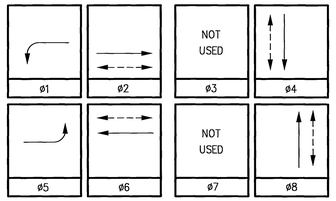
CONDUCTOR TABLE

CONTROL FUNCTION	CONDUCTORS	CONDUCTOR RUNS 1	2	3	4	5	6	7	8
VEHICLE & PEDESTRIAN HEADS, PEDESTRIAN PUSH BUTTONS, SPARES & COMMONS	12 CONDUCTOR IMSA	1	2	3	4	5	8	2	1
	–	–	–	–	–	–	–	–	–
	–	–	–	–	–	–	–	–	–
	3 CONDUCTOR IMSA	1	2	3	4	5	8	2	1
DETECTOR CABLE	#16/2								
PHASE 1		–	–	–	–	1	1	–	–
PHASE 2		2	2	2	2	2	2	–	–
PHASE 4		–	–	–	–	–	1	1	–
PHASE 5		1	1	1	1	1	1	–	–
PHASE 6		–	–	–	–	2	2	–	–
PHASE 8		–	–	1	1	1	1	–	–
TOTALS		3	3	4	4	7	8	1	–
EVPE CABLE	#20/4	–	1	1	2	–	4	1	1
IISNS	#12	–	2	2	2	2	–	2	2
LUMINAIRES	#8	–	2	2	2	2	–	2	2
SIGNAL SERVICE	#6	–	–	–	–	–	2	2	2
CONDUIT SIZE		2"(E)	2"(E)	2.5"(E)	3"	3"(E)	2–3.5"	2"(E)	2"(E)

ALL CONDUIT AND CONDUCTORS ARE NEW UNLESS OTHERWISE INDICATED AS (E) EXISTING.
EXISTING CONDUCTORS SHALL BE REMOVED AND NOT REUSED UNLESS OTHERWISE NOTED.

PHASE DIAGRAM



POLE SCHEDULE

No.	STANDARD TYPE	HGT.	SIG. M.A.	LUM. M.A.	LUMINAIRE HPS	IISNS LEGEND	SIGNAL MOUNTING VEHICLE	PED	AUDIBLE	PPB PHASE	REMARKS
1	19–4–129(N)	30'	30'(N)	12'(N)	250W(N)	Bandini Ave 4100 (N)	MAS(N)	MAS(N)	SV–1–T(N)	SP–1–T(N)	((C))(N)	ø4(N)	
2	1–A	7'	–	–	–	–	–	–	–	TP–1–T	((P))(N)	ø6(N)	
3	17–2–80	30'	15'	12'	200W	Brockton Ave 5300	–	MAS	SV–1–T	SP–1–T	((P))(N)	ø6(N)	
4	1–A	10'	–	–	–	–	–	–	TV–1–T(N)	SP–1–T	((C))(N)	ø8(N)	
5	19–4–129(N)	30'	30'(N)	12'(N)	250W(N)	Bandini Ave 4000 (N)	MAS(N)	MAS(N)	SV–1–T(N)	SP–1–T(N)	((C))(N)	ø8(N)	
6	1–A	7'	–	–	–	–	–	–	–	TP–1–T	((P))(N)	ø2(N)	
7	17–2–80	30'	15'	12'	200W	Brockton Ave 5400	–	MAS	SV–1–T	SP–1–T	((P))(N)	ø2(N)	
8	1–A	10'	–	–	–	–	–	–	TV–1–T(N)	SP–1–T	((C))(N)	ø4(N)	

ALL EQUIPMENT IS EXISTING UNLESS OTHERWISE INDICATED AS (N) NEW.
((C)) OR ((P)) – INDICATES AUDITORY PEDESTRIAN SIGNAL TO BE INSTALLED: ((C)) INDICATES CUCKOO SOUND; ((P)) INDICATES PEEP–PEEP SOUND.

