EQUIPMENT SCHEDULE

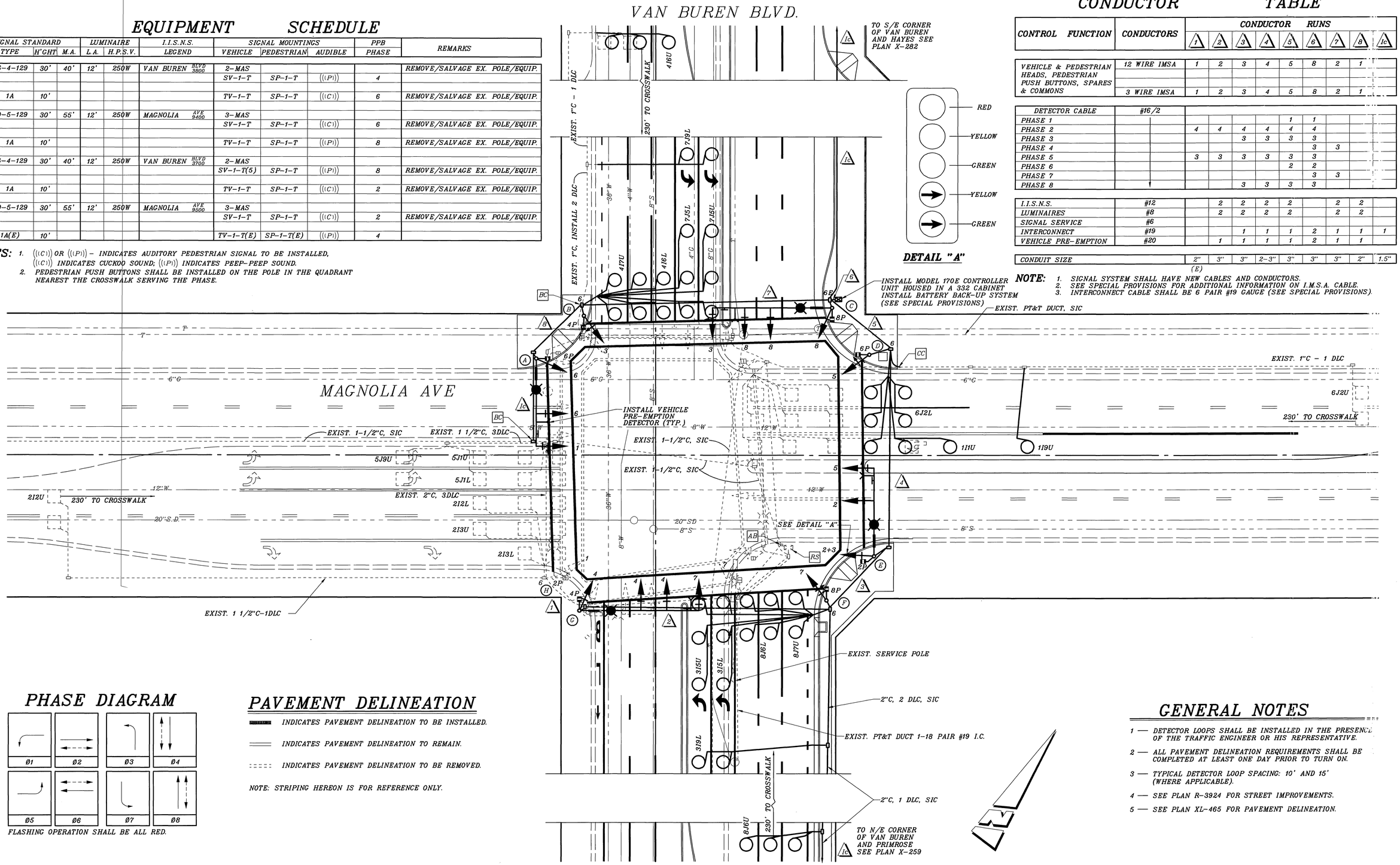
NO.	SIGNAL STANDARD TYPE	H'GHT	M.A.	LUMINAIRE L.A.	H.P.S.V.	I.I.S.N.S. LEGEND	SIGNAL MOUNTINGS VEHICLE	PEDESTRIAN	AUDIBLE	PPB PHASE	REMARKS
(A)	26-4-129	30'	40'	12'	250W	VAN BUREN BLVD 3800	2-MAS				
							SV-1-T	SP-1-T	((P1))	4	REMOVE/SALVAGE EX. POLE/EQUIP.
(B)	1A	10'					TV-1-T	SP-1-T	((C1))	6	REMOVE/SALVAGE EX. POLE/EQUIP.
(C)	29-5-129	30'	55'	12'	250W	MAGNOLIA AVE 9400	3-MAS				
							SV-1-T	SP-1-T	((C1))	6	REMOVE/SALVAGE EX. POLE/EQUIP.
(D)	1A	10'					TV-1-T	SP-1-T	((P1))	8	REMOVE/SALVAGE EX. POLE/EQUIP.
(E)	26-4-129	30'	40'	12'	250W	VAN BUREN BLVD 3700	2-MAS				
							SV-1-T(S)	SP-1-T	((P1))	8	REMOVE/SALVAGE EX. POLE/EQUIP.
(F)	1A	10'					TV-1-T	SP-1-T	((C1))	2	REMOVE/SALVAGE EX. POLE/EQUIP.
(G)	29-5-129	30'	55'	12'	250W	MAGNOLIA AVE 9500	3-MAS				
							SV-1-T	SP-1-T	((C1))	2	REMOVE/SALVAGE EX. POLE/EQUIP.
(H)	1A(E)	10'					TV-1-T(E)	SP-1-T(E)	((P1))	4	

NOTES: 1. ((C1)) OR ((P1)) – INDICATES AUDITORY PEDESTRIAN SIGNAL TO BE INSTALLED, ((C1)) INDICATES CUCKOO SOUND; ((P1)) INDICATES PEEP-PEEP SOUND.
2. PEDESTRIAN PUSH BUTTONS SHALL BE INSTALLED ON THE POLE IN THE QUADRANT NEAREST THE CROSSWALK SERVING THE PHASE.

