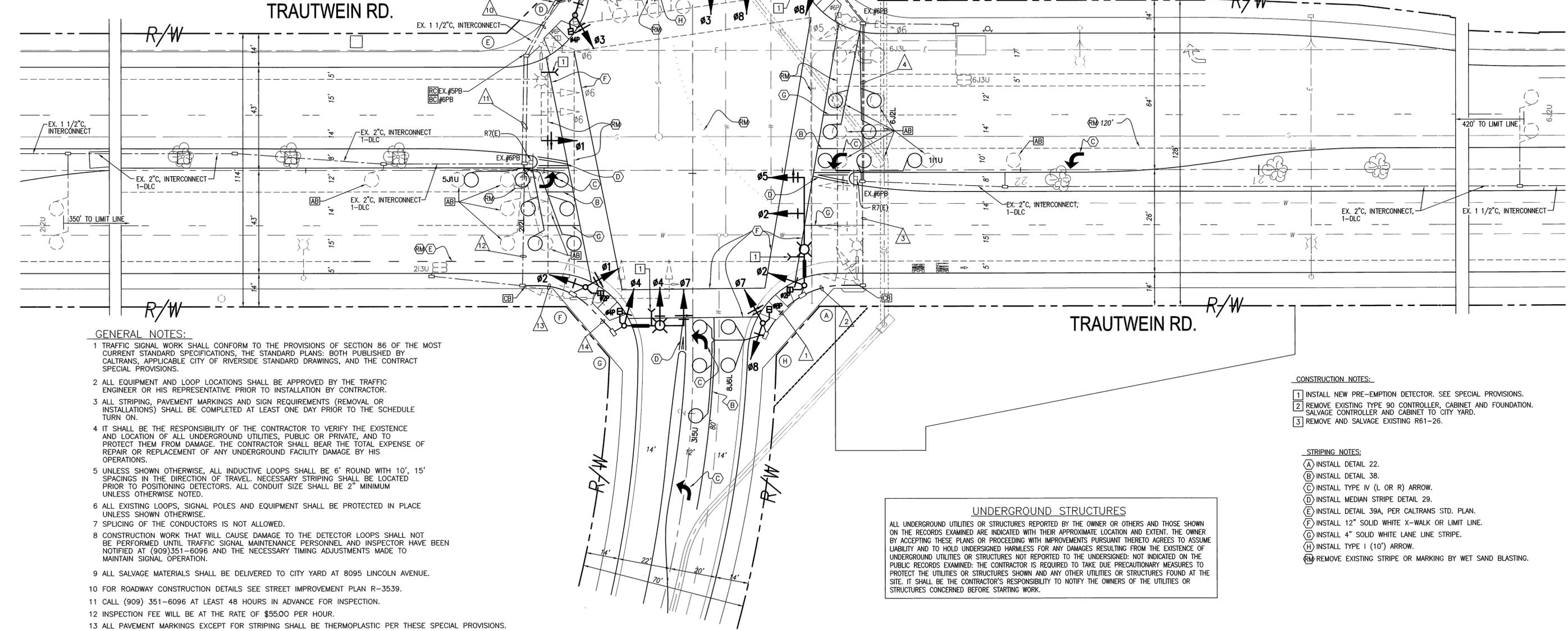


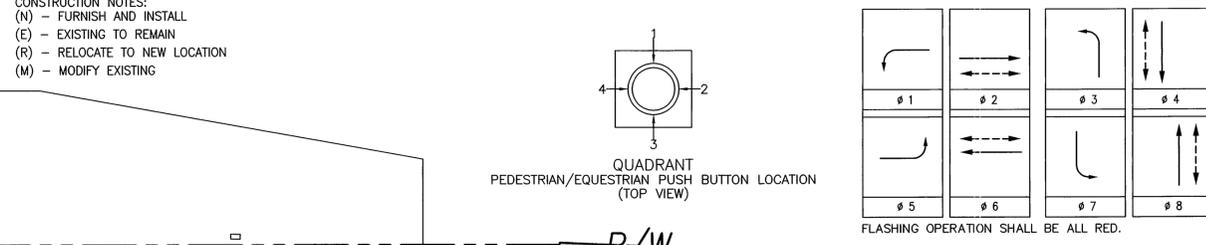
CONTROL FUNCTION	CONDUCTORS	CONDUCTOR TABLE													
		1	2	3	4	5	6	7	8	9	10	11	12	13	14
VEHICLE & PEDESTRIAN HEADS, PEDESTRIAN PUSH BUTTONS, SPARES & COMMONS	12 WIRE IMSA	1	2	2	2	3	4	4	5	8	3	2	2	2	1
	9 WIRE IMSA	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	5 WIRE IMSA	1	2	2	2	3	4	4	5	8	3	2	2	2	1
DETECTOR CABLE	#16/2	-	-	-	1	1	1	1	1	-	-	-	-	-	-
PHASE 1		-	-	-	-	-	-	-	-	3	3	1	-	-	-
PHASE 2		-	-	-	-	-	-	-	-	-	-	-	-	-	-
PHASE 3		1	1	1	1	1	1	1	1	-	-	-	-	-	-
PHASE 4		-	-	-	-	-	-	1	4	4	-	-	-	-	-
PHASE 5		-	-	-	-	-	-	-	-	1	1	1	-	-	-
PHASE 6		-	-	-	1	4	4	4	4	4	-	-	-	-	-
PHASE 7		-	-	-	-	-	-	1	1	1	-	-	-	-	-
PHASE 8		1	1	1	1	1	1	1	1	-	-	-	-	-	-
PRIORITY PRE-EMPT	#20	-	1	1	1	1	2	2	2	4	2	1	1	1	1
I.I.S.N.S.	#12	-	2	2	2	2	2	2	2	-	2	2	2	2	2
LUMINAIRES	#8	-	2	2	2	2	2	2	2	-	2	2	2	2	2
SIGNAL SERVICE	#6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CONDUIT SIZE		2"	2"	3"	3"	3.5"	3.5"	2-3"	2-3"	2-3.5"	3"	3"	2.5"	2"	2"
N = NEW E = EXISTING		N	N	E	E	E	E	E	E	E	E	E	E	N	N

SEE CONTRACT SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION ON I.M.S.A. ALL CONDUCTORS TO BE REMOVED AND REINSTALLED NEW UNLESS NOTED OTHERWISE * = ADDITIONAL EXISTING 1 1/2" CONDUIT WITH INTERCONNECT CABLES TO REMAIN (PROTECT IN PLACE)



