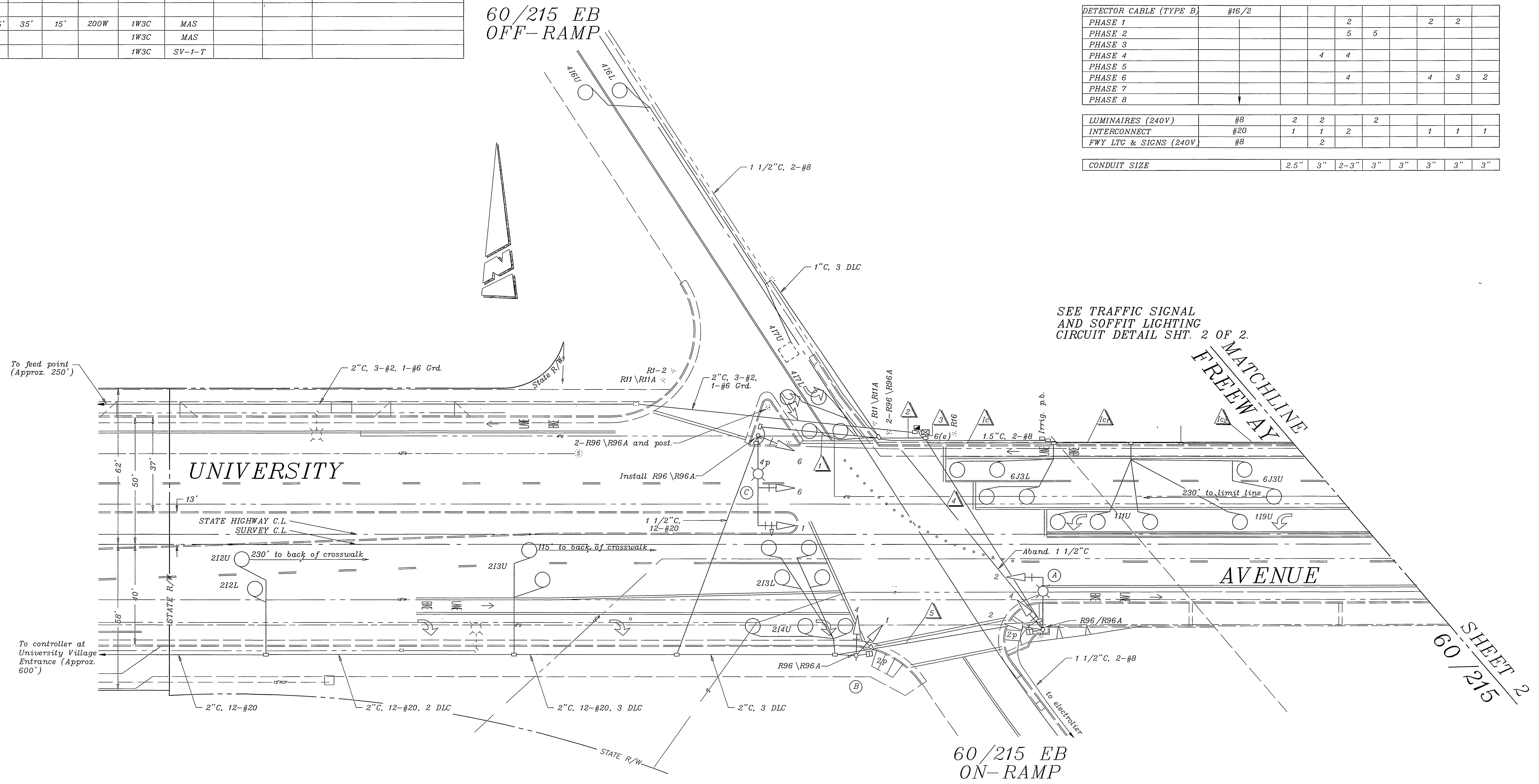


POLE SCHEDULE

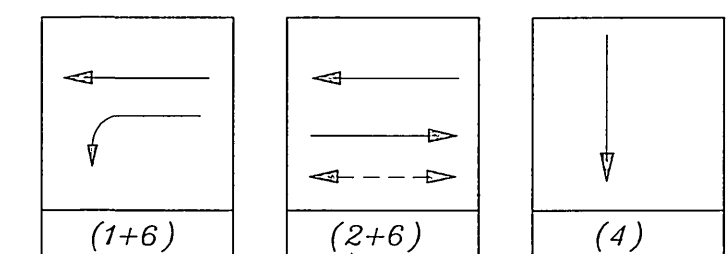
No.	TYPE	STANDARD		LUM. HPSV	SIGNAL HEAD	SIGNAL MOUNTING		PPB PHASE	REMARKS
		HGT.	SIG. M.A.			LUM. M.A.	VEHICLE		
(A)	17A	35'	20'	15'	200W	1W3C	MAS		
						1W3C	SV-1-T	SP-1-T	2
(B)	1A	10'				2W3C	TV-2-T	SP-1-T	2
(C)	24A	35'	35'	15'	200W	1W3C	MAS		
						1W3C	MAS		
						1W3C	SV-1-T		

CONDUCTOR TABLE

CONTROL FUNCTION	CONDUCTORS	CONDUCTOR RUNS								
		1	2	3	4	5	1c	1cr	1ca	
VEHICLE & PEDESTRIAN HEADS, PEDESTRIAN PUSH BUTTONS, SPARES & COMMONS	12 WIRE IMSA 5 WIRE IMSA 3 WIRE IMSA	1	1	3	2	1				
DETECTOR CABLE (TYPE B)	#16/2									
PHASE 1					2				2	2
PHASE 2					5	5				
PHASE 3										
PHASE 4				4	4					
PHASE 5										
PHASE 6					4				4	3
PHASE 7										2
PHASE 8										
LUMINAIRES (240V)	#8		2	2		2				
INTERCONNECT	#20		1	1	2				1	1
FWY LTC & SIGNS (240V)	#8		2							
CONDUIT SIZE		2.5"	3"	2-3"	3"	3"	3"	3"	3"	3"

