

# CITY OF RIVERSIDE

## TRAFFIC SIGNAL AND LIGHTING MODIFICATION PLANS

### FOR

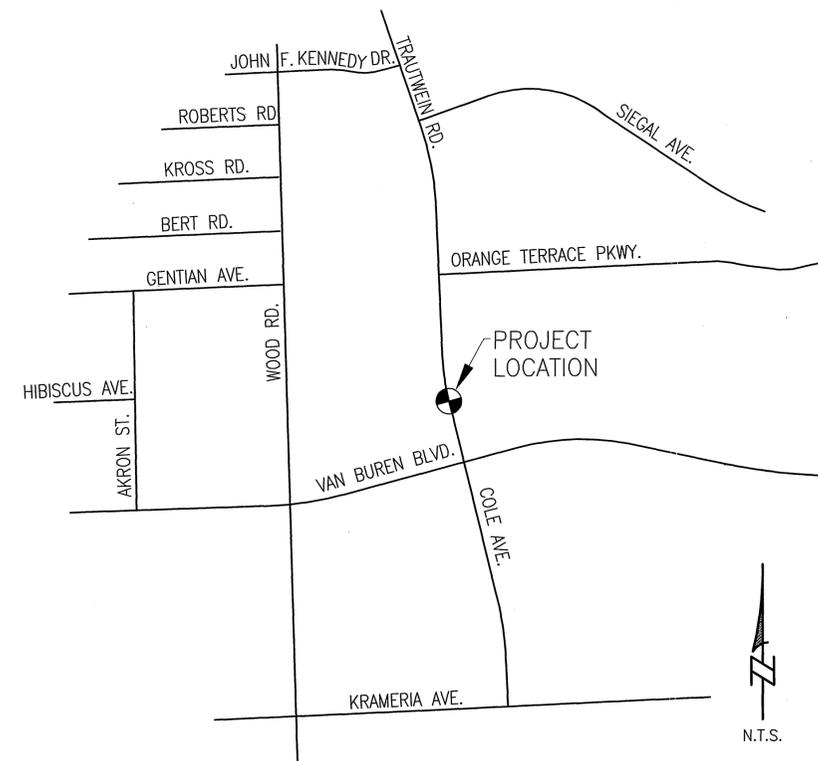
## TRAUTWEIN ROAD AT PLAZA WEST

#### GENERAL TRAFFIC SIGNAL NOTES:

- ALL WORK, MATERIAL AND EQUIPMENT SHALL CONFORM TO THE REQUIREMENTS OF THE STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION (CALTRANS) STANDARD PLANS AND SPECIFICATIONS DATED JULY, 1999 AND THE SPECIAL PROVISIONS FOR THIS PROJECT.
- ANY UTILITIES SHOWN ON THIS PLAN ARE CORRECT AND ACCURATE TO THE EXTENT OF AVAILABLE RECORDS AND KNOWLEDGE. HOWEVER, THE CONTRACTOR IS REQUIRED TO TAKE STEPS TO ASCERTAIN THE EXACT LOCATION OF ALL UNDERGROUND FACILITIES PRIOR TO DOING WORK THAT MAY DAMAGE SUCH FACILITIES OR INTERFERE WITH THEIR SERVICE. PHONE UNDERGROUND SERVICE ALERT AT (800) 227-2600, A MINIMUM OF TWO WORKING DAYS PRIOR TO THE START OF ANY EXCAVATION.
- THE ENGINEER SHALL APPROVE THE EXACT LOCATION OF ALL EQUIPMENT PLACEMENT IN THE FIELD PRIOR TO INSTALLATION. CONTRACTOR SHALL POTHOLE CONFLICTING UTILITIES AS DIRECTED BY THE ENGINEER.
- DETECTOR LOOP LOCATIONS SHALL BE VERIFIED IN THE FIELD BY THE ENGINEER OR HIS DESIGNATED REPRESENTATIVE BEFORE SAWCUTTING. ALL LOOPS SHALL BE 6" DIAMETER AND CENTERED IN THE LANE, UNLESS OTHERWISE SHOWN ON THE PLAN. DETECTOR LOOPS ARE TO BE TESTED AND APPROVED BEFORE FILLING SAWCUTS.
- THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND NOTIFY ALL UTILITY COMPANIES A MINIMUM OF 48 HOURS PRIOR TO THE START OF CONSTRUCTION.