POLE SCHEDULE													
NO.	POLE TYPE	HEIGHT	MAST ARM LENGTH		SIGNAL MOUNTING			PPB/EPB	H.P.S.V. LUMINAIRE	I.I.S.N.S. LEGEND	REMARKS		
			SIGNAL	LUMINAIRE	MA	POLE	PED						
(A)	26A-4-80(R)	35'	40'(E)	15'(E)	2-MAS(E)	SV-1-T(M)	SP-1-T(M)	8	4	400 W(E)	Countryside Ct. 19200 (N)	RELOCATE POLE AND EQUIPMENT. RELOCATE EXISTING #3 HEAD TO POLE (A). RELOCATE EXISTING FDN. INSTALL NEW EQUIPMENT.	
(B)	1-A(E)	10'	-	-	-	TV-2-T(E)	SP-1-T(E)	8	4	-	-	EXISTING TO REMAIN.	
(C)	26A-4-80(M)	35'	45'(N)	15'(E)	2-MAS(N)	SV-1-T(N)	SP-1-T(E)	6	3	400 W(E)	Trautwein Rd. 8500 (E)	EXISTING TO REMAIN. INSTALL NEW EQUIPMENT.	
(D)	1-A(E)	10'	-	-	-	TV-2-T(M)	SP-1-T(E)	6	3	-	-	EXISTING TO REMAIN. INSTALL NEW EQUIPMENT.	
(E)	26A-4-80(E)	35'	40'(M)	15'(E)	3-MAS(M)	SV-1-T(E)	SP-1-T(E)	4	2	400 W(E)	Orange Terrace Pkwy. 19400 (E)	EXISTING TO REMAIN. INSTALL NEW EQUIPMENT.	
(F)	1-A(N)	10'	-	-	-	TV-2-T(N)	SP-1-T(R)	4	2	-	-	SALVAGE TO CITY YARD EXISTING TYPE 26A AND INSTALL NEW POLE AND EQUIP. RELOCATE EX. HEADS TO NEW POLE (G). RELOCATE EX. FDN.	
(G)	19A-4-80(N)	35'	25'(N)	15'(N)	2-MAS(R)	SV-1-T(R)	SP-1-T(N)	2	1	400 W(N)	Trautwein Rd. 8400 (R)	INSTALL NEW POLE AND EQUIPMENT. REINSTALL I.I.S.N.S. FROM EX. POLE (C).	
(H)	1-A(N)	10'	-	-	-	TV-2-T(N)	SP-1-T(N)	2	1	-	-	INSTALL NEW POLE AND EQUIPMENT.	

