

CONDUCTOR SCHEDULE												
AWG	CONDUCTOR	CONDUIT RUN										
		1	2	3	4	5	6	7	8	9	10	11
#14	Ø1	3	3	3	3	3	3	3	3	3	3	3
	Ø2											
	Ø3											
	Ø4											
	Ø5											
	Ø6											
	Ø7											
	Ø8											
	Ø1											
	Ø3											
	Ø5											
	Ø2PED											
	Ø4PED											
	Ø6PED											
	Ø8PED											
	Ø2PPB											
	Ø4PPB											
	Ø6PPB											
	Ø6 BIKE PB											
	Ø8PPB											
	PPB COMMON											
	SPARE											
	TOTAL #14	13	24	24	32	37	37	45	77	34	26	13
#12	I.S.N.S.	2	2	2	2	2	2	2	2	2	2	2
#10	SIGNAL COMMON	1	1	1	1	1	1	1	1	1	1	1
#8	LUMINAIRE	2	2	2	2	2	2	2	2	2	2	2
#6	SERVICE											
DLC	Ø1											
	Ø2											
	Ø2 BIKE											
	Ø3											
	Ø4											
	Ø5											
	Ø6											
	Ø7											
	Ø8											
	TOTAL DLC	5	8	8	12	15	15	32	17	13	9	3
	INTERCONNECT CABLE (I.C.)	1	1	1	1	1	1	1	3	2	1	1
	CONDUIT SIZE	2"	3"	3"	3"	3 1/2"	2-3"	2-3"	3-3 1/2"	2-3"	3"	2"
	ALL NEW CONDUCTORS AND CONDUITS											

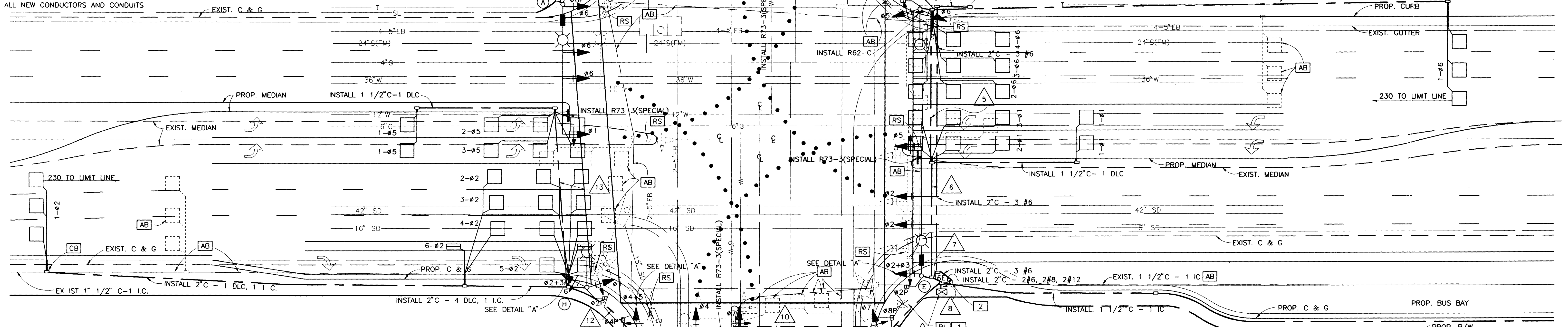
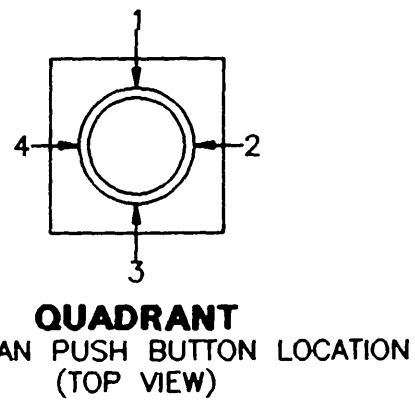
CONSTRUCTION NOTES:

1. RELOCATE EXISTING TYPE 90 CONTROLLER AND INSTALL NEW TYPE "P" CABINET. REMOVE AND SALVAGE EXIST. TYPE "R-1" CABINET. ADD DETECTOR UNITS, LOAD SWITCHES AND ADDITIONAL CABINET EQUIPMENT NEEDED FOR FULL 8 PHASE OPERATION. (SEE SPECIAL PROVISIONS)

2. INSTALL 120V. SIGN, 120V. SIGNAL, 240V. LUMINAIRE TYPE 1-A SERVICES PER CITY STD. DWG# 667

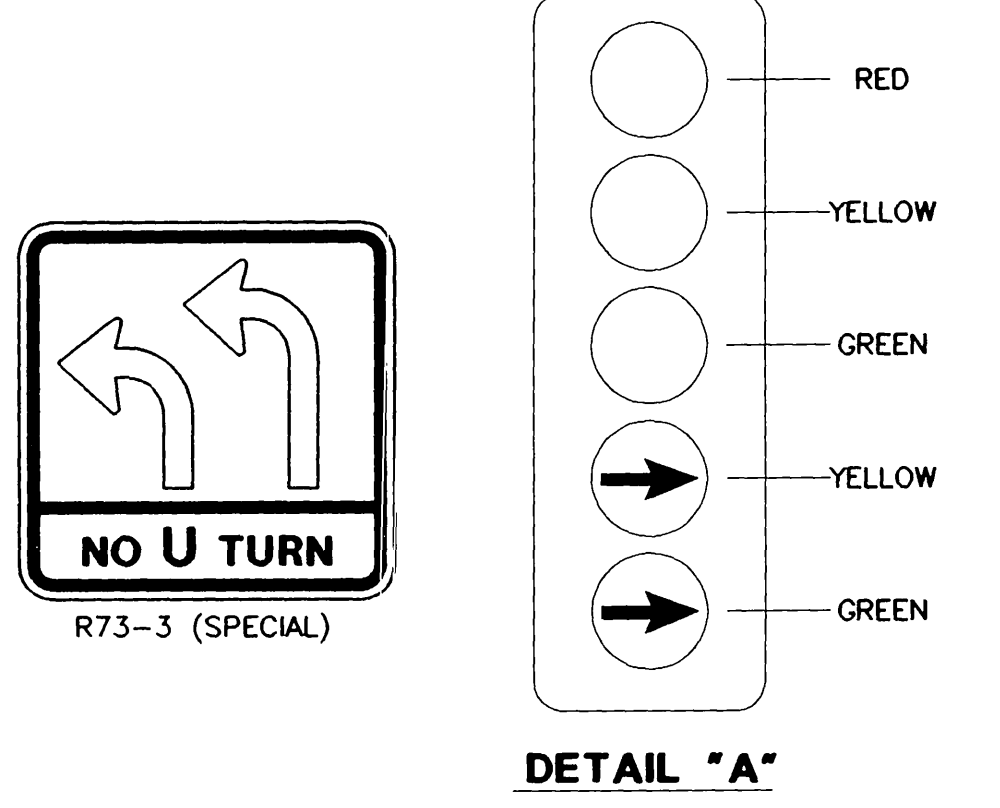
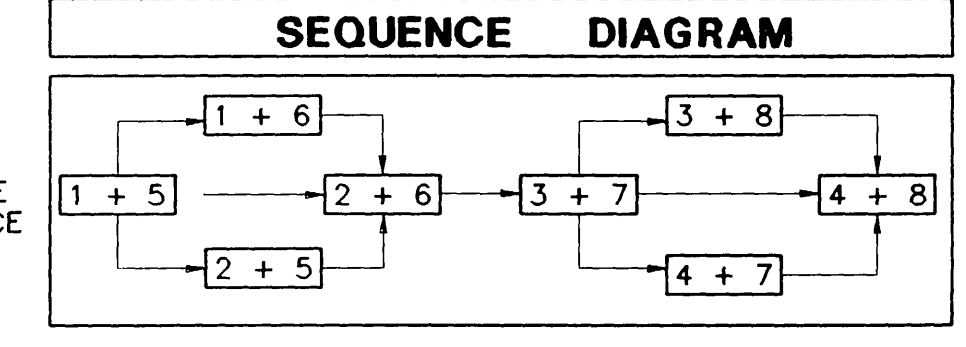
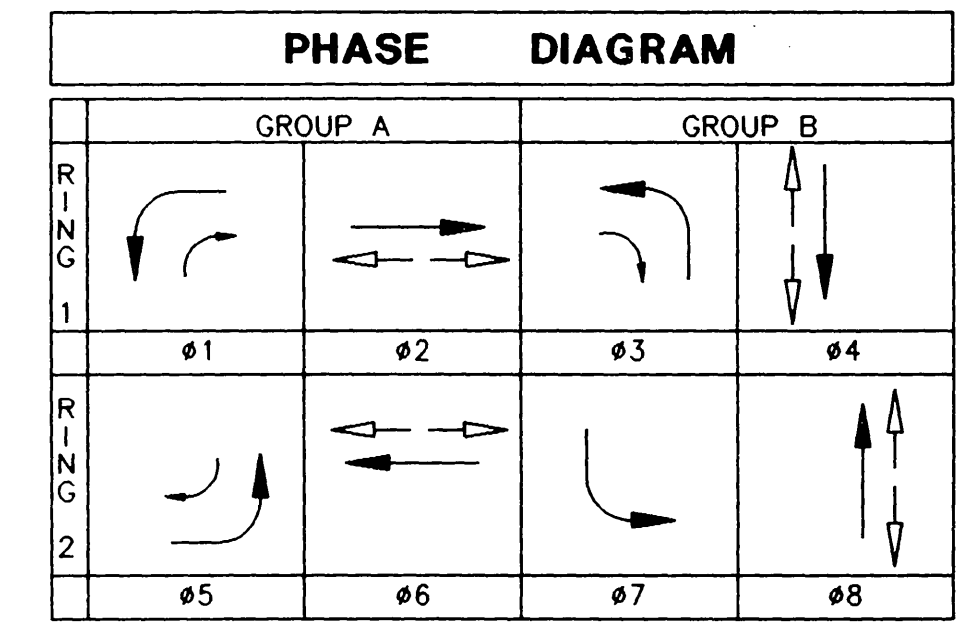
POLE SCHEDULE												
NO.	TYPE	HEIGHT	MAST ARM LENGTH		SIGNAL MOUNTING			PPB		H.P.S. LUMINAIRE	I.S.N.S. LEGEND	REMARKS
			SIGNAL	LUMINAIRE	MA	POLE	PED	Ø	QUAD			
(A)	29A-5-80	35'	55'	15'	3-MAS	SV-1-T	SP-1-T	Ø4	2	400 W.	Tyler ST 3800	
(B)	TYPE 30	35'		15'		SV-2-TB	SP-1-T	Ø6	3	400 W.		
(C)	29A-5-80	35'	55'	15'	3-MAS	SV-1-T	SP-1-T	Ø6	3	400 W.	Magnolia AVE 10200	
(D)	TYPE 30	35'		15'		SV-2-TB	SP-1-T	Ø8	4	400 W.		Ø6 BIKE PB
(E)	29A-5-80	35'	55'	15'	3-MAS	SV-1-T	SP-1-T	Ø8	4	400 W.	Tyler ST 3700	
(F)	TYPE 30	35'		15'		SV-2-TB	SP-1-T	Ø2	1	400 W.		
(G)	26A-4-80	35'	45'	15'	2-MAS	SV-1-T	SP-1-T	Ø2	1	400 W.	Magnolia AVE 10300	
(H)	TYPE 30	35'		15'		SV-2-TB	SP-1-T	Ø4	2	400 W.		

