RIVERSIDE CITY OF RIVERSIDE CALIFORNIA

PUBLIC WORKS DEPARTMENT

PALM AVENUE WIDENING

BANDINI AVENUE TO PINE STREET

PROJECT LENGTH: 3300'

TRAFFIC INDEX: 7.5

SPECIAL CONSTRUCTION NOTES

(1) CONSTRUCT STRUCTURAL SECTION PER THE SCHEDULE BELOW

(2) OVERLAY EXISTING A.C. PAVEMENT WITH A VARIABLE THICKNESS OF ASPHALT CONCRETE. MINIMUM OVERLAY TO BE 0.1' THICK.

(3) PLACE 0.2' D.G. FOR WALKWAY, 6' WIDE OR TO THE RIGHT-OF-WAY LINE IF LESS THAN 6'

(4) REPLACE OR REGRADE DRIVEWAY TO GRADES AND MATERIALS SHOWN ON THE PLAN, A.C. 0.2' THICK, P.C.C. 0.5' THICK.

(5) EXTEND EXISTING CULVERTS TO THE PROPOSED TOE OF SLOPE. SIZE, TYPE, AND LENGTH OF PIPE SHOWN ON PLAN. PLACE 1 CU. YD. BROKEN CONCRETE RUBBLE AT THE OUTLET OF THE EXTENDED CULVERT.

(200) CONSTRUCT CURB & GUTTER OR CURB ONLY PER STD. 200. TYPE I UNLESS SHOWN OTHERWISE ON PLAN.

(210) CONSTRUCT CROSS GUTTER PER STD. 210.

(302) CONSTRUCT DRIVEWAY APPROACH PER STD 302., TYPE IV.

(304) CONSTRUCT WHEELCHAIR RAMPS PER STD. 304

(305) CONSTRUCT SIDEWALK PER STD. 305

(405) CONSTRUCT CATCH BASIN PER STD. 405, "W" AND "V" DIMENSIONS SHOWN ON PLAN. STATION IS ℄ OF OPENING

(408) CONSTRUCT CATCH BASIN PER STD. 408 "W" AND "V" DIMENSIONS SHOWN ON PLAN. STATION IS ℄ OF OPENING

(500) CONSTRUCT MANHOLE PER STD. 500.

(R-2) REMOVE ENTIRE TREE: CLASS 1 - 6" TO 18" DIA.
CLASS 2 - OVER 18" TO 36" DIA.
CLASS 3 - OVER 36" DIA.

(250) PLACE BERM PER STD. 250

PLACE OPEN GRADED I.C. PER TYPICAL SECTION.

STRUCTURAL SECTION SCHEDULE

TRAFFIC INDEX = 7.5

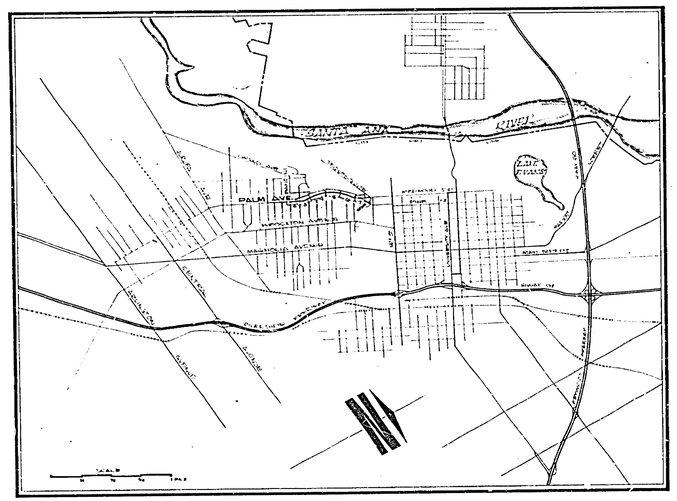
0.55' AC
0.0' AB BASE

A.C. OVER BASE
ALTERNATE I

~~0.75' AC~~

~~FULL DEPTH~~

~~ALTERNATE II~~



GENERAL CONSTRUCTION NOTES

1. EXISTING UTILITIES, SHOWN ON THIS PLAN ARE PLOTTED FROM AVAILABLE RECORDS. THE CONTRACTOR IS REQUIRED TO TAKE THE PRECAUTIONARY MEASURES TO LOCATE AND PROTECT ALL UTILITIES WHETHER OR NOT SHOWN. IF THE COVER IS NOT SHOWN IT IS SHOWN IN THE PROFILE. UTILITIES SHOWN INDICATES THAT EXACT COVER IS NOT KNOWN, BUT THE UTILITY IS NOT EXPECTED TO CONFLICT WITH IMPROVEMENTS.

2. SEE PLAN L.S.-4893 FOR STREET LIGHTING AND PLAN R-1783-E FOR SURPLUS DIRT AND BROKEN CONCRETE DISPOSAL.

3. N.P. C.M.P. SPECIFIED ON PLAN SHALL BE A MINIMUM OF 14 GA.

4. TRAFFIC SIGNS REMOVED DURING CONSTRUCTION SHALL BE SALVAGED BY THE CONTRACTOR AND RELOCATED AS DIRECTED BY THE INSPECTOR.

5. UNLESS OTHERWISE NOTED ON PLAN: ALL SLOPES 2:1. SLOPES LESS THAN 2' HIGH ARE NOT NECESSARILY SHOWN ON THE PLAN.

6. GRADE AS NECESSARY TO ALLOW FLOW TO AND FROM PROPOSED DRAINS.

7. RIGHTS-OF-ENTRY HAVE BEEN OBTAINED FOR WORK SHOWN ON PRIVATE PROPERTY.

8. SALVAGE, OR DISPOSE OF ALL FENCES REMOVED FROM CITY RIGHT OF WAY DURING CONSTRUCTION AS DIRECTED BY THE INSPECTOR.

9. RELOCATION OF EXISTING UTILITIES SHOWN IN CONFLICT WITH THE PROPOSED IMPROVEMENTS WILL BE RELOCATED BY OWNERS PRIOR TO CONSTRUCTION, EXCEPT AS NOTED ON THE PLAN.