CONDUCTOR TABLE

CONTROL FUNCTION	CONDUCTORS	CONDUCTOR RUNS 1	2	3	4	5	6	7	8	1c
VEHICLE & PEDESTRIAN HEADS, PEDESTRIAN PUSH BUTTONS, SPARES & COMMONS	12 WIRE IMSA	1	2	3	4	5	8	2	1	
	3 WIRE IMSA	1	2	3	4	5	8	2	1	
DETECTOR CABLE	#16/2									
PHASE 1						1	1			
PHASE 2		4	4	4	4	4	4			
PHASE 3				3	3	3	3			
PHASE 4							3	3		
PHASE 5		3	3	3	3	3	3			
PHASE 6						2	2			
PHASE 7							3	3		
PHASE 8				3	3	3	3			
I.I.S.N.S.	#12		2	2	2	2		2	2	
LUMINAIRES	#8		2	2	2	2		2	2	
SIGNAL SERVICE	#6									
INTERCONNECT	#19			1	1	1	2	1	1	1
VEHICLE PRE-EMPTION	#20		1	1	1	1	2	1	1	
CONDUIT SIZE		2" (E)		3"	3"	2-3"	3"	3"	2"	1.5"

NOTE:
1. SIGNAL SYSTEM SHALL HAVE NEW CABLES AND CONDUCTORS.
2. SEE SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION ON I.M.S.A. CABLE.
3. INTERCONNECT CABLE SHALL BE 6 PAIR #19 GAUGE (SEE SPECIAL PROVISIONS).



PHASE DIAGRAM

FLASHING OPERATION SHALL BE ALL RED.

PAVEMENT DELINEATION

INDICATES PAVEMENT DELINEATION TO BE INSTALLED.

INDICATES PAVEMENT DELINEATION TO REMAIN.

INDICATES PAVEMENT DELINEATION TO BE REMOVED.

NOTE: STRIPING HEREON IS FOR REFERENCE ONLY.

GENERAL NOTES

1 — DETECTOR LOOPS SHALL BE INSTALLED IN THE PRESENCE OF THE TRAFFIC ENGINEER OR HIS REPRESENTATIVE.

2 — ALL PAVEMENT DELINEATION REQUIREMENTS SHALL BE COMPLETED AT LEAST ONE DAY PRIOR TO TURN ON.

3 — TYPICAL DETECTOR LOOP SPACING: 10' AND 15' (WHERE APPLICABLE).

4 — SEE PLAN R-3924 FOR STREET IMPROVEMENTS.

5 — SEE PLAN XL-465 FOR PAVEMENT DELINEATION.

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 valid. For your Dig Alert I.D. Number call
CALL TOLL FREE
TWO WORKING DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT
1-800-227-2600

ENGINEER IN RESPONSIBLE CHARGE
THOMAS JOHN BOYD
R.C.E. No. 36170 expires 6/30/06
DATE 5/19/06

REGISTERED PROFESSIONAL ENGINEER THOMAS JOHN BOYD No. 36170 Exp. 06-30-2006 CIVIL STATE OF CALIFORNIA

MARK	REVISIONS	APPR.	DATE

DESIGNED BY _____ DRAWN BY _____ CHECKED BY _____

CITY OF RIVERSIDE, CALIFORNIA
DEPARTMENT OF PUBLIC WORKS

	BY	DATE
APPROVED BY PRINCIPAL ENGINEER	DH	5/19/06
APPROVED BY TRAFFIC DIVISION		5/19/06

APPROVED BY _____ CITY ENGINEER
DATE 5/19/06

TRAFFIC SIGNAL MODIFICATION
MAGNOLIA AVENUE AT VAN BUREN BLVD.
SCALE: 1" = 20'

ACCT. NO.
X-308C
SHEET 1 OF 1
FILE NAME: X308C.DWG

CONDUCTOR SCHEDULE

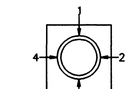
AWG	CONDUCTOR	CONDUIT RUN 1	2	3	4	5	6	7	8	9	10
#14	ø1	3	3	3	3	6	3	3	3	3	
	ø2					3					
	ø3		3	3	3	5					
	ø4					3	3	3	3		
	ø5				3	3					
	ø6	3	3	3	3	3					
	ø7					3	3	3	3		
	ø8				3	3					
	ø2PED					2	2	2	2	2	
	ø4PED		2	2	2	4	2	2	2		
	ø6PED	2	2	2	2	2					
	ø8PED			2	2	4	2				
	ø2PPB					2	2	1	1		
	ø4PPB	1	1	1	1	2	1	1	1	1	
	ø6PPB		1	2	2	2					
	ø8PPB				1	2					
	PPB COMMON	1	1	1	1	2	1	1	1	1	
	SPARE	3	3	3	3	6	3	3	3	3	
	TOTAL #14	13	19	25	29	57	22	19	19	10	
#12	I.S.N.S.	2	2	2	2		2	2	2		
#10	SIGNAL COMMON	1	1	1	1	2	1	1	1	1	
#8	LUMINAIRE	2	2	2	2		2	2	2	2	
#6	SERVICE					2					
DLC	ø1				2	2					
	ø2					4	4	4	4	4	
	ø3					3	3				
	ø4		3	3	3	3					
	ø5					3	3	3	3	3	3
	ø6				3	3					
	ø7		2	2	2	2					
	ø8					2	2				
	TOTAL DLC		5	5	10	22	12	7	7	7	3
	CONDUIT SIZE	2"	2½" (N)	2½" (N)	3" (N)	2-3" (N)	3½" (N)	3" (N)	3" (N)	2½" (N)	2" (N)

