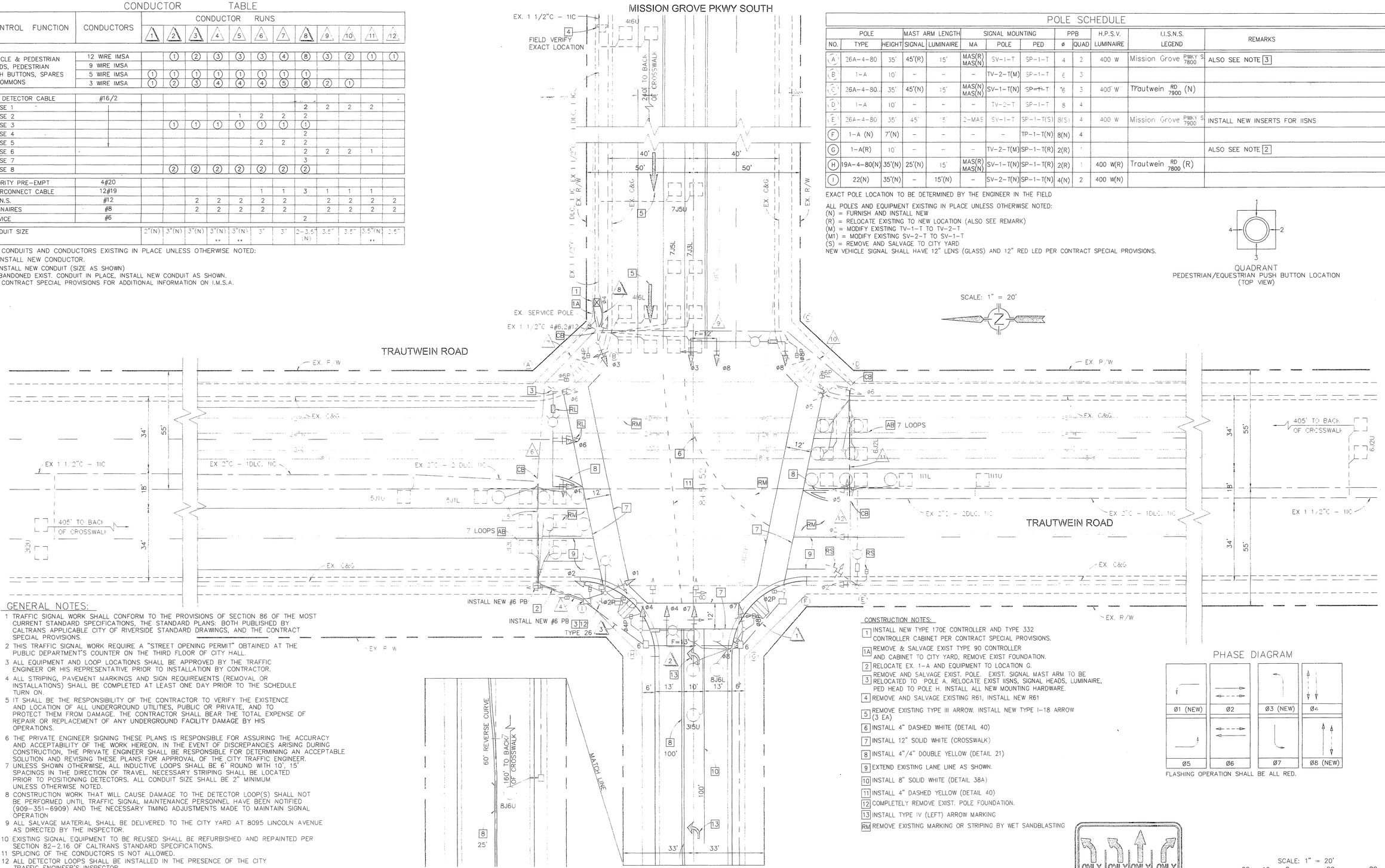
CONDUCTOR TABLE

CONTROL FUNCTION	CONDUCTORS	CONDUCTOR RUNS 1	2	3	4	5	6	7	8	9	10	11	12
VEHICLE & PEDESTRIAN HEADS, PEDESTRIAN PUSH BUTTONS, SPARES & COMMONS	12 WIRE IMSA		(1)	(2)	(3)	(3)	(3)	(4)	(8)	(3)	(2)	(1)	(1)
	9 WIRE IMSA												
	5 WIRE IMSA	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)				
	3 WIRE IMSA	(1)	(2)	(3)	(4)	(4)	(4)	(5)	(8)	(2)	(1)		
DETECTOR CABLE	#16/2												
PHASE 1									2	2	2	2	
PHASE 2						1	2	2	2				
PHASE 3			(1)	(1)	(1)	(1)	(1)	(1)	(1)				
PHASE 4									2				
PHASE 5							2	2	2				
PHASE 6									2	2	2	1	
PHASE 7									3				
PHASE 8			(2)	(2)	(2)	(2)	(2)	(2)	(2)				
PRIORITY PRE-EMPT	4#20												
INTERCONNECT CABLE	12#19						1	1	3	1	1	1	
I.I.S.N.S.	#12			2	2	2	2	2		2	2	2	2
LUMINAIRES	#8			2	2	2	2	2		2	2	2	2
SERVICE	#6								2				
CONDUIT SIZE		2"(N)	3"(N)	3"(N)	3"(N) **	3"(N) **	3"	3"	2-3.5"(N)	3.5"	3.5"	3.5"(N) **	2.5"

ALL CONDUITS AND CONDUCTORS EXISTING IN PLACE UNLESS OTHERWISE NOTED:
(X) INSTALL NEW CONDUCTOR.