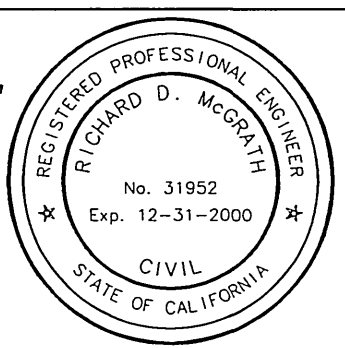


PHASE DIAGRAM



IMPORTANT NOTICE
 Section 4216.4217 of the Government Code requires a Dig Alert Identification Number to be stamped before a "Permit 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
 RICHARD D. McGRATH
 R.C.E. No. 31952 expires _____
 DATE _____



APPROVED BY	BY	DATE	APPROVED BY
PRINCIPAL ENGINEER			DIRECTOR OF PUBLIC WORKS
P.W. INSPECTION			
TRAFFIC DIVISION			
CHIEF P.W. ENGR.			
PUBLIC UTILITIES			

CITY OF RIVERSIDE, CALIFORNIA
 DEPARTMENT OF PUBLIC WORKS
 APPROVED BY: _____ BY: _____ DATE: _____
 As-built per St. Impr. R-3447 MAC 1/99
 REVISIONS: _____ APPR. DATE: _____
 DESIGNED BY: MAC DRAWN BY: MAC CHECKED BY: _____

REF: See Plan R-3447

TRAFFIC SIGNAL
 UNIVERSITY AVE.
 @
 60/215 FWY
 SCALE: 1" = 20'

ACCT. NO. X-291
 SHEET 1 OF 2
 FILE NAME: X291-1a.DWG

SHEET 2
 60/215

POLE SCHEDULE

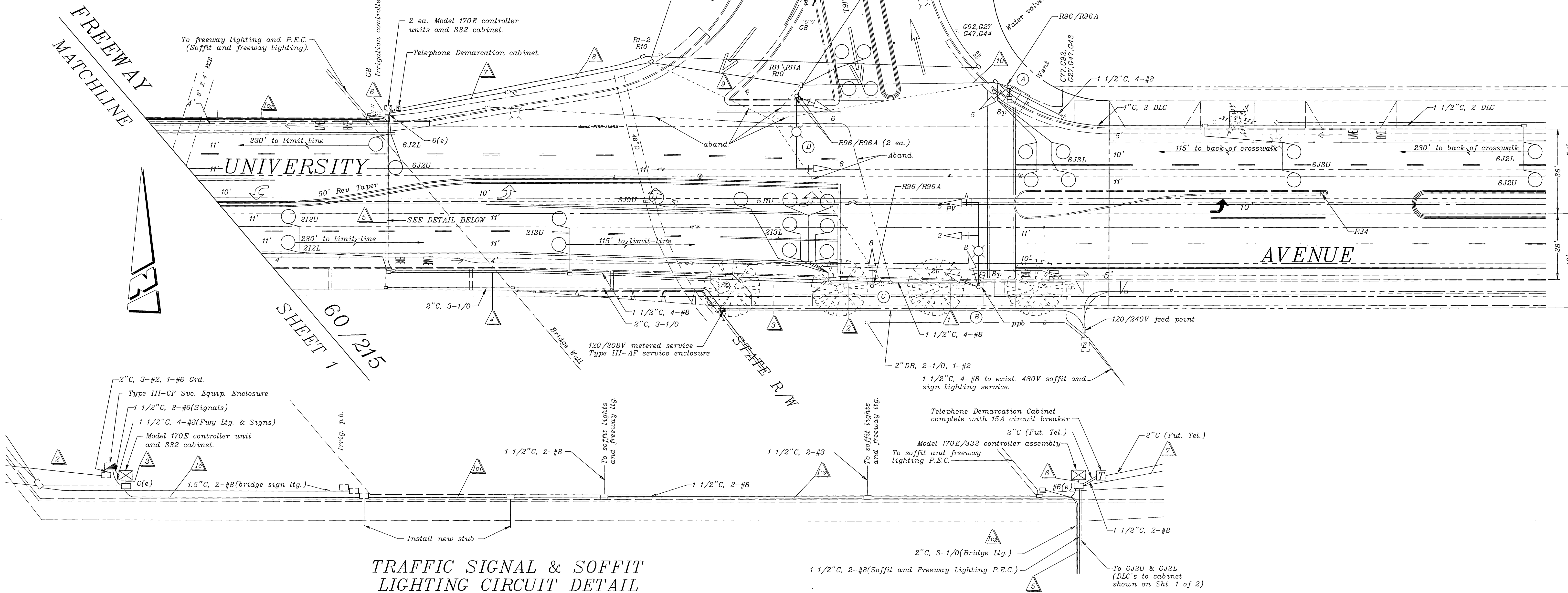
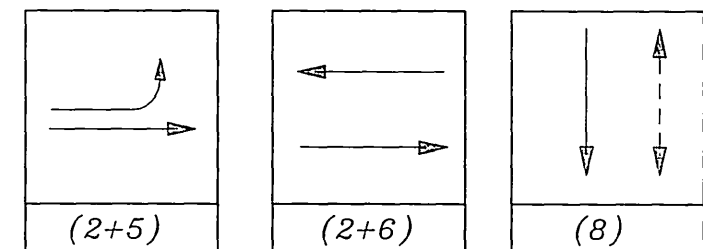
No.	STANDARD			LUM. HPSV	SIGNAL HEAD	SIGNAL MOUNTING		PPB PHASE	REMARKS
	TYPE	HGT.	SIG. M.A.			VEHICLE	PED.		
(A)	1-C	10'			1W3C	TV-1	SP-1-T	8	
(B)	24A	35'	35'	15'	200W	1W3C	MAS		
						1W3C	MAS		
						1W3C	SV-1-T	SP-1-T	8
(C)	1-C	10'			1W3C	TV-1-T			
(D)	19A-2-80	35'	30'	15'	200W	1W3C	MAS		
						1W3C	SV-1-T		

FWY 60/215
WB OFF-RAMP & ON-RAMP

CONDUCTOR TABLE

CONTROL FUNCTION	CONDUCTORS	CONDUCTOR RUNS									
		1	2	3	4	5	6	7	8	9	10
VEHICLE & PEDESTRIAN HEADS, PEDESTRIAN PUSH BUTTONS, SPARES & COMMONS	12 WIRE IMSA 5 WIRE IMSA 3 WIRE IMSA	1	1	1	1	1	2	1	1	1	1
DETECTOR CABLE (TYPE B)	#16/2										
PHASE 1											
PHASE 2					1	2	4	4			
PHASE 3											
PHASE 4											
PHASE 5					2	2	2	2			
PHASE 6								4	4	4	4
PHASE 7											
PHASE 8								4	4	4	1
TELE. SVC. (FUT.)	#8							2	2	2	
LUMINAIRES (240V)	#8	2	2	2	2	2		2	2	2	
INTERCONNECT	12 pair #20						1				
FREWAY SIGNS (240V)	#8										4
SIGNAL SERVICE	#6						3	3	3	3	
CONDUIT SIZE		1.5"	1.5"	3"	3"	3"	2-3"	3"	3"	3"	2"

PHASE DIAGRAM



See Plans R-3447 for street improvements.