INSTALL ALL NEW CONDUCTORS.
ALL CONDUITS EXISTING UNLESS OTHERWISE NOTED:
(N) = NEW CONDUIT

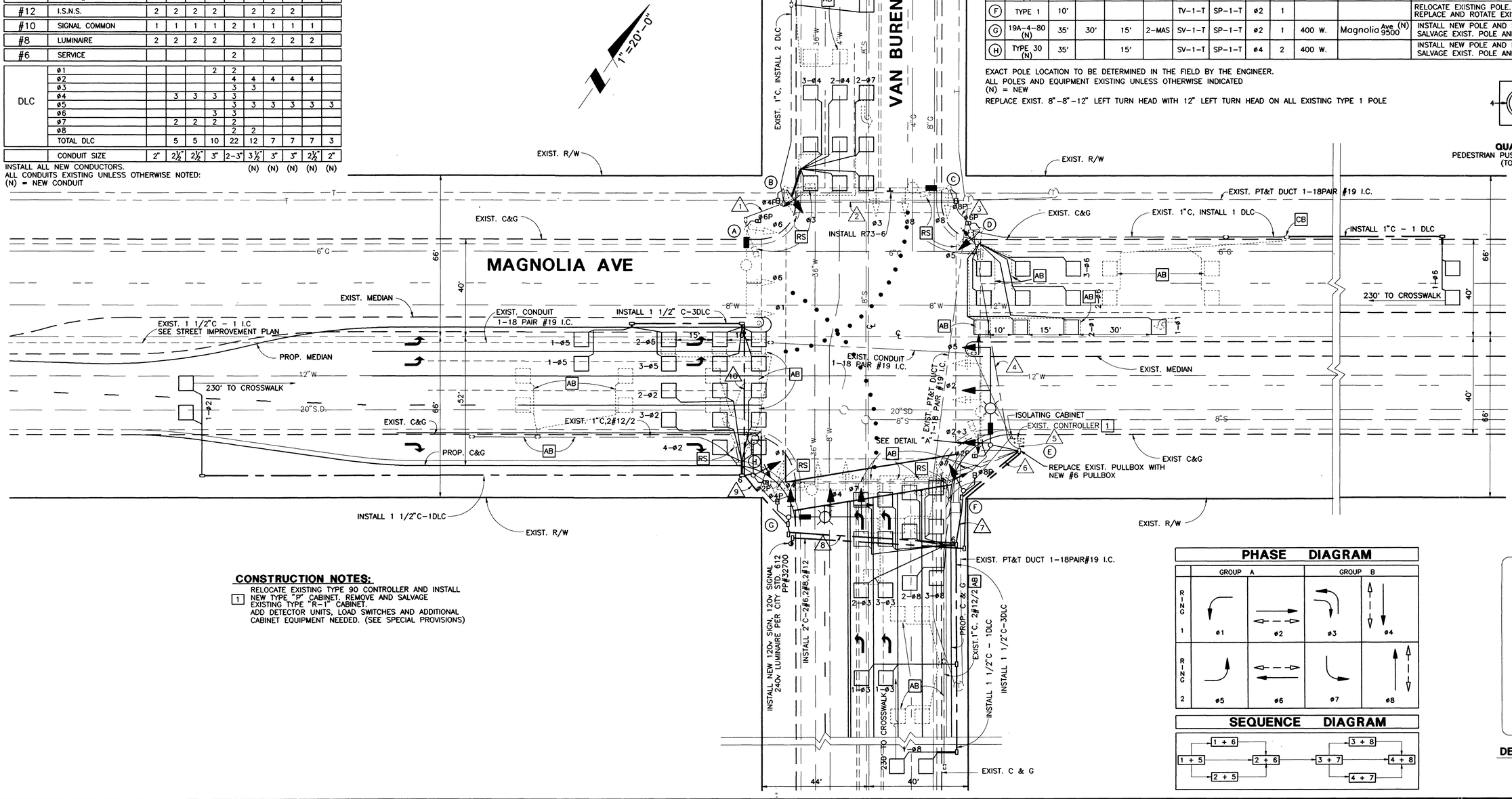
POLE SCHEDULE

NO.	POLE TYPE	POLE HEIGHT	MAST ARM LENGTH SIGNAL	MAST ARM LENGTH LUMINAIRE	SIGNAL MOUNTING MA	SIGNAL MOUNTING POLE	SIGNAL MOUNTING PED	PPB ø	PPB QUAD	H.P.S. LUMINAIRE	I.S.N.S. LEGEND	REMARKS
A	TYPE 24A	35'	35'	15'	2-MAS	SV-1-T	SP-1-T	ø4	2	400 W.	Van Buren BI(N) 3800	REPLACE AND ROTATE EXIST. PED HEAD AS SHOWN.
B	TYPE 1	10'				TV-1-T	SP-1-T	ø6	3			REPLACE AND ROTATE EXIST. PED HEAD AS SHOWN.
C	TYPE 19A	35'	30'	15'	2-MAS	SV-1-T	SP-1-T	ø6	3	400 W.	Magnolia Ave (N) 9400	REPLACE AND ROTATE EXIST. PED HEAD AS SHOWN.
D	TYPE 1	10'				TV-1-T	SP-1-T	ø8	4			REPLACE AND ROTATE EXIST. PED HEAD AS SHOWN.
E	26A-4-80 (N)	35'	40'	15'	2-MAS	SV-1-T	SP-1-T	ø8	4	400 W.	Van Buren BI(N) 3700	INSTALL NEW POLE AND EQUIPMENT SALVAGE EXIST. POLE AND EQUIPMENT
F	TYPE 1	10'				TV-1-T	SP-1-T	ø2	1			RELOCATE EXISTING POLE. REPLACE AND ROTATE EXIST. PED HEAD AS SHOWN.
G	19A-4-80 (N)	35'	30'	15'	2-MAS	SV-1-T	SP-1-T	ø2	1	400 W.	Magnolia Ave (N) 9500	INSTALL NEW POLE AND EQUIPMENT SALVAGE EXIST. POLE AND EQUIPMENT
H	TYPE 30 (N)	35'		15'		SV-1-T	SP-1-T	ø4	2	400 W.		INSTALL NEW POLE AND EQUIPMENT SALVAGE EXIST. POLE AND EQUIPMENT