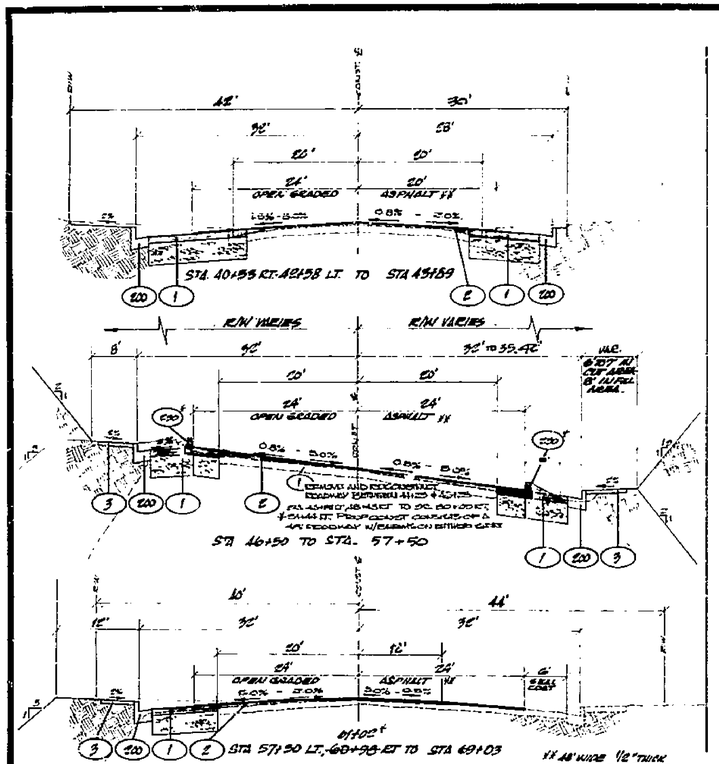
10. SEE STANDARD DRAWING NO. 1 FOR EXISTING CULTURE AND UNDERGROUND LEGEND.

CITY OF RIVERSIDE, CALIFORNIA PUBLIC WORKS DEPARTMENT			
APPROVED BY	BY	DATE	APPROVED BY
PRINCIPAL ENGINEER		4/12	
PARK DEPARTMENT	—	—	DIRECTOR OF PUBLIC WORKS
TRAFFIC DIVISION		11/4	
CHIEF PUB. WKS. ENGR.		4-8	DATE 4-8-75

Palm Avenue Widening
Bandini Avenue to Pine Street

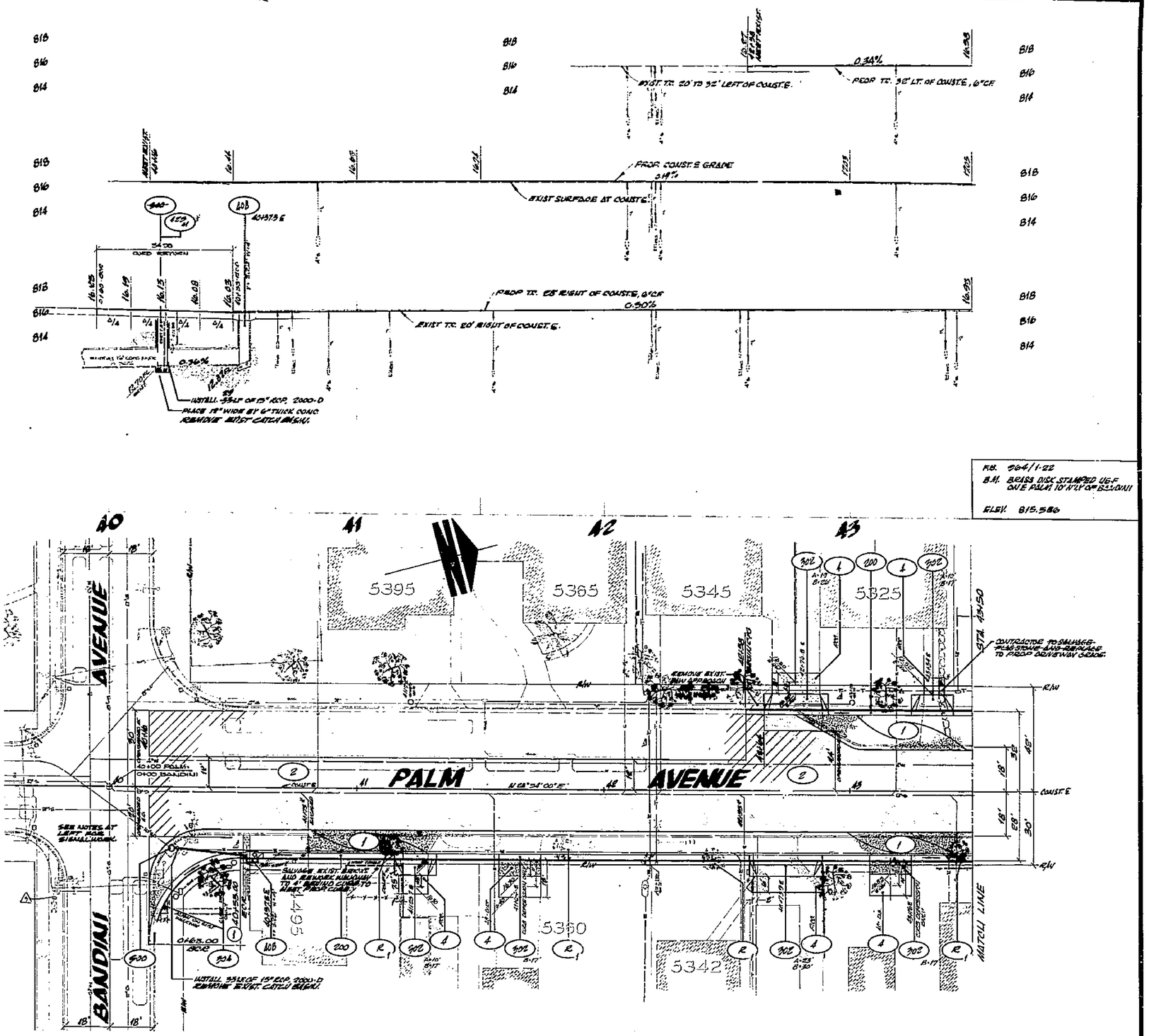
DESIGNED BY ___ DRAWN BY ___ CHECKED BY ___

