

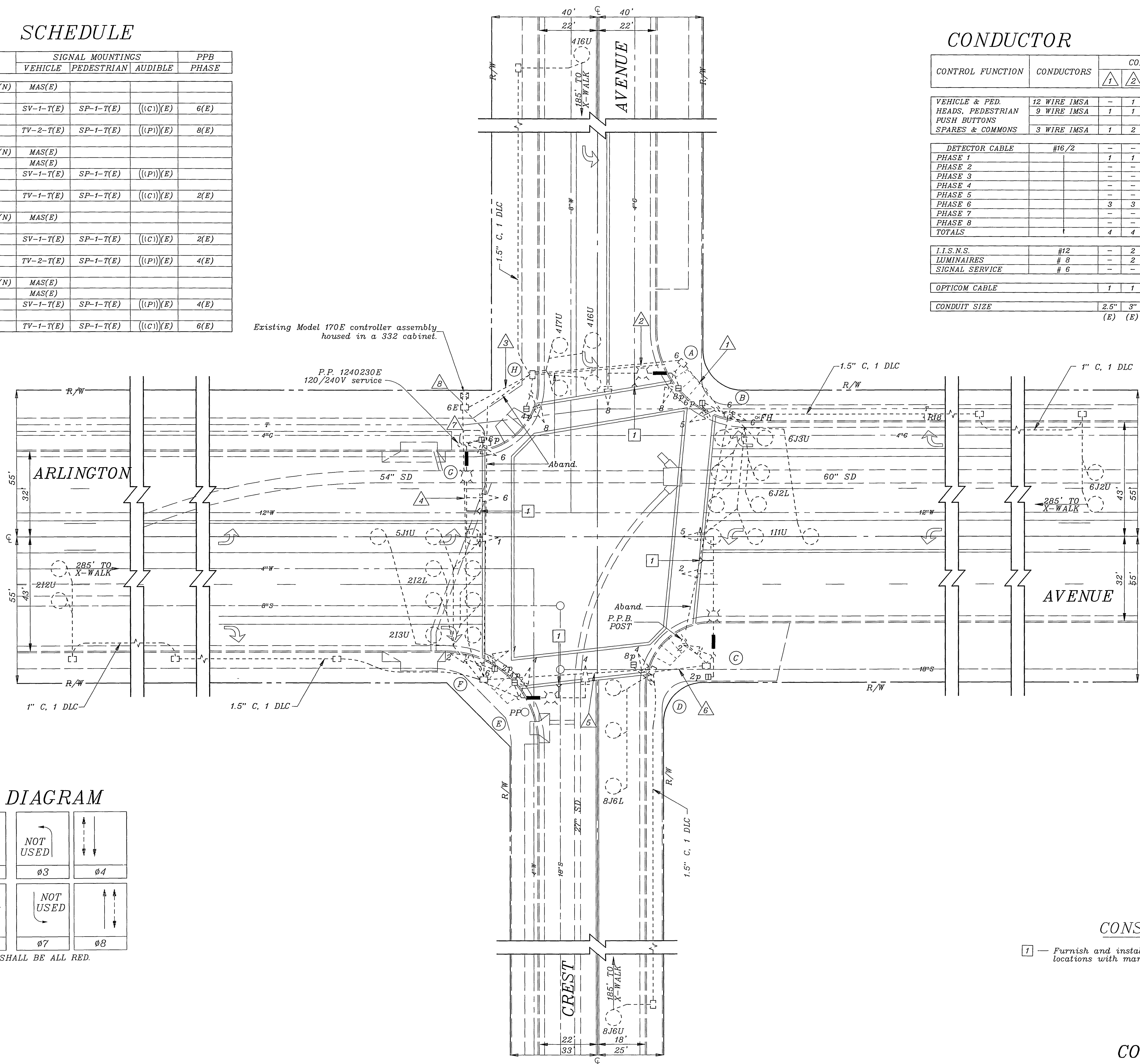
# EQUIPMENT SCHEDULE

NO.	SIGNAL STANDARD		LUMINAIRE			I.I.S.N.S. LEGEND	SIGNAL MOUNTINGS			PPB PHASE
	TYPE	HGHT	M.A.	M.A.	H.P.S.V.		VEHICLE	PEDESTRIAN	AUDIBLE	
(A)	19-4-80(E)	30'(E)	25'(E)	12'(E)	250W(E)	ARLINGTON	AVE 8800 (N)	MAS(E)		
								SV-1-T(E)	SP-1-T(E)	((C1))(E)
										6(E)
(B)	1A(E)	10'(E)						TV-2-T(E)	SP-1-T(E)	((P1))(E)
										8(E)
(C)	26-4-80(E)	30'(E)	45'(E)	15'(E)	250W(E)	CREST	AVE 8300 (N)	MAS(E)		
								SV-1-T(E)	SP-1-T(E)	((P1))(E)
										2(E)
(D)	1A(E)	10'(E)						TV-1-T(E)	SP-1-T(E)	((C1))(E)
										2(E)
(E)	19-4-80(E)	30'(E)	25'(E)	12'(E)	250W(E)	ARLINGTON	AVE 8800 (N)	MAS(E)		
								SV-1-T(E)	SP-1-T(E)	((C1))(E)
										2(E)
(F)	1A(E)	10'(E)						TV-2-T(E)	SP-1-T(E)	((P1))(E)
										4(E)
(G)	26-4-80(E)	30'(E)	45'(E)	12'(E)	250W(E)	CREST	AVE 8300 (N)	MAS(E)		
								SV-1-T(E)	SP-1-T(E)	((P1))(E)
										4(E)
(H)	1A(E)	10'(E)						TV-1-T(E)	SP-1-T(E)	((C1))(E)
										6(E)

