

CONDUCTOR		SCHEDULE						
CONTROL FUNCTION	CONDUCTORS SIZE INSULATION	RUNS						
		△	△	△	△	△	△	△
VEHICLE HEADS	#14 T.W.	-	-	-	-	-	-	-
PHASE 1 (FUTURE)					3			3
PHASE 2					3	3	3	3
PHASE 4							3	3
PHASE 5 (FUTURE)			3	3	3	3	3	6
PHASE 6					3			3
PHASE 8			3	3				3
PED. HEADS								
PHASE 2					2	2	2	2
PHASE 6								
PHASE 8			2	2	2	2	4	
PED. PUSH BUTTON								
PHASE 2						1	1	1
PHASE 6					1	1		1
PHASE 8			1	1	1	1	1	2
SPARES		3	3	3	3	3	3	6
12V COMMON		1	1	1	1	1	1	2
TOTAL		5	14	20	13	19	19	39

DETECTORS	#16/2	P.E.					
PHASE 1 (FUTURE)							3
PHASE 2							1
PHASE 4							3
PHASE 5 (FUTURE)							3
PHASE 6							3
PHASE 8							3
TOTAL			3	3	4	3	10

I.I.S.N.I	#12	T.W.	2	2	2	2	2
SIGNAL	#10	T.W.	1	1	1	1	2
LUMINAIRES	#8	T.H.W.	2	2	2	2	2
SIGNAL SERVICE	#6	T.H.W.					2
INTERCONNECT	#19	P.E.					2
CONDUIT SIZE			2"	2.5"	2.5"	2.5"	2.5"

ALL EQUIPMENT IS EXISTING UNLESS OTHERWISE NOTED NEW (N) OR RELOCATED (R)

GENERAL NOTES

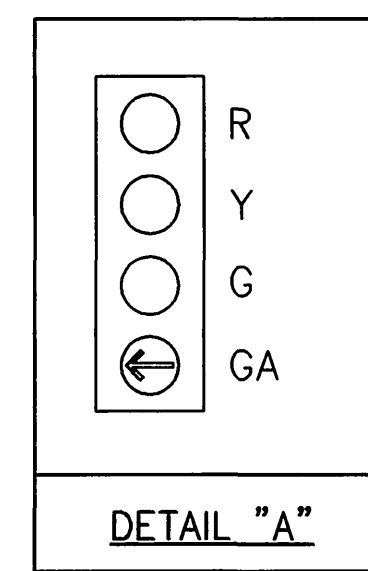
- TRAFFIC SIGNALS AND LIGHTING SHALL CONFORM TO CALTRANS STANDARD SPECIFICATIONS, SECTION 86, AND STANDARD PLANS DATED JULY, 1999.
- LOCATION OF ALL UNDERGROUND UTILITIES ARE APPROXIMATE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL UTILITIES AND SHALL VERIFY ALL CONDITIONS ON THE JOB SITE. FOUNDATIONS SHALL BE HAND DUG UNTIL CLEAR OF ALL OBSTRUCTIONS. CONTRACTOR SHALL TELEPHONE UNDERGROUND SERVICE ALERT (USA) AT 800-227-2600, FOR MARKING OF UTILITIES PRIOR TO ANY WORK. POT HOLING REQUIRED FOR UTILITIES SHOWN OR NOT SHOWN SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR, AND THE COSTS FOR SAME SHALL BE INCLUDED IN THE CONTRACT BID PRICE FOR TRAFFIC SIGNALS AND LIGHTING.
- NEW PULLBOXES SHALL BE #5, AND NEW CONDUIT SHALL BE RIGID METAL, UNLESS INDICATED OTHERWISE ON PLANS.
- DETECTOR LOOPS SHALL BE INSTALLED IN THE PRESENCE OF THE TRAFFIC ENGINEER OR HIS REPRESENTATIVE.
- TYPICAL DETECTOR LOOP SPACING: 10', 15'.
- ABANDONED FOUNDATIONS SHALL BE COMPLETELY REMOVED.
- CONTRACTOR SHALL OBTAIN APPROVAL FOR ALL EQUIPMENT LOCATIONS PRIOR TO PLACEMENT. CONTRACTOR SHALL DETERMINE THE LOCATION OF ALL TRAFFIC STRIPING PRIOR TO DETERMINING LOOP DETECTOR LOCATIONS.
- EXISTING STREET LIGHTING SHALL REMAIN IN PLACE AND OPERATIONAL UNTIL NEW TRAFFIC SIGNAL SAFETY LIGHTING IS OPERATIONAL.
- ALL NEW TRAFFIC SIGNAL EQUIPMENT, LOOPS, AND CONDUCTORS SHALL BE INSTALLED PER THIS PLAN, AND THE SPECIAL PROVISIONS.
- THE INTERSECTION SHALL BE RESTRIPE PER THE STRIPING PLAN XL-463 PRIOR TO OPERATION OF THE TRAFFIC SIGNALS. ANY EXISTING TRAFFIC CONTROLS OR MARKINGS IN CONFLICT WITH THE STRIPING PLAN OR THE TRAFFIC SIGNAL PLAN, INCLUDING STOP BARS, STOP SIGNS, AND LEGENDS, SHALL BE REMOVED, BY THE CONTRACTOR, BY WET SANDBLASTING.
- THIS TRAFFIC SIGNAL WORK REQUIRES A "STREET OPENING PERMIT" OBTAINED AT THE PUBLIC WORKS DEPARTMENT'S COUNTER ON THE THIRD FLOOR OF CITY HALL.
- 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. 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 BY THE CITY TRAFFIC ENGINEER.
- SEE PLAN XL-463 FOR PAVEMENT DELINEATION AND SIGNING REQUIREMENTS.
- SEE PLAN R-3652 FOR THE ASSOCIATED STREET IMPROVEMENTS.