CONSTRUCTION NOTES (THIS SHEET):

1. INSTALL MODEL 170 CONTROLLER ASSEMBLY WITH MODEL 332 CABINET. INSTALL 3M OPTICOM PHASE SELECTOR MODULES.
2. REMOVE AND SALVAGE EXISTING TYPE 90 CONTROLLER ASSEMBLY AND TYPE P CABINET. REMOVE FOUNDATION.
3. INSTALL 3M OPTICOM DETECTOR MODEL 711 ON MAST ARM BY CLAMPING METHOD. EXACT LOCATION OF DETECTOR SHALL BE DETERMINED BY THE MANUFACTURER'S REPRESENTATIVE IN THE FIELD.
4. REMOVE AND SALVAGE EXISTING SIGNAL STANDARD AS NOTED. REMOVE FOUNDATION.
5. REMOVE EXISTING PULL BOX AND REPLACE WITH NEW PULL BOX.
6. PAINT RED CURB.

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 REQUIREMENTS SHALL BE COMPLETED AT LEAST ONE DAY PRIOR TO TURN–ON.
3. TYPICAL DETECTOR LOOP SPACING: 10', 15', 30' (WHERE APPLICABLE).
4. CONTRACTOR SHALL PERFORM ALL PERMANENT PAINTING (INSTALLATION AND REMOVALS) WORK.
5. ALL NEW VEHICLE HEADS SHALL HAVE 12" LENSES WITH RED, YELLOW, AND GREEN 'LED' TYPE INDICATIONS.
6. NEW PEDESTRIAN SIGNAL HEADS SHALL HAVE 'LED' TYPE INDICATIONS.
7. PEDESTRIAN PUSH BUTTONS SHALL BE ADA APPROVED TYPE. EXISTING PUSH BUTTONS SHALL BE REMOVED AND BECOME THE PROPERTY OF THE CONTRACTOR.
8. OPTICOM PHASE SELECTORS SHALL BE 2 CHANNEL UNITS ONLY.
9. AUDIBLE PEDESTRIAN SIGNAL SHALL BE INTERNAL MOUNT ONLY.

SCALE:1"=20'

REGISTERED PROFESSIONAL ENGINEER — MARK H. MILLER — No. 40956 Exp. 3-31-07 — CIVIL — STATE OF CALIFORNIA

TRAFFIC No. 1575
DATE: 6-8-04

AGA Job No. : 134–006
AGA File Name: BROCKBAND
Print Date : 6/8/04
Last Revision : 6/3/04

ALBERT GROVER & ASSOCIATES
TRANSPORTATION CONSULTING ENGINEERS
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DEPARTMENT OF PUBLIC WORKS

APPROVED BY	DATE	BY
PRINCIPAL ENGINEER	6/10/04	
TRAFFIC DIVISION	6/10/04	

APPROVED BY
CITY ENGINEER
DATE 6/11/04

TRAFFIC SIGNAL PLAN

BROCKTON AVENUE AND BANDINI AVENUE

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

ACCOUNT NO. X–157A

SHEET 2 OF 9

CONDUCTOR SCHEDULE

AWG	CIRCUIT	RUNS 1	2	3	4	5	6	7	8
# 14	Ø2		–	–	3	3	3	–	–
	Ø4		3	3	3	3	3	–	–
	Ø6	3	3	3	3	3	6	3	3
	Ø8		–	–	–	–	3	–	–
	Ø2 PED	2	2	2	2	2	2	–	–
	Ø4 PED		2	2	2	2	4	2	–
	Ø6 PED		–	–	–	2	4	2	2
	Ø8 PED		–	2	2	2	4	–	–
	Ø2 PPB		1	1	1	1	1	–	–
	Ø4 PPB	1	1	1	1	1	2	1	1
	Ø6 PPB		–	–	–	–	2	1	–
	Ø8 PPB		–	–	1	1	1	–	–
	PPB COMMON	1	1	1	1	1	2	1	1
	SPARES	3	3	3	3	3	6	3	3
	TOTAL	10	16	18	22	24	43	13	10
TYPE C DLC	Ø2 DETECTOR	2	2	2	2	2	2	–	–
	Ø4 DETECTOR		–	–	–	–	1	1	–
	Ø6 DETECTOR		–	–	–	2	2	–	–
	Ø8 DETECTOR		–	1	1	1	1	–	–
	TOTAL	2	2	3	3	5	6	1	–
#12	I.I.S.N.S.		2	2	2	2	–	2	2
#10	SIGNAL COMMON	1	1	1	1	1	2	1	1
# 8	LUMINAIRE		2	2	2	2	–	2	2
	SIGNAL SERVICE		–	–	–	–	2	2	2
	TOTAL		2	2	2	2	2	4	4
CONDUIT SIZE		2"	2"	2 1/2"	2 1/2"	3"	2–3"	2"	2"