- ALL VEHICLE INDICATIONS SHALL BE 12" DIAMETER WITH METAL BACKPLATES. SIGNAL SECTION HOUSINGS SHALL BE METAL. ALL VEHICLE INDICATIONS (RED, YELLOW AND GREEN) SHALL UTILIZE LIGHT EMITTING DIODE (LED) SIGNAL MODULES.
- ALL CONDUIT SHALL BE 2" & RIGID STEEL, UNLESS OTHERWISE NOTED. NON-METALLIC CONDUIT SHALL NOT BE USED. ALL CONDUIT UNDER PAVING SHALL BE INSTALLED BY THE TRENCHING METHOD.
- ALL PULLBOXES SHALL BE #5, UNLESS OTHERWISE NOTED, AND HAVE A MAXIMUM SPACING OF 200' BETWEEN PULLBOXES.
- PEDESTRIAN INDICATION SHALL BE INTERNATIONAL SYMBOL, HAVE AUDIBLE PEDESTRIAN SIGNALS AND SHALL UTILIZE LIGHT EMITTING DIODE (LED) MODULES. PEDESTRIAN PUSH BUTTONS SHALL BE TYPE 'B' WITH INTERNATIONAL SYMBOL PLATE AND HAVE ADA PUSHBUTTONS.
- THE CONDUCTOR SCHEDULE IS FURNISHED AS AN INSTALLATION GUIDELINE ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE THE CORRECT CONDUCTORS REQUIRED FOR THE INTENDED OPERATION.
- CONTACT TRAFFIC SIGNAL MAINTENANCE ((909)351-6096) 48 HOURS IN ADVANCE TO SCHEDULE INSPECTION OF THE WORK PERFORMED. INSPECTION FOR TRAFFIC SIGNAL WORK SHALL BE AT THE RATE OF \$55.00 PER HOUR.
- EACH NEW CONDUCTOR SHALL BE IDENTIFIED, PER THE CONDUCTOR SCHEDULE, WITH A PERMANENT BAND IN PULLBOXES AND ALSO NEAR THE END OF EACH CONDUCTOR, WHERE TERMINATED. PERMANENT ID BANDS SHALL BE EMBOSSED ALUM. FOIL TYPE w/PRESSURE SENSITIVE, OIL-RESISTANT BACKING.
- ALL SIGNING, STRIPING AND PAVEMENT MARKING REQUIREMENTS (SEE PLAN XL-469) SHALL BE COMPLETED AT LEAST ONE (1) DAY PRIOR TO FINAL SIGNAL MODIFICATIONS.
- THIS TRAFFIC SIGNAL WORK REQUIRES A "STREET OPENING PERMIT" OBTAINED AT THE PUBLIC WORKS DEPARTMENT'S COUNTER ON THE THIRD FLOOR OF CITY HALL.

