

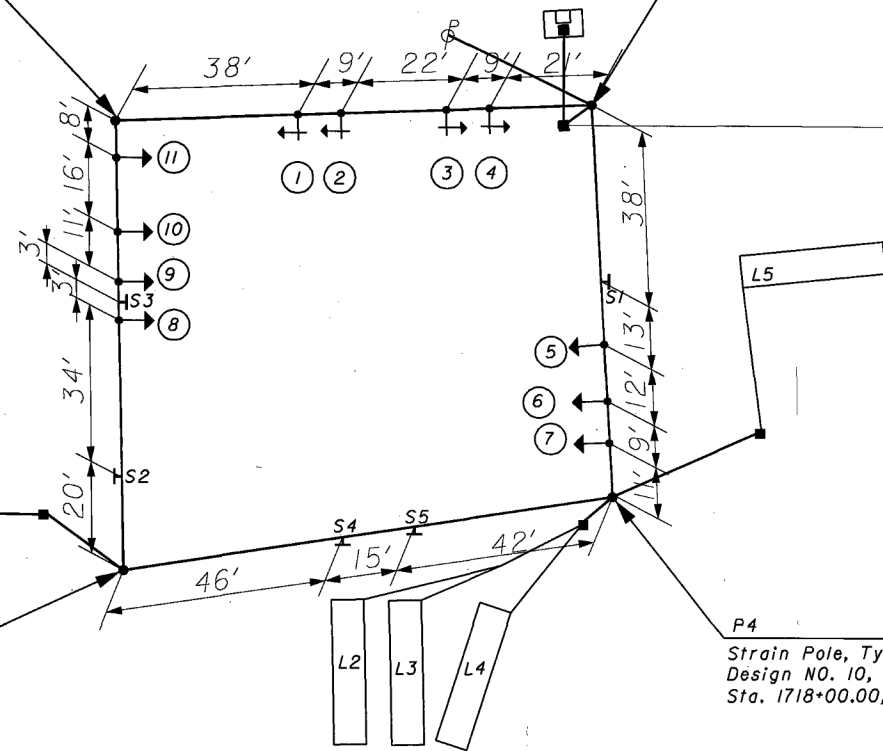
P1
Strain Pole, Type TC-81.10
Design NO. 10, Anchor Base
Sta. 1716+99.46, 37.53' LT.

P2
Strain Pole, Type TC-81.10
Design NO. 10, Anchor Base
Sta. 1716+99.49, 57.41' RT.

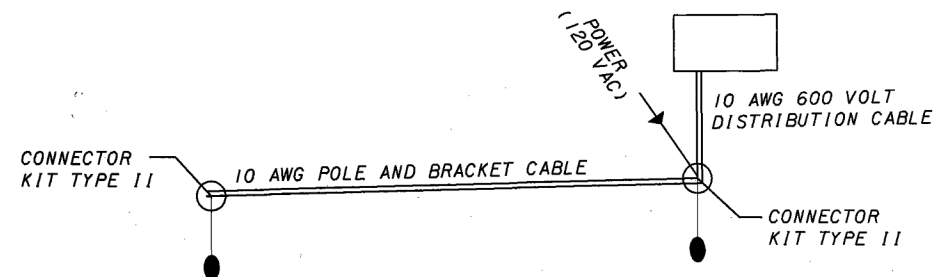
P3
Strain Pole, Type TC-81.10
Design NO. 10, Anchor Base
Sta. 1718+00.04, 37.50' LT.

P4
Strain Pole, Type TC-81.10
Design NO. 10, Anchor Base
Sta. 1718+00.00, 45.42' RT.