EXACT POLE LOCATION TO BE DETERMINED IN THE FIELD BY THE ENGINEER.
ALL POLES AND EQUIPMENT EXISTING UNLESS OTHERWISE INDICATED
(N) = NEW
REPLACE EXIST. 8"-8"-12" LEFT TURN HEAD WITH 12" LEFT TURN HEAD ON ALL EXISTING TYPE 1 POLE



QUADRANT
PEDESTRIAN PUSH BUTTON LOCATION
(TOP VIEW)

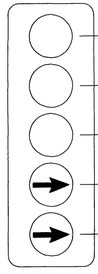


CONSTRUCTION NOTES:

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

PHASE DIAGRAM

SEQUENCE DIAGRAM



DETAIL "A"

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.

REGISTERED PROFESSIONAL ENGINEER VINCENT M. FRASCA No. 12977 Exp. 3-31-93 CIVIL STATE OF CALIFORNIA

PREPARED UNDER THE DIRECTION OF
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"
DATE: DECEMBER; 90
BENCH MARK:

MARK	REVISIONS	APPR.	DATE

DESIGNED BY K.T.O. DRAWN BY KTO/RDW CHECKED BY

CITY OF RIVERSIDE, CALIFORNIA
DEPARTMENT OF PUBLIC WORKS

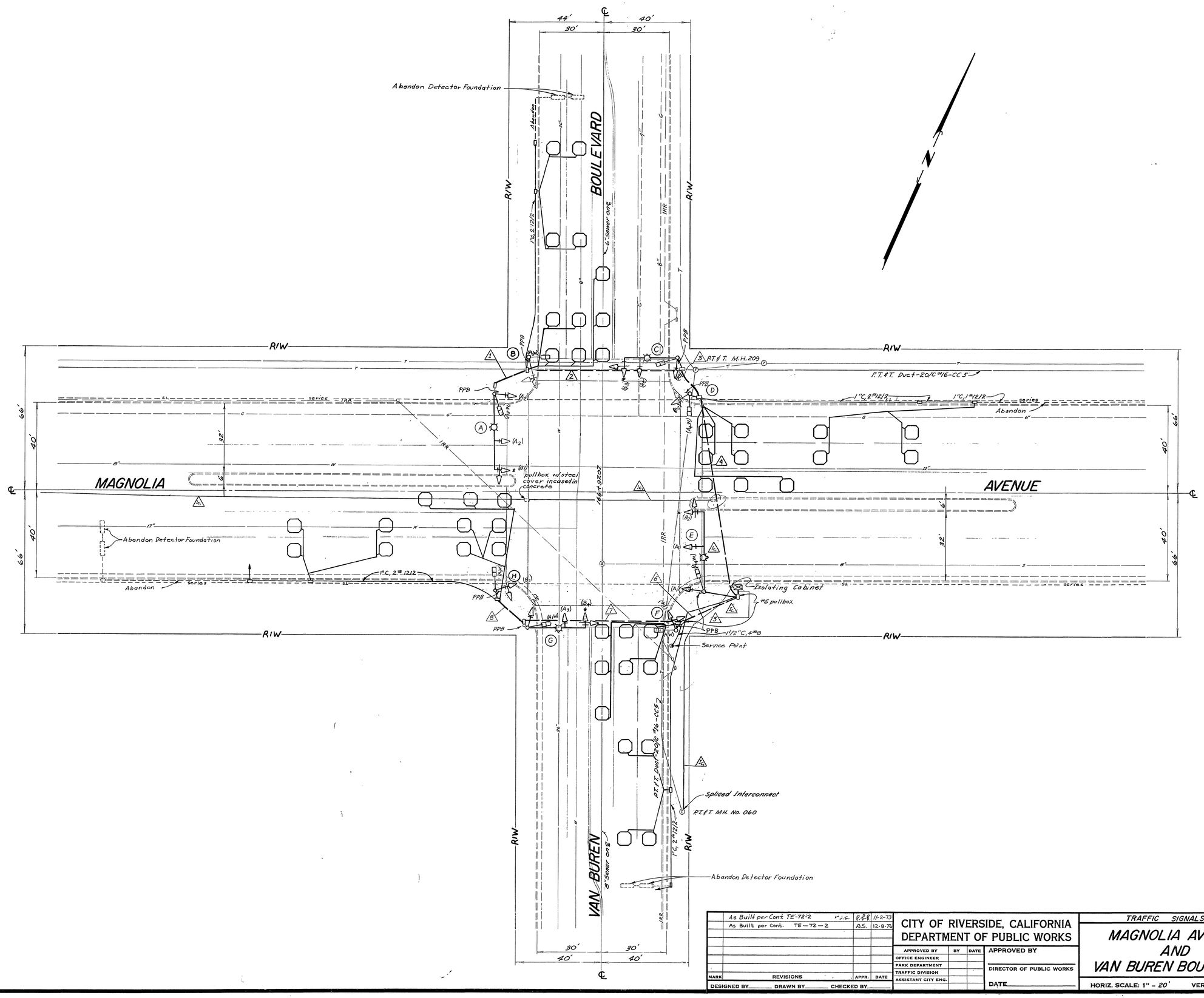
APPROVED BY	BY	DATE
PRINCIPAL ENGINEER		
INSPECTION		
TRAFFIC DIVISION		
CHIEF P.W. ENGINEER		
PUBLIC UTILITIES		

APPROVED
DIRECTOR OF PUBLIC WORKS
DATE 12/20/90

TYLER MALL EXPANSION
C.F.D. # 90-2 IMPROVEMENTS
TRAFFIC SIGNAL MODIFICATION PLAN
MAGNOLIA AVENUE
AND
VAN BUREN BLVD.