#### GENERAL STRIPING NOTES:

- TRAFFIC STRIPES, PAVEMENT MARKINGS AND RAISED PAVEMENT MARKERS PER CALTRANS TRAFFIC MANUAL, STANDARD PLANS AND SPECIFICATIONS, DATED JULY, 1999.
- ALL SIGNS SHALL BE STANDARD SIZE UNLESS OTHERWISE NOTED ON PLANS. SIGNS SHALL BE INSTALLED ON 2" GALVANIZED STEEL POSTS WITH ANCHOR BLOCKS, UNLESS OTHERWISE NOTED ON THE PLAN.
- ALL STRIPES, SIGNS, AND PAVEMENT MARKINGS SHALL BE REFLECTORIZED. STENCILS FOR PAVEMENT MARKINGS SHALL MATCH CITY STANDARD STENCILS EXACTLY. ALL STRIPING AND MARKING DETAILS SHALL MATCH CALTRANS STANDARD PLANS DETAILS.
- ALL CONFLICTING STRIPES AND PAVEMENT MARKINGS SHALL BE REMOVED BY WET SANDBLASTING. CONFLICTING SIGNS AND RAISED PAVEMENT MARKERS SHALL BE REMOVED. ALL REMOVALS OF SIGNS AND MARKINGS SHALL BE THE RESPONSIBILITY OF THE DEVELOPER OR APPLICANT.
- PAINTED TRAFFIC STRIPES SHALL BE APPLIED IN TWO COATS. PAVEMENT MARKINGS SHALL BE THERMOPLASTIC.
- ALL REMOVED SIGNS SHALL BE SALVAGED AND DELIVERED TO THE CITY YARD, AS DIRECTED BY THE CITY INSPECTOR ON THE JOB SITE.
- RAISED PAVEMENT MARKERS SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR IN ACCORDANCE WITH THE STRIPING DETAILS SHOWN ON THE SIGNING AND STRIPING PLAN. INSTALLATION SHALL BE COMPLETE WITHIN SEVEN WORKING DAYS OF ROADWAY STRIPING.



**VICINITY MAP**

#### CONSTRUCTION NOTES:

	TOTAL QTY.
RR	REMOVE AND RELOCATE EXISTING SIGNAGE. 1 Each
RS	REMOVE AND SALVAGE SIGN AND POST. 1 Each
E	EXISTING SIGN TO REMAIN. 11 Each
1	INSTALL THERMOPLASTIC PAVEMENT MARKING PER CALTRANS STANDARDS. 150 SF
2	INSTALL TRAFFIC SIGN, PER CITY OF RIVERSIDE STD. DWG #666. 4 Each
3	SANDBLAST CONFLICTING STRIPING. 600 LF
	REMOVE EXISTING CONFLICTING REFLECTIVE PAVEMENT MARKERS. 30 SF
4	INSTALL 12" SOLID WHITE THERMOPLASTIC MARKING. 550 LF
5	INSTALL 8" SOLID WHITE THERMOPLASTIC CHANNELIZING STRIPE-DETAIL 38. 150 LF
6	PAINT DOUBLE YELLOW STRIPE-DETAIL 21. 75 LF
7	INSTALL 8" SOLID WHITE THERMOPLASTIC CHANNELIZING STRIPE-DETAIL 38A. 110 LF
8	PAINT DOUBLE YELLOW MEDIAN STRIPE-DETAIL 29. 15 LF
9	PAINT 6" WHITE BIKE LANE DROP STRIPE-DETAIL 39A. 200 LF
10	PAINT MEDIAN NOSE YELLOW, PER CITY OF RIVERSIDE STD. 25 LF

#### INDEX OF SHEETS:

DWG	SHEET	DESCRIPTION
X-398A	1	TITLE SHEET
X-398A	2	TRAFFIC SIGNAL MODIFICATION TRAUTWEIN ROAD AT PLAZA WEST
XL-469	1	TRAFFIC SIGNING AND STRIPING PLAN TRAUTWEIN ROAD AT PLAZA WEST



**RK engineering group, inc.**  
 TRAFFIC ENGINEERING - DESIGN SERVICES  
 20201 S.W. Birch Street, Suite 250 · Newport Beach, CA 92660  
 Phones: (949) 474-0809 Fax: (949) 474-0902  
 Robert Kahn R.C.E. No. 20285 Date 9/16/02  
 PREPARED BY: ROBERT KAHN R.C.E. NO. DATE 9/30/05

