

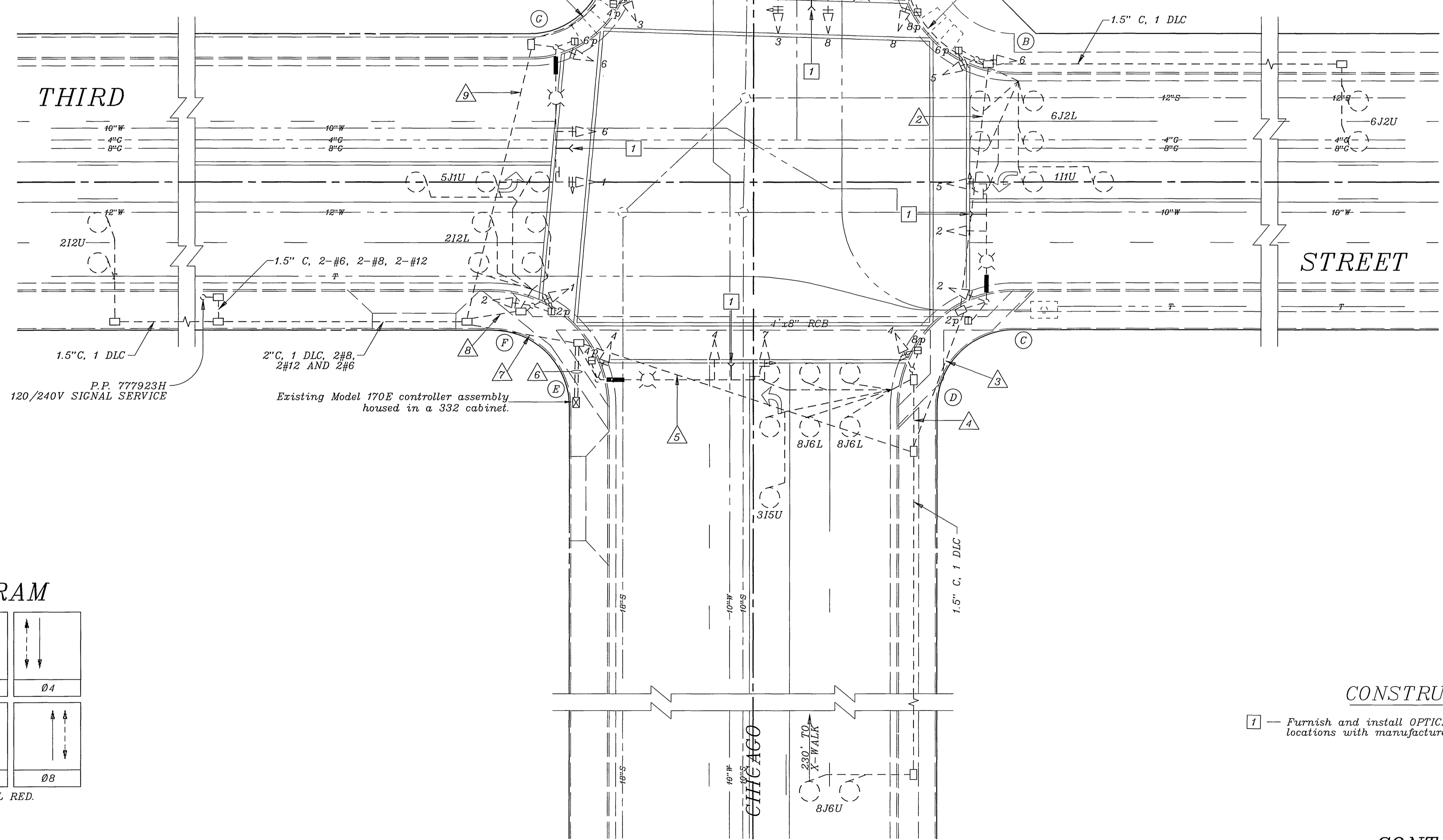
EQUIPMENT SCHEDULE

NO.	SIGNAL STANDARD		LUMINAIRE			I.I.S.N.S. LEGEND	SIGNAL MOUNTINGS			PPB PHASE
	TYPE	HCHT	M.A.	M.A.	H.P.S.V.		VEHICLE	PEDESTRIAN	AUDIBLE	
(A)	26-4-80(E)	30'(E)	40'(E)	15'(E)	200W(E)	Third	MAS(E)			
							MAS(E)			
							SV-1-T(E)	SP-1-T(E)	((P))E	6(E)
(B)	1A(E)	10'(E)					TV-2-T(E)	SP-1-T(E)	((C))E	8(E)
(C)	24-4-80(E)	30'(E)	35'(E)	15'(E)	200W(E)	Chicago	MAS(E)			
							MAS(E)			
							SV-1-T(E)	SP-1-T(E)	((C))E	8(E)
(D)	1A(E)	10'(E)					TV-1-T(E)	SP-1-T(E)	((P))E	2(E)
(E)	29-5-80(E)	30'(E)	50'(E)	15'(E)	200W(E)	Third	MAS(E)			
							MAS(E)			
							SV-1-T(E)	SP-1-T(E)	((P))E	2(E)
(F)	1A(E)	10'(E)					TV-2-T(E)	SP-1-T(E)	((C))E	4(E)
(G)	26-4-80(E)	30'(E)	40'(E)	15'(E)	200W(E)	Chicago	MAS(E)			
							MAS(E)			
							SV-1-T(E)	SP-1-T(E)	((C))E	4(E)
(H)	1A(E)	10'(E)					TV-1-T(E)	SP-1-T(E)	((P))E	6(E)