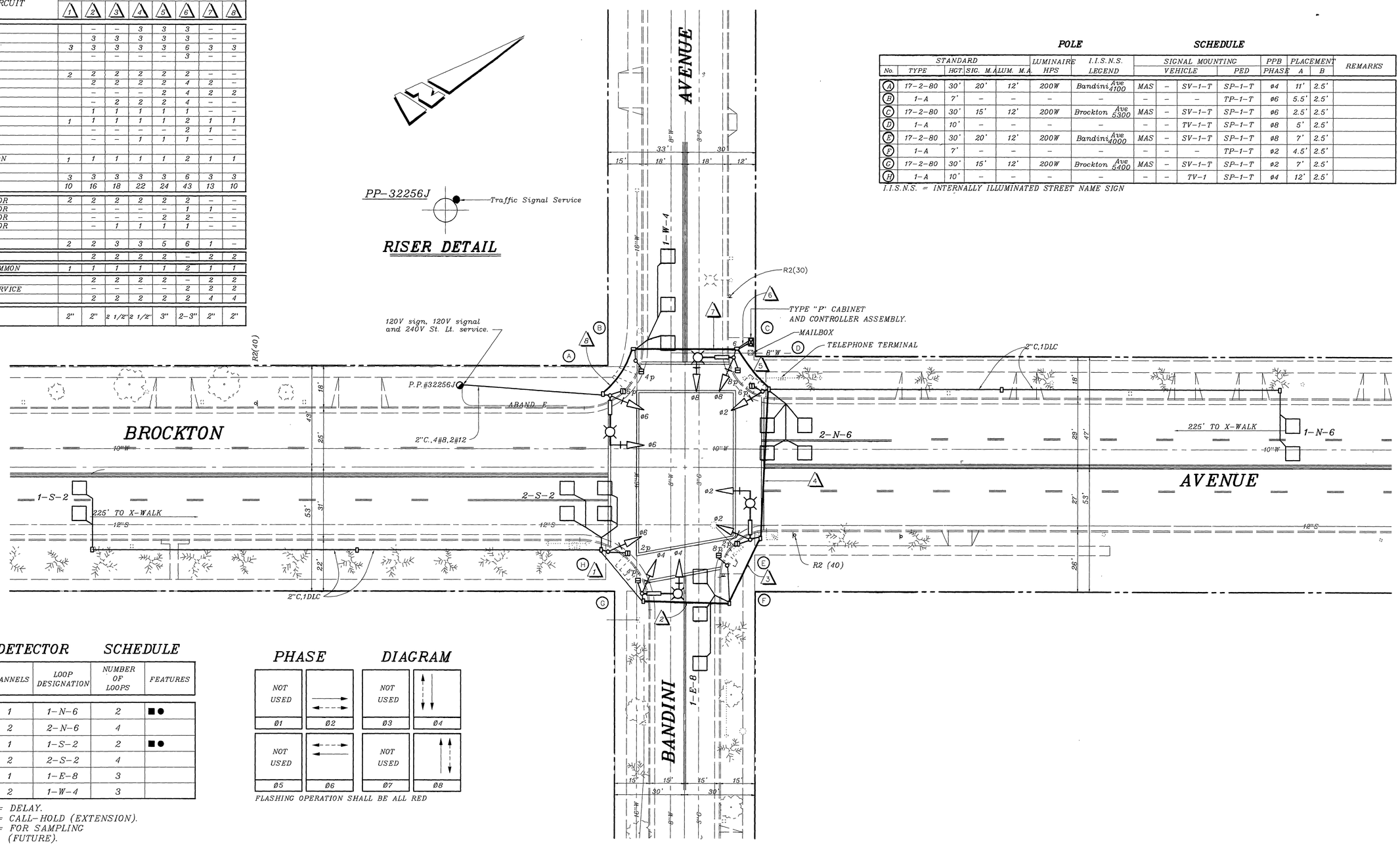
PP–32256J — Traffic Signal Service

RISER DETAIL

POLE SCHEDULE

No.	STANDARD TYPE	MAST ARM HGT.	SIG. M. ARM	LUM. M. ARM	LUMINAIRE HPS	I.I.S.N.S. LEGEND	SIGNAL MOUNTING VEHICLE			PED	PPB PHASE	PLACEMENT A	PLACEMENT B	REMARKS
A	17–2–80	30'	20'	12'	200W	Bandini Ave 4100	MAS	–	SV–1–T	SP–1–T	ø4	11'	2.5'	
B	1–A	7'	–	–	–	–	–	–	–	TP–1–T	ø6	5.5'	2.5'	
C	17–2–80	30'	15'	12'	200W	Brockton Ave 5300	MAS	–	SV–1–T	SP–1–T	ø6	2.5'	2.5'	
D	1–A	10'	–	–	–	–	–	–	TV–1–T	SP–1–T	ø8	5'	2.5'	
E	17–2–80	30'	20'	12'	200W	Bandini Ave 4000	MAS	–	SV–1–T	SP–1–T	ø8	7'	2.5'	
F	1–A	7'	–	–	–	–	–	–	–	TP–1–T	ø2	4.5'	2.5'	
G	17–2–80	30'	15'	12'	200W	Brockton Ave 5400	MAS	–	SV–1–T	SP–1–T	ø2	7'	2.5'	
H	1–A	10'	–	–	–	–	–	–	TV–1	SP–1–T	ø4	12'	2.5'	

I.I.S.N.S. = INTERNALLY ILLUMINATED STREET NAME SIGN



DETECTOR SCHEDULE

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

▲ = DELAY.
■ = CALL–HOLD (EXTENSION).
● = FOR SAMPLING (FUTURE).

PHASE DIAGRAM

NOT USED		NOT USED	
Ø1	Ø2	Ø3	Ø4
NOT USED		NOT USED	
Ø5	Ø6	Ø7	Ø8

FLASHING OPERATION SHALL BE ALL RED

AS–BUILT PER SIGNALIZATION MAC 12/97

DESIGNED BY ____ DRAWN BY ____ CHECKED BY ____

CITY OF RIVERSIDE, CALIFORNIA
DEPARTMENT OF PUBLIC WORKS

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PARK DEPARTMENT		
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CHIEF P.W. ENGR.		
PUBLIC UTILITIES		

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DIRECTOR OF PUBLIC WORKS
DATE

TRAFFIC SIGNAL

BROCKTON AVE. & BANDINI AVE.

ACCT. NO. X–157

SHEET 1 OF 1

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

FILE NO.