IMPORTANT NOTICE
Section 4216/4217 of the Government Code requires a Dig Alert identification Number to be issued before a "Hole to Conquer" 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

RICHARD D. McGRATH
R.C.E. No. 31952 expires



DESIGNED BY	MAC	DRAWN BY	MAC	CHECKED BY	
APPROVED BY	BY	DATE	APPROVED BY	BY	DATE
As-built per St. Impr. R-3447	MAC	1/99			
REVISIONS	APPR.	DATE			
TRAFFIC DIVISION					
CHIEF P.W. ENGR					
PUBLIC UTILITIES					

CITY OF RIVERSIDE, CALIFORNIA
DEPARTMENT OF PUBLIC WORKS

APPROVED BY	BY	DATE	APPROVED BY	BY	DATE

TRAFFIC SIGNAL
UNIVERSITY AVE.
@
S.R.-60/I-215 FWY

SCALE: 1" = 20'

ACCT. NO.
0476-528160-440440-90192

X-291
SHEET 2 OF 2
FILE NAME: X291-2A.DWG

POLE

SCHEDULE

No.	TYPE	STANDARD		LUM. HPSV	SIGNAL HEAD	SIGNAL MOUNTING VEHICLE	PPB PHASE	REMARKS
		HCT.	SIG. M.A.					
(A)	17A(E)	35'	20'(E)	15'(E)	200W(E)	1W3C(E) 1W3C(E)	MAS(E) SV-1-T(E)	SP-1-T(N) 2(N)
(B)	1A(R)	10'				2W3C(E)	TV-2-T(E)	SP-1-T(N) 2(N)
(C)	24A(E)	35'	35'(E)	15'(E)	200W(E)	1W3C(E) 1W3C(E) 1W3C(E)	MAS(E) MAS(E) SV-1-T(E)	

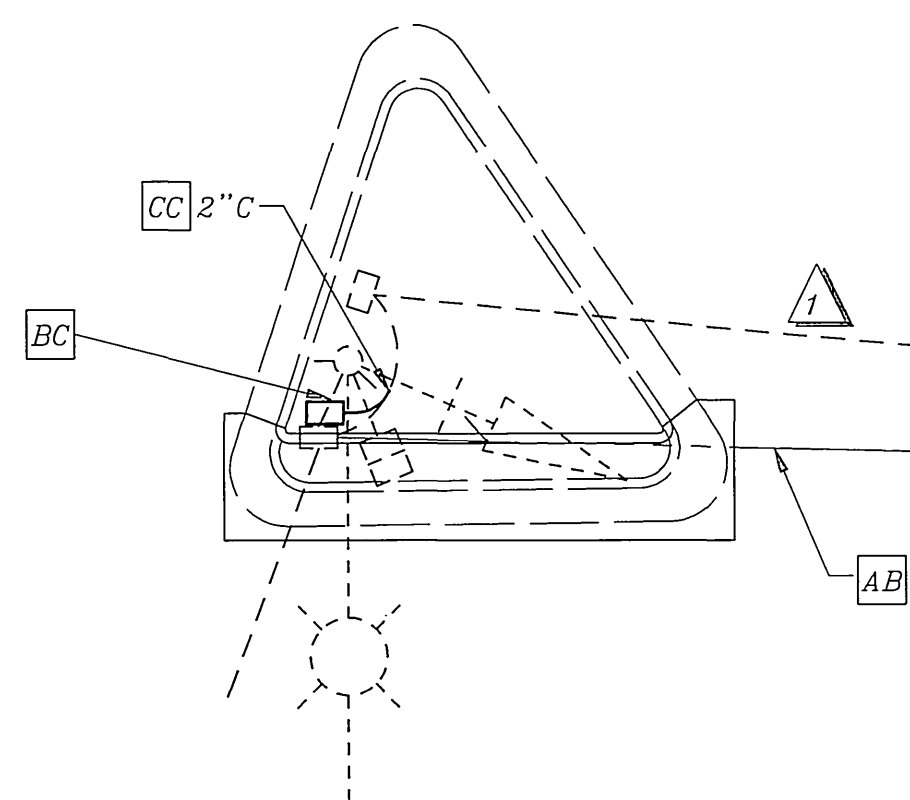
1. (N) = NEW, (E) = EXISTING, (R) = RELOCATE.