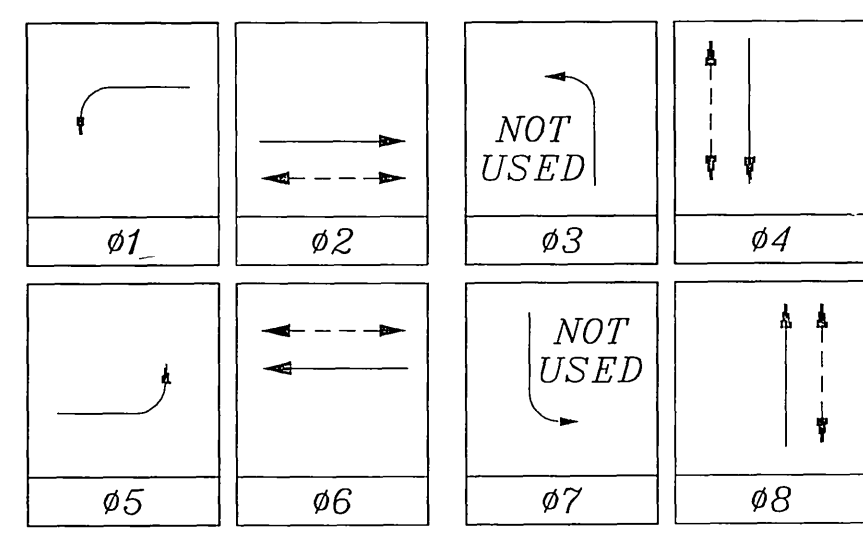
(E)=EXISTING (N)=NEW

# CONDUCTOR TABLE

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



## PHASE DIAGRAM



## 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 4216/4217 of the Government Code requires a Dig Alert identification Number to be issued before a "Normal 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 3/7/02

REGISTERED PROFESSIONAL ENGINEER  
 THOMAS JOHN BOYD  
 No. 36170  
 Exp. 06-30-2004  
 CIVIL  
 STATE OF CALIFORNIA

CITY OF RIVERSIDE, CALIFORNIA  
 DEPARTMENT OF PUBLIC WORKS

APPROVED BY	BY	DATE
THOMAS BOYD	THOMAS BOYD	3/4/02
DEPUTY PW DIR/ENG		
PRINCIPAL ENGINEER		
P.W. INSPECTION		
TRAFFIC DIVISION		
PUBLIC UTILITIES		

TRAFFIC SIGNAL MODIFICATION  
**ARLINGTON AVENUE AND CREST AVENUE**  
 SCALE: 1" = 20'

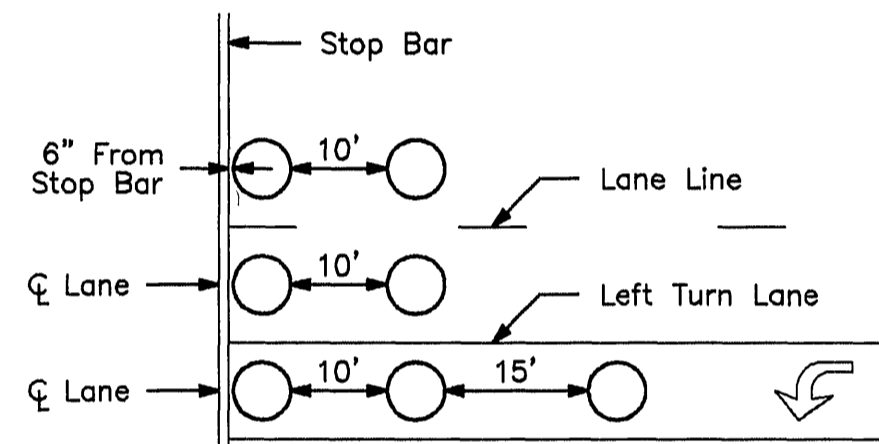
ACCT. NO. XXXXXXXXXXX-XXXXXXXX  
**X-416A**  
 SHEET 1 OF 1  
 FILE NAME: X416A.DWG