INDEXED
ACCOUNT No. 250
DRAWING NUMBER
R-1656
SHEET 1 OF 8



TYPICAL SECTIONS

SCALES: HORZ. 1" = 10'
VERT. 1" = 4'



FB. 364/1-22
B.M. BRASS DISK STAMPED U6-F ON E PALM 10' W'LY OF B'DINI
ELEV. 815.586

NOTES FOR SIGNAL WORK ONLY

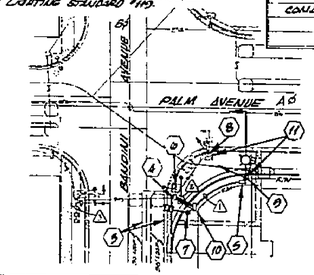
CONSTRUCTION NOTES:

1. NOTIFY TRAFFIC ENGINEERING REPRESENTATIVE (AT PH. 787-7576) 48 HOURS PRIOR TO START OF SIGNAL WORK.
2. INSTALL NEW CONDUCTORS PER SCHEDULE AT RIGHT.
3. INSTALL DETECTOR LOOPS & CABLES AS DIRECTED BY T.E. REPRESENTATIVE.
4. INTERCEPT EXIST. 2" CONDUIT & EXTEND AS SHOWN. INSTALL DRS CUT AS INDICTED. USE THREADED RIGID COUPLING.
5. INSTALL #5 TRAFFIC SIGNAL PULL BOX.
6. SALVAGE AND RELOCATE EXIST. STANDARD AND EQUIPMENT, REMOVE FOUNDATION AND CONDUIT.
7. INSTALL SALVAGED STANDARD AND EQUIPMENT ON NEW FOUNDATION AND CONDUIT.
8. SALVAGE EXIST. STANDARD AND RELOCATE EXIST. LUMINAIRE AND HEADS ON NEW MOUNTING HARDWARE FOR TYPE IIX, REMOVE FOUNDATION & CONDUIT.
9. INSTALL NEW TYPE IIX STANDARD AND MAST ARM ON NEW FOUNDATION AND CONDUIT. INSTALL SALVAGED HEADS, EQUIP. AND LUMINAIRE.
10. INSTALL #5 TRAFFIC SIGNAL PULL BOX W/10' LOOP EXTRA SLACK FOR FUTURE RELOCATION AS DIRECTED.
11. SALVAGE EXIST. PED. PUSH BUTTON. INSTALL NEW PED. PUSH BUTTON ON NEW TYPE IIX STD. AS DIRECTED.

ALL WORK SHALL BE DONE IN ACCORDANCE WITH SECTION 8" SIGNALS AND LIGHTING" OF THE STANDARD SPECIFICATIONS DATED JULY 1973 OF THE STATE OF CALIFORNIA, DEPT. OF TRANS. AND APPLICABLE CITY OF RIVERSIDE STANDARD SPECIFICATIONS, SPECIAL PROVISIONS, AND STREET LIGHTING STANDARD #193.

CONDUCTOR SCHEDULE

CONTROL FUNCTION	CONDUCTORS VEH	CONDUCTORS PED	CONDUIT RUN Δ1	CONDUIT RUN Δ2	CONDUIT RUN Δ3
VEHICLE HEADS	#12	TW			
Ø A			5	5	5
Ø B					
PED. HEADS					
Ø AW				2	2
Ø BW			2	2	2
PED. PUSH BUTTON					
Ø AW				1	1
Ø BW			1	1	1
SPARES			5	5	5
DETECTOR CABLE	#12/2	FB			
Ø A				2	2
Ø B					
12 V COMMON	#12	TW	1	1	1
120 V COMMON	#10		1	1	1
SIGNAL SERVICE	#8				
LUMINAIRES		THW	2	2	
TOTALS	#14	TW	9	18	18
	#12/2	FB		2	2
	#12	TW	1	1	1
	#10		1	1	1
	#8				
	#8	THW	2	2	
CONDUIT			2" NRM	2" NRM	3" RGS



CURVE DATA

CURVE	R	Δ	L	T
1	35.00'	90° 00' 00"	54.98'	35.00'