CONDUCTOR TABLE

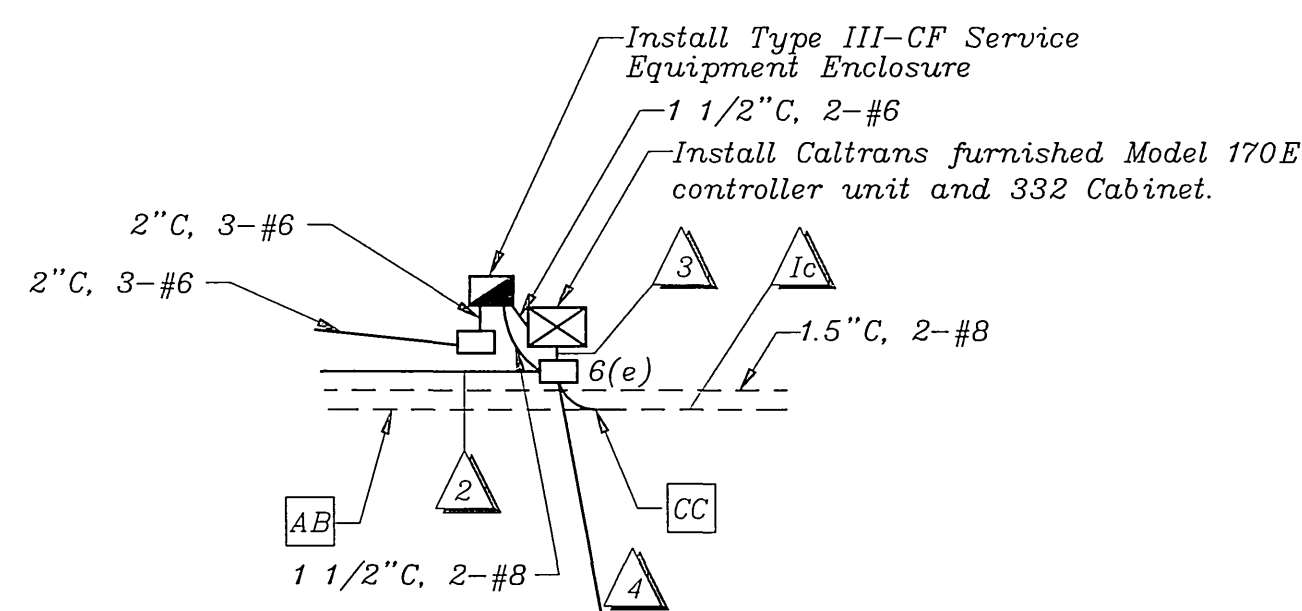
CONTROL FUNCTION	CONDUCTORS	CONDUCTOR RUNS								
		1	2	3	4	5	1c	1cr	1ca	
VEHICLE & PEDESTRIAN HEADS, PEDESTRIAN PUSH BUTTONS, SPARES & COMMONS	12 WIRE IMSA 5 WIRE IMSA 3 WIRE IMSA	1	1	3	2	1				
DETECTOR CABLE (TYPE B)	#16/2			2			2	2		
PHASE 1				5	5					
PHASE 2										
PHASE 3										
PHASE 4				4	4					
PHASE 5										
PHASE 6				4			4	3	2	
PHASE 7										
PHASE 8										
LUMINAIRES (240V)	#8				2					
INTERCONNECT	#20	1	1	2			1	1	1	
FWY LTC & SIGNS (240V)	#8		2							

CONDUIT SIZE	2.5"	3"	2-3"	3"	3"	3"	3"	3"
	(E)	(N)	(N)	(N)	(E)	(E)	(E)	(E)

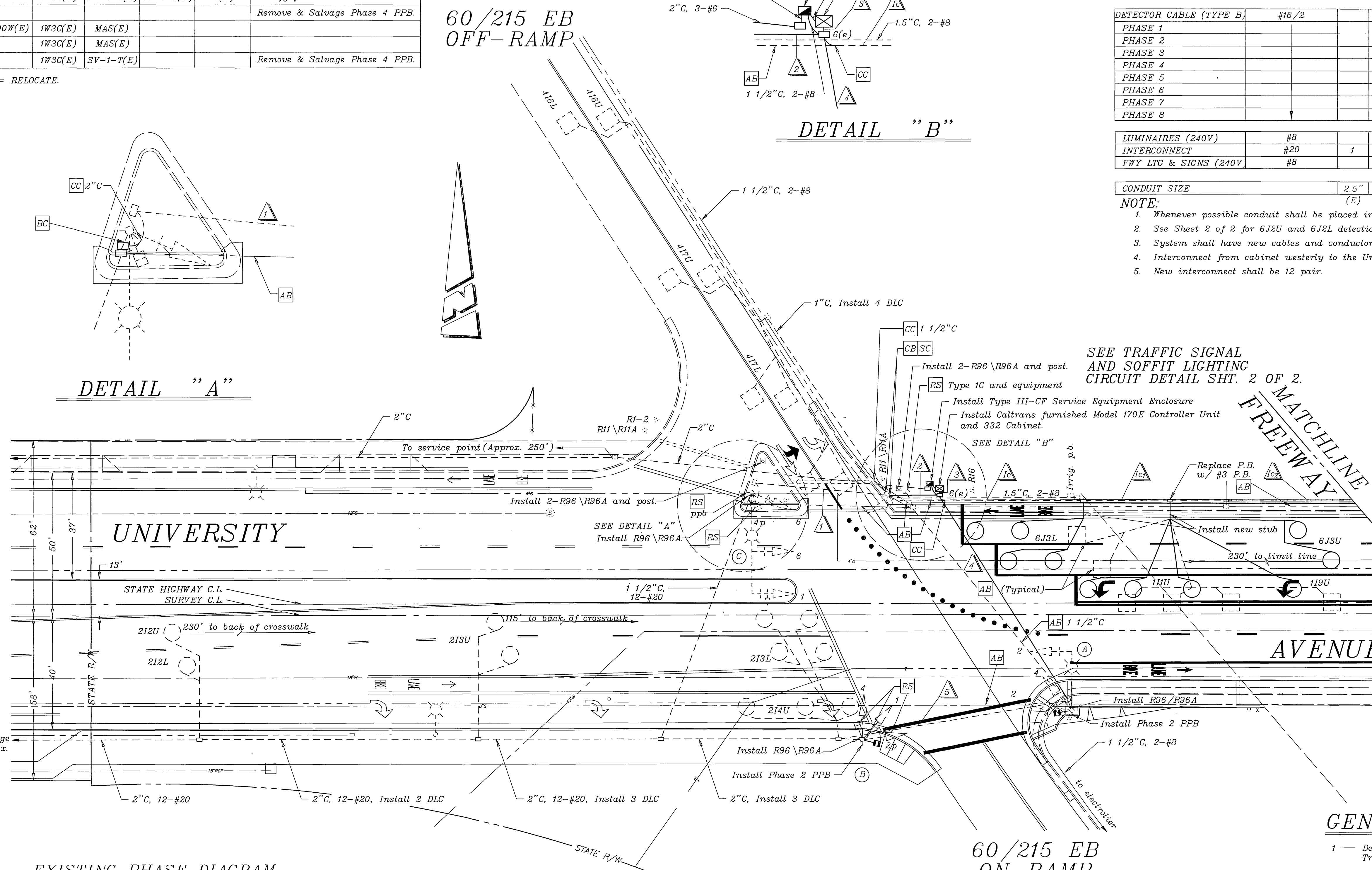
NOTE:
 1. Whenever possible conduit shall be placed in common trench; cover shall be a min. of 12".
 2. See Sheet 2 of 2 for 6J2U and 6J2L detection.
 3. System shall have new cables and conductors, except in existing street light conduits as indicated.
 4. Interconnect from cabinet westerly to the University Village Entrance exists.
 5. New interconnect shall be 12 pair.