HORIZ SCALE: 1" VERT. SCALE: 1"

PROJECT NO.
X-308
SHEET 1 OF 1
FILE NO: 8911175



MARK	REVISIONS	APPR.	DATE
	As Built per Cont. TE-72-2 r.j.c.	R.F.B.	11-2-73
	As Built per Cont. TE-72-2	A.S.	12-8-76

DESIGNED BY_____ DRAWN BY_____ CHECKED BY_____

CITY OF RIVERSIDE, CALIFORNIA
DEPARTMENT OF PUBLIC WORKS

APPROVED BY	BY	DATE
OFFICE ENGINEER		
PARK DEPARTMENT		
TRAFFIC DIVISION		
ASSISTANT CITY ENG.		

APPROVED BY

DIRECTOR OF PUBLIC WORKS

DATE

TRAFFIC SIGNALS

MAGNOLIA AVENUE AND VAN BUREN BOULEVARD

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

PROJECT NO. X-308

SHEET 1 OF 2

FILE NO.

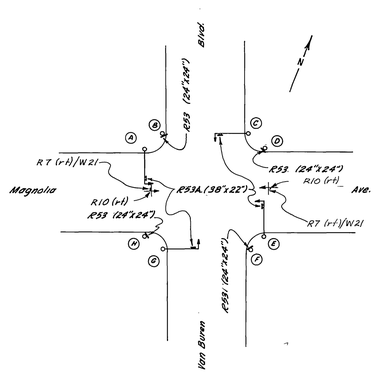
CONDUCTOR SCHEDULE

Control Function	Conductors Size	Insulation	Conduit Run 1	2	3	4	5	6	7	8	1c		
Vehicle Heads	#14	T.W.											
ØA1							3						
ØA2			3	3	3	3	3						
ØA3							3	3	3				
ØA4						3	3						
ØB1			3	3	3	3	6	3	3	3			
ØB2						3	3						
ØB3				3	3	3	3						
ØB4							3	3	3				
Spares			3	3	3	3	3	3	3	3			
Pedestrian Heads													
ØA1W							2	2	2				
ØA2W				2	2	2	2						
ØA3W			2	2	2	2	4	2	2	2			
ØA4W						2	2						
Ped. Push Buttons													
ØA1W							2	2	1				
ØA2W				1	2	2	2						
ØA3W			1	1	1	1	2	1	1	1			
ØA4W						1	2						
Detector Cable	2/#12	P.E.											
ØA1							3	3	3	3			
ØA2						3	3						
ØA3				3	3	3	3						
ØA4							3	3					
ØB1						1	1						
ØB2							1	1	1	1			
ØB3							1	1					
ØB4				1	1	1	1						
12V Common	#12	T.W.	1	1	1	1	1	1	1	1			
120V Common	#10		1	1	1	1	1	1	1	1			
Signal Service	#8						2	2					
Luminaires		T.H.W.	2	2	2	2		2	2				
Interconnect	20/#18	P.E.									1		
Totals	#14	T.W.	12	18	22	28	48	19	18	9			
	#12		1	1	1	1	1	1	1	1			
	#10		1	1	1	1	1	1	1	1			
	#8						2	2					
		T.H.W.	2	2	2	2		2	2				
	2/#12	P.E.		4	4	8	16	8	4	4			
	20/#18										1		
Conduit Size			2"	2½"	2½"	3"	2-3"	3"	2½"	2"	1½"		

SIGNING REQUIREMENTS

Location	Code No.	Size	Mounting	Facing	Remarks
A	R93A	36"x22"	O.H. Signal Arm	E	
B	R93	24"x24"	Signal Std.	S	
C	R93A	36"x22"	O.H. Signal Arm	S	
D	R93	24"x24"	Signal Std.	W	
E	R93A	36"x22"	O.H. Signal Arm	W	
F	R93	24"x24"	Signal Std.	N	
G	R93A	36"x22"	O.H. Signal Arm	N	
H	R93	24"x24"	Signal Std.	E	
I	R10 (r-t)	48"X16"	14' Wood Post	S	
	R7 (r-t) W21	9"x24" 36" 18"x18"		E	
J	R10 (r-t)	48"X16"	14' Wood Post	N	
	R7 (r-t) W21	9"x24" 36" 18"x18"		W	

SEE "SIGN LOCATION DIAGRAM"



SIGN LOCATION DIAGRAM
Scale: None

EQUIPMENT SCHEDULE

Location	Standard	Vehicle Equipment Heads	Mtg's	Back plate	Louver	Ped. Equipment Heads	Mtg's	R.P.B.'s	Luminaire Wattage	Remarks
A	Type XXIV	1W3C(GA)*	M-2	1						
	35'L.A, 15'L.A.	1W3C(12")	M-2	1					400W	
		1W3C(12")	B-1	1		1W2C	W-0	1		
B	Type I	1W3C	A-2	1	2	1W2C	W-0	1		
		(R,Y, 12"GA.)								
C	Type XII	1W3C(GA)*	M-2	1						
	30'LA., 15'L.A.	1W3C(12")	M-2	1					400W	
		1W3C(12")	B-1	1		1W2C	W-0	1		
D	Type I	1W3C	A-2	1	2	1W2C	W-0	1		
		(R,Y, 12"GA.)								
E	Type XXIV	1W3C(GA)*	M-2	1						
	35'LA, 15'L.A.	1W3C(12")	M-2	1					400W	
		1W3C(12")	B-1	1		1W2C	W-0	1		
F	Type I	1W3C	A-2	1	2	1W2C	W-0	1		
		(R,Y, 12"GA.)								
G	Type XII	1W3C(GA)*	M-2	1						
	30'LA, 15'L.A.	1W3C(12")	M-2	1					400W	
		1W3C(12")	B-1	1		1W2C	W-0	1		
H	Type I	1W3C	A-2	1	2	1W2C	W-0	1		
		(R,Y, 12"G.A.)								
I										
J										