CAUTION

PACIFIC TELEPHONE CABLES UNDERGROUND, BEFORE EXCAVATING CALL: 714-684-0071 OR 714-547-6606

MARK	REVISIONS	APPR	DATE
Δ1	CONDS. ELECTRICAL UNDERGROUND	W.L.V.	6-14-79
Δ2	16 POST		6-11-79

DESIGNED BY ____ DRAWN BY ____ CHECKED BY ____

CITY OF RIVERSIDE, CALIFORNIA
DEPARTMENT OF PUBLIC WORKS

APPROVED BY	INT	DATE
PRINCIPAL ENGINEER		7/17
PARK DEPARTMENT		7/17
TRAFFIC DIVISION		7/16
CHIEF P. W. ENGR.		7/18

APPROVED BY ____
DIRECTOR OF PUBLIC WORKS
DATE 4-8-80

Palm Avenue Widening

Bandini Avenue to Pine Street

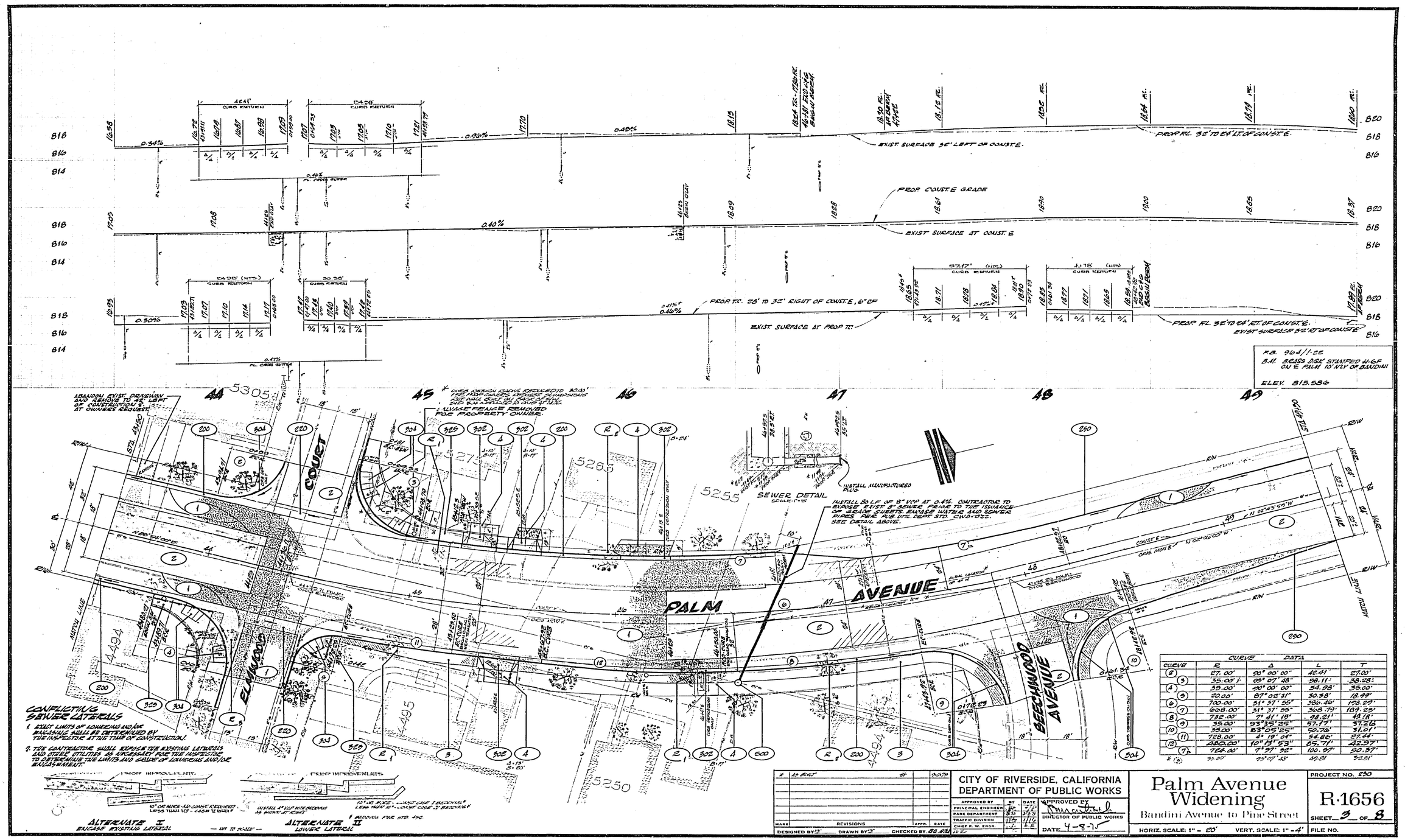
PROJECT NO. 250

R-1656

SHEET 2 OF 8

HORIZ. SCALE: 1" = 20' VERT. SCALE: 1" = 4'

FILE NO. 1



CURVE DATA				
CURVE	R	Δ	L	T
2	27.00'	90° 00' 00"	42.41'	27.00'
3	55.00'	95° 07' 48"	91.11'	58.28'
4	35.00'	90° 00' 00"	54.98'	35.00'
5	20.00'	87° 02' 31"	30.38'	18.99'
6	730.00'	51° 37' 55"	380.46'	203.27'
7	608.00'	31° 37' 55"	318.79'	163.25'
8	732.00'	7° 41' 19"	98.21'	49.16'
9	35.00'	93° 35' 25"	57.17'	37.26'
10	55.00'	83° 05' 25"	79.76'	48.07'
11	725.00'	4° 19' 24"	54.86'	27.44'
12	480.00'	10° 13' 53"	85.71'	42.97'
7A	784.00'	7° 37' 52"	100.57'	50.37'
*	33.00'	75° 07' 45"	43.81'	32.81'

MARK	REVISIONS	APPR.	DATE
1	10 FEET 35'		3-17-75

DESIGNED BY J.T. DRAWN BY J.T. CHECKED BY B.B.

CITY OF RIVERSIDE, CALIFORNIA
DEPARTMENT OF PUBLIC WORKS

APPROVED BY	BY	DATE
PRINCIPAL ENGINEER		4-2-75
PARK DEPARTMENT		2-27-75
TRAFFIC DIVISION		1-16-75
CHIEF P. W. ENGR.		1-6-75