EQUIPMENT		SCHEDULE		REMARKS							
NO.	SIGNAL STANDARD	LUMINAIRE		I.I.S.N.S. LEGEND	PPB PHASE						
		HTGHT.	M.A.								
				VEHICLE	PEDESTRIAN						
(A)	19-4-80(N)	30'(N)	25'(N)	250W(N)	Arlington	MAS(N)	SV-1-T(N)	SP-1-T(N)	((C))	6(N)	
(B)	1A(N)	10'(N)					TV-2-T(N)	SP-1-T(N)	((P))	8(N)	
(C)	28-4-80(N)	30'(N)	45'(N)	15'(N)	250W(N)	Crest	MAS(N)	SV-1-T(N)	((P))		PPB & POST - #8P
(D)	1A(E)	10'(E)					TV-1-T(N)	SP-1-T(N)	((C))	2(N)	
(E)	19-4-80(N)	30'(N)	25'(N)	12'(N)	250W(N)	Arlington	MAS(N)	SV-1-T(N)	((C))	2(N)	INSTALL HORIZONTAL LUMINAIRE MAST ARM
(F)	1A(E)	10'(E)					TV-2-T(E)	SP-1-T(N)	((P))	4(N)	
(G)	28-4-80(N)	30'(N)	45'(N)	12'(N)	250W(N)	Crest	MAS(N)	SV-1-T(N)	((P))	4(N)	INSTALL HORIZONTAL LUMINAIRE MAST ARM
(H)	1A(N)	10'(N)					TV-1-T(N)	SP-1-T(N)	((C))	6(N)	

(E)=EXISTING (N)=NEW

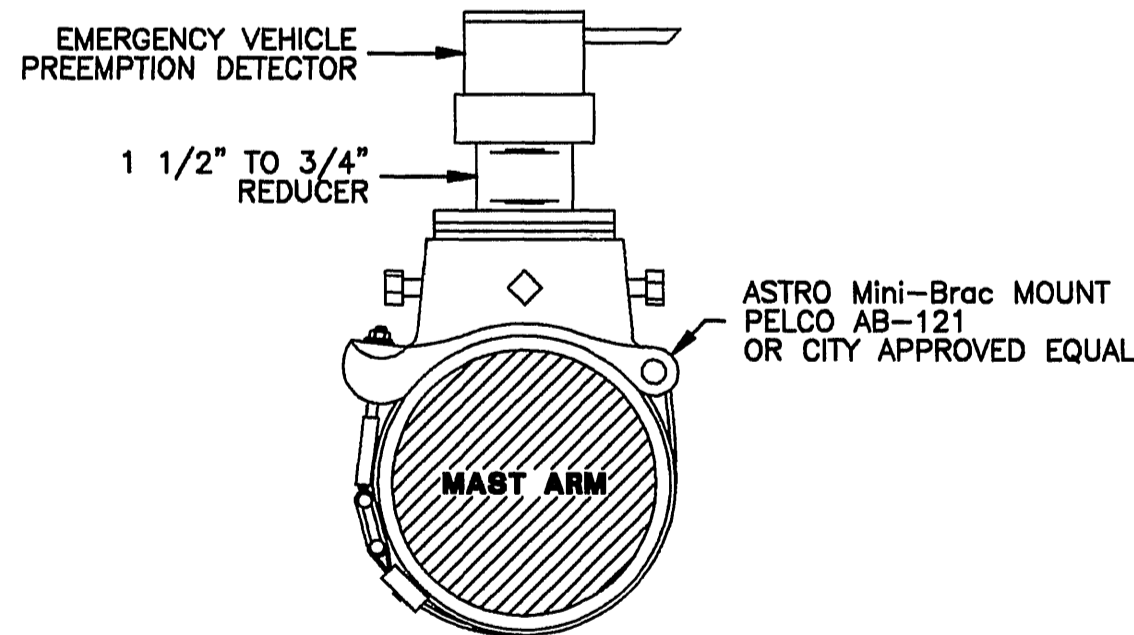
**NOTES:**

- ALL VEHICULAR HEADS SHALL HAVE 12" LENSES.
- ALL LEFT TURN HEADS SHALL HAVE ALL ARROWS.
- LUMINAIRES SHALL BE HIGH PRESSURE SODIUM VAPOR.
- ((C)) OR ((P)) INDICATES AUDITORY PEDESTRIAN SIGNAL TO BE INSTALLED. ((C)) INDICATES CUCKOO SOUND; ((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.



Loops shall be 6' diameter, centered in interior lanes, and installed 3' from lane lines in outside lanes