EXACT POLE LOCATION TO BE DETERMINED BY THE TRAFFIC ENGINEER OR HIS REPRESENTATIVE IN THE FIELD. TYPE 1-A SHALL BE SPUN ALUMINUM NEW VEHICLE SIGNAL SHALL HAVE 12" LENS (GLASS) AND 12" RED LED.



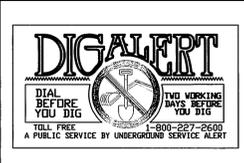
- GENERAL NOTES:**
- TRAFFIC SIGNAL WORK SHALL CONFORM TO THE PROVISIONS OF SECTION 86 OF THE MOST CURRENT STANDARD SPECIFICATIONS, THE STANDARD PLANS: BOTH PUBLISHED BY CALTRANS, APPLICABLE CITY OF RIVERSIDE STANDARD DRAWINGS, AND THE CONTRACT SPECIAL PROVISIONS.
 - ALL EQUIPMENT AND LOOP LOCATIONS SHALL BE APPROVED BY THE TRAFFIC ENGINEER OR HIS REPRESENTATIVE PRIOR TO INSTALLATION BY CONTRACTOR.
 - ALL STRIPING, PAVEMENT MARKINGS AND SIGN REQUIREMENTS (REMOVAL OR INSTALLATIONS) SHALL BE COMPLETED AT LEAST ONE DAY PRIOR TO THE SCHEDULED TURN ON.
 - IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE EXISTENCE AND LOCATION OF ALL UNDERGROUND UTILITIES, PUBLIC OR PRIVATE, AND TO PROTECT THEM FROM DAMAGE. THE CONTRACTOR SHALL BEAR THE TOTAL EXPENSE OF REPAIR OR REPLACEMENT OF ANY UNDERGROUND FACILITY DAMAGE BY HIS OPERATIONS.
 - UNLESS SHOWN OTHERWISE, ALL INDUCTIVE LOOPS SHALL BE 6' ROUND WITH 10', 15' SPACINGS IN THE DIRECTION OF TRAVEL. NECESSARY STRIPING SHALL BE LOCATED PRIOR TO POSITIONING DETECTORS. ALL CONDUIT SIZE SHALL BE 2" MINIMUM UNLESS OTHERWISE NOTED.
 - ALL EXISTING LOOPS, SIGNAL POLES AND EQUIPMENT SHALL BE PROTECTED IN PLACE UNLESS SHOWN OTHERWISE.
 - SPlicing OF THE CONDUCTORS IS NOT ALLOWED.
 - CONSTRUCTION WORK THAT WILL CAUSE DAMAGE TO THE DETECTOR LOOPS SHALL NOT BE PERFORMED UNTIL TRAFFIC SIGNAL MAINTENANCE PERSONNEL AND INSPECTOR HAVE BEEN NOTIFIED AT (909)351-6096 AND THE NECESSARY TIMING ADJUSTMENTS MADE TO MAINTAIN SIGNAL OPERATION.
 - ALL SALVAGE MATERIALS SHALL BE DELIVERED TO CITY YARD AT 8095 LINCOLN AVENUE.
 - FOR ROADWAY CONSTRUCTION DETAILS SEE STREET IMPROVEMENT PLAN R-3539.
 - CALL (909) 351-6096 AT LEAST 48 HOURS IN ADVANCE FOR INSPECTION.
 - INSPECTION FEE WILL BE AT THE RATE OF \$55.00 PER HOUR.
 - ALL PAVEMENT MARKINGS EXCEPT FOR STRIPING SHALL BE THERMOPLASTIC PER THESE SPECIAL PROVISIONS.