APPROVED BY
DIRECTOR OF PUBLIC WORKS
DATE 4-8-75

Palm Avenue Widening

Bandini Avenue to Pine Street

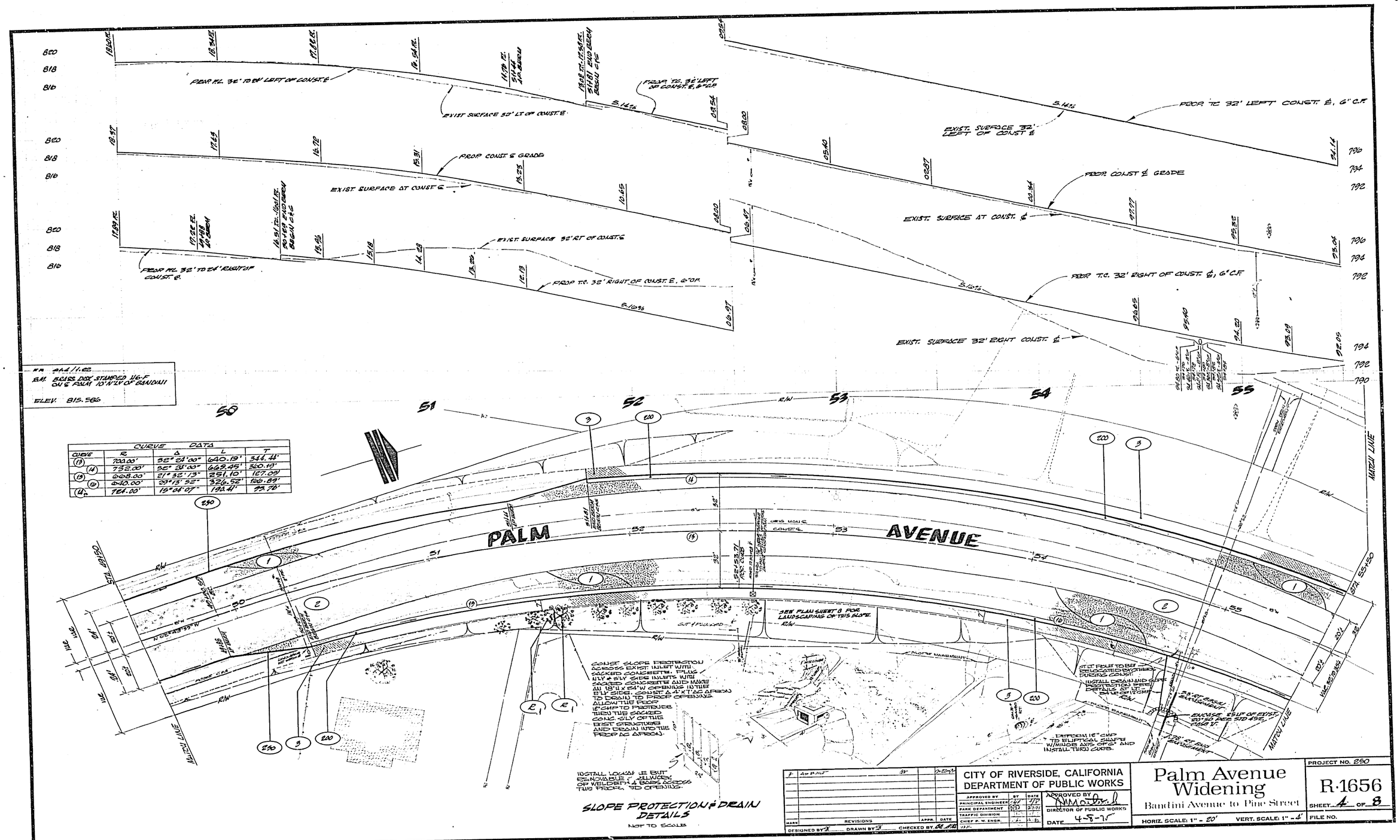
HORIZ. SCALE: 1" = 20' VERT. SCALE: 1" = 4'

PROJECT NO. 250

R-1656

SHEET 3 OF 8

FILE NO.



CURVE DATA				
CURVE	R	Δ	L	T
(13)	700.00'	32° 24' 00"	640.19'	344.44'
(14)	732.00'	32° 24' 00"	669.45'	360.19'
(15)	668.00'	21° 32' 13"	251.10'	127.05'
(16)	640.00'	29° 13' 52"	326.52'	166.89'
(14a)	724.00'	15° 04' 07"	190.41'	95.76'

MARK	REVISIONS	APPR.	DATE
F	As Built		

DESIGNED BY X DRAWN BY X CHECKED BY

CITY OF RIVERSIDE, CALIFORNIA
DEPARTMENT OF PUBLIC WORKS

APPROVED BY	BY	DATE
PRINCIPAL ENGINEER		
PARK DEPARTMENT		2-7-75
TRAFFIC DIVISION		
CHIEF P. W. ENGR.		

APPROVED BY
DIRECTOR OF PUBLIC WORKS
DATE 4-8-75

Palm Avenue Widening

Bandini Avenue to Pine Street

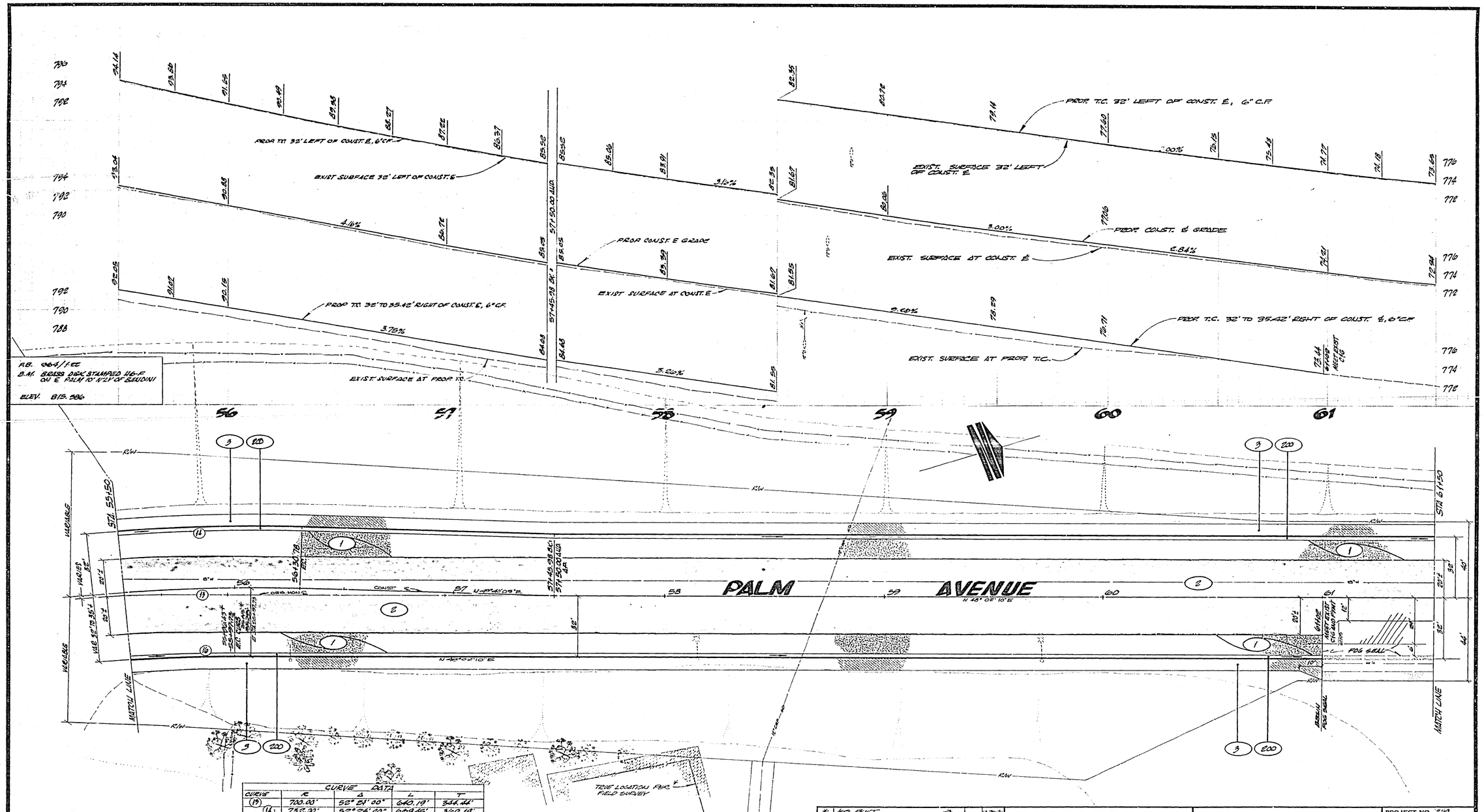
HORIZ. SCALE: 1" = 20' VERT. SCALE: 1" = 4'