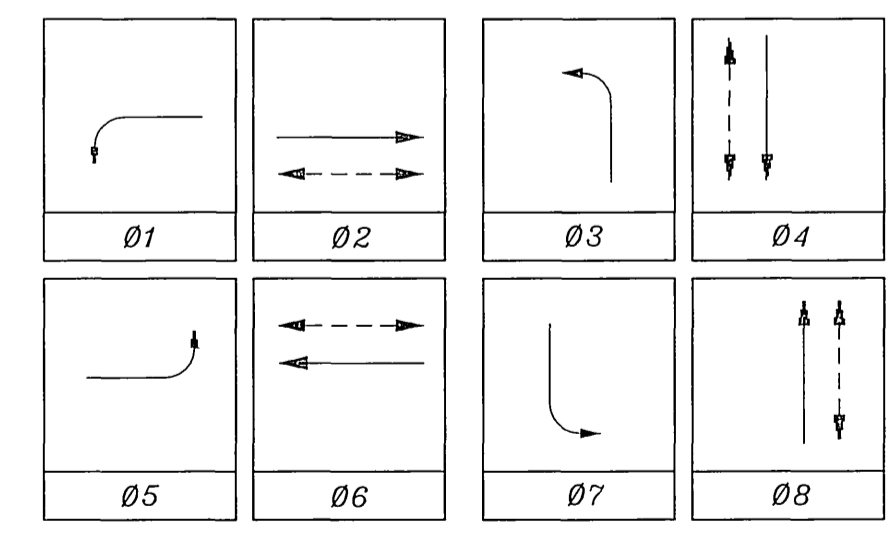
(E)-EXISTING (N)-NEW

CONDUCTOR TABLE

CONTROL FUNCTION	CONDUCTORS	CONDUCTOR RUNS									
		1	2	3	4	5	6	7	8	9	10
VEHICLE & PED. HEADS, PEDESTRIAN PUSH BUTTONS, SPARES & COMMONS	12 WIRE IMSA	1	2	3	-	3	6	2	1	1	-
	9 WIRE IMSA	-	-	-	1	1	2	1	-	1	1
	3 WIRE IMSA	1	2	3	1	4	8	3	1	2	1
DETECTOR CABLE	#16/2	-	-	-	-	-	-	-	-	-	-
PHASE 1		-	1	1	-	1	1	-	-	-	-
PHASE 2		-	-	-	-	2	2	1	-	-	-
PHASE 3		-	-	-	1	1	1	-	-	-	-
PHASE 4		-	-	-	-	2	2	-	2	2	-
PHASE 5		-	-	-	-	1	1	1	-	-	-
PHASE 6		-	2	2	-	2	2	-	-	-	-
PHASE 7		-	-	-	-	1	1	-	-	1	1
PHASE 8		-	-	-	1	2	2	-	-	-	-
TOTALS		-	3	3	2	6	12	6	2	3	3
I.I.S.N.S.	#12	2	2	2	-	2	-	2	-	2	-
LUMINAIRES	# 8	2	2	2	-	2	-	2	-	2	-
SIGNAL SERVICE	# 6	-	-	-	-	-	2	-	-	-	-
OPTICOM CABLE		1	1	2	-	2	4	1	-	1	-
CONDUIT SIZE		1.5"	3"	3"	2.5"	3.5"	2-3"	3.5"	1.5"	3"	2"
		(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)



PHASE DIAGRAM



FLASHING OPERATION SHALL BE ALL RED.

CONSTRUCTION NOTES

1 - Furnish and install OPTICAL DETECTOR on signal mast arm per detail. Verify locations with manufacturer's representative prior to installing.

CONTRACT TE-01-09

**IMPORTANT NOTICE**  
 Section 4316/4217 of the Government Code requires a Dig Alert Identification Number to be issued before a Permit to Excavate will be valid. For your Dig Alert ID, Number call CALL TOLL FREE TWO WORKING DAYS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

**ENGINEER IN RESPONSIBLE CHARGE**  
 THOMAS JOHN BOYD  
 R.C.E. No. 36170 expires 6/30/04  
 DATE 3/2/02

REGISTERED PROFESSIONAL ENGINEER  
 THOMAS JOHN BOYD  
 No. 36170  
 E.P. 05-30-2004  
 CIVIL  
 STATE OF CALIFORNIA

MARK REVISIONS APPR. DATE  
 DESIGNED BY MAC DRAWN BY MAC CHECKED BY

CITY OF RIVERSIDE, CALIFORNIA  
 DEPARTMENT OF PUBLIC WORKS  
 APPROVED BY BY DATE  
 ENGINEERING MANAGER  
 PRINCIPAL ENGINEER  
 P.W. INSPECTION  
 TRAFFIC DIVISION  
 PUBLIC UTILITIES