**DETECTOR LOOP INSTALLATION DETAIL**

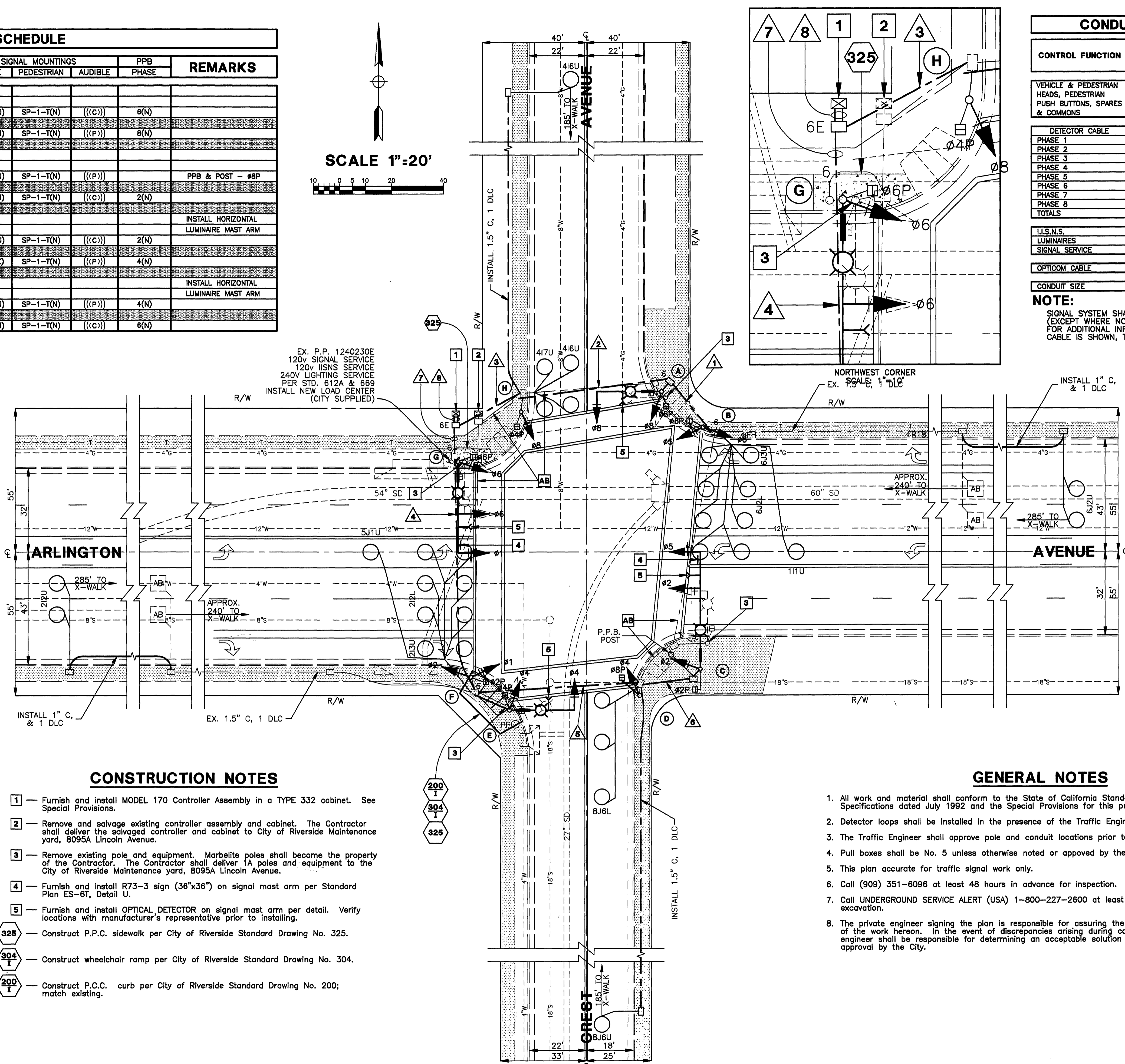
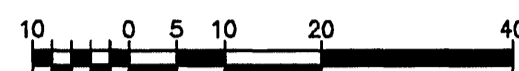


**MAST-ARM MOUNTING CLAMP FOR OPTICAL DETECTOR**

**CONSTRUCTION NOTES**

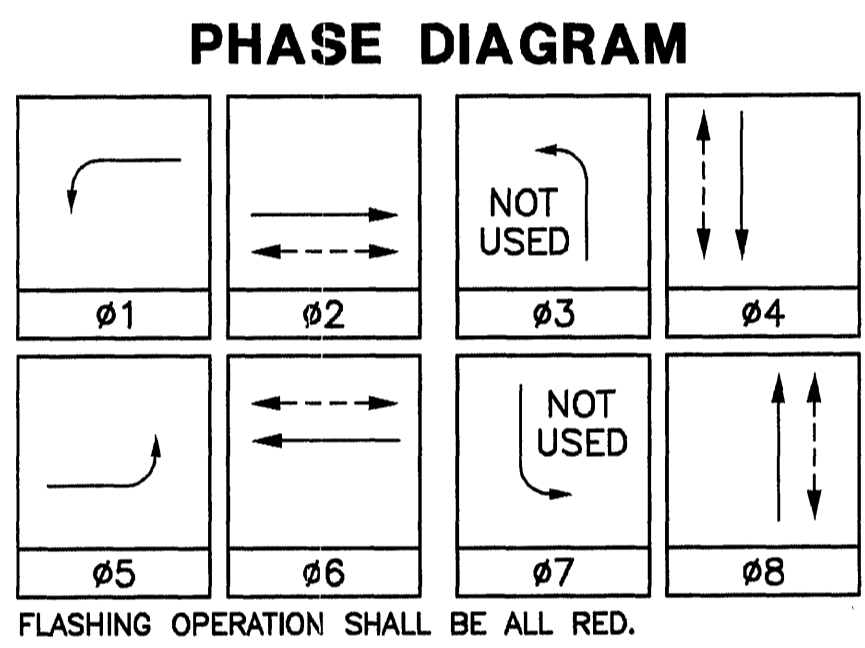
- Furnish and install MODEL 170 Controller Assembly in a TYPE 332 cabinet. See Special Provisions.
- Remove and salvage existing controller assembly and cabinet. The Contractor shall deliver the salvaged controller and cabinet to City of Riverside Maintenance yard, 8095A Lincoln Avenue.
- Remove existing pole and equipment. Marbelite poles shall become the property of the Contractor. The Contractor shall deliver 1A poles and equipment to the City of Riverside Maintenance yard, 8095A Lincoln Avenue.
- Furnish and install R73-3 sign (36"x36") on signal mast arm per Standard Plan ES-6T, Detail U.
- Furnish and install OPTICAL DETECTOR on signal mast arm per detail. Verify locations with manufacturer's representative prior to installing.
- Construct P.P.C. sidewalk per City of Riverside Standard Drawing No. 325.
- Construct wheelchair ramp per City of Riverside Standard Drawing No. 304.
- Construct P.C.C. curb per City of Riverside Standard Drawing No. 200; match existing.