PHASE		DIAGRAM	
(FUT.)	← →	NOT USED	EXCLUSIVE
φ1	← →	φ3	↑ ↓
NOT USED	← →	NOT USED	EXCLUSIVE
φ5	← →	φ7	↑ ↓

FLASHING OPERATION SHALL BE ALL RED.

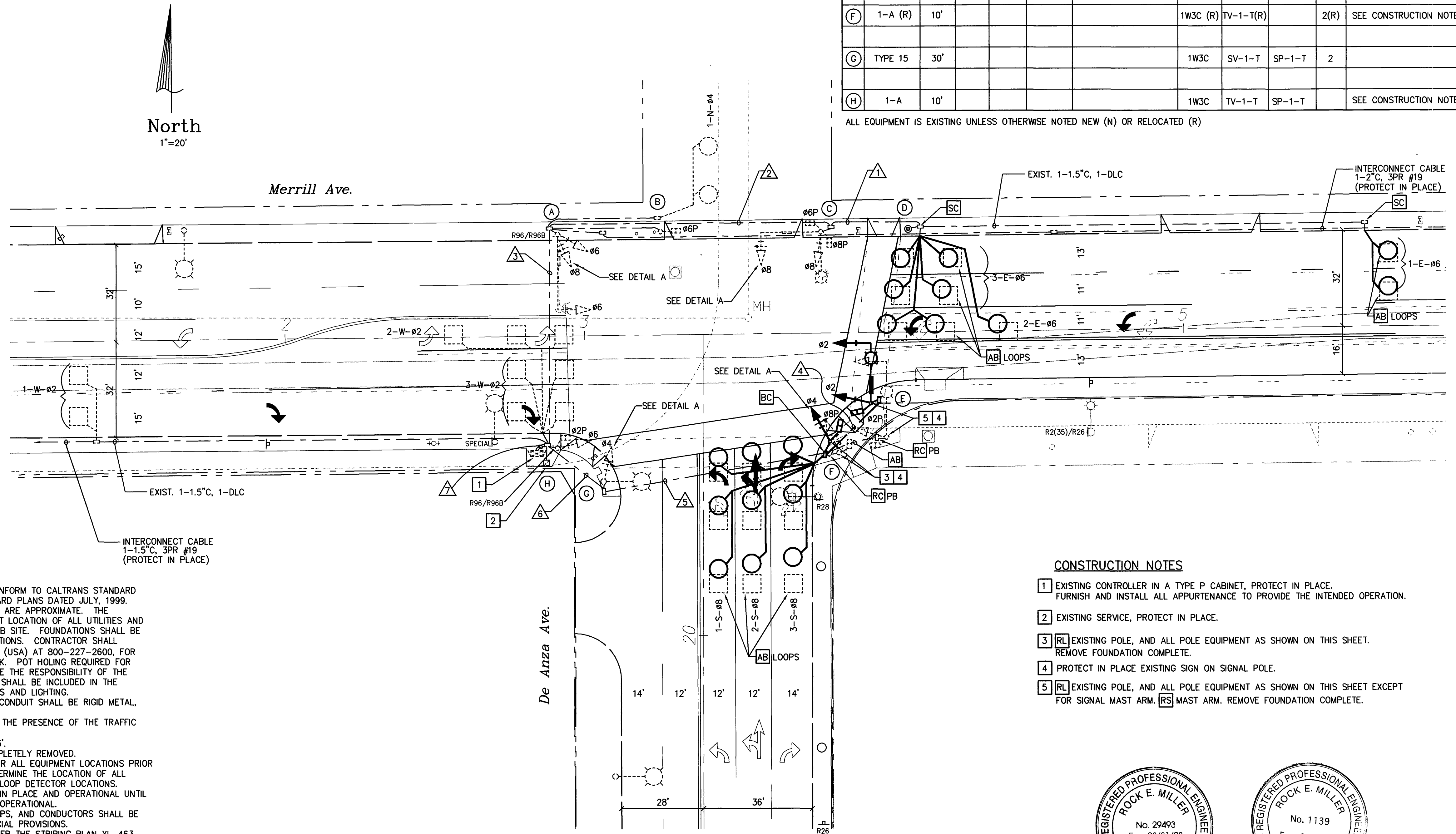
DETECTOR SCHEDULE			
CHANNELS	LOOPS DESIGNATION	NUMBER OF LOOPS	FEATURES
1	1-W-2	2	● ■
2	2-W-2	3	
1	3-W-2	4	■
2	1-N-4	1	NOT USED
1	1-E-6	2	● ■
2	2-E-6	3	
1	3-E-6	4	■
2	1-S-8	3	
1	2-S-8	3	
2	3-S-8	3	▲