EXACT POLE LOCATION TO BE DETERMINED IN THE FIELD BY THE ENGINEER. INSTALL ALL NEW POLES & EQUIPMENT, REMOVE AND SALVAGE ALL EXISTING POLES AND EQUIPMENT TYPE 1-A SHALL BE SPUN ALUMINUM



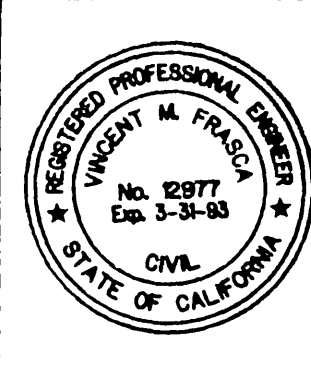
GENERAL NOTES: (APPLY TO ALL SIGNAL PLANS)

- TRAFFIC SIGNAL WORK SHALL BE PERFORMED IN ACCORDANCE TO THE MOST CURRENT PROVISIONS OF SECTION 86 OF THE STANDARD SPECIFICATIONS, THE STANDARD PLANS, BOTH PUBLISHED BY THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION (CALTRANS), THE CONSTRUCTION PLAN(S) AND AS DIRECTED BY THE TRAFFIC ENGINEER.
- ALL EQUIPMENT AND LOOP LOCATIONS SHALL BE APPROVED BY THE TRAFFIC ENGINEER OR HIS REPRESENTATIVE PRIOR TO INSTALLATION BY CONTRACTOR.
- 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 FACILITIES DAMAGED BY HIS OPERATIONS.
- ALL LOOPS SHALL BE 6'x6' UNLESS OTHERWISE NOTED.
- 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 HAVE BEEN NOTIFIED AT (714)351-6096 AND THE NECESSARY TIMING ADJUSTMENTS MADE TO MAINTAIN SIGNAL OPERATION.
- ALL SIGNAL PLATES AND BACK PLATES SHALL BE METAL. ALL LENSES SHALL BE GLASS. LEFT-TURN HEADS SHALL HAVE RED, YELLOW, AND GREEN ARROWS. ALL VEHICLE INDICATIONS SHALL BE 12". PEDESTRIAN INDICATIONS SHALL BE INTERNATIONAL SYMBOL TYPE "C".
- ALL SALVAGED MATERIALS SHALL BE DELIVERED TO CITY YARD.



Underground Service Alert
Call: TOLL FREE
1 - 800
422 - 4133
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.



PREPARED UNDER THE DIRECTION OF
James B. Dobbins
REGISTERED CIVIL ENGINEER, No. 12977
EXPIRATION DATE: 3/31/93 DATE:
RECOMMENDED BY:
James B. Dobbins DATE: 12-19-90

J.F. Davidson Associates, Inc.
ENGINEERING PLANNING SURVEYING
ARCHITECTURE LANDSCAPE ARCHITECTURE
MUNICIPAL ENGINEERING DIVISION
3426 TENTH STREET
RIVERSIDE, CA 92502
(714) 683-0209 FAX (714) 686-5807
SCALE: 1"=20'-0" BENCH MARK:
DATE: DECEMBER, 90

DESIGNED BY: K.T.O. DRAWN BY: KTO/ROW CHECKED BY: [Signature]
TRAFFIC DIVISION
CHIEF P.W. ENGINEER [Signature]
PUBLIC UTILITIES

CITY OF RIVERSIDE, CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
APPROVED BY: [Signature] BY: DATE: 12/20/90
INSPECTION: [Signature]
DATE: 12/20/90

TYLER MALL EXPANSION
C.F.D. # 90-2 IMPROVEMENTS
TRAFFIC SIGNAL MODIFICATION PLAN
TYLER STREET
AND
MAGNOLIA AVENUE
HORIZ. SCALE: 1" VERT. SCALE: 1"