SCALE 1"=20'



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

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

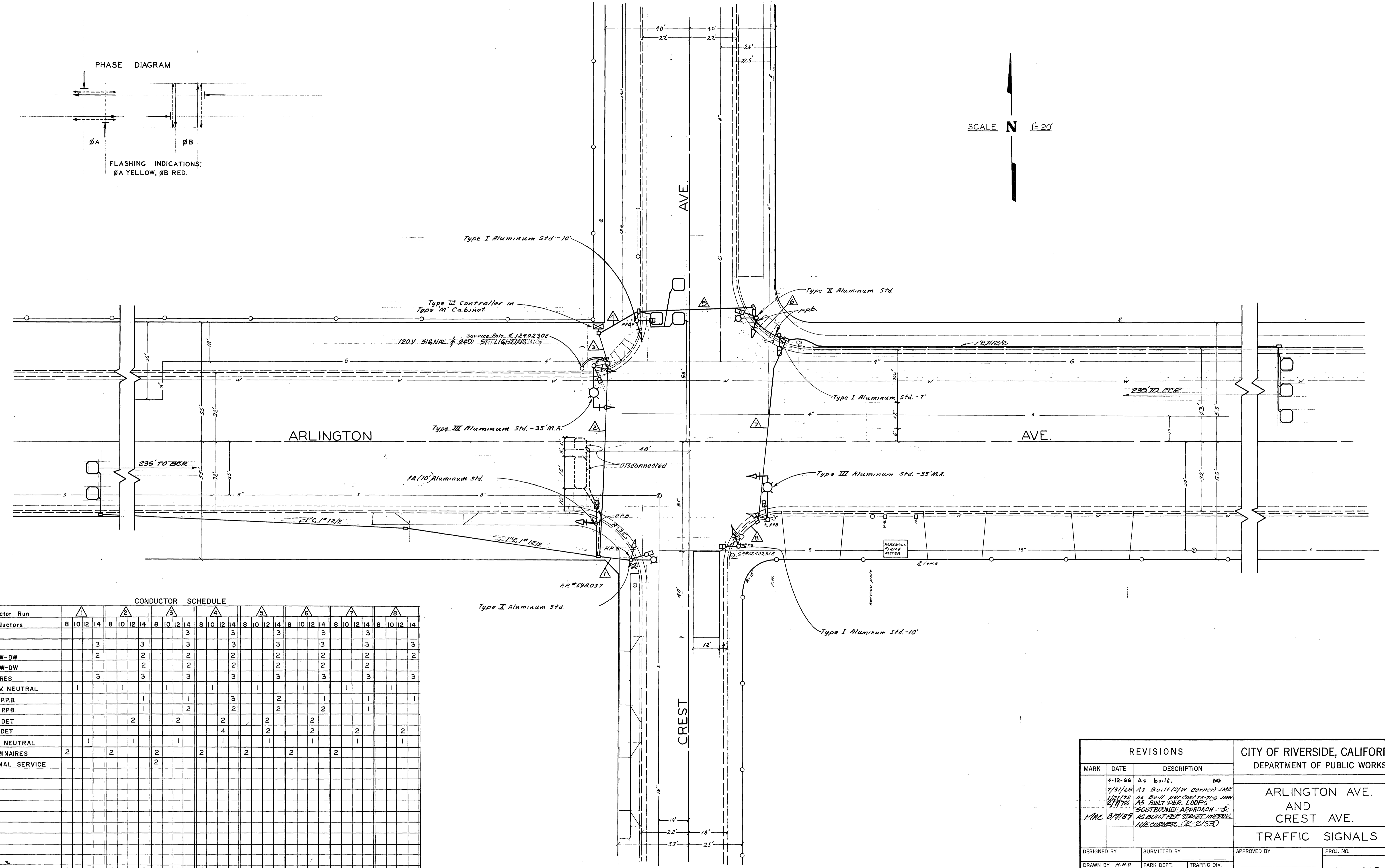
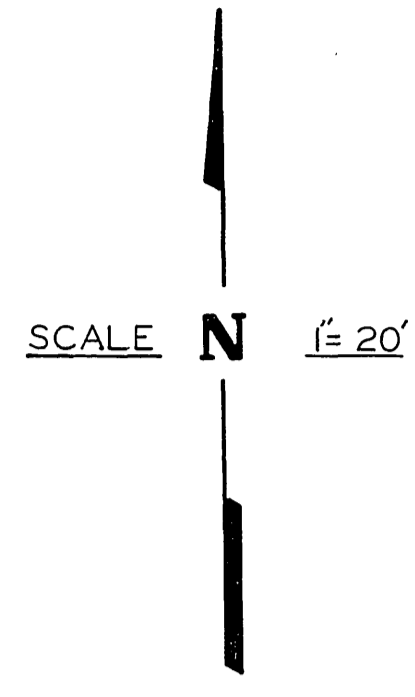
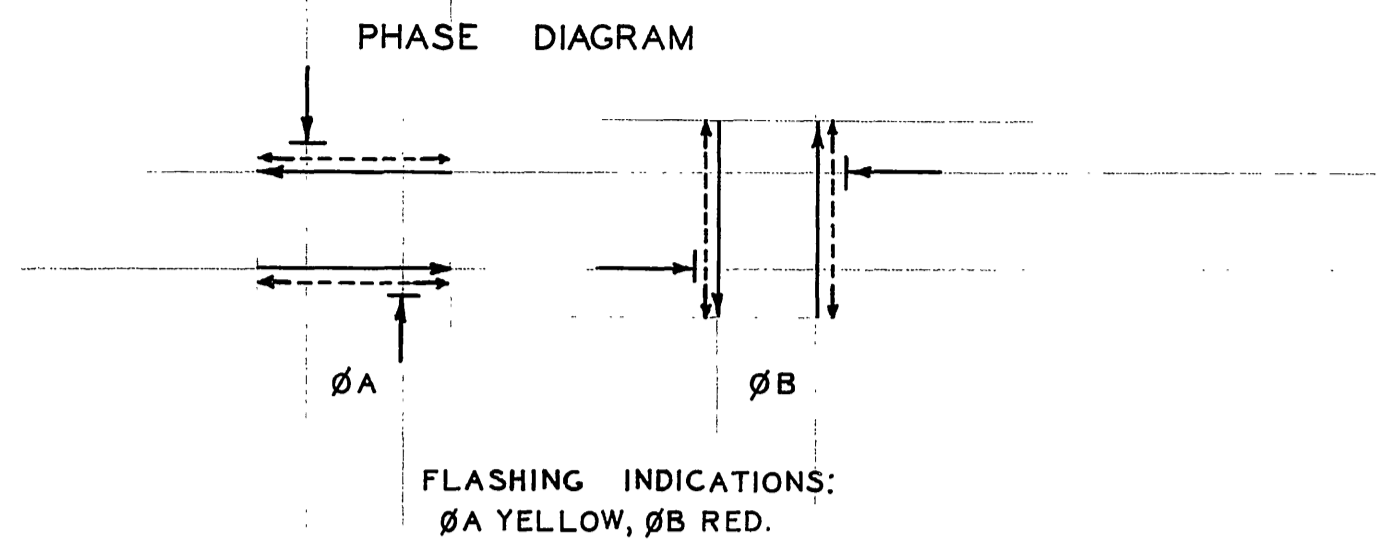