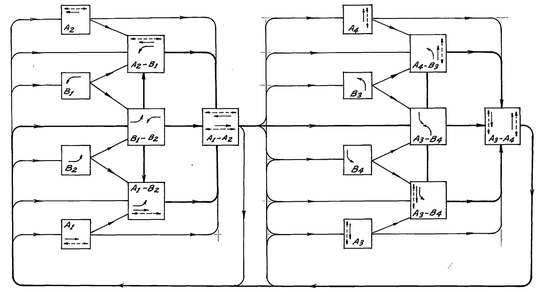
S.A. = Signal Arm L.A. = Luminaire Arm

* Programmed Visibility Signal Heads.

All Type I standards are aluminum.

Luminaires are High Pressure Sodium Vapor.

PHASE DIAGRAM



ØA1, ØA2, ØA3 & ØA4 - Type SP Modules

ØB1, ØB2, ØB3 & ØB4 - Type S Modules

Flashing Indications: All Red

MARK	REVISIONS	APPR.	DATE
	As Built per Cont. TE-72-2 W.O.	P.B.B.	10-31-73

DESIGNED BY: DRAWN BY JMW CHECKED BY:

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT

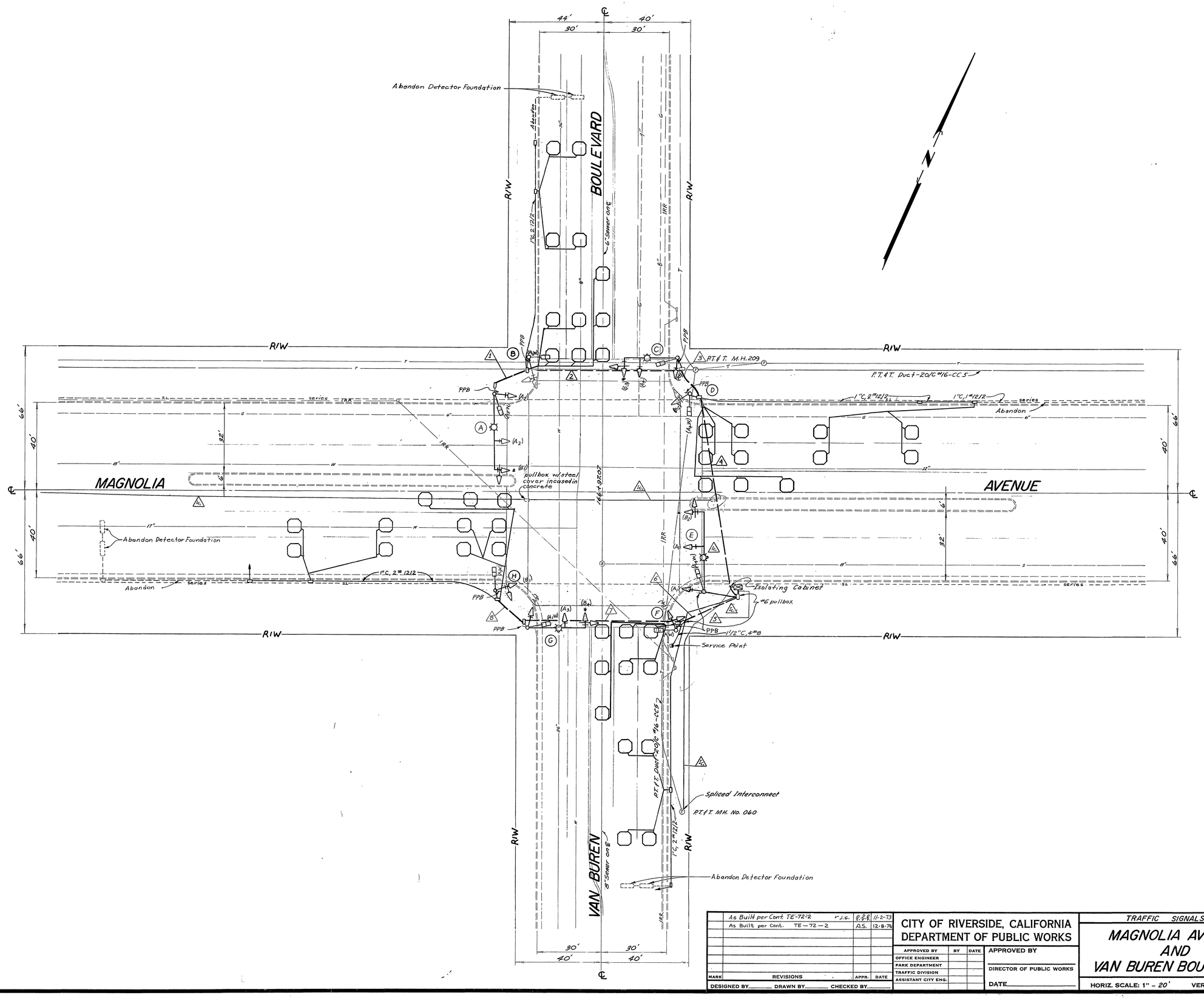
APPROVED BY	BY	DATE
PRINCIPAL ENGINEER		
PARK DEPARTMENT		
TRAFFIC DIVISION		
CHIEF PUB. WKS. ENGR.		