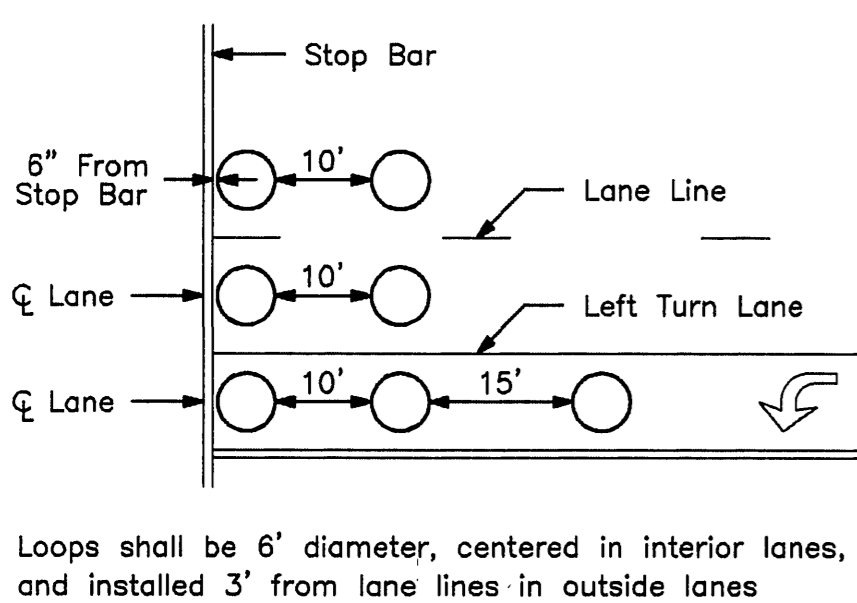
TRAFFIC SIGNAL MODIFICATION  
 CHICAGO AVENUE AND THIRD STREET  
 SCALE: 1" = 20'

ACCT. NO. XXXXXXXXXXX-XXXXXXX  
 X-434A  
 SHEET 1 OF 1  
 FILE NAME: X434A.DWG

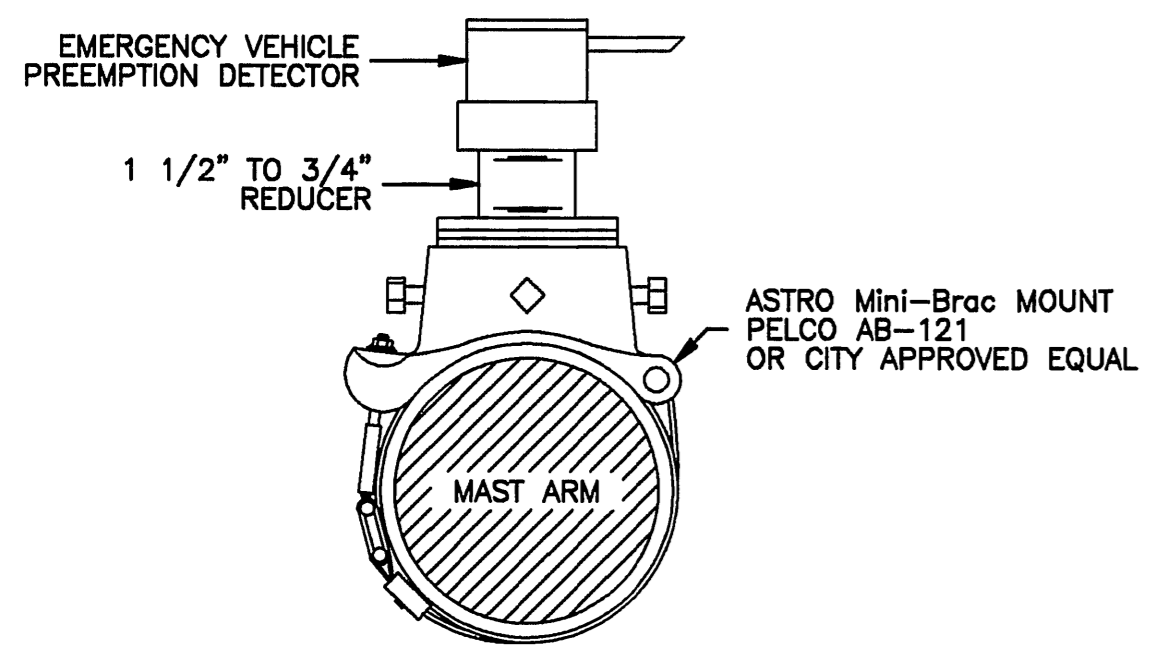
EQUIPMENT		SCHEDULE		REMARKS				
NO.	SIGNAL STANDARD	LUMINAIRE		SIGNAL MOUNTINGS		PPB	PHASE	REMARKS
		HTGHT.	M.A.	VEHICLE	PEDESTRIAN			
(A)	28-4-80(N)	30'(N)	40'(N)	15'(R)	200W(R)	Third	ST 1600 (N)	MAS(N) MAS(N) SV-1-T(N) SP-1-T(N) ((I(P)) (N)) 6(N)
(B)	1A(E)	10'(E)						TV-2-T(N) SP-1-T(N) ((I(C)) (N)) 8(N)
(C)	24-4-80(N)	30'(N)	35'(N)	15'(R)	200W(R)	Chicago	AVE 3200 (N)	MAS(N) MAS(N) SV-1-T(N) SP-1-T(N) ((I(C)) (N)) 8(N)
(D)	1A(E)	10'(E)						TV-1-T(N) SP-1-T(N) ((I(P)) (N)) 2(N)
(E)	29-5-80(N)	30'(N)	50'(N)	15'(R)	200W(R)	Third	ST 1700 (N)	MAS(N) MAS(N) SV-1-T(N) SP-1-T(N) ((I(P)) (N)) 2(N)
(F)	1A(E)	10'(E)						TV-2-T(N) SP-1-T(N) ((I(C)) (N)) 4(N)
(G)	26-4-80(N)	30'(N)	40'(N)	15'(R)	200W(R)	Chicago	AVE 3200 (N)	MAS(N) MAS(N) SV-1-T(N) SP-1-T(N) ((I(C)) (N)) 4(N)
(H)	1A(N)	10'(N)						TV-1-T(N) SP-1-T(N) ((I(P)) (N)) 6(N)