(N) INSTALL NEW CONDUIT (SIZE AS SHOWN)
** ABANDONED EXIST. CONDUIT IN PLACE, INSTALL NEW CONDUIT AS SHOWN.
SEE CONTRACT SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION ON I.M.S.A.



POLE SCHEDULE

NO.	POLE TYPE	HEIGHT	MAST ARM LENGTH SIGNAL	LUMINAIRE	SIGNAL MOUNTING MA	POLE	PED	PPB ø	QUAD	H.P.S.V. LUMINAIRE	I.I.S.N.S. LEGEND	REMARKS
(A)	26A-4-80	35'	45'(R)	15'	MAS(R) MAS(N)	SV-1-T	SP-1-T	4	2	400 W	Mission Grove PWKY S 7800	ALSO SEE NOTE 3
(B)	1-A	10'	–	–	–	TV-2-T(M)	SP-1-T	6	3			
(C)	26A-4-80	35'	45'(N)	15'	MAS(N) MAS(N)	SV-1-T(N)	SP-1-T	6	3	400 W	Trautwein RD 7900 (N)	
(D)	1-A	10'	–	–	–	TV-2-T	SP-1-T	8	4			
(E)	26A-4-80	35'	45'	15'	2-MAS	SV-1-T	SP-1-T(S)	8(S)	4	400 W	Mission Grove PWKY S 7900	INSTALL NEW INSERTS FOR IISNS
(F)	1-A (N)	7'(N)	–	–	–	–	TP-1-T(N)	8(N)	4			
(G)	1-A(R)	10'	–	–	–	TV-2-T(M)	SP-1-T(R)	2(R)	1			ALSO SEE NOTE 2
(H)	19A-4-80(N)	35'(N)	25'(N)	15'	MAS(R) MAS(N)	SV-1-T(N)	SP-1-T(R)	2(R)	1	400 W(R)	Trautwein RD 7800 (R)	
(I)	22(N)	35'(N)	–	15'(N)	–	SV-2-T(N)	SP-1-T(N)	4(N)	2	400 W(N)		