APPROVED BY _____
DIRECTOR OF PUBLIC WORKS
DATE _____

EQUIPMENT & CONDUCTORS
MAGNOLIA AVE.
& VAN BUREN BLVD.

SCALE: NONE

ACCOUNT No. 84-451-630
DRAWING NUMBER
X-308
SHEET 2 OF 2



MARK	REVISIONS	APPR.	DATE
	As Built per Cont. TE-72-2 r.j.c.	R.F.B.	11-2-73
	As Built per Cont. TE-72-2	A.S.	12-8-76

DESIGNED BY_____ DRAWN BY_____ CHECKED BY_____

CITY OF RIVERSIDE, CALIFORNIA
DEPARTMENT OF PUBLIC WORKS

APPROVED BY	BY	DATE
OFFICE ENGINEER		
PARK DEPARTMENT		
TRAFFIC DIVISION		
ASSISTANT CITY ENG.		

APPROVED BY

DIRECTOR OF PUBLIC WORKS

DATE

TRAFFIC SIGNALS

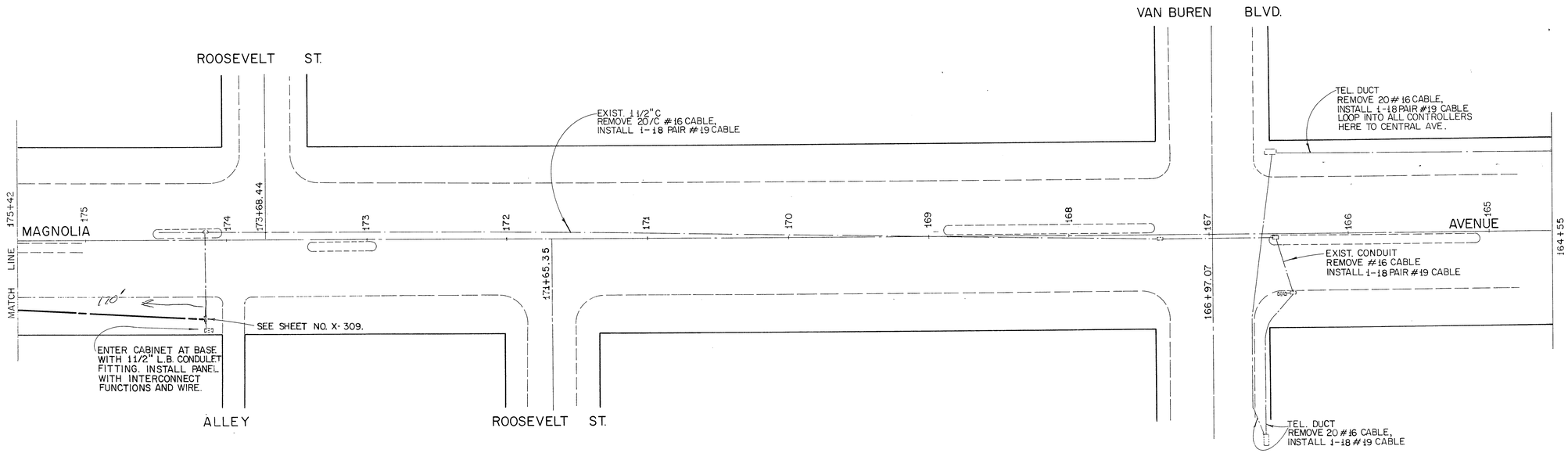
MAGNOLIA AVENUE AND VAN BUREN BOULEVARD

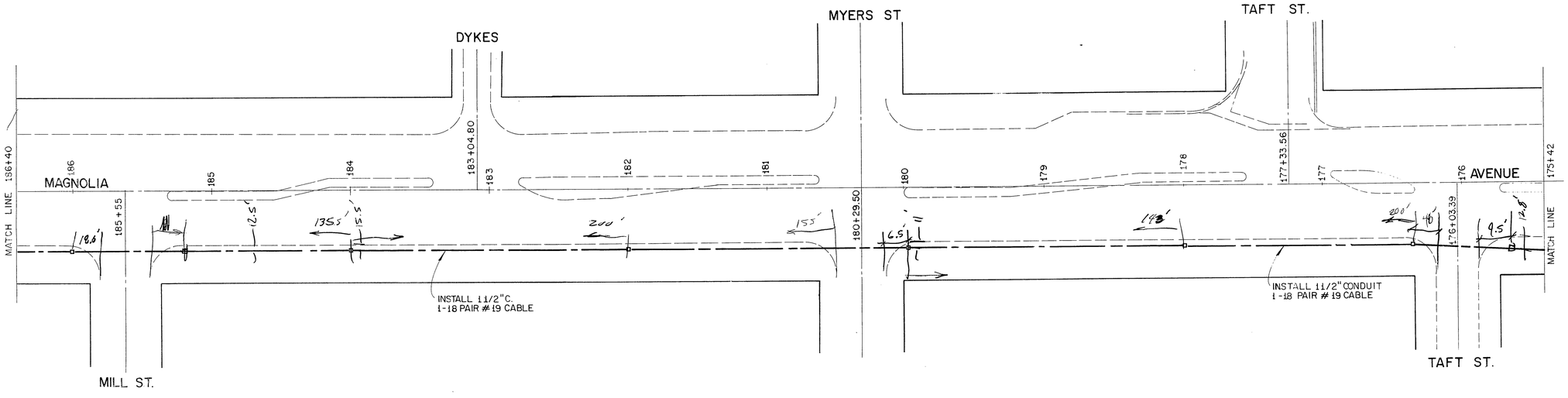
HORIZ. SCALE: 1" = 20' VERT. SCALE: 1" =

PROJECT NO. X-308

SHEET 1 OF 2

FILE NO.





MPA
MOHLE, PERRY & ASSOC.