PROJECT NO. 250

R-1656

SHEET 4 OF 8

FILE NO.



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(14)	732.00'	52° 24' 00"	669.45'	360.19'
(16)	640.00'	29° 13' 35"	326.50'	166.89'

MARK	REVISIONS	APPR.	DATE

DESIGNED BY ____ DRAWN BY ____ CHECKED BY ____

CITY OF RIVERSIDE, CALIFORNIA
DEPARTMENT OF PUBLIC WORKS

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

APPROVED BY ____
DIRECTOR OF PUBLIC WORKS
DATE 4-9-75

Palm Avenue Widening

Bandini Avenue to Pine Street

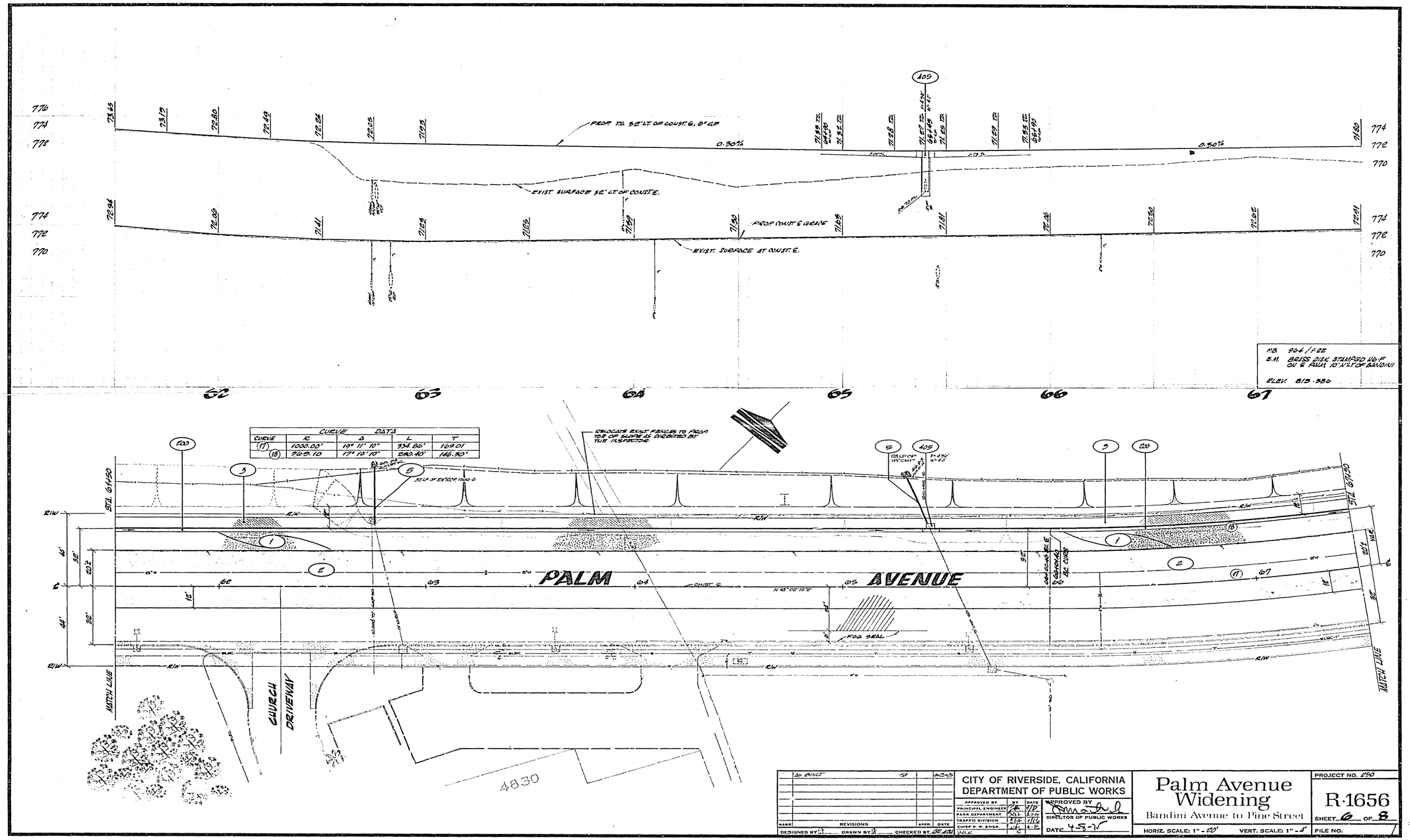
HORIZ. SCALE: 1" = 20' VERT. SCALE: 1" = 4'

PROJECT NO. 270

R-1656

SHEET 5 OF 8

FILE NO.