DETAIL "A"



DETAIL "B"



PAVEMENT DELINEATION

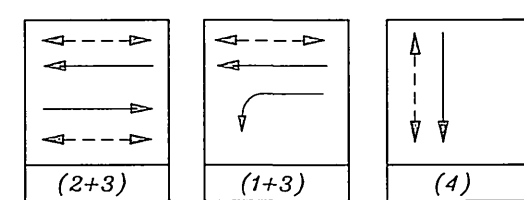
- Indicates striping and pavement markings to be installed.
- Indicates striping and pavement markings to remain.
- - - - Indicates striping and pavement markings to be removed.

SEE TRAFFIC SIGNAL AND SOFFIT LIGHTING CIRCUIT DETAIL SHT. 2 OF 2.

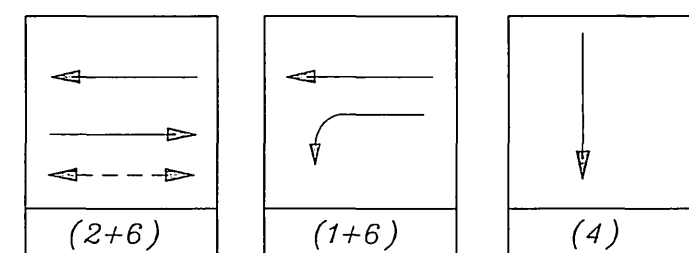
GENERAL NOTES

- 1 - Detector loops shall be installed in the presence of the Traffic Engineer or his representative.
- 2 - All signing, striping, and pavement markings shown hereon are for reference only. See Plan XL-374, 374A and 374B for pavement delineation and signs.
- 3 - Typical detector loop spacing: 10', 15', and 30'(if applicable).
- 4 - See Plans R-3447 for street improvements and bridge lighting.
- 5 - City of Riverside Public Utilities will install service cable to meter.

EXISTING PHASE DIAGRAM



PROPOSED PHASE DIAGRAM



IMPORTANT NOTICE
 Section 4216/4217 of the Government Code requires a Dig Alert Identification Number to be issued before a "Permit to Excavate" will be void. 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
 Richard D. McGrath
 RICHARD D. McGRATH
 R.C.E. No. 31952 expires 12-31-2000
 DATE 4-2-97



MARK	REVISIONS	APPR.	DATE

CITY OF RIVERSIDE, CALIFORNIA
 DEPARTMENT OF PUBLIC WORKS
 APPROVED BY: [Signature]
 BY DATE: 4/4/97
 TRAFFIC DIVISION
 CHIEF P.W. ENGR.
 PUBLIC UTILITIES

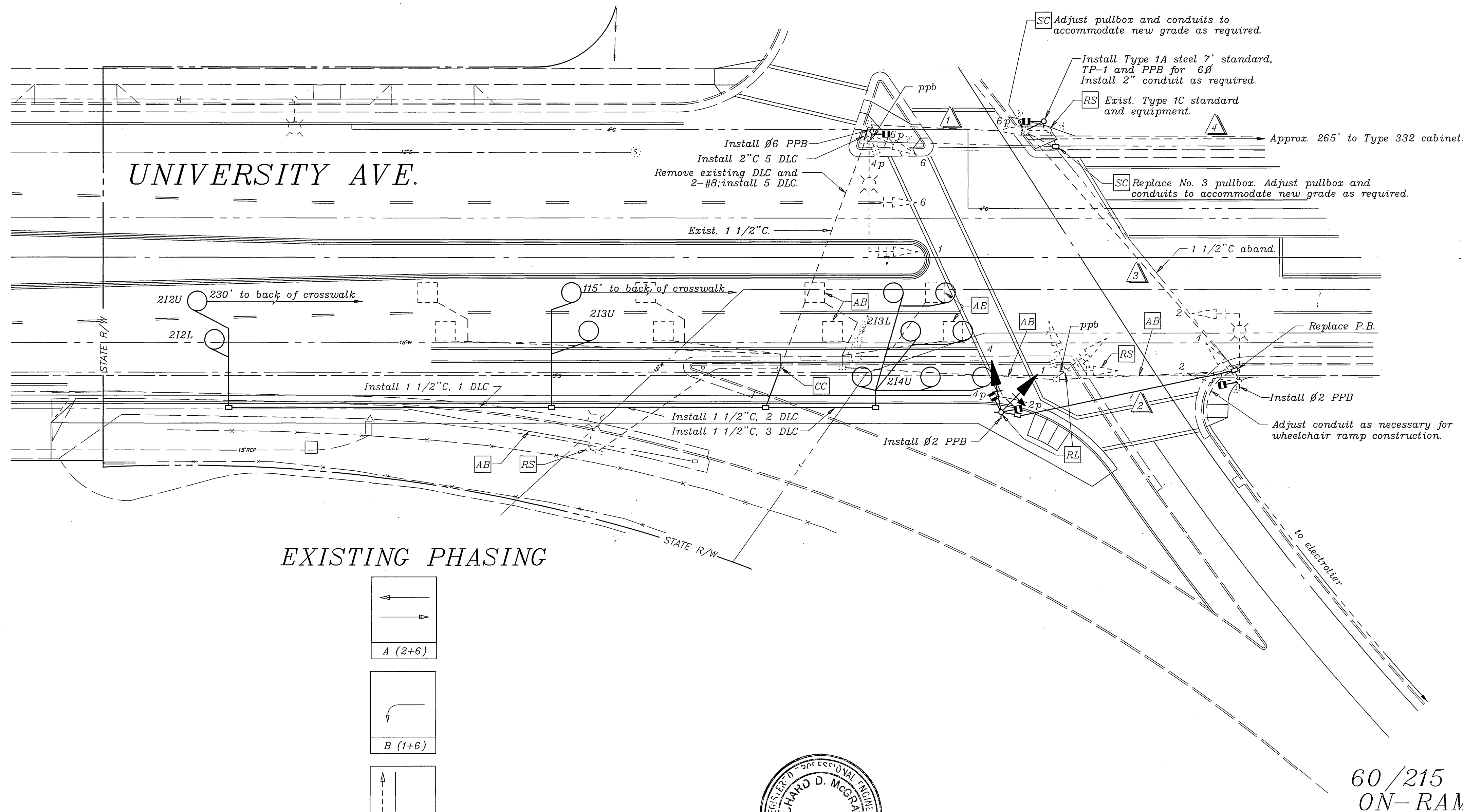
TRAFFIC SIGNAL MODIFICATION
 UNIVERSITY AVE.
 @
 60/215 FWY
 SCALE: 1" = 20'

ACCT. NO. 0432-541500-440302-30316
 X-291
 SHEET 1 OF 2
 FILE NAME: X291-1.DWG

ENCROACHMENT PERMIT NO. 08-97-N-MC-0184

SHEET 2
 60/215

60/215 EB
OFF-RAMP



GENERAL NOTES

- 1 - Detector loops shall be installed in the presence of the Traffic Engineer or his representative.
- 2 - All signing, striping, and pavement markings shown hereon are for reference only. See Plan XL-341 for pavement delineation and signs.
- 3 - Typical detector loop spacing: 10', 15', and 30' (where applicable).