- SAMPLING (FUTURE)
- ▲ CALL-HOLD (EXTENSION)
- DELAY
- DETECTOR DISCONNECT.



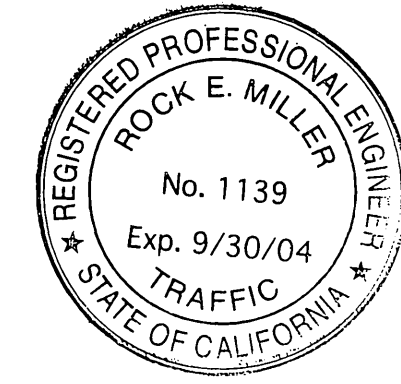
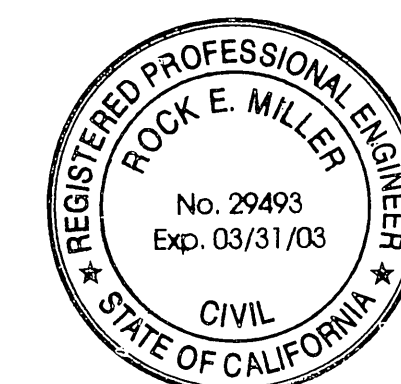
POLE SCHEDULE										
STANDARD No.	Type	Height	Sig MA	LUM MA	LUM. HPSV	I.S.N.S. LEGEND	SIGNAL HEAD	SIGNAL MOUNTING VEHICLE	PPB PHASE	REMARKS
(B)	1-A	7'					2W3C	SV-2-TB		
(C)	17-2-80	30'	20'	12'	250W	MERRILL AV 3600	1W3C	MAS		LUM. ARM 90 DEG. TO SIGNAL
(D)	P.P.B. POST	3'-10"					1W3C	SV-1-T	SP-1-T	6
(E)	19-2-80(R)	30'	20'(N)	12'(R)	250W(R)	DE ANZA AV 6300(R)	1W3C(R)	MAS(R)		
(F)	1-A (R)	10'					1W3C (R)	TV-1-T(R)		2(R) SEE CONSTRUCTION NOTES 3 AND 4
(G)	TYPE 15	30'					1W3C	SV-1-T	SP-1-T	2
(H)	1-A	10'					1W3C	TV-1-T	SP-1-T	SEE CONSTRUCTION NOTES 4

ALL EQUIPMENT IS EXISTING UNLESS OTHERWISE NOTED NEW (N) OR RELOCATED (R)



CONSTRUCTION NOTES

- EXISTING CONTROLLER IN A TYPE P CABINET, PROTECT IN PLACE. FURNISH AND INSTALL ALL APPURTENANCE TO PROVIDE THE INTENDED OPERATION.
- EXISTING SERVICE, PROTECT IN PLACE.
- RL EXISTING POLE, AND ALL POLE EQUIPMENT AS SHOWN ON THIS SHEET. REMOVE FOUNDATION COMPLETE.
- PROTECT IN PLACE EXISTING SIGN ON SIGNAL POLE.
- RL EXISTING POLE, AND ALL POLE EQUIPMENT AS SHOWN ON THIS SHEET EXCEPT FOR SIGNAL MAST ARM. [RS] MAST ARM. REMOVE FOUNDATION COMPLETE.