(E)=EXISTING (N)=NEW (R)=RELOCATE

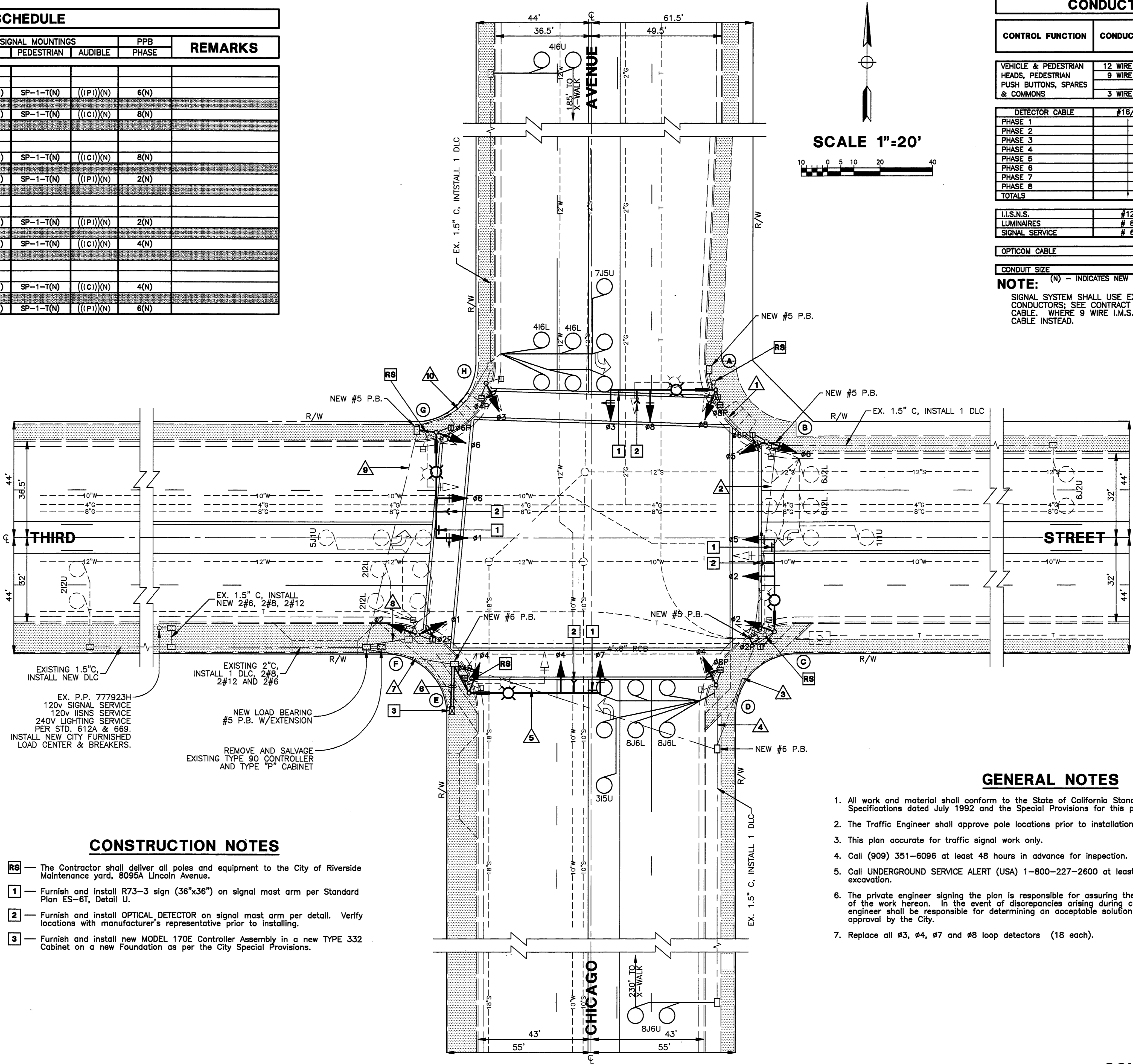
- NOTES:**
- ALL VEHICULAR HEADS SHALL HAVE 12" LENSES.
  - ALL LEFT TURN HEADS SHALL HAVE ALL ARROWS.
  - LUMINAIRES SHALL BE HIGH PRESSURE SODIUM VAPOR.
  - ((I(C))) OR ((I(P))) INDICATES AUDITORY PEDESTRIAN SIGNAL TO BE INSTALLED. ((I(C))) INDICATES CUCKOO SOUND; ((I(P))) INDICATES PEEP-PEEP SOUND.
  - PEDESTRIAN PUSH BUTTONS SHALL BE INSTALLED ON THE POLE IN THE QUADRANT NEAREST THE CROSSWALK SERVING THE PHASE. R/R W/ADA BUTTONS.
  - FOUNDATIONS NOT TO BE REUSED SHALL BE COMPLETELY REMOVED.