MARK	REVISIONS	APPR.	DATE

CITY OF RIVERSIDE, CALIFORNIA  
 DEPARTMENT OF PUBLIC WORKS

APPROVED BY:	BY:	DATE:	APPROVED BY:
DEPUTY P.W. DIR./ENG.	<i>JR</i>	9/16/02	<i>Tom Bog</i>
PRINCIPAL ENGINEER			DIRECTOR OF PUBLIC WORKS
P.W. INSPECTOR			DATE 9/16/02
TRAFFIC DIVISION			

TITLE SHEET (SIGNAL MODIFICATION) ACCOUNT NO.: XXXX

**TRAUTWEIN ROAD AND PLAZA WEST**

**X-398A**

SHEET 1 OF 2

SCALE: NONE

FILE NAME: 10290201-SHT1D.DWG



CONDUCTOR SCHEDULE								
CONTROL FUNCTION	CONDUCTOR	CONDUCTOR RUNS						
		1	2	3	4	5	6	7
VEHICLE & PEDESTRIAN HEADS, PEDESTRIAN	12 WIRE IMSA	1	2	2	3	1	1	1
PUSH BUTTONS, SPARES & COMMONS	9 WIRE IMSA	-	-	-	-	-	-	-
	5 WIRE IMSA	-	1	1	2	1	1	-
	3 WIRE IMSA	1	1	1	5	3	2	1
DETECTOR CABLE	#16/2							
Ø1	#16/2	1	1	1	1	-	-	-
Ø2	#16/2	-	-	-	2	-	-	-
Ø6	#16/2	2	2	2	2	-	-	-
Ø8	#16/2	-	-	-	-	1	1	1
I.I.S.N.S.	#12	2	2	2	-	-	-	-
LUMINAIRES	#8	2	2	2	-	2	2	2
SIGNAL SERVICE	#6	-	-	-	2	2	-	-
INTERCONNECT CABLE	-	-	-	1	2	1	1	1
E.V.P. CABLE	-	-	-	1	2	1	1	1
CONDUIT SIZE		2"	3"	3"	2-3"	3"	3"	2"