CONSTRUCTION NOTES

- 1 - Existing conductors shall be reused unless otherwise indicated.
 - 2 - Pedestrian Push Buttons shall be installed on all poles, in the quadrant nearest the crosswalk serving the phase.
- SC Splice-point for exist. and new cable and conductors except additions. (See 4 below)
- 1 Install 3-#14 (6 PPB and Ped. Signal) and 5 DLC in existing 2 1/2" conduit.
- 2 Install 2" C with cables and conductors as follows:
- 3-#14 - Phase 1
 - 2-#14 - Phase 2p
 - 1-#14 - Phase 2 PPB
 - 3-#14 - Phase 4
 - 2-#14 - Phase 4p
 - 1-#14 - Phase 4 ppb
 - 3-#14 - Spares
 - 1-#14 - 12V common
 - 1-#10 - 120V common
- 3 Install new cables and conductors in existing conduit as follows:
- 3-#14 - Phase 1
 - 3-#14 - Phase 2
 - 2-#14 - Phase 2p
 - 1-#14 - Phase 2 PPB
 - 3-#14 - Phase 4
 - 2-#14 - Phase 4p
 - 1-#14 - Phase 4 ppb
 - 3-#14 - Spares
 - 1-#14 - 12V common
 - 1-#10 - 120V common
 - 2-#10 - Street Light
- 4 Install new cables, conductors and 5 DLC to Type 332 cabinet as follows; approximate distance 265'.
- 2-#14 - Phase 2p
 - 1-#14 - Phase 2 PPB
 - 2-#14 - Phase 6p
 - 1-#14 - Phase 6 ppb
 - 5 DLC (Phase 2 detection)

ENCROACHMENT PERMIT NO. 08-95-N-MC-0240

ENGINEER IN RESPONSIBLE CHARGE
Richard O. McBrath
RICHARD D. McGRATH
R.C.E. No. 31952 expires 12-31-96
DATE: 6-30-95

CITY OF RIVERSIDE, CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
APPROVED BY: [Signature]
DATE: 7/3/95
PRINCIPAL ENGINEER: [Signature]
P.W. INSPECTION: [Signature]
TRAFFIC DIVISION: [Signature]
CHIEF P.W. ENGR: [Signature]
PUBLIC UTILITIES: [Signature]

TRAFFIC SIGNAL MODIFICATION
UNIVERSITY AVE.
60/215 FWY

ACCT. NO. 0432-541500-440302-30316
X-291
SHEET 1 OF 1
FILE NAME: X291.DWG

SCALE: 1" = 20'

POLE

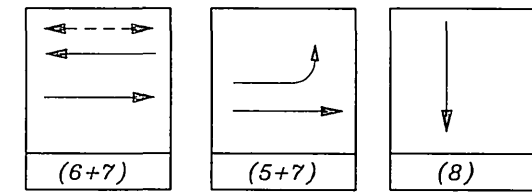
SCHEDULE

No.	STANDARD			LUM. HPSV	SIGNAL HEAD	SIGNAL MOUNTING		PPB PHASE	REMARKS
	TYPE	HGT.	SIG. M.A.			LUM. M.A.	VEHICLE		
(A)	1-C(E)	10'			1W3C(E)	TV-1(E)	SP-1-T(N)	8(N)	
(B)	24A(E)	35'	35'(E)	15'(E)	200W(E)	1W3C(E)	MAS(E)		
						1W3C(E)	MAS(E)		
						1W3C(E)	SV-1-T(E)	SP-1-T(N)	8(N)
(C)	1-C(E)	10'			1W3C(E)	TV-1-T(E)			
(D)	19A-2-80(N)	35'	25'(N)	15'(N)	200W(R)	1W3C(R)	MAS(R)		
						1W3C(R)	SV-1-T(R)		

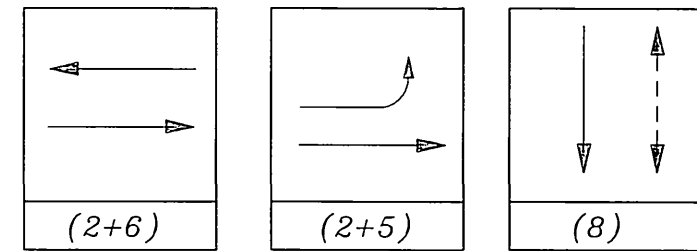
NOTE:

1. Pole and arms at Location D shall be City furnished. Contractor shall provide anchor bolts.

EXISTING PHASE DIAGRAM



PROPOSED PHASE DIAGRAM



SEE TRAFFIC SIGNAL AND SOFFIT LIGHTING CIRCUIT DETAIL THIS SHEET; ALSO SEE PLAN R-3447 SHT. 2 OF 2 FOR BRIDGE LIGHTING.

FWY 60/215
WB OFF-RAMP & ON-RAMP

CONDUCTOR TABLE

CONTROL FUNCTION	CONDUCTORS	CONDUCTOR RUNS									
		1	2	3	4	5	6	7	8	9	10
VEHICLE & PEDESTRIAN HEADS, PEDESTRIAN PUSH BUTTONS, SPARES & COMMONS	12 WIRE IMSA 5 WIRE IMSA 3 WIRE IMSA	1	1	1	1	1	2	1	1	1	1
DETECTOR CABLE (TYPE B)	#16/2										
PHASE 1											
PHASE 2				1	2	4	4				
PHASE 3											
PHASE 4											
PHASE 5				2	2	2	2				
PHASE 6								4	4	4	4
PHASE 7											
PHASE 8								4	4	4	1
TELEPHONE (FUT.)	5 pair #18										
LUMINAIRES (240V)	#8	2	2	2	2	2		2	2	2	
INTERCONNECT	12 pair #20							1			
FREWAY SIGNS (240V)	#8										4
SIGNAL SERVICE	#6							2	2	2	2
CONDUIT SIZE		1.5"	1.5"	3"	3"	3"	2-3"	3"	3"	3"	2"
		(E)	(E)	(N)	(N)	(N)	(N)	(E)	(E)	(N)	(N)

NOTE: 1. Whenever possible conduit shall be placed in common trench.
2. See Sheet 1 of 2 for 6J3U and 6J3L detection.
3. Interconnect cable shall be 12 pair #20 ga.
4. See Sheet 1 of 2 for 10z.