SPAN WIRE DIAGRAM



LIGHTING DIAGRAM



ITEM 625.07-725.11 LUMINAIRES

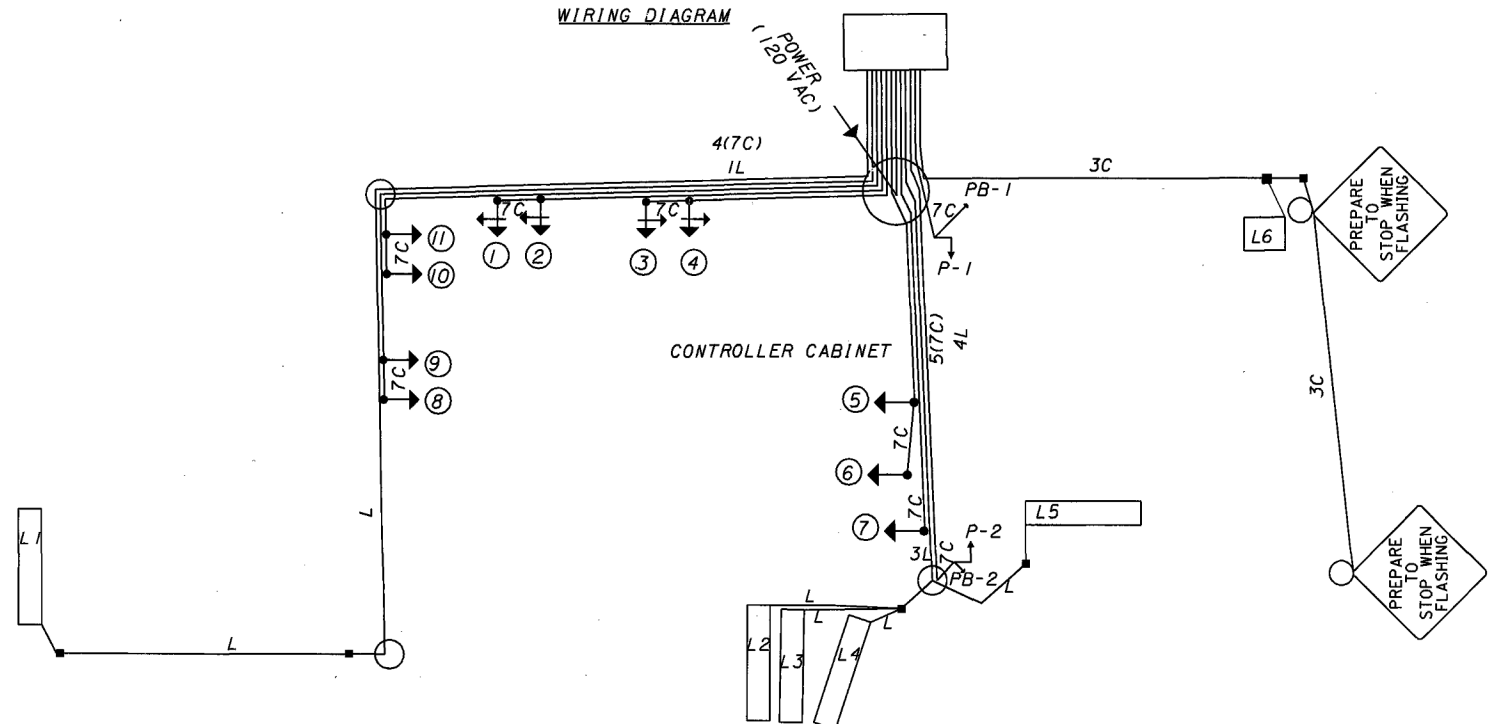
LUMINAIRES SHALL HAVE SINGLE RATED 110 VOLT, 200 WATT INTEGRAL REGULATOR BALLASTS FOR USE WITH HIGH PRESSURE SODIUM LAMPS AND SHALL BE GENERAL ELECTRIC M400, WESTINGHOUSE OV-25, ITT AMERICAN 400, OR EQUAL APPROVED BY THE ENGINEER.

ITEM 725.14 LAMPS

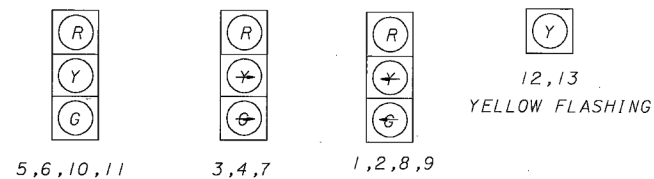
HIGH PRESSURE SODIUM LAMPS SHALL BE GENERAL ELECTRIC "LUCALUX" WESTINGHOUSE "CERMALUX", SYLVANIA "LUMALUX", OR EQUAL APPROVED BY THE ENGINEER. 200 WATTS HPS LAMPS SHALL BE OF THE 100 VOLT DESIGN, ANSI S56.