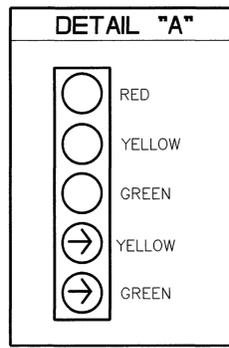
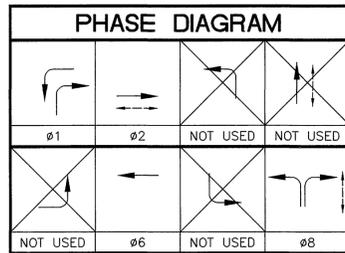
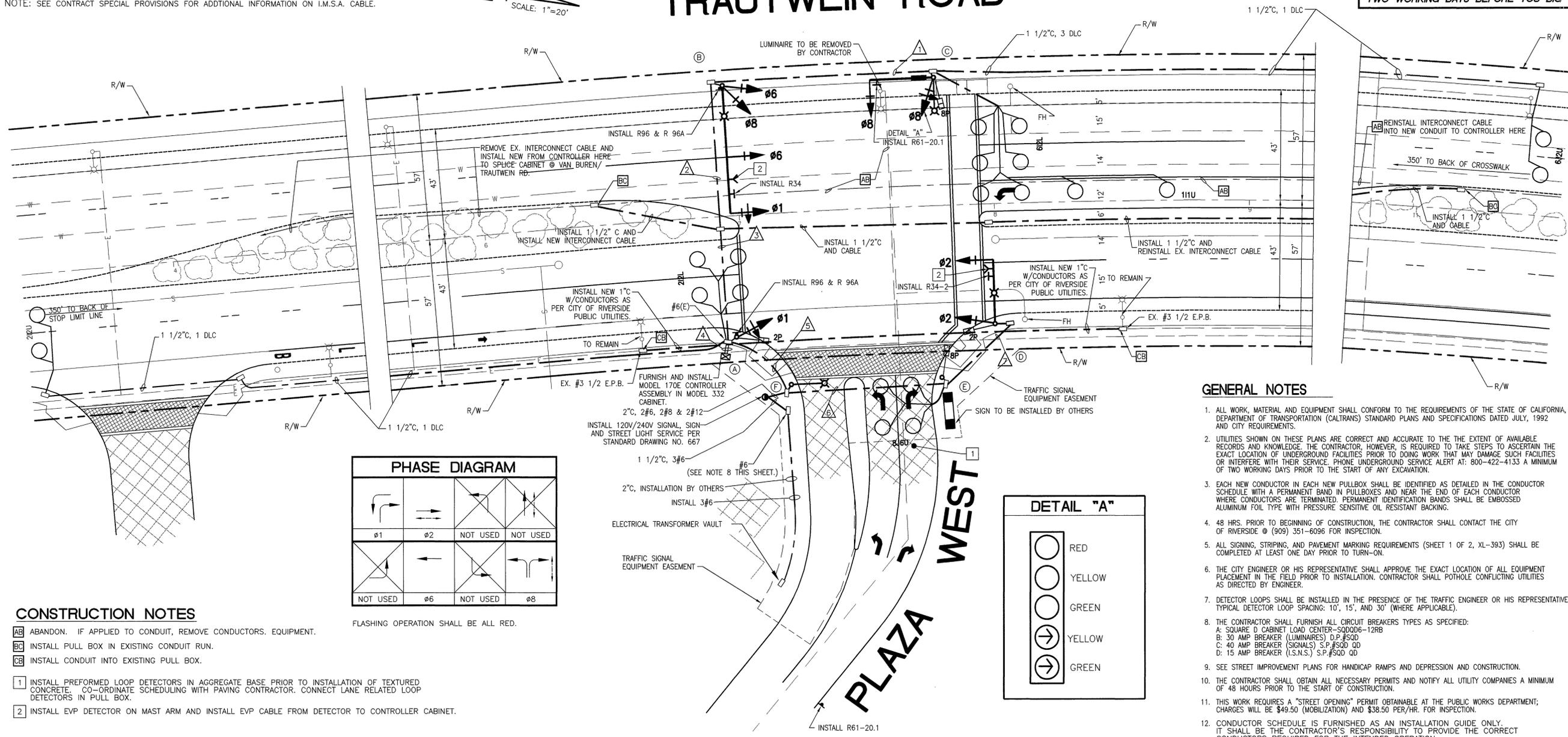
NOTE: SEE CONTRACT SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION ON I.M.S.A. CABLE.

EQUIPMENT SCHEDULE														
NO.	TYPE	SIGNAL STANDARD			LUMINAIRE		I.I.S.N.S.		SIGNAL MOUNTINGS			REMARKS		
		HEIGHT	M.A.	M.A.	WATTS	LEGEND	MA	VEHICLE	AUDIBLE PEDESTRIAN	Ø	QUAD			
(A)	1A	10'	-	-	-	-	-	-	TV-1-T	SP-1-T	2	W	-	-
(B)	29-5-80	30'	50'	12'	250	-	-	MAS MAS	SV-2-TA	-	-	-	-	"F" DIMENSION 22'
(C)	19-3-80	30'	25'	12'	250	TRAUTWEIN RD	8900	MAS	SV-1-T	SP-1-T	6	E	8	E
(D)	19-2-80	30'	25'	12'	250	-	-	MAS	SV-1-T	SP-1-T	-	-	8	S
(E)	1A	7'	-	-	-	-	-	-	-	TP-1-T	-	-	2	W
(F)	15	30'	-	12'	250	-	-	-	-	-	-	-	2	W