PROJECT NO. X-316
SHEET 1 OF 1
FILE NO: 8911175

CONDUCTOR SCHEDULE

CONTROL FUNCTION	CONDUCTORS	CONDUIT RUN															
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
VEHICLE HEADS																	
PHASE A1	1/4" TW																
A2																	
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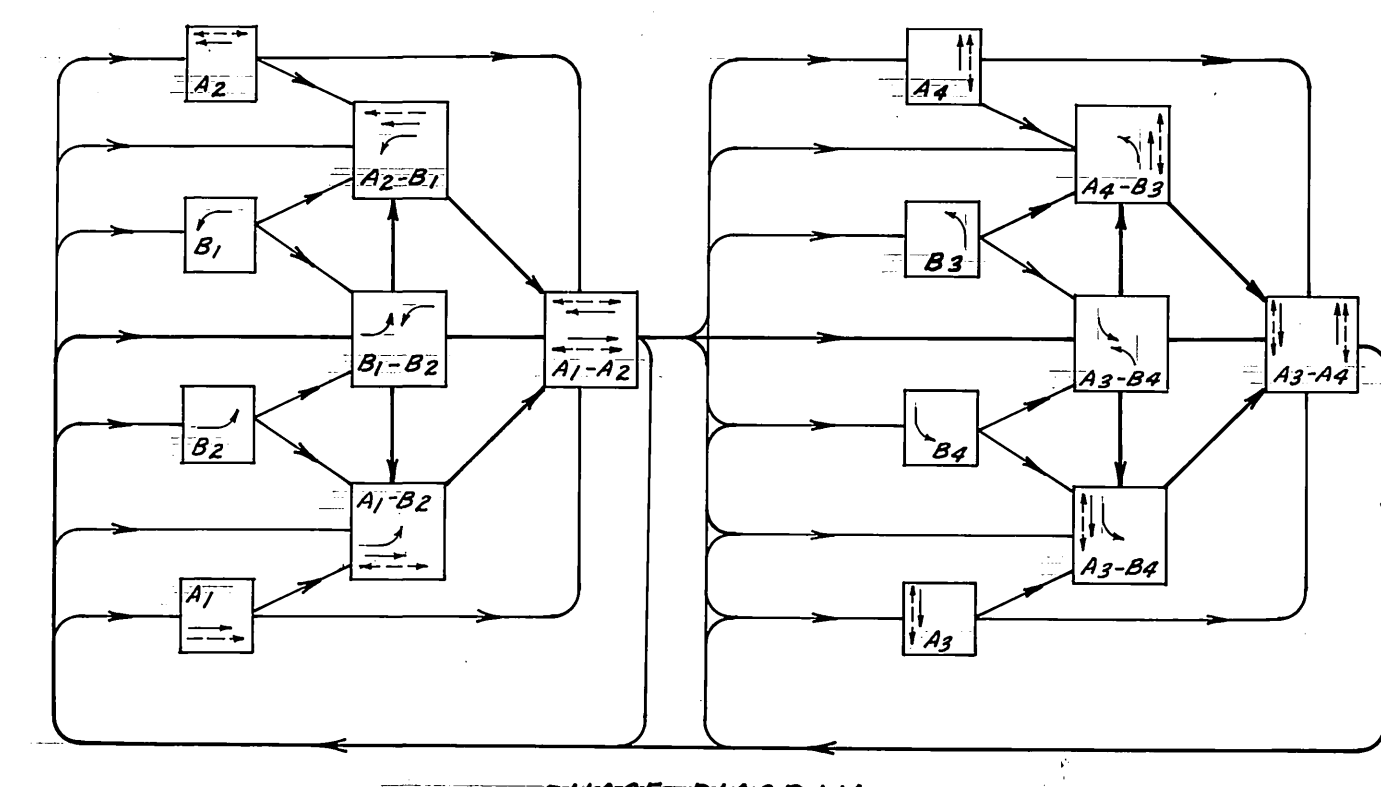
CONDUCTOR SCHEDULE