**DETECTOR LOOP INSTALLATION DETAIL**



**MAST-ARM MOUNTING CLAMP FOR OPTICAL DETECTOR**

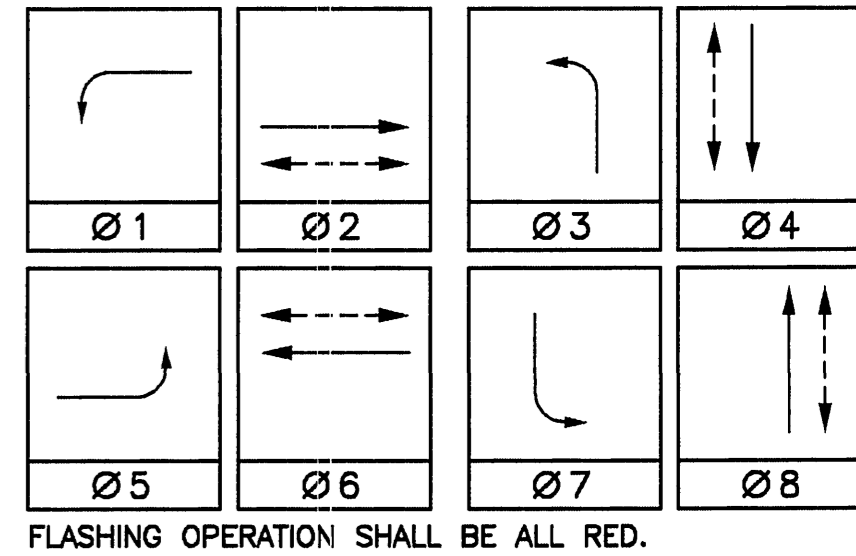


- CONSTRUCTION NOTES**
- RS - The Contractor shall deliver all poles and equipment to the City of Riverside Maintenance yard, 8095A Lincoln Avenue.
  - 1 - Furnish and install R73-3 sign (36"x36") on signal mast arm per Standard Plan ES-6T, Detail U.
  - 2 - Furnish and install OPTICAL DETECTOR on signal mast arm per detail. Verify locations with manufacturer's representative prior to installing.
  - 3 - Furnish and install new MODEL 170E Controller Assembly in a new TYPE 332 Cabinet on a new Foundation as per the City Special Provisions.

CONDUCTOR		TABLE									
CONTROL FUNCTION	CONDUCTORS	CONDUCTOR RUNS									
		1	2	3	4	5	6	7	8	9	10
VEHICLE & PEDESTRIAN HEADS, PEDESTRIAN PUSH BUTTONS, SPARES & COMMONS	12 WIRE IMSA 9 WIRE IMSA 3 WIRE IMSA	1	2	3	4	5	6	7	8	9	10
DETECTOR CABLE	#16/2	-	-	-	-	-	-	-	-	-	-
PHASE 1		-	1	1	1	1	1	1	1	1	1
PHASE 2		-	-	-	-	-	2	2	1	-	-
PHASE 3		-	-	-	1	1	1	-	-	-	-
PHASE 4		-	-	-	-	-	2	2	-	2	2
PHASE 5		-	-	-	-	-	1	1	1	-	-
PHASE 6		-	2	2	-	-	2	2	-	-	-
PHASE 7		-	-	-	-	-	1	1	1	1	1
PHASE 8		-	-	-	-	-	1	2	2	-	-
TOTALS		-	3	3	2	6	12	6	2	3	3
I.I.S.N.S.	#12	2	2	2	-	-	2	-	2	-	-
LUMINAIRES	# 8	2	2	2	-	-	2	-	2	-	-
SIGNAL SERVICE	# 6	-	-	-	-	-	2	-	-	-	-
OPTICOM CABLE		1	1	2	-	-	2	4	1	-	1
CONDUIT SIZE		1.5"	3"	3"	2.5"	3.5"	2-3"	3.5"	1.5"	3"	2"

**NOTE:** (N) - INDICATES NEW CONDUIT (N)  
SIGNAL SYSTEM SHALL USE EXISTING CONDUITS AND SHALL HAVE ALL NEW CABLES AND CONDUCTORS; SEE CONTRACT SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION ON I.M.S.A. CABLE. WHERE 9 WIRE I.M.S.A. IS SHOWN, THE CONTRACTOR MAY USE ALL 12 WIRE I.M.S.A. CABLE INSTEAD.