- CONSTRUCTION NOTES:**
- INSTALL NEW PRE-EMPTION DETECTOR. SEE SPECIAL PROVISIONS.
 - REMOVE EXISTING TYPE 90 CONTROLLER, CABINET AND FOUNDATION. SALVAGE CONTROLLER AND CABINET TO CITY YARD.
 - REMOVE AND SALVAGE EXISTING R61-26.

- STRIPING NOTES:**
- (A) INSTALL DETAIL 22.
 - (B) INSTALL DETAIL 38.
 - (C) INSTALL TYPE IV (L OR R) ARROW.
 - (D) INSTALL MEDIAN STRIPE DETAIL 29.
 - (E) INSTALL DETAIL 39A, PER CALTRANS STD. PLAN.
 - (F) INSTALL 12" SOLID WHITE X-WALK OR LIMIT LINE.
 - (G) INSTALL 4" SOLID WHITE LANE LINE STRIPE.
 - (H) INSTALL TYPE 1 (10') ARROW.
 - (RM) REMOVE EXISTING STRIPE OR MARKING BY WET SAND BLASTING.

UNDERGROUND STRUCTURES
 ALL UNDERGROUND UTILITIES OR STRUCTURES REPORTED BY THE OWNER OR OTHERS AND THOSE SHOWN ON THE RECORDS EXAMINED ARE INDICATED WITH THEIR APPROXIMATE LOCATION AND EXTENT. THE OWNER BY ACCEPTING THESE PLANS OR PROCEEDING WITH IMPROVEMENTS PURSUANT THERETO AGREES TO ASSUME LIABILITY AND TO HOLD UNDERSIGNED HARMLESS FOR ANY DAMAGES RESULTING FROM THE EXISTENCE OF UNDERGROUND UTILITIES OR STRUCTURES NOT REPORTED TO THE UNDERSIGNED; NOT INDICATED ON THE PUBLIC RECORDS EXAMINED: THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT THE UTILITIES OR STRUCTURES SHOWN AND ANY OTHER UTILITIES OR STRUCTURES FOUND AT THE SITE. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE OWNERS OF THE UTILITIES OR STRUCTURES CONCERNED BEFORE STARTING WORK.

1029-99-01-SHTZ.DWG-BW-11/10/99



PRIVATE ENGINEERING NOTE
 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 PARTNER 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.



PREPARED UNDER THE DIRECTION OF:
 Robert K. Kujawa
 REGISTERED CIVIL ENGINEER No. 20285
 EXPIRATION DATE: 09-30-01 DATE: 11/10/99

RKJK
 ASSOCIATES
 TRAFFIC ENGINEERING • DESIGN SERVICES
 1601 Dove St., Suite 290 • Newport Beach, CA 92660
 Phone: (949) 474-0909 Fax: (949) 474-0902

SCALE: 1" = 20'
 DATE: 6/25/99

MARK	REVISIONS	APPR.	DATE

DESIGNED BY: B.W. DRAWN BY: B.W. CHECKED BY: R.K.

CITY OF RIVERSIDE, CALIFORNIA
 DEPARTMENT OF PUBLIC WORKS

APPROVED BY: [Signature] DATE: 11/29/99
 PRINCIPAL ENGR.
 PARK DEPARTMENT

APPROVED BY: [Signature] DATE: 11-29-99
 DIRECTOR OF PUBLIC WORKS

TRAFFIC DIVISION
 P.W. ENGINEER, MGR. [Signature]
 STREET SERVICES

TRACT No. 28866
 SIGNAL MODIFICATION PLAN
 TRAUTWEIN ROAD
 AND
 ORANGE TERRACE PARKWAY

FOR: COMMUNITIES SOUTHWEST

PROJECT NO.
 X-332A

SHEET 1 OF 1

FILE NO.

