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 CY OF 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.
220	CONSTRUCT CROSS GUTTER PER STD. 220.
302	CONSTRUCT DRIVEWAY APPROACH PER STD 302., TYPE IV.
304	CONSTRUCT WHEELCHAIR RAMPS PER STD. 304
325	CONSTRUCT SIDEWALK PER STD. 325
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.
E2	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 A.C. PER TYPICAL SECTION.

STRUCTURAL SECTION SCHEDULE

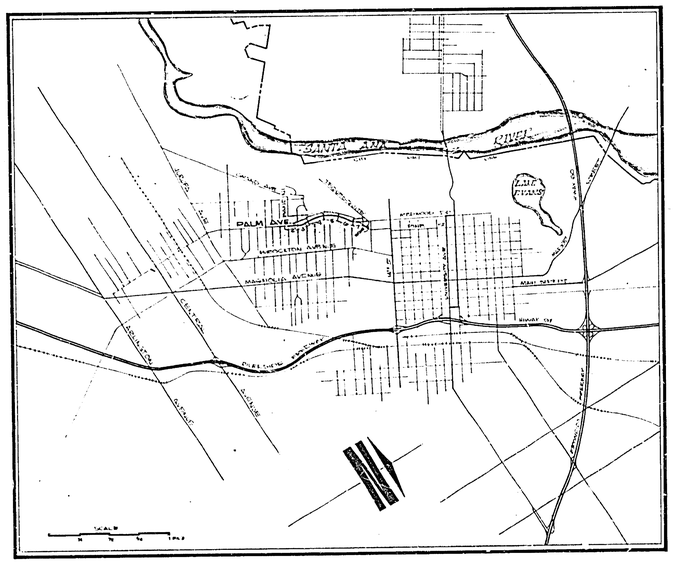
TRAFFIC INDEX = 7.5

0.33' AC
0.0' DG BASE

AC. OVER BASE
ALTERNATE I

~~0.73' 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 KNOWN 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 L5-4893 FOR STREET LIGHTING AND PLAN R-1753-E FOR SURPLUS DIRT AND BROKEN CONCRETE DISPOSAL.
3. M.C. CMP 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 OTHERS 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:	DIRECTOR OF PUBLIC WORKS
PRINCIPAL ENGINEER		4/12		
PARK DEPARTMENT				
TRAFFIC DIVISION		11/14		
CHIEF PUB. WKS. ENGR.		4-8	DATE 4-8-15	

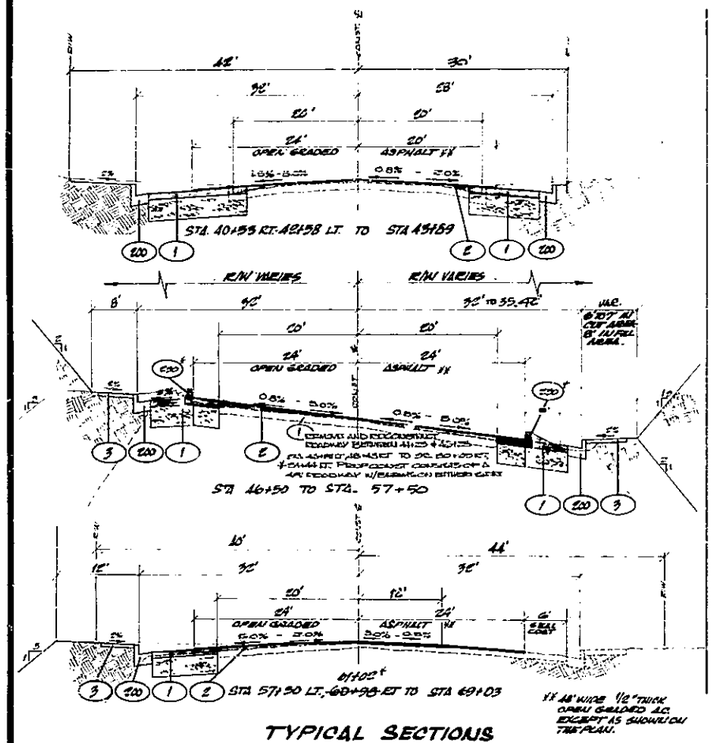
Palm Avenue Widening
Bandini Avenue to Pine Street