ITEM NUMBER	QUANTITY	UNIT	ITEM DESCRIPTION
625	2	EACH	CONNECTOR KIT, TYPE II
625	94	FT	NO. 10 AWG 600 VOLT DISTRIBUTION CABLE
625	514	FT	NO. 10 AWG POLE AND BRACKET CABLE
625	2	EACH	LUMINAIRE, CONVENTIONAL
625	927	FT	CONDUIT, 2", 725.04
625	927	FT	TRENCH, 24" DEEP
625	7	EACH	PULL BOX, 725.08, 18"
625	1	EACH	PULL BOX, 725.08, 24"
625	5	EACH	GROUND ROD
625	1	EACH	POWER SERVICE
630	5	EACH	SIGN HANGER ASSEMBLY, SPAN WIRE
630	35	SQ FT	SIGN, FLAT SHEET
632	2	EACH	VEHICULAR SIGNAL HEAD WITH LED LAMP UNIT, 1 SECTION, 12" LENS, 1-WAY, AS PER PLAN
632	11	EACH	VEHICULAR SIGNAL HEAD WITH LED LAMP UNITS, 3 SECTION, 12" LENS, 1-WAY, AS PER PLAN
632	2	EACH	PEDESTRIAN SIGNAL HEAD WITH LED LAMP UNITS, TYPE A2, AS PER PLAN
632	13	EACH	COVERING OF VEHICULAR SIGNAL HEAD
632	2	EACH	COVERING OF PEDESTRIAN SIGNAL HEAD
632	2	EACH	PEDESTRIAN PUSHBUTTON
632	6	EACH	DETECTOR LOOP
632	4	EACH	LOOP DETECTOR UNIT, 2 CHANNEL
632	424	FT	MESSENGER WIRE, 7 STRAND, 3/8" DIAMETER WITH ACCESSORIES
632	1128	FT	SIGNAL CABLE, 7 CONDUCTOR, NO. 14 AWG
632	4	EACH	STRAIN POLE FOUNDATION
632	1615	FT	LOOP DETECTOR LEAD-IN CABLE
632	90	FT	POWER CABLE, 2 CONDUCTOR, NO. 6 AWG
632	2	EACH	COMBINATION STRAIN POLE, TYPE TC-81.10, DESIGN 10
632	2	EACH	STRAIN POLE, TYPE TC-81.10, DESIGN 10
632	2	EACH	WOOD POLE, (CLASS III, 35' HEIGHT)
632	1	EACH	REMOVAL OF TRAFFIC SIGNAL INSTALLATION AND DISPOSAL
632	717	FT	SIGNAL CABLE, 3 CONDUCTOR, NO. 10 AWG
633	1	EACH	CONTROLLER UNIT, TYPE 170E, WITH CABINET, TYPE 332
633	1	EACH	CABINET RISER
633	1	EACH	CABINET FOUNDATION, AS PER PLAN
633	1	EACH	CONTROLLER WORK PAD, AS PER PLAN