EXACT POLE LOCATION TO BE DETERMINED BY THE ENGINEER IN THE FIELD

ALL POLES AND EQUIPMENT EXISTING IN PLACE UNLESS OTHERWISE NOTED:
(N) = FURNISH AND INSTALL NEW
(R) = RELOCATE EXISTING TO NEW LOCATION (ALSO SEE REMARK)
(M) = MODIFY EXISTING TV-1-T TO TV-2-T
(M1) = MODIFY EXISTING SV-2-T TO SV-1-T
(S) = REMOVE AND SALVAGE TO CITY YARD
NEW VEHICLE SIGNAL SHALL HAVE 12" LENS (GLASS) AND 12" RED LED PER CONTRACT SPECIAL PROVISIONS.

QUADRANT
PEDESTRIAN/EQUESTRIAN PUSH BUTTON LOCATION
(TOP VIEW)

SCALE: 1" = 20'

GENERAL NOTES:

1. 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.
2. THIS TRAFFIC SIGNAL WORK REQUIRE A "STREET OPENING PERMIT" OBTAINED AT THE PUBLIC DEPARTMENT'S COUNTER ON THE THIRD FLOOR OF CITY HALL.
3. ALL EQUIPMENT AND LOOP LOCATIONS SHALL BE APPROVED BY THE TRAFFIC ENGINEER OR HIS REPRESENTATIVE PRIOR TO INSTALLATION BY CONTRACTOR.
4. ALL STRIPING, PAVEMENT MARKINGS AND SIGN REQUIREMENTS (REMOVAL OR INSTALLATIONS) SHALL BE COMPLETED AT LEAST ONE DAY PRIOR TO THE SCHEDULE TURN ON.
5. 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.
6. THE PRIVATE ENGINEER SIGNING THESE PLANS 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 THESE PLANS FOR APPROVAL OF THE CITY TRAFFIC ENGINEER.
7. 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.
8. CONSTRUCTION WORK THAT WILL CAUSE DAMAGE TO THE DETECTOR LOOP(S) SHALL NOT BE PERFORMED UNTIL TRAFFIC SIGNAL MAINTENANCE PERSONNEL HAVE BEEN NOTIFIED (909-351-6909) AND THE NECESSARY TIMING ADJUSTMENTS MADE TO MAINTAIN SIGNAL OPERATION
9. ALL SALVAGE MATERIAL SHALL BE DELIVERED TO THE CITY YARD AT 8095 LINCOLN AVENUE AS DIRECTED BY THE INSPECTOR.
10. EXISTING SIGNAL EQUIPMENT TO BE REUSED SHALL BE REFURBISHED AND REPAINTED PER SECTION 82-2.16 OF CALTRANS STANDARD SPECIFICATIONS.
11. SPLICING OF THE CONDUCTORS IS NOT ALLOWED.
12. ALL DETECTOR LOOPS SHALL BE INSTALLED IN THE PRESENCE OF THE CITY TRAFFIC ENGINEER'S INSPECTOR.
13. INSPECTION FEE WILL BE AT THE RATE OF $55.00 PER HOUR.
14. ALL PAVEMENT MARKINGS EXCEPT FOR STRIPING SHALL BE THERMOPLASTIC.
15. CALL (909) 351-6096 AT LEAST 48 HOURS IN ADVANCE FOR INSPECTION.

CONSTRUCTION NOTES:

1. INSTALL NEW TYPE 170E CONTROLLER AND TYPE 332 CONTROLLER CABINET PER CONTRACT SPECIAL PROVISIONS.
1A. REMOVE & SALVAGE EXIST TYPE 90 CONTROLLER AND CABINET TO CITY YARD, REMOVE EXIST FOUNDATION.
2. RELOCATE EX. 1-A AND EQUIPMENT TO LOCATION G.
3. REMOVE AND SALVAGE EXIST. POLE. EXIST. SIGNAL MAST ARM TO BE RELOCATED TO POLE A. RELOCATE EXIST IISNS, SIGNAL HEADS, LUMINAIRE, PED HEAD TO POLE H. INSTALL ALL NEW MOUNTING HARDWARE.
4. REMOVE AND SALVAGE EXISTING R61, INSTALL NEW R61
5. REMOVE EXISTING TYPE III ARROW. INSTALL NEW TYPE I-18 ARROW (3 EA)
6. INSTALL 4" DASHED WHITE (DETAIL 40)
7. INSTALL 12" SOLID WHITE (CROSSWALK)
8. INSTALL 4"/4" DOUBLE YELLOW (DETAIL 21)
9. EXTEND EXISTING LANE LINE AS SHOWN.
10. INSTALL 8" SOLID WHITE (DETAIL 38A)
11. INSTALL 4" DASHED YELLOW (DETAIL 40)
12. COMPLETELY REMOVE EXIST. POLE FOUNDATION.
13. INSTALL TYPE IV (LEFT) ARROW MARKING
RM. REMOVE EXISTING MARKING OR STRIPING BY WET SANDBLASTING

PHASE DIAGRAM

FLASHING OPERATION SHALL BE ALL RED.

R61 (SPECIAL) 4

SCALE: 1" = 20'
20 10 0 20 80

Underground Service Alert
Call: TOLL FREE 1 - 800 227-2600
TWO WORKING DAYS BEFORE YOU DIG

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

REGISTERED PROFESSIONAL ENGINEER TECH C. LOH No. 50293 Exp. 6-30-01 CIVIL STATE OF CALIFORNIA

PREPARED UNDER THE DIRECTION OF:
REGISTERED CIVIL ENGINEER NO: 50293
EXPIRATION DATE: 6-30-01 DATE: 1/4/01

CANTY ENGINEERING GROUP, INC.
CIVIL ENGINEERING – PLANNING – SURVEYING
2020 IOWA AVENUE, SUITE 102, P.O. BOX 52050, RIVERSIDE, CA 92517
TEL (909) 683 – 5234 FAX (909) 683 – 5301
CITY OF RIVERSIDE BUSINESS TAX ACCOUNT NO: 69372 EXP DATE: 4/7/01

SCALE: 1" = 20'
DATE: JULY, 2000.

BENCH MARK: CIT. OF RIVERSIDE BENCH MARK: E8-A2 N.L. NAIL AND TAG IN TOP OF 35" X 50" X 20" GRANITE BOULDER, 100' W'LY OF TRAUTWEIN ROAD AND 500 FEET N'LY OF JESSE LANE. FB 735\74 ELEV: 1588.453

MARK	REVISIONS	APPR	DATE

DESIGNED BY K.T.O. DRAWN BY K.T.O. CHECKED BY T.L.

CITY OF RIVERSIDE, CALIFORNIA
DEPARTMENT OF PUBLIC WORKS

APPROVED BY:	BY:	DATE
PRINCIPAL ENGR		1/9/01
PARK DEPARTMENT	—	—
TRAFFIC DIVISION		1/4/01
P.W. ENGINEER, MGR.		1/10/01
STREET SERVICES		1/5/01