PLANS DESIGNED BY: *Rock Miller* 10/28/02 DATE

Katz, Okitsu & Associates
Traffic Engineers and Transportation Planners
17852 E. SEVENTEENTH STREET #102
JUSTIN, CA 92780
(714) 573-0317 FAX: (714) 573-9534

DESIGNED BY: HAK DRAWN BY: HAK CHECKED BY: REM

REVISIONS: APRR. DATE

CITY OF RIVERSIDE, CALIFORNIA
DEPARTMENT OF PUBLIC WORKS

APPROVED BY: *[Signature]* DATE: 11/15/02
PRINCIPAL ENGINEER
P.W. INSPECTION
TRAFFIC DIVISION
CHIEF P.W. ENGR.
PUBLIC UTILITIES

TRAFFIC SIGNAL MODIFICATION
MERRILL AVENUE
AND
DE ANZA AVENUE
SCALE 1"=20'

ACCT. NO. XXXX-XXXXXX-XXXXXX-XXXX

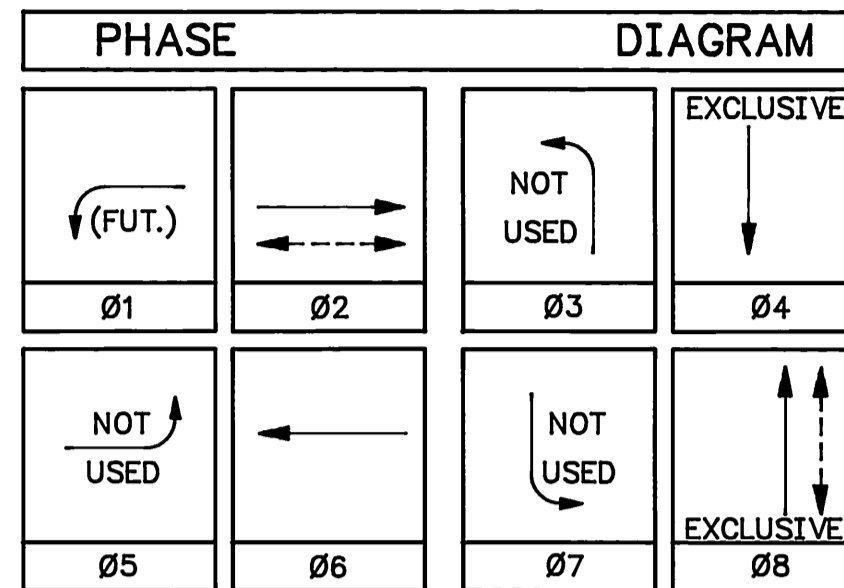
X-233A
SHEET 1 OF 1
FILE NAME: XXXX.DWG

DETECTOR SCHEDULE

CHANNELS	LOOP DESIGNATION	NUMBER OF LOOPS	FEATURES
1	1-W-2	2	●
2	2-W-2	3	■
1	3-W-2	4	★
2	1-N-4	1	▲
1	1-E-6	2	●
2	2-E-6	3	■
1	3-E-6	4	★
2	1-S-8	3	▲
1	2-S-8	3	▲
2	3-S-8	3	▲

- SAMPLING (future)
- CALL-HOLD (extension)
- ▲ DELAY
- ★ DETECTOR DISCONNECT (see Special Provision)