CURVE DATA				
CURVE	R	Δ	L	T
(17)	1000.00'	19° 11' 10"	334.86'	169.01
(18)	969.10	17° 10' 10"	290.40'	146.30'

MARK	REVISIONS	APPR.	DATE
	NO BUILT		

DESIGNED BY ___ DRAWN BY ___ CHECKED BY BE

CITY OF RIVERSIDE, CALIFORNIA
DEPARTMENT OF PUBLIC WORKS

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

APPROVED BY
DIRECTOR OF PUBLIC WORKS
DATE 4-8-75

Palm Avenue Widening

Bandini Avenue to Pine Street

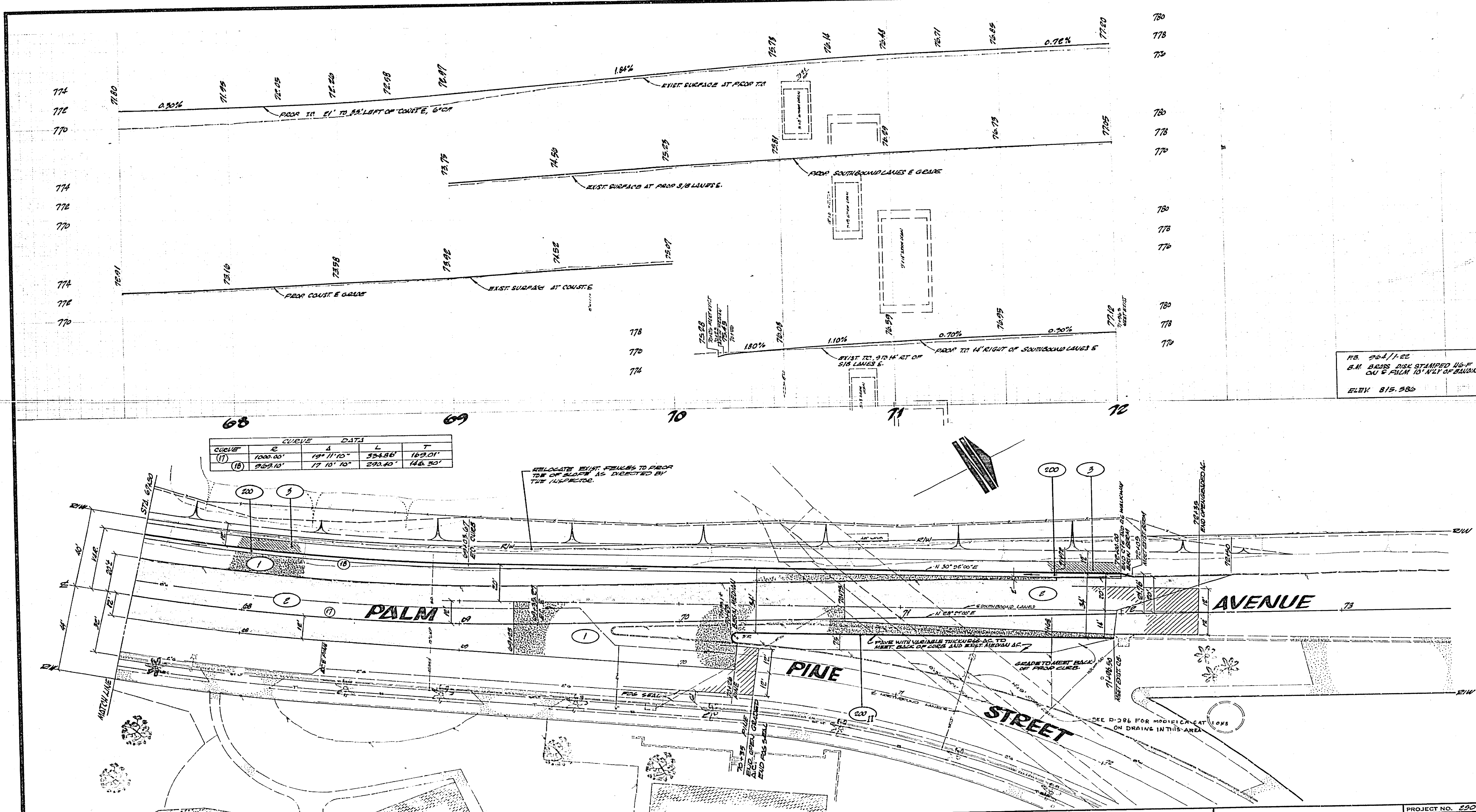
HORIZ. SCALE: 1" = 20' VERT. SCALE: 1" = 4'

PROJECT NO. 250

R-1656

SHEET 6 OF 8

FILE NO.



CURVE DATA				
CURVE	R	Δ	L	T
(17)	1000.00'	19° 11' 10"	334.86'	169.01'
(18)	969.10'	17° 10' 10"	290.40'	146.30'

MARK	REVISIONS		APPR.	DATE
*	AS BUILT			

DESIGNED BY ___ DRAWN BY ___ CHECKED BY ___

CITY OF RIVERSIDE, CALIFORNIA
DEPARTMENT OF PUBLIC WORKS

APPROVED BY	BY	DATE
PRINCIPAL ENGINEER		4/8
PARK DEPARTMENT		2-7-75
TRAFFIC DIVISION		6/16
CHIEF P. W. ENGR.		4-8

APPROVED BY ___ DIRECTOR OF PUBLIC WORKS
DATE 4-8-75

Palm Avenue Widening

Bandini Avenue to Pine Street

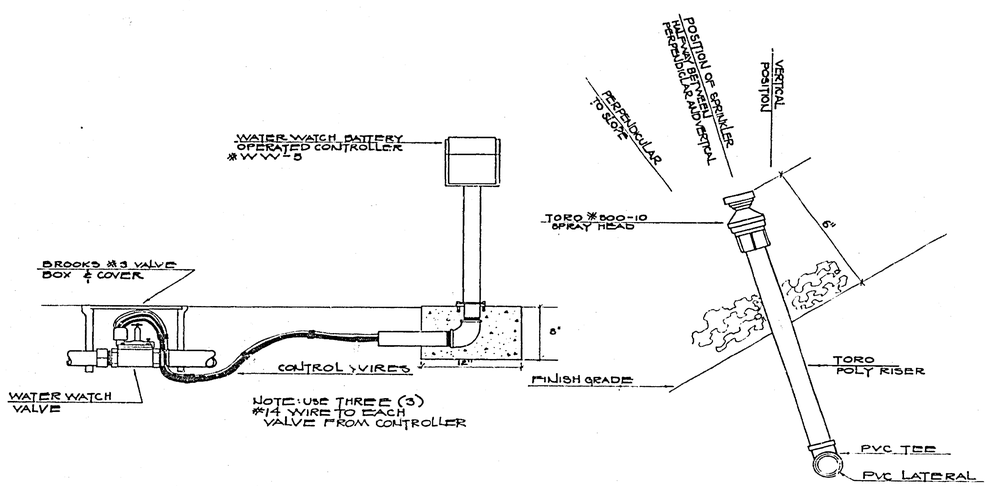
HORIZ. SCALE: 1" = 20' VERT. SCALE: 1" = 4'