FREWAY MATCHLINE

UNIVERSITY AVENUE

AVENUE

SHEET 1
60/215

TRAFFIC SIGNAL & SOFFIT LIGHTING CIRCUIT DETAIL

GENERAL NOTES

- Detector loops shall be installed in the presence of the Traffic Engineer or his representative.
- All signing, striping, and pavement markings shown hereon are for reference only. See Plan XL-374A, 374B for final pavement delineation and other signs.
- Typical detector loop spacing: 10', 15', and 30' (if applicable).
- See Plans R-3447 for street improvements.
- At new controller cabinet installations, contractor shall remove ground cover and grade as required.

CONSTRUCTION NOTES

- System shall have new cables and conductors, except as noted.
- Pedestrian Push Buttons shall be installed on poles in the quadrant nearest the crosswalk serving the phase.
- Conduit shall be installed to service pole and 90 up pole to 6" above grade. City of Riverside Public Utilities will install conductors to enclosure.
- Install Caltrans Type III-AF Service Equipment Enclosure. See Special Provisions for additional specifications.
- Pullbox shall conform to City of Riverside Public Utilities Standard Drawing No. UCS-320 for ESB-6 Underground Structures. Cover shall be marked "City of Riverside Electric".

ENCROACHMENT PERMIT NO. 08-97-N-MC-0184

IMPORTANT NOTICE
Section 4210.212 of the Government Code requires a Dig Alert Identification Number to be placed before a "Permit 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
Richard D. McGrath
RICHARD D. McGRATH
R.C.E. No. 31952 expires 12-31-2000
DATE 4-2-97

REGISTERED PROFESSIONAL ENGINEER
RICHARD D. McGRATH
No. 31952
Exp. 12-31-2000
CIVIL
STATE OF CALIFORNIA

MARK	REVISIONS	APPR.	DATE

CITY OF RIVERSIDE, CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
APPROVED BY: [Signature]
PRINCIPAL ENGINEER
P.W. INSPECTION
TRAFFIC DIVISION
CHIEF P.W. ENGR.
PUBLIC UTILITIES

TRAFFIC SIGNAL MODIFICATION
UNIVERSITY AVE.
@
S.R.-60/I-215 FWY
SCALE: 1" = 20'

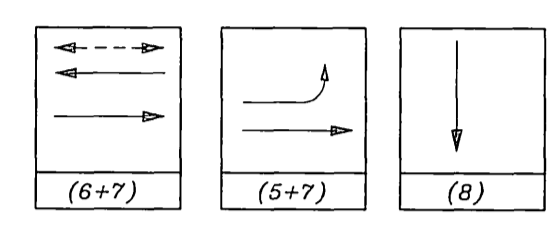
ACCT. NO. 0476-528160-440440-90192
X-291
SHEET 2 OF 2
FILE NAME: X291-2.DWG

POLE SCHEDULE

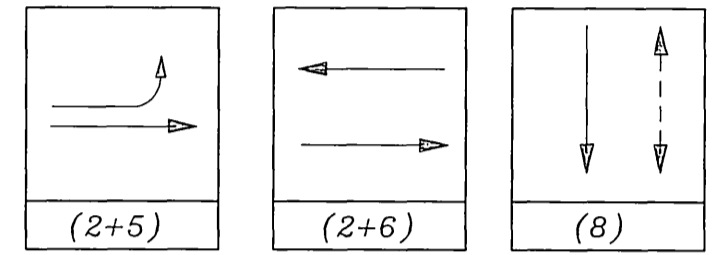
No.	STANDARD				LUM. HPSV	SIGNAL HEAD	SIGNAL MOUNTING VEHICLE	PPB PHASE	REMARKS
	TYPE	HGT.	SIG. M.A.	LUM. M.A.					
(A)	1-C(E)	10'				1W3C(E)	TV-1(E)	SP-1-T(N)	8(N)
(B)	24A(E)	35'	35'(E)	15'(E)	200W(E)	1W3C(E)	MAS(E)		
						1W3C(E)	MAS(E)		
(C)	1-C(E)	10'				1W3C(E)	TV-1-T(B)		
						1W3C(E)	SV-1-T(R)	SP-1-T(N)	8(N)
(D)	19A-2-80(N)	35'	30'(N)	15'(N)	200W(R)	1W3C(R)	MAS(R)		Provide wire, mount a Type III P.E.C. and test switch (Contractor) on pole.
						1W3C(R)	SV-1-T(R)		

NOTE:
1. Pole and arms at Location D shall be City furnished. Contractor shall provide anchor bolts.

EXISTING PHASE DIAGRAM



PROPOSED PHASE DIAGRAM



SEE TRAFFIC SIGNAL AND SOFFIT LIGHTING CIRCUIT DETAIL THIS SHEET; ALSO SEE PLAN R-3447 SHT. 2 OF 2 FOR BRIDGE LIGHTING.