CONDUCTOR SCHEDULE

AWG	CIRCUIT	RUNS 1	2	3	4	5	6	7	8
# 14	Ø2		–	–	3	3	3	–	–
	Ø4		3	3	3	3	3	–	–
	Ø6	3	3	3	3	3	6	3	3
	Ø8		–	–	–	–	3	–	–
	Ø2 PED	2	2	2	2	2	2	–	–
	Ø4 PED		2	2	2	2	4	2	–
	Ø6 PED		–	–	–	2	4	2	2
	Ø8 PED		–	2	2	2	4	–	–
	Ø2 PPB		1	1	1	1	1	–	–
	Ø4 PPB	1	1	1	1	1	2	1	1
	Ø6 PPB		–	–	–	–	2	1	–
	Ø8 PPB		–	–	1	1	1	–	–
	PPB COMMON	1	1	1	1	1	2	1	1
	SPARES	3	3	3	3	3	6	3	3
	TOTAL	10	16	18	22	24	43	13	10
TYPE C DLC	Ø2 DETECTOR	2	2	2	2	2	2	–	–
	Ø4 DETECTOR		–	–	–	–	1	1	–
	Ø6 DETECTOR		–	–	–	2	2	–	–
	Ø8 DETECTOR		–	1	1	1	1	–	–
	TOTAL	2	2	3	3	5	6	1	–
#12	I.I.S.N.S.		2	2	2	2	–	2	2
#10	SIGNAL COMMON	1	1	1	1	1	2	1	1
# 8	LUMINAIRE		2	2	2	2	–	2	2
	SIGNAL SERVICE		–	–	–	–	2	2	2
	TOTAL		2	2	2	2	2	4	4
CONDUIT SIZE		2"	2"	2 1/2	2 1/2	3"	2–3"	2"	2"