- NOTES:
- ALL VEHICLES HEADS SHALL HAVE 12" LENSES. BLOCK NUMBER PER RIVERSIDE CITY STANDARD DWG 6628.
  - ALL LEFT TURN HEADS SHALL HAVE ALL ARROWS.
  - EXACT POLE LOCATIONS DETERMINED BY CITY ENGINEER IN THE FIELD.
  - PEDESTRIAN PUSH BUTTONS SHALL BE INSTALLED ON THE POLE IN THE QUADRANT NEAREST THE CROSSWALK SERVING THE PHASE.
  - AUDIBLE PEDESTRIAN SIGNALS SHALL BE PROVIDED; SEE SPECIAL PROVISIONS.



# TRAUTWEIN ROAD



- ### CONSTRUCTION NOTES
- AB ABANDON. IF APPLIED TO CONDUIT, REMOVE CONDUCTORS. EQUIPMENT.
- BC INSTALL PULL BOX IN EXISTING CONDUIT RUN.
- CE INSTALL CONDUIT INTO EXISTING PULL BOX.
- INSTALL PREFORMED LOOP DETECTORS IN AGGREGATE BASE PRIOR TO INSTALLATION OF TEXTURED CONCRETE. CO-ORDINATE SCHEDULING WITH PAVING CONTRACTOR. CONNECT LANE RELATED LOOP DETECTORS IN PULL BOX.
  - INSTALL EVP DETECTOR ON MAST ARM AND INSTALL EVP CABLE FROM DETECTOR TO CONTROLLER CABINET.

DETECTOR SCHEDULE			
LOOP DESIGNATION	NUMBER OF LOOPS	FEATURES	
111U	4		
212U	2	●	■
212L	4		
8J6U	4	●	
6J2U	2	●	■
6J2L	4		

- SAMPLING (FUTURE)
  - CALL-HOLD (EXTENSION)
- DETECTORS SHALL BE 2-CHANNEL RACK-MOUNTED.