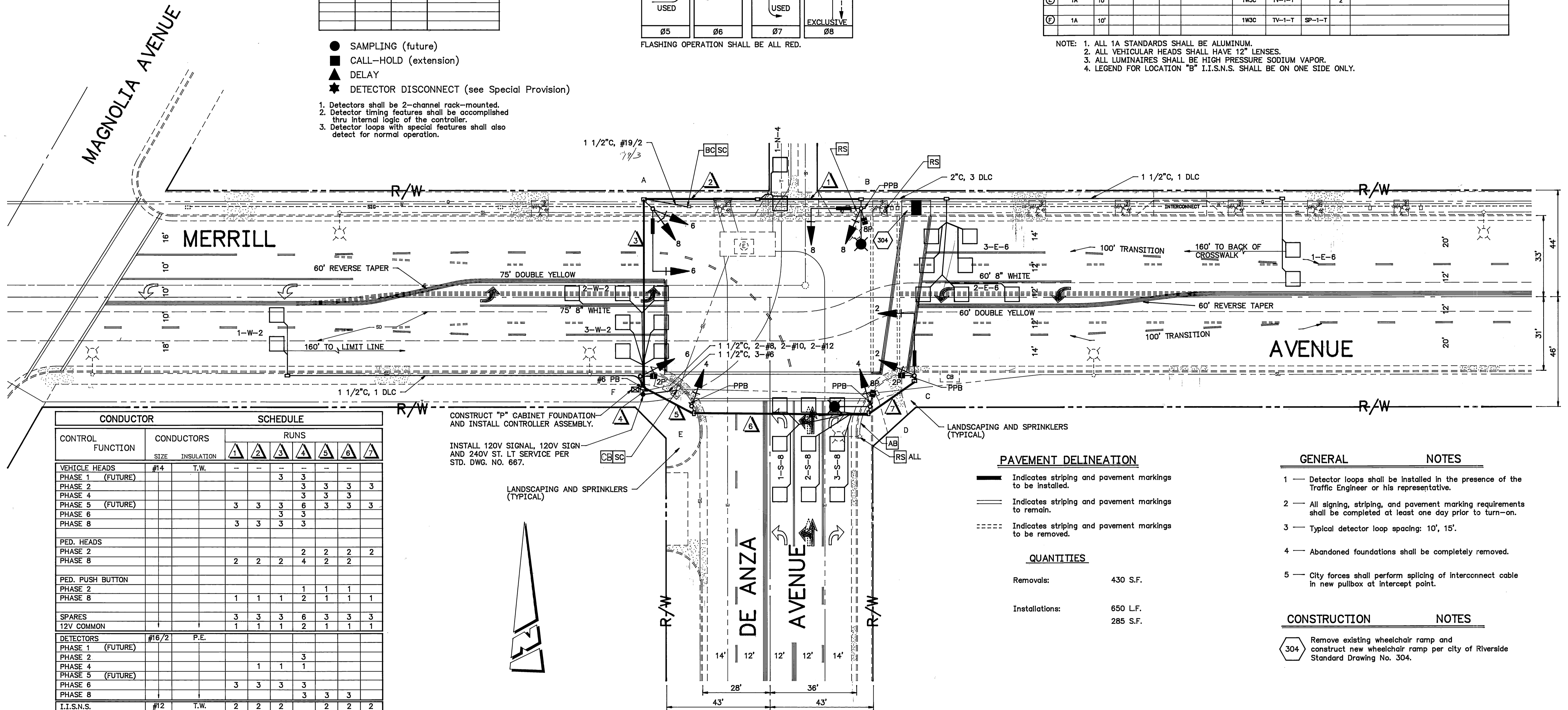
1. Detectors shall be 2-channel rack-mounted.
2. Detector timing features shall be accomplished thru internal logic of the controller.
3. Detector loops with special features shall also detect for normal operation.



FLASHING OPERATION SHALL BE ALL RED.

No.	TYPE	STANDARD		POLE		SCHEDULE				REMARKS		
		HGT.	SIG. M.A.	LUM. M.A.	LUM. HPSV	I.S.N.S. LEGEND	SIGNAL HEAD	SIGNAL VEHICLE	SIGNAL MOUNTING PED		PPB PHASE	
(A)	18-2-80	17'	25'			DE ANZA	6300	1W3C	MAS			
(B)	17-2-80	30'	20'	12'	250W	MERRILL	AV 3800	1W3C	MAS			LUM. ARM SHALL BE 90 DEG. TO SIGNAL ARM AS SHOWN; SEE NOTE 4
(C)	19-2-80	30'	25'	12'	250W	DE ANZA	6300	1W3C	MAS			
(D)	TYPE 15	30'						1W3C	SV-1-T	SP-1-T	8	
(E)	1A	10'						1W3C	TV-1-T			2
(F)	1A	10'						1W3C	TV-1-T	SP-1-T		

- NOTE: 1. ALL 1A STANDARDS SHALL BE ALUMINUM.
 2. ALL VEHICULAR HEADS SHALL HAVE 12" LENSES.
 3. ALL LUMINAIRES SHALL BE HIGH PRESSURE SODIUM VAPOR.
 4. LEGEND FOR LOCATION "B" I.I.S.N.S. SHALL BE ON ONE SIDE ONLY.