Control Function	Conductors		Conduit Run																			
	Size	Insulation	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Vehicle Heads	#14	T.W.																				
ΦA1								3	3													
ΦA2				3	3	3	3	3	3												3	
ΦA3										3		3										
ΦA4			3	3	3	3	3	3	3													
ΦB1				3	3	3	3	3	3					3	3	3						
ΦB2				3	3	3	3	3	3												3	
ΦB3			6	3	3	3	3	3	3													
ΦB4										3		3										
Pedestrian Heads																						
ΦA1W										2		2										
ΦA2W			4	2	2	2	2	2	2												2	2
ΦA3W										2		2	4	2	2							
ΦA4W					2	2	2	2	2													
Ped. Push Button																						
ΦA1W										3		3										
ΦA2W				3	3	3	3	3	3												1	1
ΦA3W				2	2	2	2	2	2													
ΦA4W					1	2	3	3	3													
Detector Cable	#12	U.S.E.O.R.W.F.																				
ΦA1 + ΦA2 Coil										2		2										
ΦA2 + ΦA3 Coil					2	2	2	2	2													
ΦA3 + ΦA4 Coil				2	2	2	2	2	2												2	2
ΦA1 + ΦA4 Coil										1		1										1
ΦB1						1	1	1	1													
ΦB2										1		1										
ΦB3										1		1										
ΦB4			1	1	1	1	1	1	1												1	1
Sample Det. #1										1		1										
Sample Det. #2				1	1	1	1	1	1												1	1
Spares	#14	T.W.	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
R.R. Pre-emption										2		2										
TRV Common	#12		1	1	1	1	1	1	1													
TRV Common	#10		1	1	1	1	1	1	1													
Luminaires	#8																					
Signal Service Interconnect	#14	P.E.			2	2	2	2	2													
Totals	#14	T.W.	18	25	28	29	36	52	3	19		17	11	10	12	9	20	1	1			
	#12	U.S.E.O.R.W.F.	1	4	6	7	7	7	13	6		4		1		3	3	1	1		1	
	#12	T.W.	1	1	1	1	1	1	1	1		1	1	1	1	1	1	1	1		1	
	#10		1	1	1	1	1	1	1	1		1	1	1	1	1	1	1	1		1	
	#8		2		2	2	2	2	2		4	2		2	2		2					
	#14	P.E.																			1	1
Conduit Size			2"	3"	3"	3"	3"	3"	3"	3"	3"	1 1/2"	2"	1 1/2"	2"	2"	2"	2 1/2"	1 1/2"	1 1/2"	2"	2"

Two of the #8 conductors are not a part of intersectional lighting.

EQUIPMENT SCHEDULE

Location	Standard	Vehicle Equipment			Ped. Equipment			Luminaire	Remarks
		Heads	Mtg's	Back Plate	Heads	Mtg's	RRB's		
A	Type I	1W3C(12")	A-4	1	2	1W2C	W-0	1	
B	Type III	1W3C	B-1	1	1	1W2C	W-0	1	1000W
C	Type I	1W3C*	A-6					1	
D	Type I	1W3C(12")	A-1	1		1W2C	W-0	1	
E	Type III	1W3C(12")	B-1	1		1W2C	W-0	1	400W
F	PPB Post								
G	Type I	1W3C(12")	A-1	1		1W2C	W-0	1	
H	Type III	1W3C(12")	B-1	1		1W2C	W-0	1	1000W
I	PPB Post								
J	Type I	1W3C	A-1			1W2C	W-0	1	
K	Type III	1W3C(12")	B-1	1		1W2C	W-0	1	400W



PHASE DIAGRAM

Flashing Indications: Φ's A1, A2 - yellow; All other Φ's - Red

ΦA1, ΦA2, ΦA3 & ΦA4 - Type DP Module

ΦB1, ΦB2, ΦB3 & ΦB4 - Type S Module

CITY OF RIVERSIDE, CALIFORNIA PUBLIC WORKS DEPARTMENT				EQUIPMENT & CONDUCTOR SCHEDULE		ACCOUNT No.
APPROVED BY _____ BY _____ DATE _____				APPROVED BY _____		DRAWING NUMBER
DESIGNED BY _____ DRAWN BY <u>JMH</u> CHECKED BY _____				DIRECTOR OF PUBLIC WORKS		X-316
REVISIONS _____				DATE _____		SHEET <u>2</u> OF <u>2</u>
SCALE:				DATE:		