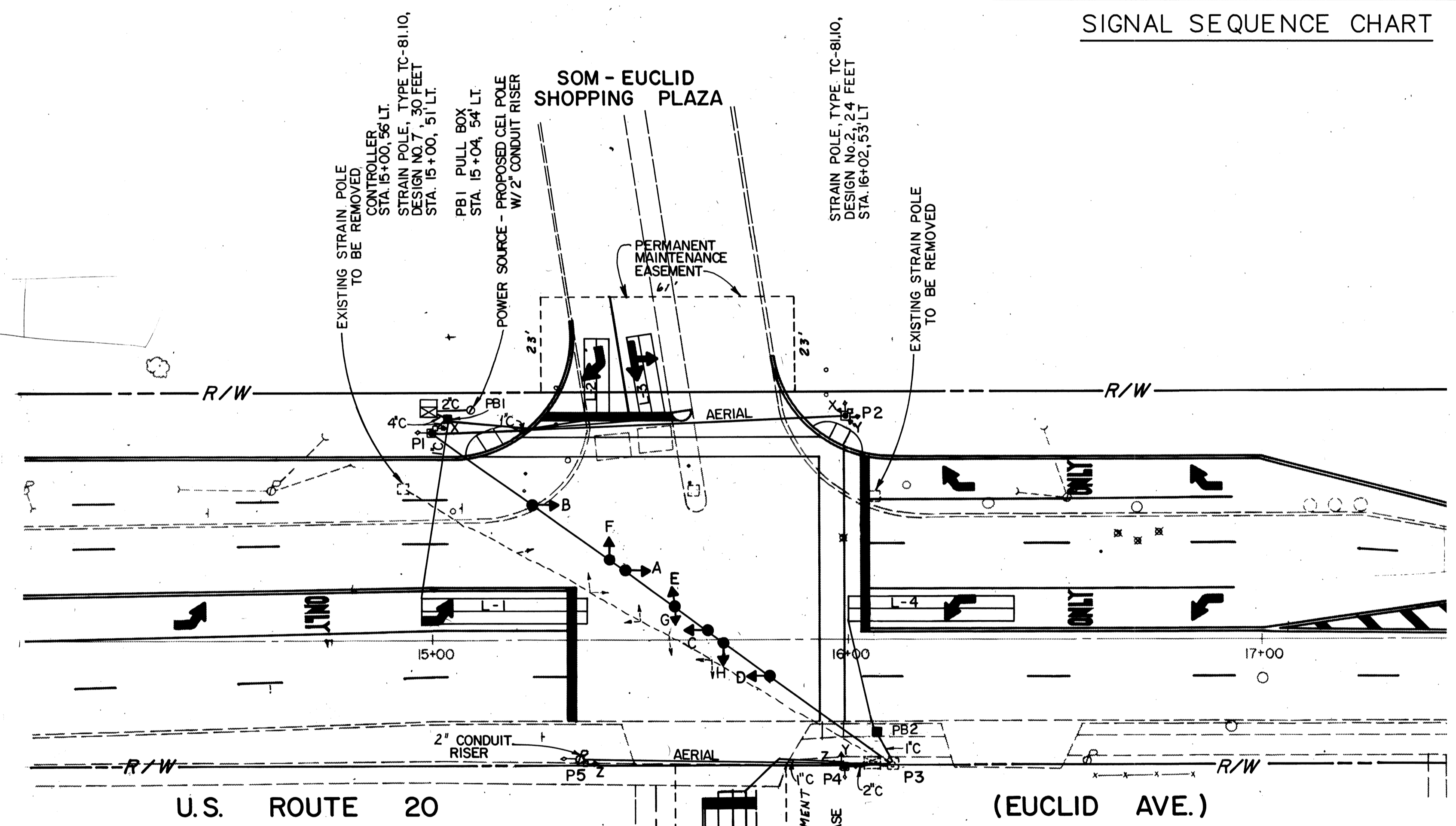
FOR SIGNING AND STRIPING DETAILS SEE SHEET No. 32