**GENERAL NOTES**

- 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.
- Detector loops shall be installed in the presence of the Traffic Engineer or his representative.
- The Traffic Engineer shall approve pole and conduit locations prior to installation by Contractor.
- Pull boxes shall be No. 5 unless otherwise noted or approved by the Traffic Engineer.
- 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.

CONTRACT TE-99-2

	<p><b>IMPORTANT NOTICE:</b> Section 4131.4137 of the Government Code requires a Dig Alert identification number to be issued before a "Shovel to Excavator" will be used. CALL TOLL FREE TWO WORKING DAYS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600</p>	<p><b>PRIVATE ENGINEERING NOTE</b> 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>ARLINGTON AVENUE and CREST AVENUE</b> X-416 SHEET 1 OF 1 SCALE: 1"=20' FILE NAME: X416.DWG</p>
	<p>SCALE: AS SHOWN DATE: DEC. 1998</p>	<p>MARK REVISIONS APPR. DATE DESIGNED BY: L.S.E. DRAWN BY: L.S.E. CHECKED BY:</p>	<p>APPROVED BY: BY DATE PRINCIPLE ENGINEER: <i>R. Mc Bratt</i> 3/21/00 P.W. INSPECTION: <i>R. Mc Bratt</i> 3/21/00 TRAFFIC DIVISION: <i>R. Mc Bratt</i> 3/21/00 CHIEF P.W. ENGINEER: <i>R. Mc Bratt</i> 3/21/00 PUBLIC UTILITIES</p>	<p>APPROVED BY: BY DATE DIRECTOR OF PUBLIC WORKS: <i>R. Mc Bratt</i> 3-28-00</p>		