CONDUCTOR SCHEDULE											
AWG	CONDUCTOR RUN	1	2	3	4	5	6	7	8	9	10
Ø1		3	3	3	3	3	3	3			
Ø2			3	3	3	3	3	3			
Ø3		3	3	3	3	3	3	3	3	3	
Ø4		(3)	(3)	(3)	(3)	(3)	(3)	(3)			
Ø5									3	3	3
Ø6		3	3	3	3	3	3	3	3	3	
Ø7					(3)	(3)	(3)	(3)			
Ø8							3	6	3	3	3
Ø2P				2	2	2	2	4	2		
Ø4P		2	2	2	2	2	2	2			
Ø6P		(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	
Ø8P							2	4	2	2	2
Ø2PPB					1	1	2	2			
Ø4PPB		1	1	2	2	2	2	2			
Ø6PPB		(1)	(1)	(1)	(1)	(1)	(1)	(2)	(1)	(1)	(1)
Ø8PPB							2	2	1	1	1
PPB COMMON		1	1	1	1	1	1	2	1	1	1
SPARES		3	3	3	3	3	3	6	3	3	3
TOTAL ¹		16	16	22	22	23	23	29	29	34	34
#12 I.S.N.S.		2	2	2	2	2	2	-	2	2	2
#10 SIGNAL COMMON		1	1	1	1	1	1	2	1	1	1
LUMINAIRE		2	2	2	2	2	2	2	2	2	2
#8 SERVICE		-	-	-	-	-	-	2	-	-	-
THW TOTAL		2	2	2	2	2	2	2	2	2	2

CONDUCTOR SCHEDULE (CONTINUED)											
AWG	CONDUCTOR RUN	1	2	3	4	5	6	7	8	9	10
Ø1								2	2	2	
Ø2			1	4	4	4	4	4			
Ø3						2	2	2			
Ø4		(4)	(4)	(4)	(4)	(4)	(4)	(4)			
Ø5			2	2	2	2	2	2			
Ø6									4	4	1
Ø7		(2)	(2)	(2)	(2)	(2)	(2)	(2)			
Ø8							4	4			
TOTAL ¹		(6)	3	(6)	6	(6)	9	(6)	12	(6)	6