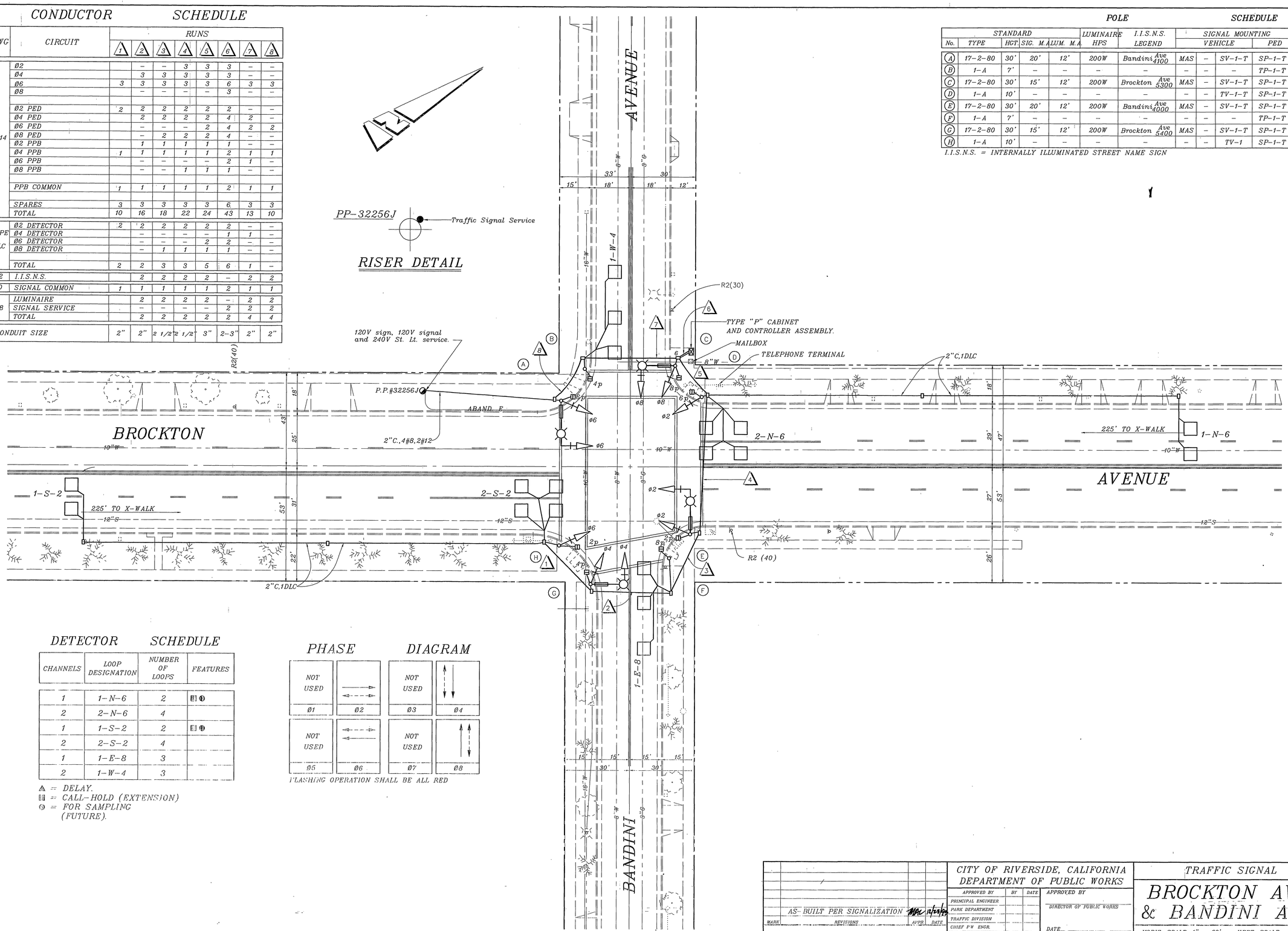
PP–32256J — Traffic Signal Service

RISER DETAIL

POLE SCHEDULE

No.	STANDARD TYPE	HGT.	SIG. M.A.	LUM. M.A.	LUMINAIRE HPS	I.I.S.N.S. LEGEND	SIGNAL MOUNTING VEHICLE		PED	PPB PHASE	PLACEMENT A	B	REMARKS
(A)	17–2–80	30'	20'	12'	200W	Bandini Ave 4100	MAS	–	SV–1–T	SP–1–T	ø4	11'	2.5'	
(B)	1–A	7'	–	–	–	–	–	–	–	TP–1–T	ø6	5.5'	2.5'	
(C)	17–2–80	30'	15'	12'	200W	Brockton Ave 5300	MAS	–	SV–1–T	SP–1–T	ø6	2.5'	2.5'	
(D)	1–A	10'	–	–	–	–	–	–	TV–1–T	SP–1–T	ø8	5'	2.5'	
(E)	17–2–80	30'	20'	12'	200W	Bandini Ave 4000	MAS	–	SV–1–T	SP–1–T	ø8	7'	2.5'	
(F)	1–A	7'	–	–	–	–	–	–	–	TP–1–T	ø2	4.5'	2.5'	
(G)	17–2–80	30'	15'	12'	200W	Brockton Ave 5400	MAS	–	SV–1–T	SP–1–T	ø2	7'	2.5'	
(H)	1–A	10'	–	–	–	–	–	–	TV–1	SP–1–T	ø4	12'	2.5'	

I.I.S.N.S. = INTERNALLY ILLUMINATED STREET NAME SIGN



DETECTOR SCHEDULE

CHANNELS	LOOP DESIGNATION	NUMBER OF LOOPS	FEATURES
1	1–N–6	2	▯ ⓓ
2	2–N–6	4	
1	1–S–2	2	▯ ⓓ
2	2–S–2	4	
1	1–E–8	3	
2	1–W–4	3	

△ = DELAY.
▯ = CALL–HOLD (EXTENSION)
ⓓ = FOR SAMPLING (FUTURE).

PHASE DIAGRAM

NOT USED		NOT USED	
Ø1	Ø2	Ø3	Ø4
NOT USED		NOT USED	
Ø5	Ø6	Ø7	Ø8

FLASHING OPERATION SHALL BE ALL RED

AS–BUILT PER SIGNALIZATION 11-29-95

CITY OF RIVERSIDE, CALIFORNIA
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DATE

MARK REVISIONS APPR DATE

DESIGNED BY ____ DRAWN BY ____ CHECKED BY ____

TRAFFIC SIGNAL

BROCKTON AVE. & BANDINI AVE.

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

ACCT. NO. X–157

SHEET 1 OF 1

FILE NO.