**PHASE DIAGRAM**



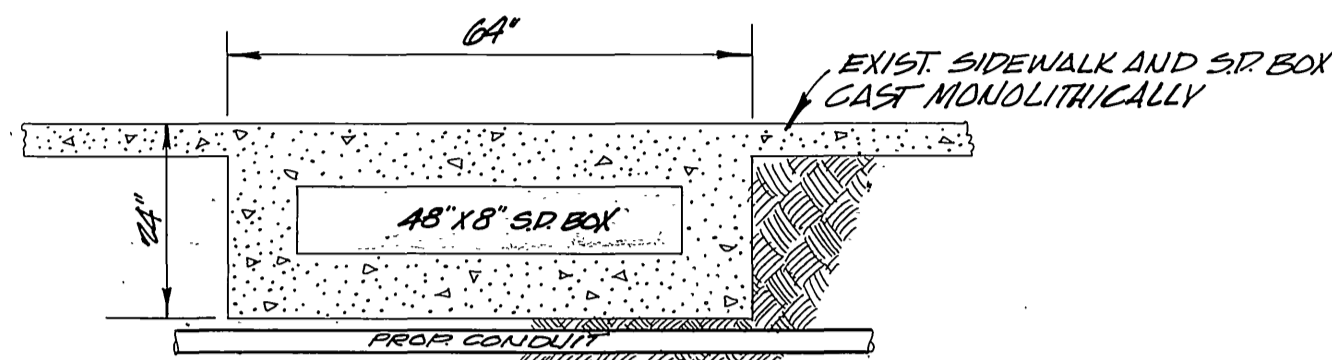
**GENERAL NOTES**

- All work and material shall conform to the State of California Standard Plans and Standard Specifications dated July 1992 and the Special Provisions for this project.
- The Traffic Engineer shall approve pole locations prior to installation by Contractor.
- This plan accurate for traffic signal work only.
- Call (909) 351-6096 at least 48 hours in advance for inspection.
- Call UNDERGROUND SERVICE ALERT (USA) 1-800-227-2600 at least 2 working days prior to excavation.
- The private engineer signing the plan is responsible for assuring the accuracy and acceptability of the work hereon. In the event of discrepancies arising during construction, the private engineer shall be responsible for determining an acceptable solution and revising the plan for approval by the City.
- Replace all Ø3, Ø4, Ø7 and Ø8 loop detectors (18 each).

CONTRACT TE-99-4

<p><b>IMPORTANT NOTICE:</b> Section 416/4217 of the Government Code requires a City Alert Identification Number to be issued before a "Turn to Director" will be valid. CALL TOLL FREE TWO WORKING DAYS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600</p>	<p><b>PRIVATE ENGINEERING NOTE</b> CONSTRUCTION CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONSTRUCTION CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THAT THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND CONSTRUCTION CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD DESIGN PROFESSIONAL HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF DESIGN PROFESSIONAL.</p>	<p>ENGINEER IN RESPONSIBLE CHARGE: <i>Lawrence S. Eisenhart</i> LAWRENCE S. EISENHART RCE NO. 13493 EXPIRATION DATE: 3-31-01 DATE: 2/18/00</p>	<p><b>LAWRENCE S. EISENHART</b> CONSULTING ENGINEER 2070 Locust Court San Bernardino, California 92404 Tel: (909) 864-5406 Fax: (909) 864-5047</p>	<p>CITY OF RIVERSIDE, CALIFORNIA DEPARTMENT OF PUBLIC WORKS</p>	<p>TRAFFIC SIGNAL MODIFICATION PLAN <b>CHICAGO AVENUE and THIRD STREET</b> SCALE: 1"=20'</p>	<p>ACCT. NO. 430-541600-440303-35102 <b>X-434</b> SHEET 1 OF 1 FILE NAME: X434.DWG</p>





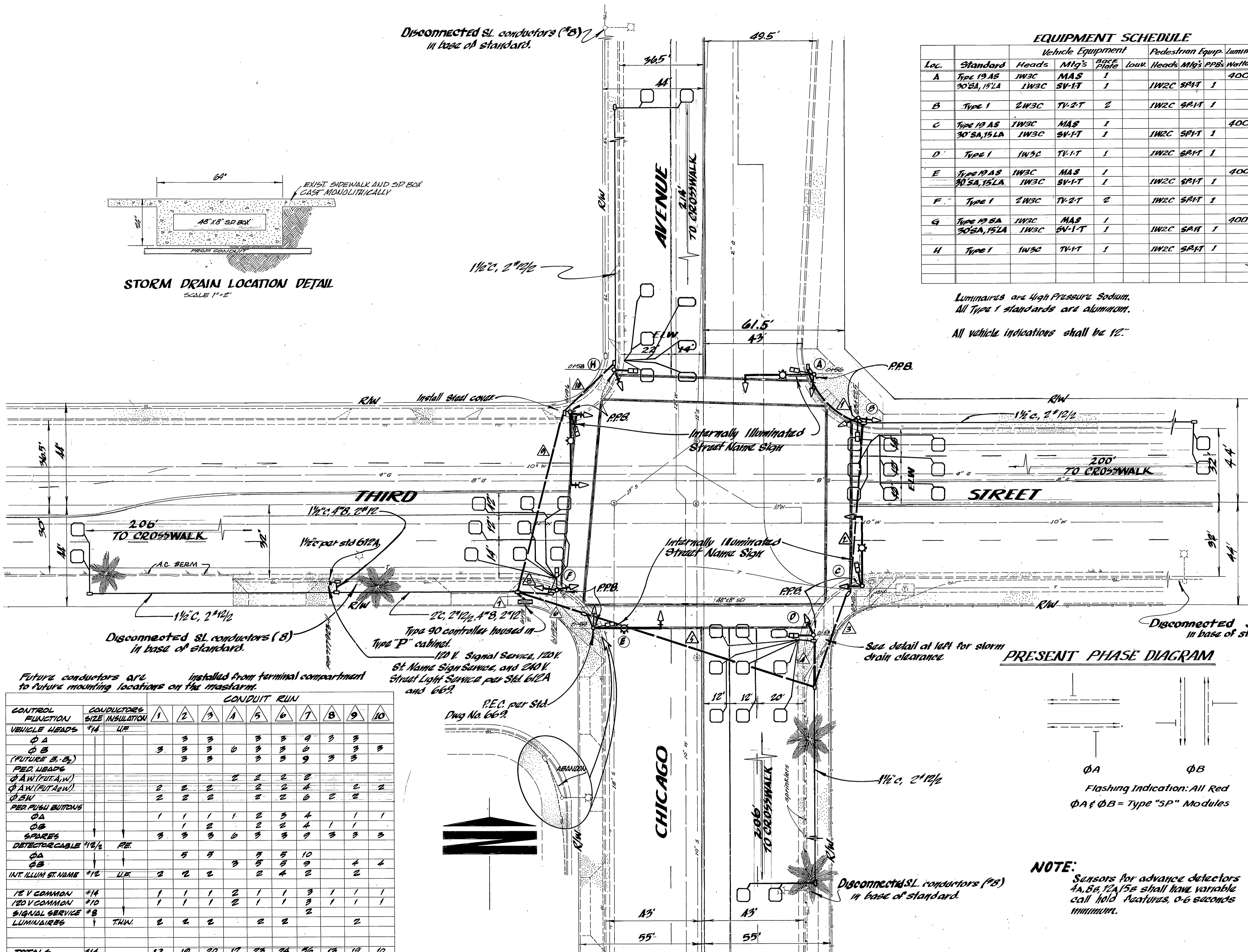
STORM DRAIN LOCATION DETAIL  
SCALE 1"=2'