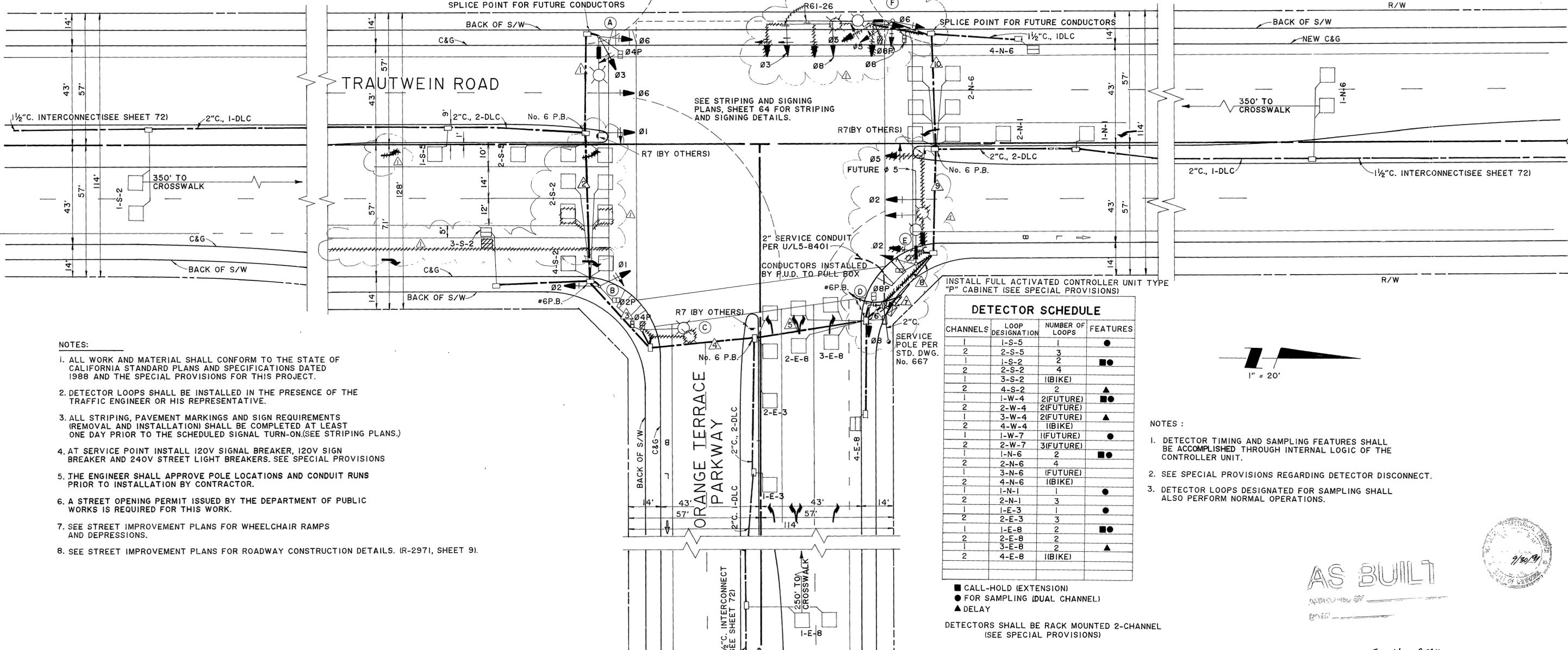
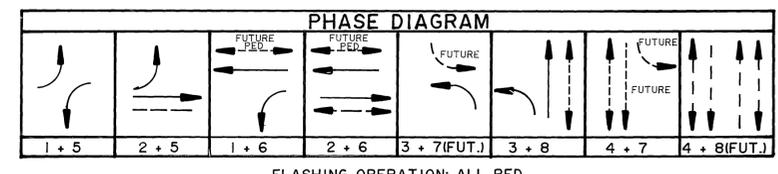
INTERCONNECT CABLE	-	FUT.	FUT.	FUT.	FUT.	FUT.	FUT.	FUT.	FUT.	FUT.	-
CONDUIT SIZE	3"	3"	3 1/2"	3 1/2"	2-3"	2-3"	2-3 1/2"	3"	3"	2 1/2"	

* TOTAL CONDUCTORS = PRESENT (X) PLUS FUTURE (X)
 * INSTALL SEPERATE 1/2" CONDUIT AND PULL ROPE FOR FUTURE INTERCONNECT.

POLE SCHEDULE										
POLE NO.	TYPE	MAST ARM LENGTH SIGNAL	LUMINAIRE	SIGNAL MOUNTING MA	PPB	LUMINAIRE	I.S.N.S. LEGEND	REMARKS		
(A)	26A-4-80	40'	15'	MAS MAS	SV-2-TB	SP-I-T	4 2	400 W.H.P.S. Orange Terrace Pkwy		
(B)	1-A				TV-2-T	SP-I-T	4 2			
(C)	26A-4-80	(FUT. 45')	15'			SP-I-T	2 1	400 W.H.P.S.		
(D)	1-A				TV-1-T	SP-I-T	2 1			
(E)	26A-4-80	40'	15'	MAS MAS	SV-1-T	SP-I-T	8 4	400 W.H.P.S. Orange Terrace Pkwy		
(F)	26A-4-80	45'	15'	MAS MAS	SV-3-TB	SP-I-T	8 2	400 W.H.P.S. Troutwein Rd		

NOTES: 1. TYPE I-A STANDARDS SHALL BE ALUMINUM.
 2. LEFT TURN HEADS SHALL BE ALL ARROW INDICATIONS.