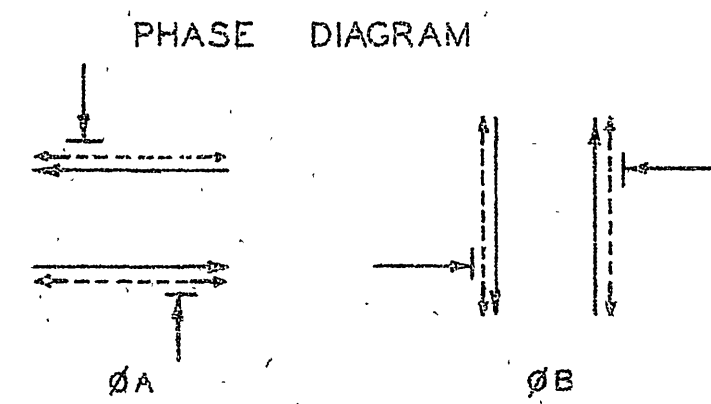


CONDUCTOR SCHEDULE

Conductor Run	1		2		3		4		5		6		7		8																
Conductors	8	10	12	14	8	10	12	14	8	10	12	14	8	10	12	14	8	10	12	14											
ØA																															
ØB			3				3				3				3				3												
ØA W-DW			2				2				2				2				2												
ØB W-DW				2			2				2				2				2												
SPARES			3				3				3				3				3												
120V. NEUTRAL																															
ØA PPB			1				1				1				1				1												
ØB PPB				1			2				2				2				1												
ØA DET				2			2				2				2				2												
ØB DET							4				2				2				2												
12V. NEUTRAL			1				1				1				1				1												
LUMINAIRES	2			2			2		2		2		2		2		2		1												
SIGNAL SERVICE				2																											
Total Conductors	2	1	1	9	2	1	3	12	4	1	3	16	2	1	7	1	2	1	5	17	2	1	5	16	2	1	3	15	1	3	9
Conduit Size	1 1/2"		2"		2"		2"		2"		2"		2"		2"		2"		1 1/2"												

Note: Splices used in Runs 2 & 3.

REVISIONS			CITY OF RIVERSIDE, CALIFORNIA DEPARTMENT OF PUBLIC WORKS	
MARK	DATE	DESCRIPTION		
	4-12-66	As built. <b>MG</b>	<b>ARLINGTON AVE. AND CREST AVE. TRAFFIC SIGNALS</b>	
	7/31/68	As built (SW corner) <b>MM</b>		
	1/21/72	As built per contract 7-16 <b>MM</b>		
	2/1/78	As built per loops		
	3/1/78	SOUTHBOUND APPROACH SE		
	MAR 3/1/69	AS BUILT PER STREET IMPROV. N/E CORNER. (12-2153)		
DESIGNED BY	SUBMITTED BY		APPROVED BY	PROJ. NO.
DRAWN BY <b>R.B.D.</b>	PARK DEPT.	TRAFFIC DIV.	DIRECTOR OF PUBLIC WORKS	<b>X-416</b>
CHECKED BY	RECOMMENDED BY		DATE	SHEET OF
	ASSISTANT CITY ENGINEER			