**Underground Service Alert**

CALL TOLL FREE  
1-800-227-2600

TWO WORKING DAYS BEFORE YOU DIG

- ### GENERAL NOTES
- ALL WORK, MATERIAL AND EQUIPMENT SHALL CONFORM TO THE REQUIREMENTS OF THE STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION (CALTRANS) STANDARD PLANS AND SPECIFICATIONS DATED JULY, 1992 AND CITY REQUIREMENTS.
  - UTILITIES SHOWN ON THESE PLANS ARE CORRECT AND ACCURATE TO THE THE EXTENT OF AVAILABLE RECORDS AND KNOWLEDGE. THE CONTRACTOR, HOWEVER, IS REQUIRED TO TAKE STEPS TO ASCERTAIN THE EXACT LOCATION OF UNDERGROUND FACILITIES PRIOR TO DOING WORK THAT MAY DAMAGE SUCH FACILITIES OR INTERFERE WITH THEIR SERVICE. PHONE UNDERGROUND SERVICE ALERT AT: 800-422-4133 A MINIMUM OF TWO WORKING DAYS PRIOR TO THE START OF ANY EXCAVATION.
  - EACH NEW CONDUCTOR IN EACH NEW PULLBOX SHALL BE IDENTIFIED AS DETAILED IN THE CONDUCTOR SCHEDULE WITH A PERMANENT BAND IN PULLBOXES AND NEAR THE END OF EACH CONDUCTOR WHERE CONDUCTORS ARE TERMINATED. PERMANENT IDENTIFICATION BANDS SHALL BE EMBOSSED ALUMINUM FOIL TYPE WITH PRESSURE SENSITIVE OIL RESISTANT BACKING.
  - 48 HRS. PRIOR TO BEGINNING OF CONSTRUCTION, THE CONTRACTOR SHALL CONTACT THE CITY OF RIVERSIDE @ (909) 351-6096 FOR INSPECTION.
  - ALL SIGNING, STRIPING, AND PAVEMENT MARKING REQUIREMENTS (SHEET 1 OF 2, XL-393) SHALL BE COMPLETED AT LEAST ONE DAY PRIOR TO TURN-ON.
  - THE CITY ENGINEER OR HIS REPRESENTATIVE SHALL APPROVE THE EXACT LOCATION OF ALL EQUIPMENT PLACEMENT IN THE FIELD PRIOR TO INSTALLATION. CONTRACTOR SHALL POTHOLE CONFLICTING UTILITIES AS DIRECTED BY ENGINEER.
  - DETECTOR LOOPS SHALL BE INSTALLED IN THE PRESENCE OF THE TRAFFIC ENGINEER OR HIS REPRESENTATIVE. TYPICAL DETECTOR LOOP SPACING: 10', 15', AND 30' (WHERE APPLICABLE).
  - THE CONTRACTOR SHALL FURNISH ALL CIRCUIT BREAKERS TYPES AS SPECIFIED:  
A: SQUARE D CABINET LOAD CENTER-SQD06-12RB  
B: 30 AMP BREAKER (LUMINAIRES) D.P.#50D  
C: 40 AMP BREAKER (SIGNALS) S.P.#50D QD  
D: 15 AMP BREAKER (I.S.N.S.) S.P.#50Q QD
  - SEE STREET IMPROVEMENT PLANS FOR HANDICAP RAMPS AND DEPRESSION AND CONSTRUCTION.
  - THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND NOTIFY ALL UTILITY COMPANIES A MINIMUM OF 48 HOURS PRIOR TO THE START OF CONSTRUCTION.
  - THIS WORK REQUIRES A "STREET OPENING" PERMIT OBTAINABLE AT THE PUBLIC WORKS DEPARTMENT; CHARGES WILL BE \$49.50 (MOBILIZATION) AND \$38.50 PER/HR. FOR INSPECTION.
  - CONDUCTOR SCHEDULE IS FURNISHED AS AN INSTALLATION GUIDE ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE THE CORRECT CONDUCTORS REQUIRED FOR THE INTENDED OPERATION.

**PRIVATE ENGINEERING NOTE**

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.

**RKJK**  
DESIGN GROUP Incorporated  
TRAFFIC ENGINEERING - DESIGN SERVICES

ROBERT KAHN R.C.E. No.20285 Exp. 9/30/97

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MARK	REVISIONS	APPR.	DATE

CITY OF RIVERSIDE, CALIFORNIA  
DEPARTMENT OF PUBLIC WORKS

APPROVED BY: [Signature] DATE: 10/16/96

PRINCIPAL ENGINEER: [Signature] DATE: 10/16/96

P.W. INSPECTION: [Signature] DATE: 10/16/96

TRAFFIC DIVISION: [Signature] DATE: 10/16/96

CHIEF P.W. ENGINEER: [Signature] DATE: 10/16/96

PUBLIC UTILITIES: [Signature] DATE: 10/16/96

TRAFFIC SIGNAL  
**TRAUTWEIN ROAD @ PLAZA WEST**

SCALE: 1" = 20'

ACCT. NO. XXXX

**X-398**

SHEET 1 OF 1

FILE NAME: SHT2.DWG

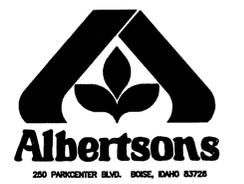


REVISIONS:

DATE	BY

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TRAFFIC SIGNAL IMPROVEMENTS FOR ORANGECREST PLAZA

LOCATION:  
N.E.C. VAN BUREN BOULEVARD & TRAUWEIN ROAD RIVERSIDE, CA

**COURTNEY ARCHITECTS**

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656 Santa Rosa Street, Suite 3A  
San Luis Obispo, California 93401

PROJECT NO. 742-96-101  
PLOT DATE: 9/16/96  
PATHNAME: C:\742-96-101-SHT2.DWG