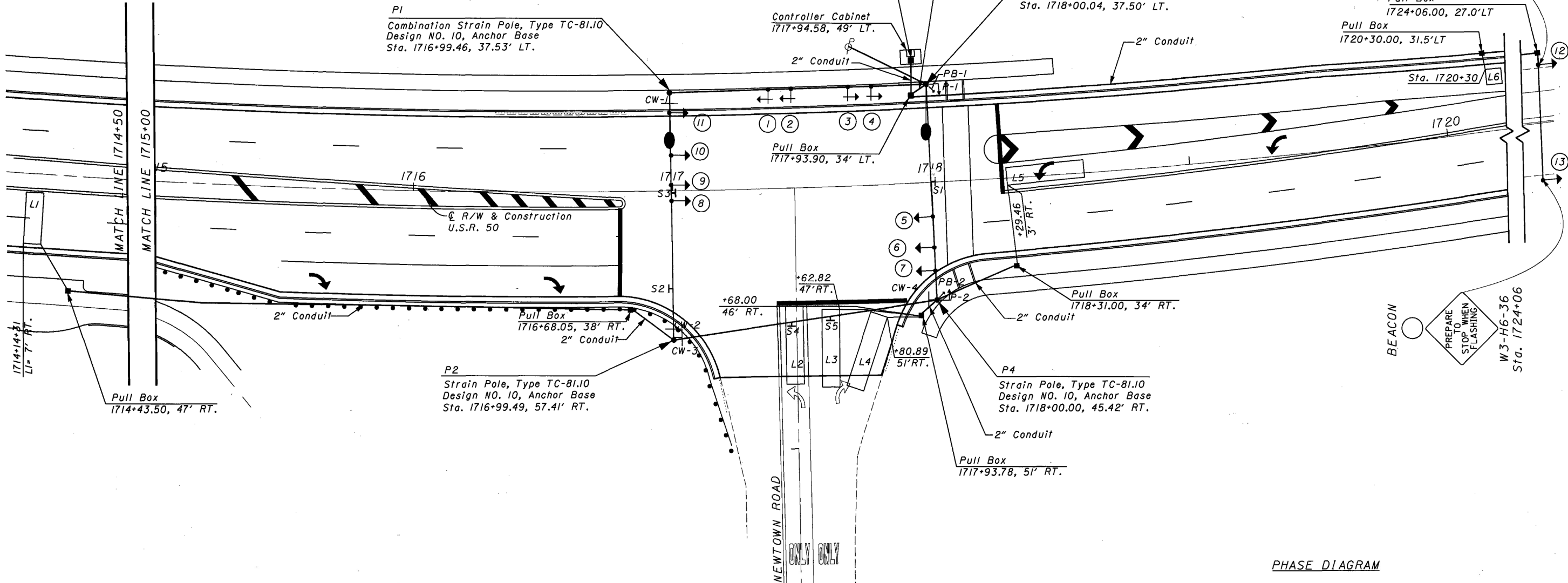
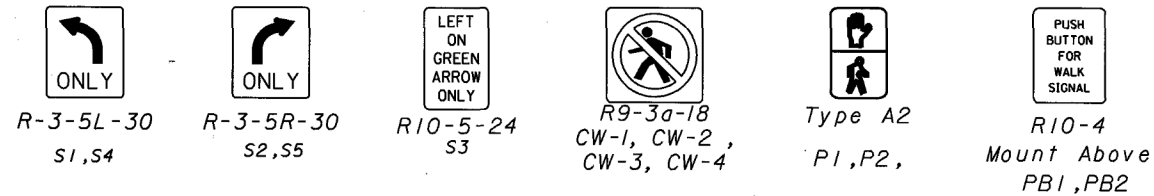
WIRING DIAGRAM



PROPOSED SIGNAL HEAD ASSEMBLY



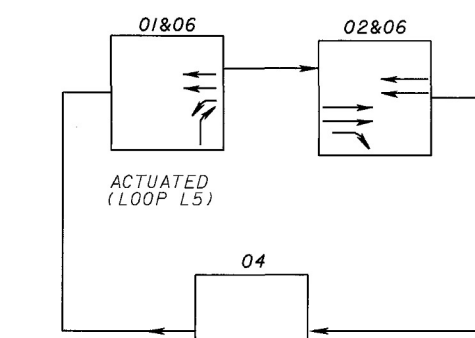
NOTE: ALL SIGNAL HEADS SHALL BE 12"



LEGEND

- CONTROLLER, POLE MOUNTED
- 3- SECTION SIGNAL HEAD
- 5- SECTION SIGNAL HEAD
- SIGNAL SUPPORT POLE
- PULL BOX
- LOOP DETECTOR
- PROPOSED SIGN
- EXISTING SIGN
- PROPOSED LIGHT