PREPARED BY: R. H. Mohle Oct 9, 1985
DESIGN ENGR. R.C.E. 10692 DATE

MARK	REVISIONS	APPR.	DATE

DESIGNED BY JJS DRAWN BY JAD CHECKED BY RHM

CITY OF RIVERSIDE, CALIFORNIA
DEPARTMENT OF PUBLIC WORKS

APPROVED BY	BY	DATE
PRINCIPAL ENGINEER		
PARK DEPARTMENT		
TRAFFIC DIVISION		
CHIEF P. W. ENGR.		
PUBLIC UTILITIES		

APPROVED BY
DIRECTOR OF PUBLIC WORKS
DATE

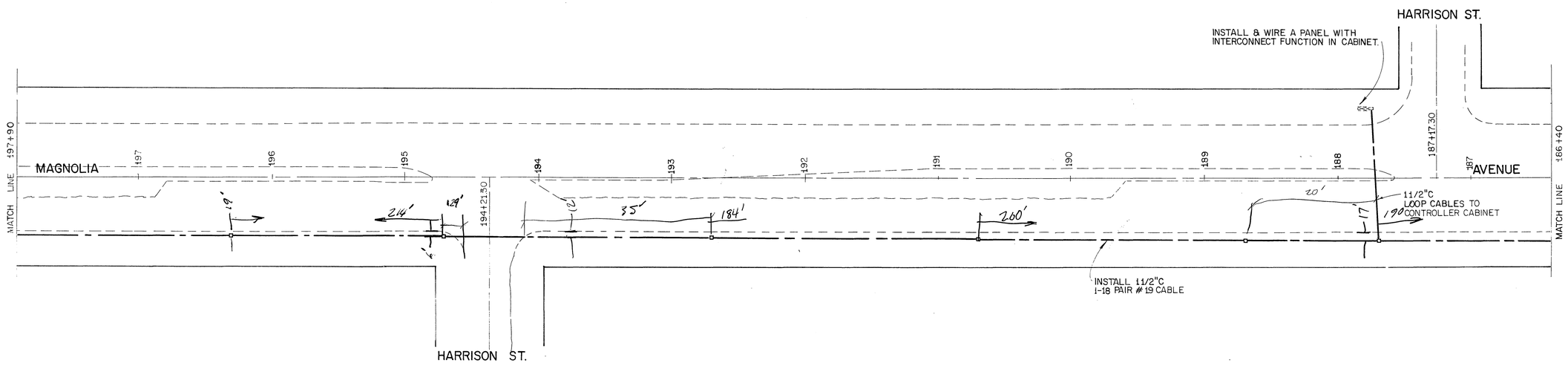
INTERCONNECT DETAIL
MAGNOLIA AVENUE
E/O HARRISON ST. TO
VAN BUREN BLVD.

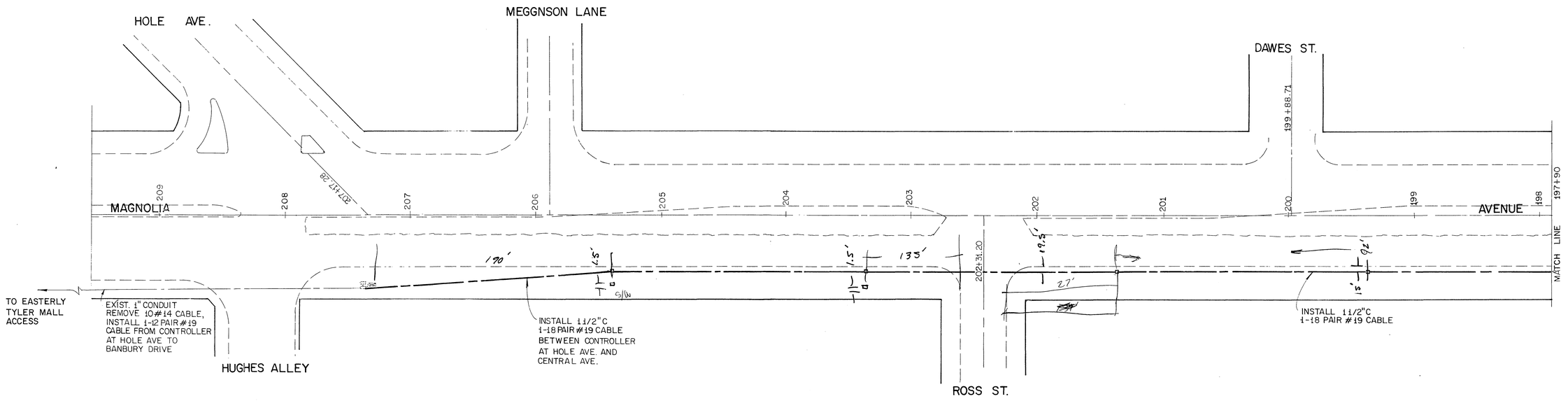
PROJECT NO.

SHEET 50 OF 50

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

FILE NO.





MOHLE, PERRY & ASSOC.

PREPARED BY: R. H. Mohle Oct 9, 1980
DESIGN ENGR. R.C.E. 10692 DATE

MARK	REVISIONS	APPR.	DATE

DESIGNED BY JJS DRAWN BY JAD CHECKED BY RHM

CITY OF RIVERSIDE, CALIFORNIA
DEPARTMENT OF PUBLIC WORKS

APPROVED BY	BY	DATE
PRINCIPAL ENGINEER		9/21/81
PARK DEPARTMENT		
TRAFFIC DIVISION		9/15
CHIEF P. W. ENGR.		10-30
PUBLIC UTILITIES		12/1

APPROVED BY
DIRECTOR OF PUBLIC WORKS
DATE 12/10/81

INTERCONNECT DETAIL
MAGNOLIA AVENUE
HOLE AVE. TO HARRISON ST.

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

PROJECT NO.

SHEET 49 OF 50

FILE NO.