CONDUCTOR		SCHEDULE						
CONTROL FUNCTION	CONDUCTORS	RUNS						
		1	2	3	4	5	6	7
VEHICLE HEADS	#14 T.W.	-	-	-	-	-	-	-
PHASE 1 (FUTURE)					3	3		
PHASE 2					3	3	3	3
PHASE 4					3	3	3	
PHASE 5 (FUTURE)		3	3	3	3	3	3	3
PHASE 6					3	3		
PHASE 8		3	3	3	3			
PED. HEADS								
PHASE 2					2	2	2	2
PHASE 8		2	2	2	4	2	2	
PED. PUSH BUTTON								
PHASE 2					1	1	1	
PHASE 8		1	1	1	2	1	1	1
SPARES		3	3	3	6	3	3	3
12V COMMON		1	1	1	2	1	1	1
DETECTORS	#16/2 P.E.							
PHASE 1 (FUTURE)								
PHASE 2						3		
PHASE 4				1	1	1		
PHASE 5 (FUTURE)								
PHASE 6		3	3	3	3			
PHASE 8					3	3	3	
I.I.S.N.S.	#12 T.W.	2	2	2		2	2	2
120V COMMON	#10 T.W.	1	1	1	2	1	1	1
LUMINAIRES	#8 T.H.W.	2	2	2		2	2	2
SIGNAL SERVICE	#6 T.H.W.					2		
INTERCONNECT	#19/2 P.E.		1	1	1			
TOTAL	#14 T.W.	13	13	19	38	19	19	13
	#12 T.W.	2	2	2		2	2	2
	#10 T.W.	1	1	1	2	1	1	1
	#8 T.H.W.	2	2	2		2	2	2
	#6 T.H.W.					2		
	#16/2 P.E.	3	4	4	10	3	3	
	#19/2 P.E.		1	1	1			
#14 EQUIV.		30.5	36.5	42.5	80	36.5	36.5	21.5
CONDUIT SIZE		2"	2 1/2"	2 1/2"	2", 3"	2 1/2"	2 1/2"	2"

CONSTRUCT "P" CABINET FOUNDATION AND INSTALL CONTROLLER ASSEMBLY.
 INSTALL 120V SIGNAL, 120V SIGN AND 240V ST. LT SERVICE PER STD. DWG. NO. 667.

LANDSCAPING AND SPRINKLERS (TYPICAL)

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.

QUANTITIES

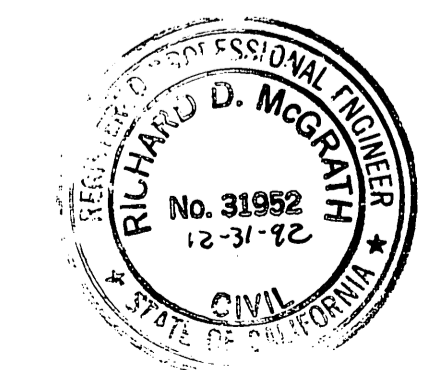
Removals:	430 S.F.
Installations:	650 L.F.
	285 S.F.

GENERAL NOTES

- 1 — Detector loops shall be installed in the presence of the Traffic Engineer or his representative.
- 2 — All signing, striping, and pavement marking requirements shall be completed at least one day prior to turn-on.
- 3 — Typical detector loop spacing: 10', 15'.
- 4 — Abandoned foundations shall be completely removed.
- 5 — City forces shall perform splicing of interconnect cable in new pullbox at intercept point.

CONSTRUCTION NOTES

- 304 Remove existing wheelchair ramp and construct new wheelchair ramp per city of Riverside Standard Drawing No. 304.



ENGINEER IN RESPONSIBLE CHARGE
 Richard D. McGrath
 RICHARD D. McGRATH
 R.C.E. No. 31952 expires 12-31-92
 DATE 5-17-91

DESIGNED BY MRC DRAWN BY MRC CHECKED BY JMD

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

TRAFFIC SIGNALS
 DE ANZA AVE.
 AND
 MERRILL AVE.

ACCT. NO. 30-576-392-02
 X-233
 SHEET 1 OF 1
 FILE NO.

CONTRACT TE-91-1

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