PHASE DIAGRAM



US 50 PREFERENTIAL
US 50 FLASHES AMBER
NEWTOWN ROAD FLASHES RED

DETECTOR ASSIGNMENTS							
DET #	LOCATION	LOOP SIZE*	PHASE	AMP #	TURNS	MODE	DELAY TIME (SECS)
L1	EB THRU	6' x 20'	Ø2	1	3	PRESENCE	
L2	NB LT	6' x 30'	Ø8	4	3	PRESENCE	
L3	NB RT	6' x 30'	Ø8	5	3	PRESENCE	10
L4	NB RT	6' x 30'	Ø8	5	3	PRESENCE	10
L5	WB LT	6' x 30'	Ø1	6	3	PRESENCE	
L6	WB THRU	6' x 6'	Ø6	1	3	PRESENCE	

POLE ORIENTATION DATA CHART							ORIENTATION ANGLE (DEG) FROM INDEX LINE				
POLE	TC-81.10 DESIGN NO.	STATION & OFFSET	FOUNDATION ELEVATION	POLE HEIGHT	INDEX LINE ANGLE	RESULTANT SPAN PULL	HAND HOLE	PED. SIGNAL	PUSH BUTTON	LUMINAIRE	POWER
P1	10	1716+99.46 - 38' LT	512.12	32'	135°	135°/225°	0°			225°	
P2	10	1716+99.49 - 57' RT	513.68	32'	225°	135°/218°	0°				
P3	10	1718+00.04 - 38' LT	513.59	32'	225°	135°/223°	0°	135°	90°	135°	255°
P4	10	1718+00.00 - 45' RT	515.29	32'	135°	129°/225°	0°	225°	270°		

ALL WEATHERHEADS SHALL BE 2" EXCEPT FOR THE 3" SIGNAL WEATHERHEAD ON POLE 'P2'.
** ELEVATIONS SHALL BE STAKED AND APPROVED BY THE DIVISION OF TRAFFIC PRIOR TO FOUNDATION EXCAVATION.

HANDHOLE & BOLT HOLE POSITIONING

ROTATE POLE ACCORDING TO
RESULTANT SPAN PULL
ROTATE POLE FOUNDATION AS SHOWN
ON THE INTERSECTION LAYOUT SHEET

POLE
ITEM
ANGLE

HANDHOLE

INDEX
LINE

INDEX
LINE
ANGLE

Q HAM. 50

90°

INCREASING
STATIONS

NOTES:
1. ALL ANGLES MEASURED CLOCKWISE
2. INDEX LINE GOES THROUGH CENTER
OF HANDHOLE

ACTUATED TRAFFIC SIGNAL CONTROLLER TIMING CHART

START UP		DUAL ENTRY	
START IN: Y/R FLASH OR ALL RED		REST IN RED: RING 1; RING 2	
TIME FOR FLASH OR ALL RED:			
FIRST PHASE(S): * & *			
COLOR DISPLAYED: GREEN; YELLOW			
INTERVAL OR FEATURE		CONTROLLER MOVEMENT NO.	
INTERSECTION MOVEMENT		WBL	EBT
MINIMUM GREEN (INITIAL) (SEC.)		7	10
ADDED INITIAL *(SEC./ACTUATION)			
PASSAGE TIME (PRESET GAP) (SEC.)		5	
TIME BEFORE REDUCTION *(SEC.)			
MINIMUM GAP *(SEC.)			
TIME TO REDUCE *(SEC.)			
MAXIMUM GREEN I (SEC.)		20	40
MAXIMUM GREEN II (SEC.)			
YELLOW CHANGE (SEC.)		4	4
ALL RED CLEARANCE (SEC.)		1.5	1.5
WALK (SEC.)			
PEDESTRIAN CLEARANCE (SEC.)			15
RECALL	MAXIMUM (ON/OFF)		
	MINIMUM (ON/OFF)	ON	ON
	PEDESTRIAN (ON/OFF)		
MEMORY (ON/OFF)			
CALL TO NON-ACTUATED	NO. 1		
	NO. 2		

* VOLUME DENSITY CONTROLS