APPROVED BY: R. McBrath
DIRECTOR OF PUBLIC WORKS
DATE 1-10-01

SIGNAL MODIFICATION PLAN
MISSION GROVE PKWY SOUTH
TRAUTWEIN ROAD

FOR: SHEFFIELD HOMES

PROJECT NO. X-336B
SHEET 1 OF 1
FILE NO.: 1022-002

CONDUCTOR SCHEDULE

AWG	CONDUCTOR RUN	1	1A	2	3	4	5	6	7	8	9	10
#14	ø1 (FUTURE)			3	3	3	3					
	ø2			3	3	3	6	3	3	3	3	
	ø3 (FUTURE)						6	3				
	ø4	3	(3)	3	3	3	3					
	ø"A" OVERLAP	2		2	2	2	2					
	ø5						3	3	3	3	3	
	ø6					3	6	3	3			
	ø7	3	(3)	3	3	3	6	3	3	3	3	(3)
	ø8 (FUTURE)						3	3	3	3	3	(3)
	ø2P (FUTURE)			(2)	(2)	(2)	(4)	(2)	(2)	(2)	(2)	
	ø4P	2	(2)	2	2	2	4					
	ø6P					2	4	2	2			
	ø8P						2	2	2	2	2	(2)
	ø2PPB (FUTURE)		(1)	(1)	(1)	(1)	(2)	(1)	(1)	(1)	(1)	(1)
	ø4PPB			1	1	2	2					
	ø6PPB						2	1				
	ø8PPB						2	2	2	1	1	
	PPB COMMON		(1)	1	1	1	2	1	1	1	1	(1)
	SPARES	3	(3)	3	3	3	6	3	3	3	3	(3)
	TOTAL	13	(13)	24	24	30	68	32	28	22	22	(13)
#12	I.S.N.S.	2	(2)	2	2	2		2	2	2	2	
#10	SIGNAL COMMON	1	(1)	1	1	1	2	1	1	1	1	(1)
# 8	LUMINAIRE	2	(2)	2	2	2		2	2	2	2	
# 6	SERVICE						2					
DLC	ø1 (FUTURE)						2	2	2	2		
	ø2			2	3	3	3					
	ø3 (FUTURE)						(2)	(2)	(2)	(2)	(2)	(2)
	ø4						2					
	ø5				2	2	2					
	ø6						3	3	3	1		
	ø7						3					
	ø8 (FUTURE)						(2)	(2)	(2)	(2)	(2)	(2)
	TOTAL DLC			2	5	5	19	9	9	7	4	4
	INTERCONNECT				1	1	2	1	1	1		
	CONDUIT SIZE	2"	(2")	2"	3"	3"	2-3½"	3½"	3½"	3½"	2½"	(2")

(X) INSTALL FOR FUTURE USE.
(Y) FUTURE

DETECTOR SCHEDULE

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

(X) FUTURE
■ CALL-HOLD (EXTENSION)
● FOR SAMPLING
DETECTOR SHALL BE RACK-MOUNTED 2-CHANNEL (ALSO SEE SPECIAL PROVISIONS)