PROJECT NO. 250

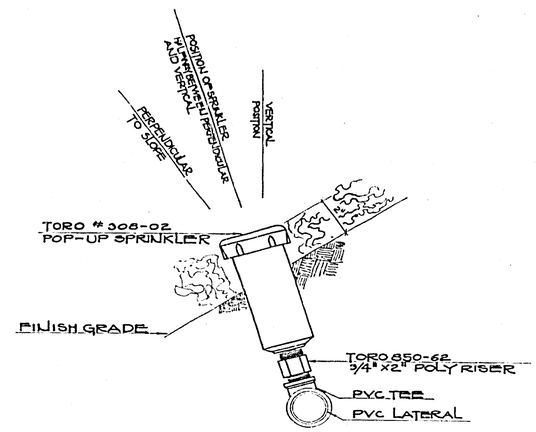
R·1656

SHEET 7 OF 8

FILE NO.

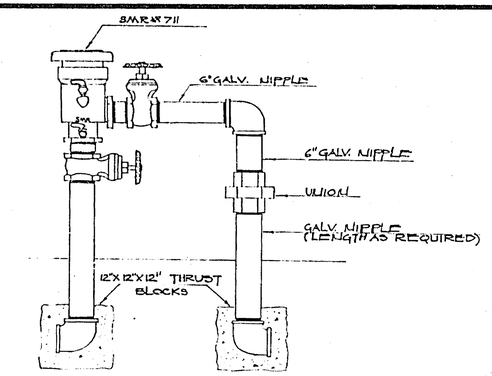


TYPICAL INSTALLATION DETAIL



TYPICAL INSTALLATION DETAIL

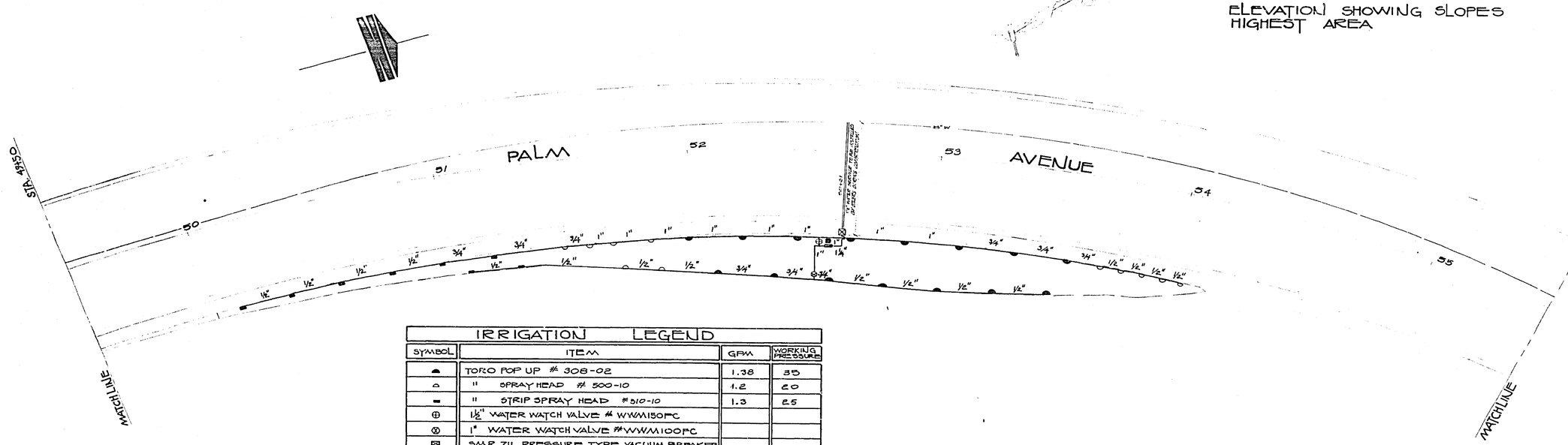
NOTE: SPRINKLERS SHALL BE INSTALLED HALFWAY BETWEEN VERTICAL AND PERPENDICULAR TO SLOPE. AFTER WATER HAS BEEN TURNED ON SPRINKLER POSITION SHOULD BE ADJUSTED SLIGHTLY TO INSURE PROPER DISTRIBUTION.



BACKFLOW PREVENTER DETAIL

GROUNDCOVER SHALL BE: OSTEOSPERMUM FRUITICOSUM ALBA (WHITE AFRICAN DAISY). IT SHALL BE PLANTED 12" ON CENTER.

ELEVATION SHOWING SLOPES HIGHEST AREA



IRRIGATION LEGEND

SYMBOL	ITEM	GPM	WORKING PRESSURE
◓	TORO POP UP # 308-02	1.38	35
△	" SPRAY HEAD # 500-10	1.2	20
▬	" STRIP SPRAY HEAD # 510-10	1.3	25
⊕	1½" WATER WATCH VALVE # WWM150PC		
⊗	1" WATER WATCH VALVE #WWM100PC		
⊠	SMR 711 PRESSURE TYPE VACUUM BREAKER		
⊠	1½" WATER METER		
—	SCHEDULE 40 PVC PIPE (SIZE INDICATED)		
▣	WATERWATCH CONTROLLER WW-5		

MARK	REVISIONS	APPR.	DATE

DESIGNED BY GRK DRAWN BY GRK CHECKED BY

CITY OF RIVERSIDE, CALIFORNIA
PARKS AND RECREATION DEPARTMENT

APPROVED BY	BY	DATE
PRINCIPAL ENGINEER		4/8
PARK DEPARTMENT		2-27
TRAFFIC DIVISION		11/6
CHIEF PUB. WKS. ENGR.		4-8
DIR. PUBLIC WORKS		

APPROVED BY
PARKS and RECREATION DIRECTOR
DATE

Palm Avenue Widening

Bandini Avenue to Pine Street

SCALE: 1" = 20'

ACCOUNT No. 250
DRAWING NUMBER
R-1656
SHEET 8 OF 8