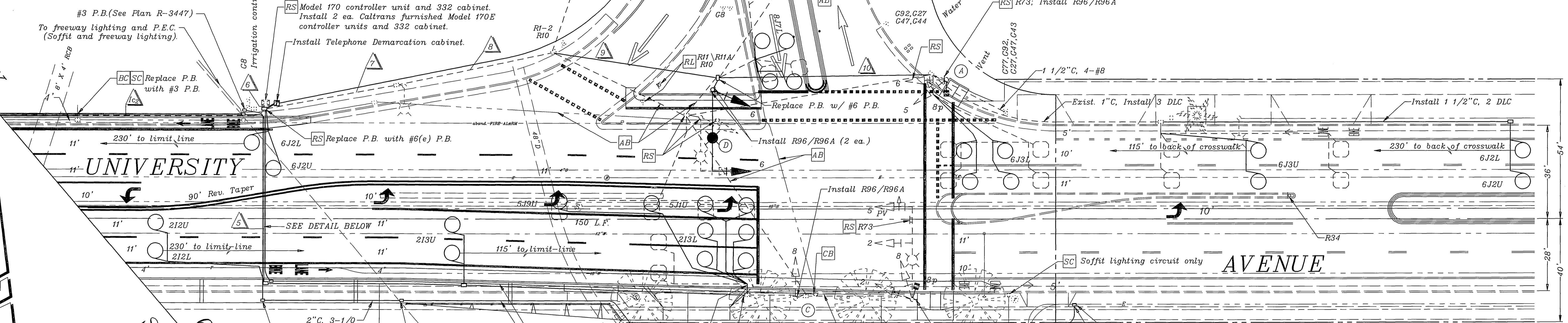
FWY 60/215 WB OFF-RAMP & ON-RAMP

CONDUCTOR TABLE

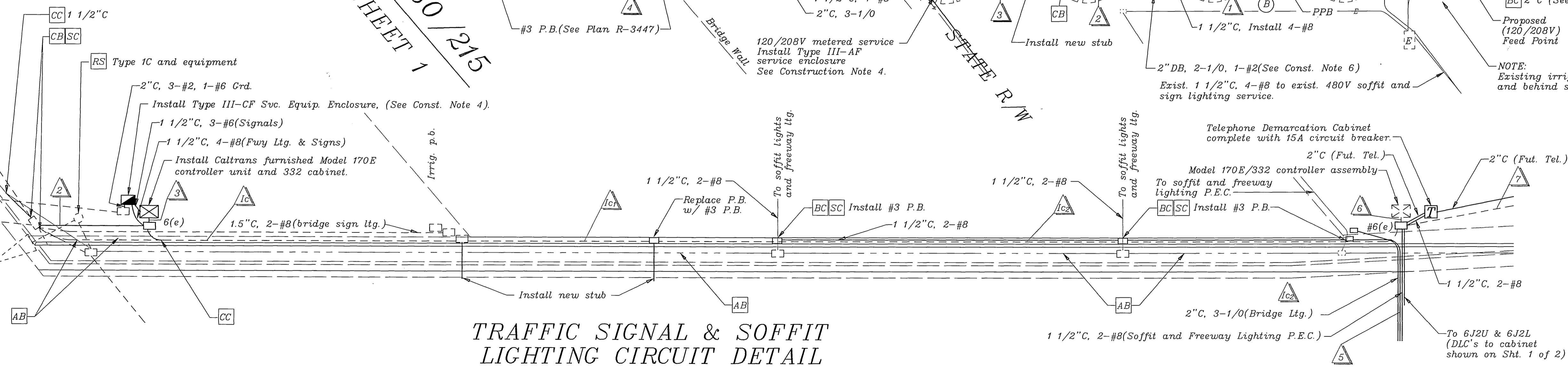
CONTROL FUNCTION	CONDUCTORS	CONDUCTOR RUNS									
		1	2	3	4	5	6	7	8	9	10
VEHICLE & PEDESTRIAN HEADS, PEDESTRIAN PUSH BUTTONS, SPARES & COMMONS	12 WIRE IMSA 5 WIRE IMSA 3 WIRE IMSA	1	1	1	1	1	2	1	1	1	1
DETECTOR CABLE (TYPE B)	#16/2										
PHASE 1											
PHASE 2				1	2	4	4				
PHASE 3											
PHASE 4											
PHASE 5				2	2	2	2				
PHASE 6								4	4	4	4
PHASE 7											
PHASE 8								4	4	4	1
TELE. SVC. (FUT.)	#8							2	2	2	
LUMINAIRES (240V)	#8	2	2	2	2	2		2	2	2	
INTERCONNECT	12 pair #20							1			
FREWAY SIGNS (240V)	#8										4
SIGNAL SERVICE	#6							3	3	3	3
CONDUIT SIZE		1.5"	1.5"	3"	3"	3"	3"	2-3"	3"	3"	2"
		(E)	(E)	(N)	(N)	(N)	(E)	(E)	(E)	(N)	(N)

NOTE:
1. Whenever possible conduit shall be placed in common trench.
2. Interconnect cable shall be 12 pair #20 ga.
3. See Sheet 1 of 2 for 1/2" C.
4. System shall have new cables and conductors, except as noted on plans.

FREEWAY MATCHLINE



TRAFFIC SIGNAL & SOFFIT LIGHTING CIRCUIT DETAIL



GENERAL NOTES

- Detector loops shall be installed in the presence of the Traffic Engineer or his representative.
- All striping, and pavement markings shown hereon are for reference only. See Plan XL-374.374A, 374B for final pavement delineation and other signs.
- Typical detector loop spacing: 10', 15', and 30' (if applicable).
- See Plans R-3447 for street improvements.
- At new controller cabinet installations, contractor shall remove ground cover and grade as required.
- This plan is accurate for Electrical Work Only.

CONSTRUCTION NOTES

- System shall have new cables and conductors, except as noted.
- Pedestrian Push Buttons shall be installed on poles in the quadrant nearest the crosswalk serving the phase.
- Conduit shall be installed to service pole and 90 up pole to 6" above grade. City of Riverside Public Utilities will install conductors to enclosure.
- Install Caltrans Type III-AF and Type III-CF Service Equipment Enclosure. See Special Provisions for additional specifications.
- Pullbox shall conform to City of Riverside Public Utilities Standard Drawing No. UCS-320 for ESB-6 Underground Structures. Cover shall be marked "City of Riverside Electric".
- Conduit shall be 2" Direct Burial PVC with a minimum 24" of cover. Cable installed by City of Riverside Public Utilities forces. (See Special Provisions for additional specifications).

ENCROACHMENT PERMIT NO. 08-97-N-MC-0184

IMPORTANT NOTICE
Section 416/417 of the Government Code requires a Dig Alert Identification Number to be issued before a "Permit 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
Richard D. McGrath
R.C.E. No. 31852 expires 12-31-2000
DATE 7/14/97



CITY OF RIVERSIDE, CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
APPROVED BY: [Signature]
DATE: 7/14/97
TRAFFIC DIVISION
CHIEF P.E. ENGR. [Signature]
PUBLIC UTILITIES [Signature]

TRAFFIC SIGNAL MODIFICATION
UNIVERSITY AVE.
@
S.R.-60/I-215 FWY
SCALE: 1" = 20'

ACCT. NO. 0476-62860-44040-30192
X-291
SHEET 2 OF 2
FILE NAME: X291-2.DWG