Loc.	Standard	Vehicle Equipment				Pedestrian Equip.		Luminaire	-Remarks-	
		Heads	Mtg's	Post Plate	Low	Heads	Mtg's/PPB	Wattage		
A	Type 19 AS 30 SA, 15 LA	1W3C	MAS	SV-1T	1	1W2C	SP1T	1	400W	
B	Type 1	2W3C	TV-2T		2	1W2C	SP1T	1		
C	Type 19 AS 30 SA, 15 LA	1W3C	MAS	SV-1T	1	1W2C	SP1T	1	400W	Salvage exist. standard and luminaire.
D	Type 1	1W3C	TV-1T		1	1W2C	SP1T	1		
E	Type 19 AS 30 SA, 15 LA	1W3C	MAS	SV-1T	1	1W2C	SP1T	1	400W	Salvage exist. standard and luminaire and remove std. foundation.
F	Type 1	2W3C	TV-2T		2	1W2C	SP1T	1		
G	Type 19 SA 30 SA, 15 LA	1W3C	MAS	SV-1T	1	1W2C	SP1T	1	400W	
H	Type 1	1W3C	TV-1T		1	1W2C	SP1T	1		Salvage exist. standard and luminaire, remove std. foundation and install pull box.

Luminaires are High Pressure Sodium.  
All Type 1 standards are aluminum.  
All vehicle indications shall be 12."

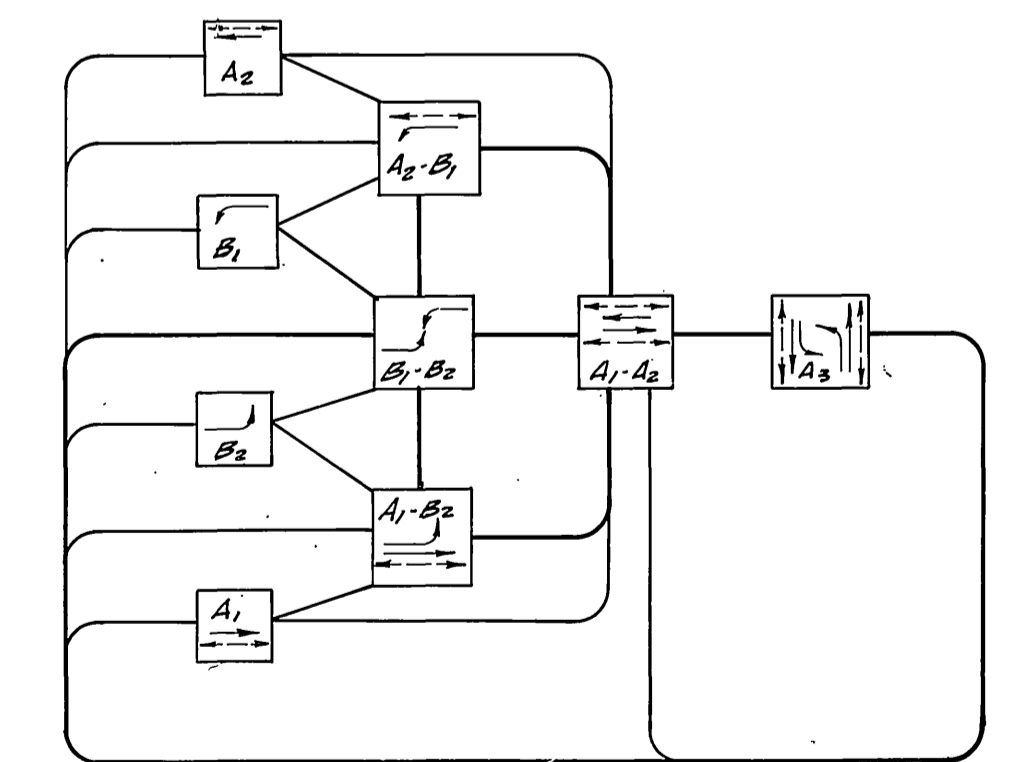
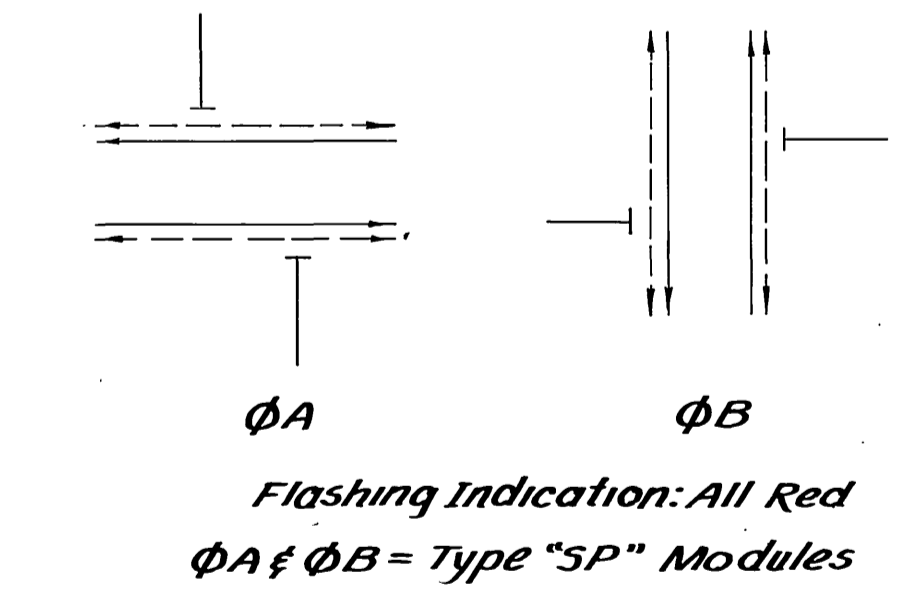
GENERAL NOTES:

- This plan is accurate for electrical work only.
- See plan R-1809, sheet 6 of 7 for street improvements.



PRESENT PHASE DIAGRAM

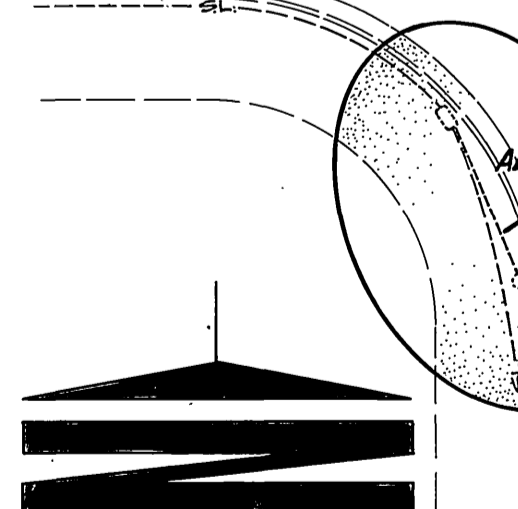
FUTURE PHASE DIAGRAM



NOTE:  
Sensors for advance detectors A1, A2, A3, B1, B2, B3 shall have variable call hold features, 0-6 seconds minimum.

CONTROL FUNCTION	CONDUITS SIZE INSULATION	CONDUIT RUN													
		1	2	3	4	5	6	7	8	9	10				
VEHICLE HEADS #14 U.E.															
Φ A			3	3	3	3	3	3	3	3	3	3	3	3	3
Φ B		3	3	3	3	3	3	3	3	3	3	3	3	3	3
(FUTURE B-B)															
PER WEAPS															
Φ A W/FUT A1W					2	2	2	2	2	2	2	2	2	2	2
Φ A W/FUT A2W					2	2	2	2	2	2	2	2	2	2	2
Φ B W					2	2	2	2	2	2	2	2	2	2	2
PER PUB. BUILDING															
Φ A		1	1	1	1	2	3	4	1	1	1	1	1	1	1
Φ B			1	2	2	2	4	1	1	1	1	1	1	1	1
SPARES			3	3	3	3	3	3	3	3	3	3	3	3	3
DETECTOR CABLE #10/2 RE.															
Φ A				5	5	5	5	10							
Φ B						3	3	3	4	2					
INT. ILLUM ST. NAME #12 U.E.		2	2	2	2	2	4	2	2						
120V COMMON #14		1	1	1	2	1	1	3	1	1	1	1	1	1	1
120V COMMON #10		1	1	1	2	1	1	3	1	1	1	1	1	1	1
SIGNAL SERVICE #8															
LUMINAIRE #8															
TOTALS			12	10	20	17	25	24	5/6	19	19	10	10	4	4
#14 RE.						3	10	10	19	4	4				
#12 U.E.			2	2	2	2	4	2	2						
#10			1	1	1	2	1	1	3	1	1	1	1	1	1
#8															
THW.			2	2	2	2	2	2	2						
CONDUIT SIZE			1 1/2"	3"	3"	2 1/2"	3 1/2"	3 1/2"	2-3"	1 1/2"	3"	2"			

P.E.C. per Std. Dwg No. 669.



CITY OF RIVERSIDE, CALIFORNIA PUBLIC WORKS DEPARTMENT		TRAFFIC SIGNALS <b>Chicago Avenue and Third Street</b>		ACCOUNT No. 20-56-100-01 DRAWING NUMBER <b>X-43A</b> SHEET 016 OF 016
APPROVED BY PRINCIPAL ENGINEER PARK DEPARTMENT	DATE 7/28	APPROVED BY DIRECTOR OF PUBLIC WORKS	DATE 7-21-16	SCALE: 1"=20'
DESIGNED BY <b>JMW</b>	DRAWN BY <b>JMW</b>	CHECKED BY <b>JMW</b>	DATE 7-21-16	

FILED 7/28/16