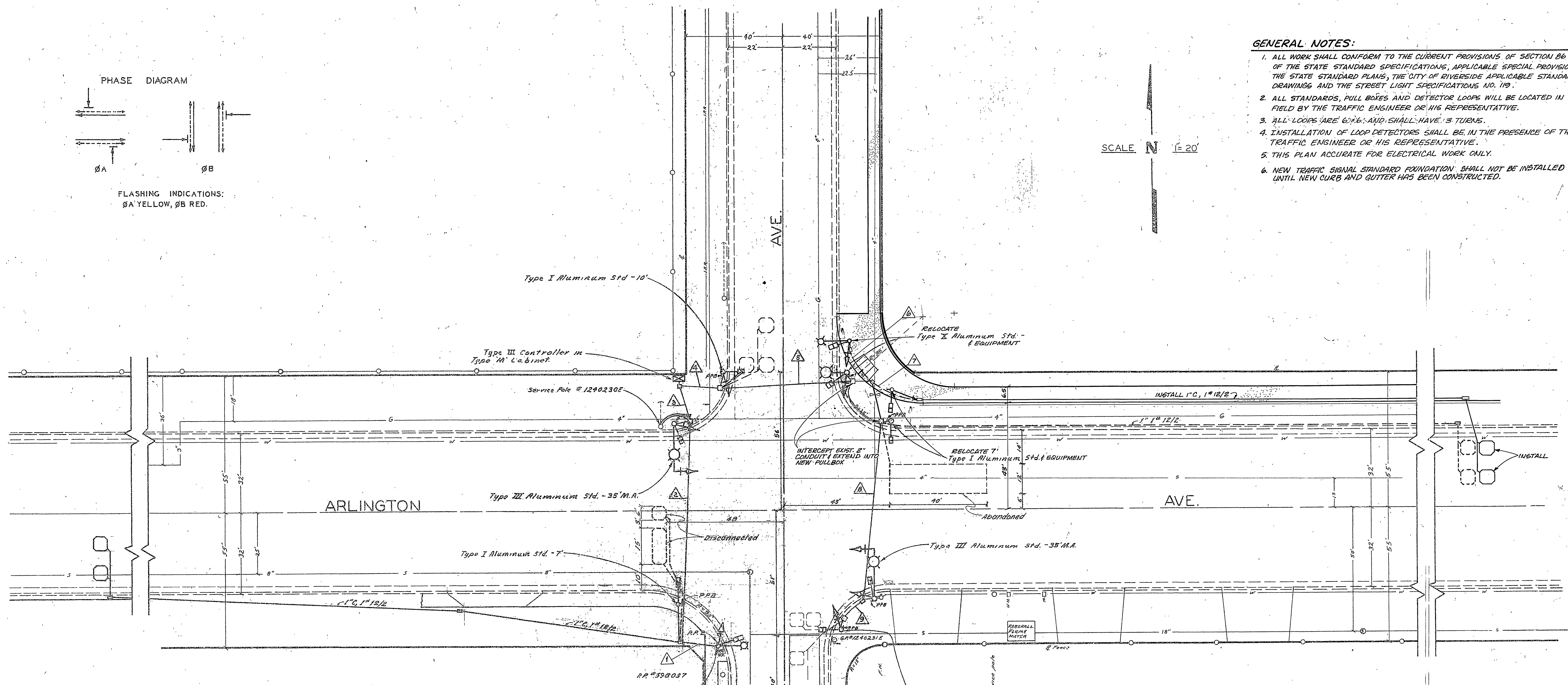


FLASHING INDICATIONS:  
ØA YELLOW, ØB RED.

**GENERAL NOTES:**

1. ALL WORK SHALL CONFORM TO THE CURRENT PROVISIONS OF SECTION 06 OF THE STATE STANDARD SPECIFICATIONS, APPLICABLE SPECIAL PROVISIONS, THE STATE STANDARD PLANS, THE CITY OF RIVERSIDE APPLICABLE STANDARD DRAWINGS AND THE STREET LIGHT SPECIFICATIONS NO. 119.
2. ALL STANDARDS, PULL BOXES AND DETECTOR LOOPS WILL BE LOCATED IN THE FIELD BY THE TRAFFIC ENGINEER OR HIS REPRESENTATIVE.
3. ALL LOOPS ARE 6"x6" AND SHALL HAVE 3 TURNS.
4. INSTALLATION OF LOOP DETECTORS SHALL BE IN THE PRESENCE OF THE TRAFFIC ENGINEER OR HIS REPRESENTATIVE.
5. THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY.
6. NEW TRAFFIC SIGNAL STANDARD FOUNDATION SHALL NOT BE INSTALLED UNTIL NEW CURB AND GUTTER HAS BEEN CONSTRUCTED.

SCALE N 1" = 20'



CONDUCTOR SCHEDULE

Conductor Run	A		B		C		D		E		F		G		H		I			
Conductors	8	10	12	14	8	10	12	14	8	10	12	14	8	10	12	14	8	10	12	14
ØA																				
ØB																				
ØA W-DW			2				2				2				2				2	
ØB W-DW																				
SPARES																				
120V NEUTRAL																				
ØA P.R.B.																				
ØB P.R.B.																				
ØA DET																				
ØB DET																				
12V. NEUTRAL																				
LUMINAIRES	2				2				2				2				2			
SIGNAL SERVICE																				
Total Conductors	2	1	1	9	2	1	3	12	4	1	3	16	2	1	7	1	2	1	5	17
Conduit Size	1 1/2" (EXIST)				2" (EXIST)				2" (EXIST)				2" (EXIST)				2" (NEW)	1 1/2" (NEW)	2" (EXIST)	1 1/2" (EXIST)

**NOTE:**

- 1) DET. CABLE SHALL BE 12/2'S
- 2) RUNS NO'S. 4 THRU 9 SHALL HAVE NEW CONDUCTORS; CONTROLLER RUN SHALL HAVE SOME NEW CONDUCTORS.
- 3) CONDUCTORS FOR DETECTOR LOOPS SHALL BE CONTINUOUS, UNBLENDED, TYPE USE, CROSS-LINKED POLYETHYLENE INSULATED, NO. 12 GA. STRANDED COPPER WIRE.

**GENERAL NOTES:**

Lighting service to be 240V multiple  
Underground utility locations are approximate.  
Contact individual utilities for exact locations.

**J. F. DAVIDSON ASSOCIATES**  
CIVIL ENGINEERS - SURVEYORS - PLANNERS  
RIVERSIDE, CALIFORNIA

APPROVED BY: *J. F. Davidson* DATE: 5/5/80  
R.E. No. 17550

W.O. 5279 FOR: SILVA F.B.

REVISIONS			CITY OF RIVERSIDE, CALIFORNIA DEPARTMENT OF PUBLIC WORKS	
MARK	DATE	DESCRIPTION		
			ARLINGTON AVE. AND CREST AVE. TRAFFIC SIGNALS	
DESIGNED BY	SUBMITTED BY	APPROVED BY	PRJ. NO.	
DRAWN BY	PARK DEPT.	RECOMMENDED BY		X-416
CHECKED BY	ASSISTANT CITY ENGINEER	DATE		SHEET OF

W.O. 5279 SILVA JFD # 5560