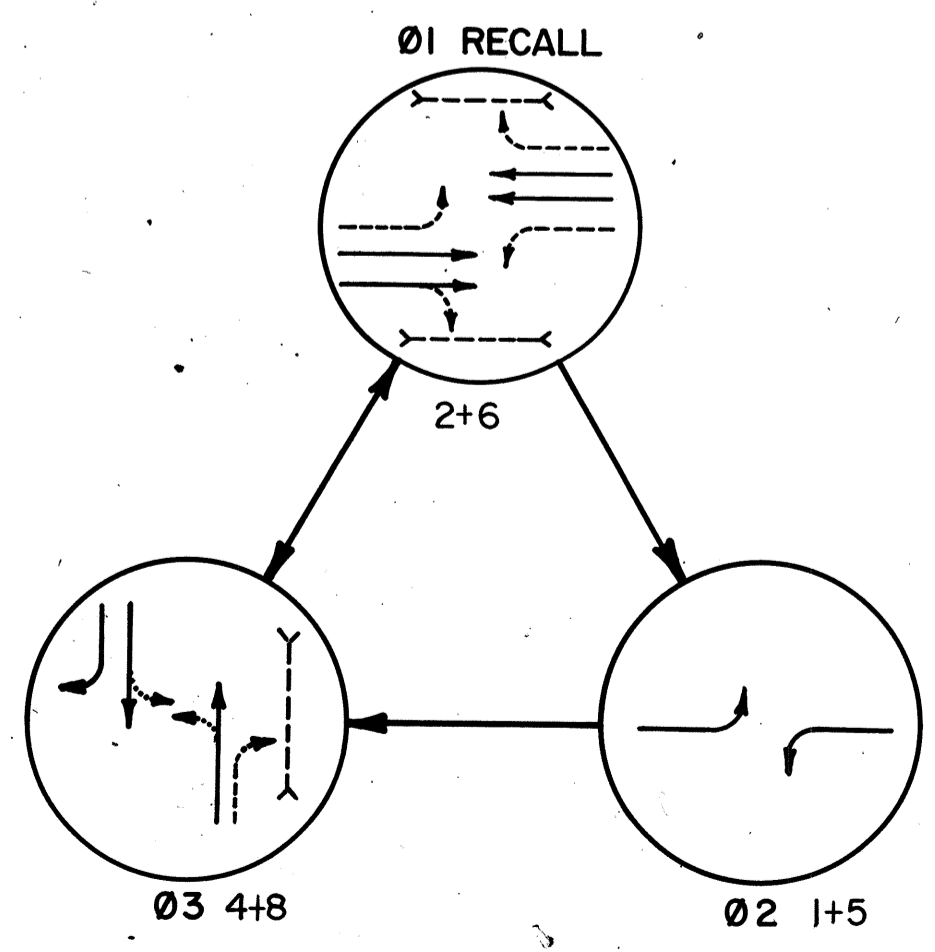
SPAN DIAGRAM



WIRING DIAGRAM



U.S. ROUTE 20 (EUCLID AVE.)



PHASING DIAGRAM

LOOP DESIGNATION	SIZE	NO. OF TURNS	PULSE OR PRESENCE	DELAY OR EXTENSION (SEC.)	CONNECT TO DETECTOR UNIT NO.	ASSOCIATED CONTROLLER PHASE
L-1	6X40	2-4-2	PRESENCE	-	L-1	φ2
L-2	6X20	2-4-2	PRESENCE	8.0	L-2	φ3
L-3	6X20	2-4-2	PRESENCE	-	L-3	φ3
L-4	6X40	2-4-2	PRESENCE	-	L-4	φ2
L-5	6X20	2-4-2	PRESENCE	5.0	L-5	φ3

LOOP DETECTOR CHART

FUNCTION	φ1	φ2	φ3
INITIAL GREEN	3.0	3.0	5.0
MINIMUM GREEN	20.0	10.0	10.0
VEHICLE EXTENSION	3.0	2.0	3.0
MAXIMUM GREEN	40.0	20.0	25.0
PEDESTRIAN WALK	7.0	-	7.0
PEDESTRIAN CLEARANCE	10.0	-	13.0
VEHICLE YELLOW CLEARANCE	3.0	3.0	3.0
VEHICLE ALL RED CLEARANCE	-	1.0	1.0
RECALL	ON	OFF	OFF
MEMORY	OFF	OFF	OFF

SIGNAL TIMING CHART

ITEM	ITEM EXT.	DESCRIPTION	UNIT	QTY
625		GROUND ROD	EACH	4
625		PULL BOX, 713.08, 18"	EACH	2
625		TRENCH	L.F.	55
625		TRENCH IN PAVED AREAS, TYPE A	L.F.	5
625		CONDUIT, 713.04, 1"	L.F.	55
625		CONDUIT, 713.04, 2"	L.F.	30
625		CONDUIT, 713.04, 4"	L.F.	5
632		VEHICULAR SIGNAL HEAD, 3-SECTION, 12" LENS, 1-WAY, A.P.P.	EACH	4
632		VEHICULAR SIGNAL HEAD, 3-SECTION, 12" LENS, 2-WAY, A.P.P.	EACH	1
632		VEHICULAR SIGNAL HEAD, 5-SECTION, 12" LENS, 1-WAY, A.P.P.	EACH	2
632		PEDESTRIAN SIGNAL HEAD, TYPE D-2 As Per Plan	EACH	6
632		PEDESTRIAN PUSHBUTTON	EACH	6
632		LOOP DETECTOR UNIT, DELAY & EXTEND TYPE, AS PER PLAN	EACH	5
632		LOOP DETECTOR PAVEMENT CUTTING	L.F.	600
632		CONCRETE FOR ANCHOR BASE FOUNDATION	C.Y.	4.0
632		STRAIN POLE, TYPE TC-81.10, DESIGN No.2, 24'	EACH	1
632		STRAIN POLE, TYPE TC-81.10, DESIGN No.7, 30'	EACH	1
632		CABLE SUPPORT ASSEMBLY	EACH	3
632		MESSENGER WIRE, 7-STRAND, 3/8" DIA. WITH ACCESSORIES	L.F.	312
632		SIGNAL CABLE, 5-CONDUCTOR, No. 14 AWG	L.F.	610
632		SIGNAL CABLE, 7-CONDUCTOR, No. 14 AWG	L.F.	285
632		SIGNAL CABLE, 9-CONDUCTOR, No. 14 AWG	L.F.	430
632		LOOP DETECTOR WIRE	L.F.	1654
632		LOOP DETECTOR LEAD-IN CABLE	L.F.	542
632		POWER CABLE, 2-CONDUCTOR, No. 8 AWG	L.F.	100
632		POWER SERVICE	EACH	1
632		COVERING OF VEHICULAR SIGNAL HEADS	EACH	7
632		REMOVAL OF TRAFFIC SIGNAL INSTALLATION, AS PER PLAN	EACH	1
632		REUSE OF STRAIN POLE	EACH	1
633		CONCRETE FOR CABINET FOUNDATION	C.Y.	1
633		CONTROLLER, ACTUATED 3 PHASE, SOLID STATE, DIGITAL, AS PER PLAN	EACH	1
633		COORDINATOR, SECONDARY, SOLID STATE DIGITAL	EACH	1
632		CONDUIT RISER, 2" DIAMETER	EACH	3

THESE QUANTITIES HAVE BEEN TRANSFERRED TO SHEETS 25 & 26.

U.S. ROUTE 20