Orange Terrace Pkwy BLOCK NUMBER
I.S.N.S. LEGEND DETAIL



- NOTES:
- ALL WORK AND MATERIAL SHALL CONFORM TO THE STATE OF CALIFORNIA STANDARD PLANS AND SPECIFICATIONS DATED 1988 AND THE SPECIAL PROVISIONS FOR THIS PROJECT.
 - DETECTOR LOOPS SHALL BE INSTALLED IN THE PRESENCE OF THE TRAFFIC ENGINEER OR HIS REPRESENTATIVE.
 - ALL STRIPING, PAVEMENT MARKINGS AND SIGN REQUIREMENTS (REMOVAL AND INSTALLATION) SHALL BE COMPLETED AT LEAST ONE DAY PRIOR TO THE SCHEDULED SIGNAL TURN-ON.(SEE STRIPING PLANS.)
 - AT SERVICE POINT INSTALL 120V SIGNAL BREAKER, 120V SIGN BREAKER AND 240V STREET LIGHT BREAKERS. SEE SPECIAL PROVISIONS
 - THE ENGINEER SHALL APPROVE POLE LOCATIONS AND CONDUIT RUNS PRIOR TO INSTALLATION BY CONTRACTOR.
 - A STREET OPENING PERMIT ISSUED BY THE DEPARTMENT OF PUBLIC WORKS IS REQUIRED FOR THIS WORK.
 - SEE STREET IMPROVEMENT PLANS FOR WHEELCHAIR RAMPS AND DEPRESSIONS.
 - SEE STREET IMPROVEMENT PLANS FOR ROADWAY CONSTRUCTION DETAILS. (R-2971, SHEET 9).

DETECTOR SCHEDULE			
CHANNELS	LOOP DESIGNATION	NUMBER OF LOOPS	FEATURES
1	1-S-5	1	●
2	2-S-5	3	●
1	1-S-2	2	●●
2	2-S-2	4	●●
1	3-S-2	(BIKE)	▲
2	4-S-2	2	▲
1	1-W-4	2(FUTURE)	●●
2	2-W-4	2(FUTURE)	●●
1	3-W-4	2(FUTURE)	▲
2	4-W-4	(BIKE)	▲
1	1-W-7	(FUTURE)	●
2	2-W-7	3(FUTURE)	●
1	1-N-6	2	●●
2	2-N-6	4	●●
1	3-N-6	(FUTURE)	●
2	4-N-6	(BIKE)	▲
1	1-N-1	1	●
2	2-N-1	3	●
1	1-E-3	1	●
2	2-E-3	3	●
1	1-E-8	2	●●
2	2-E-8	2	●●
1	3-E-8	2	▲
2	4-E-8	(BIKE)	▲

■ CALL-HOLD (EXTENSION)
 ● FOR SAMPLING (DUAL CHANNEL)
 ▲ DELAY
 DETECTORS SHALL BE RACK MOUNTED 2-CHANNEL (SEE SPECIAL PROVISIONS)

- NOTES:
- DETECTOR TIMING AND SAMPLING FEATURES SHALL BE ACCOMPLISHED THROUGH INTERNAL LOGIC OF THE CONTROLLER UNIT.
 - SEE SPECIAL PROVISIONS REGARDING DETECTOR DISCONNECT.
 - DETECTOR LOOPS DESIGNATED FOR SAMPLING SHALL ALSO PERFORM NORMAL OPERATIONS.

AS BUILT

Underground Service Alert Call: TOLL FREE 1 - 800 422 - 4133 TWO WORKING DAYS BEFORE YOU DIG	PRIVATE ENGINEERING NOTE (NOT REQUIRED BY GOVERNING AGENCY) 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 HARMLESS FROM PERSONAL LIABILITY FROM ANY AND ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES, INCLUDING REASONABLE ATTORNEY'S FEES, ARISING FROM THIS PROJECT, EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF DESIGN PROFESSIONAL.	PREPARED UNDER THE DIRECTION OF REGISTERED CIVIL ENGINEER NO. 35458 EXPIRATION DATE 9/30/91 DATE 2/14/88	DAVIDSON ASSOCIATES, INC. CIVIL ENGINEERS ARCHITECTS PLANNERS 1103 1230C	CITY OF RIVERSIDE, CALIFORNIA DEPARTMENT OF PUBLIC WORKS APPROVED BY: DATE 3/23/89 TRAFFIC DIVISION CHIEF P.W. ENGR. PUBLIC UTILITIES	PROJECT NO. X-332 SHEET 70 OF 106 FILE NO. 87-10058
--	---	--	---	---	---