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

POLE SCHEDULE

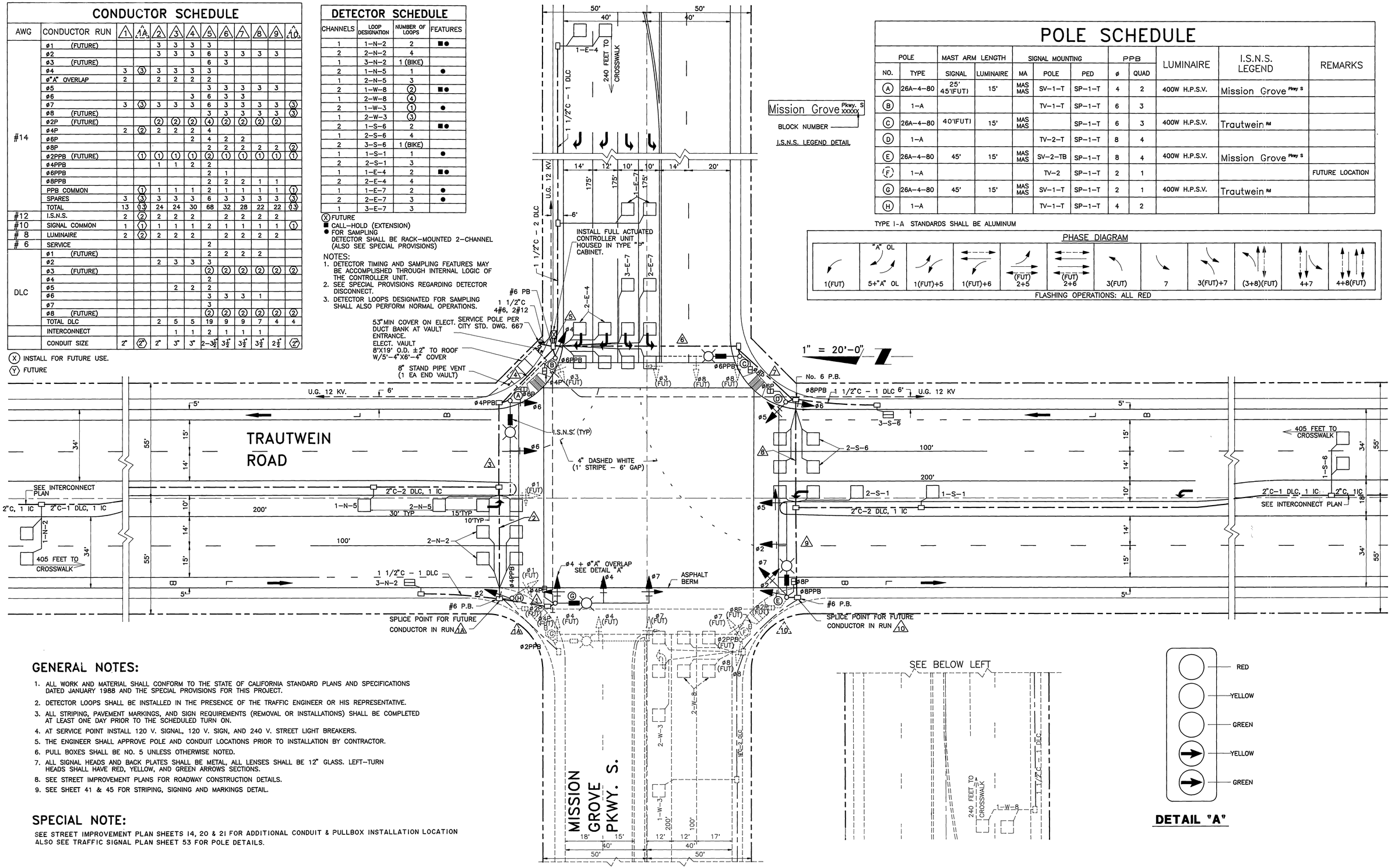
POLE NO.	POLE TYPE	MAST ARM LENGTH SIGNAL	MAST ARM LENGTH LUMINAIRE	SIGNAL MOUNTING MA	SIGNAL MOUNTING POLE	SIGNAL MOUNTING PED	PPB ø	PPB QUAD	LUMINAIRE	I.S.N.S. LEGEND	REMARKS
(A)	26A-4-80	25' 45'(FUT)	15'	MAS MAS	SV-1-T	SP-1-T	4	2	400W H.P.S.V.	Mission Grove Pkwy S	
(B)	1-A				TV-1-T	SP-1-T	6	3			
(C)	26A-4-80	40'(FUT)	15'	MAS MAS		SP-1-T	6	3	400W H.P.S.V.	Trautwein Rd	
(D)	1-A				TV-2-T	SP-1-T	8	4			
(E)	26A-4-80	45'	15'	MAS MAS	SV-2-TB	SP-1-T	8	4	400W H.P.S.V.	Mission Grove Pkwy S	
(F)	1-A				TV-2	SP-1-T	2	1			FUTURE LOCATION
(G)	26A-4-80	45'	15'	MAS MAS	SV-1-T	SP-1-T	2	1	400W H.P.S.V.	Trautwein Rd	
(H)	1-A				TV-1-T	SP-1-T	4	2			

TYPE I-A STANDARDS SHALL BE ALUMINUM

Mission Grove Pkwy. S XXXXX
BLOCK NUMBER
I.S.N.S. LEGEND DETAIL

PHASE DIAGRAM

FLASHING OPERATIONS: ALL RED



GENERAL NOTES:

1. ALL WORK AND MATERIAL SHALL CONFORM TO THE STATE OF CALIFORNIA STANDARD PLANS AND SPECIFICATIONS DATED JANUARY 1988 AND THE SPECIAL PROVISIONS FOR THIS PROJECT.
2. DETECTOR LOOPS SHALL BE INSTALLED IN THE PRESENCE OF THE TRAFFIC ENGINEER OR HIS REPRESENTATIVE.
3. ALL STRIPING, PAVEMENT MARKINGS, AND SIGN REQUIREMENTS (REMOVAL OR INSTALLATIONS) SHALL BE COMPLETED AT LEAST ONE DAY PRIOR TO THE SCHEDULED TURN ON.
4. AT SERVICE POINT INSTALL 120 V. SIGNAL, 120 V. SIGN, AND 240 V. STREET LIGHT BREAKERS.
5. THE ENGINEER SHALL APPROVE POLE AND CONDUIT LOCATIONS PRIOR TO INSTALLATION BY CONTRACTOR.
6. PULL BOXES SHALL BE NO. 5 UNLESS OTHERWISE NOTED.
7. ALL SIGNAL HEADS AND BACK PLATES SHALL BE METAL, ALL LENSES SHALL BE 12" GLASS. LEFT-TURN HEADS SHALL HAVE RED, YELLOW, AND GREEN ARROWS SECTIONS.
8. SEE STREET IMPROVEMENT PLANS FOR ROADWAY CONSTRUCTION DETAILS.
9. SEE SHEET 41 & 45 FOR STRIPING, SIGNING AND MARKINGS DETAIL.

SPECIAL NOTE:

SEE STREET IMPROVEMENT PLAN SHEETS 14, 20 & 21 FOR ADDITIONAL CONDUIT & PULLBOX INSTALLATION LOCATION
ALSO SEE TRAFFIC SIGNAL PLAN SHEET 53 FOR POLE DETAILS.

DETAIL "A"

Underground Service Alert
Call: TOLL FREE
1-800 422-4133
TWO WORKING DAYS BEFORE YOU DIG

PRIVATE ENGINEERING NOTE

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REGISTERED PROFESSIONAL ENGINEER JIMMY W. SIMS No. 35458 Exp. 9/30/91 CIVIL STATE OF CALIFORNIA

PREPARED UNDER THE DIRECTION OF:
JIMMY W. SIMS R.C.E. No. 35458
EXPIRATION DATE: 9/30/91 DATE: 11/19/89
APPROVED BY.

SCALE: 1" = 20'-0"
DATE: 4-19-88

J.F. Davidson Associates, Inc.
ENGINEERING PLANNING SURVEYING ARCHITECTURE LANDSCAPE ARCHITECTURE
3880 Lemon Street, Suite 300, P.O. Box 493, Riverside, CA 92502, (714) 686-0844, FAX 714-686-5954
11200 S. Mt Vernon Ave., Suite "D", Colton, CA 92324, (714) 825-1082
73-080 El Paseo, Suite 106, Palm Desert, CA 92260, (619) 346-5691, FAX 619-340-0529

BENCH MARK

MARK	REVISIONS	APPR	DATE

DESIGNED BY B.D DRAWN BY K.T.O. CHECKED BY R.C.H.

CITY OF RIVERSIDE, CALIFORNIA
DEPARTMENT OF PUBLIC WORKS

APPROVED BY	BY	DATE
PRINCIPAL ENGINEER		11/15/89
PARK DEPARTMENT		11/14/89
TRAFFIC DIVISION		12/6/89
CHIEF P.W. ENGR.		
PUBLIC UTILITIES		12/6/89

APPROVED BY Barry Beck
DIRECTOR OF PUBLIC WORKS
DATE 12/15/89

CFG 86-1 IMPROVEMENT AREA No. 1
SIGNAL PLANS
TRAUTWEIN ROAD
AT
MISSION GROVE PKWY SO.

HORIZ. SCALE: 1" = 20' VERT. SCALE: 1"

PROJECT NO. R-3056 (X-336)
SHEET 51 OF 88
FILE NO.: 8710164

WWR 12/14/89 RJR 12/12/89

INDEXED 7-24-90 HI