DESIGNED BY ___ DRAWN BY ___ CHECKED BY ___

INDEXED ___ ACCOUNT No. 290

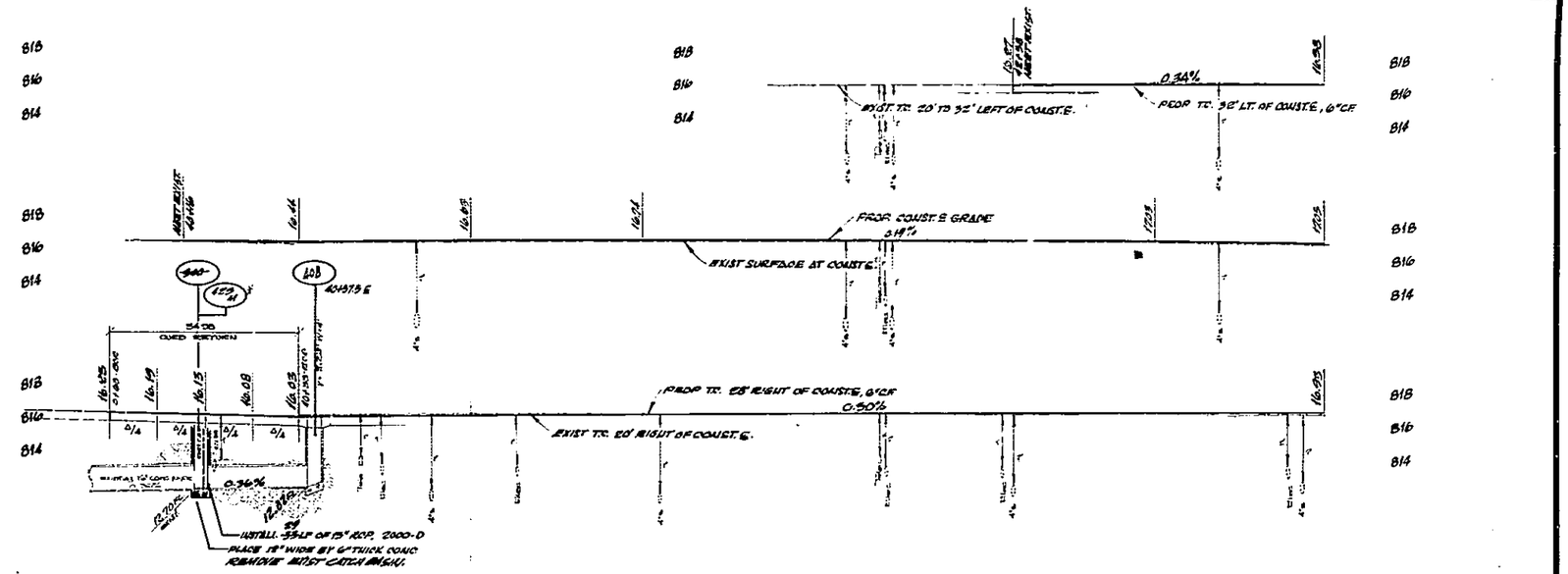
DRAWING NUMBER R-1656

SHEET 1 OF 8



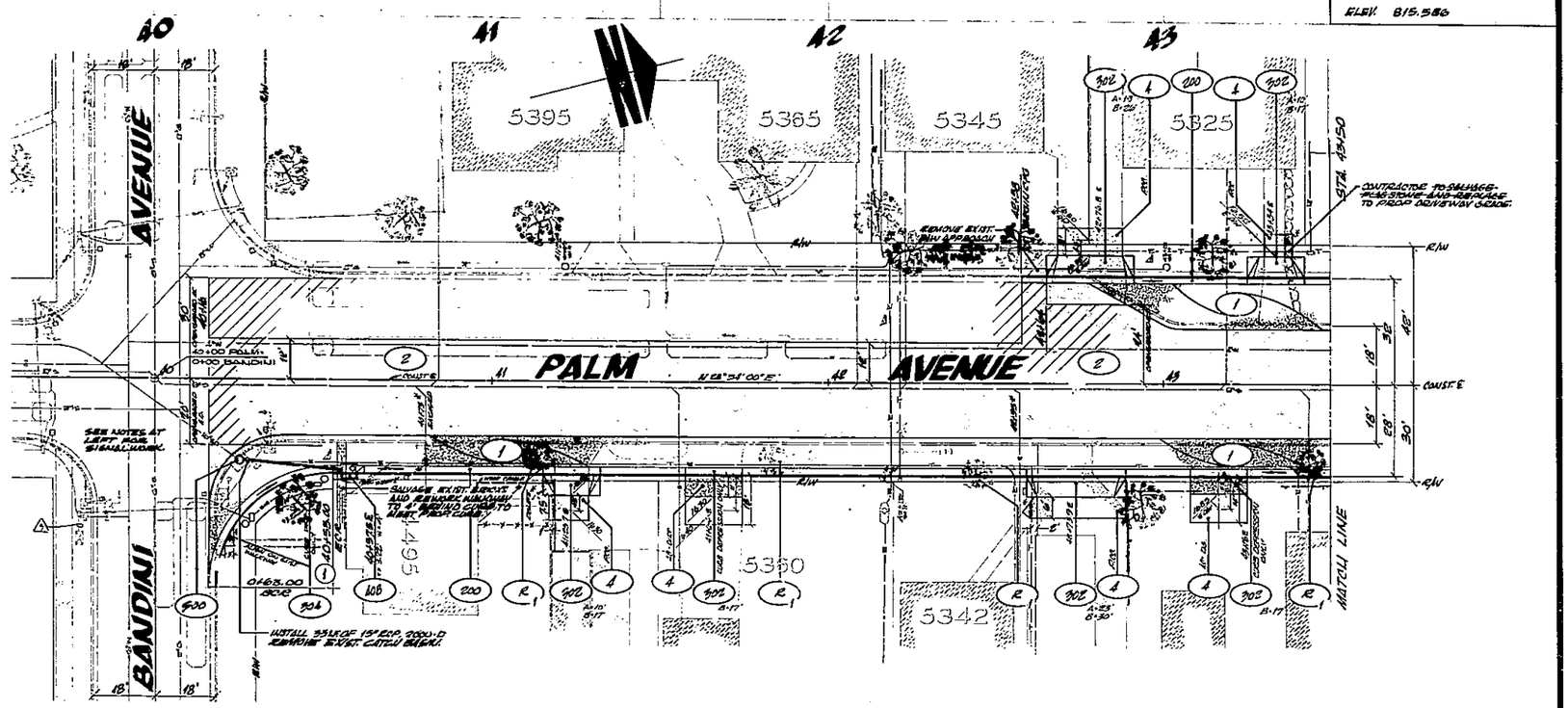
TYPICAL SECTIONS

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



B.M. BRASS DISK STAMPED U.G.R. ON E PALM 10' W.L. OF BANDINI

ELEV. 815.586



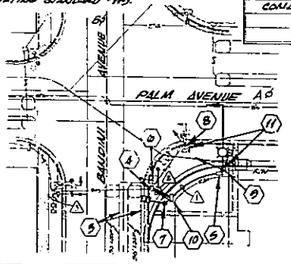
NOTES FOR SIGNAL WORK ONLY

CONSTRUCTION NOTES:

1. NOTIFY TRAFFIC ENGINEERING REPRESENTATIVE (AT PH. 787-7370) 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 OUT 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 XIX, REMOVE FOUNDATION & CONDUIT.
9. INSTALL NEW TYPE XIX STANDARD AND MAST ARM ON NEW FOUNDATION AND CONDUIT. INSTALL SALVAGED HEADS, EQUIP, AND LUMINAIRE.
10. INSTALL #5 TRAFFIC SIGNAL PULL BOX AND LEAVE EXTRA SLACK FOR FUTURE RELOCATION AS DIRECTED.
11. SALVAGE EXIST. PED. PUSH BUTTON. INSTALL NEW PED. PUSH BUTTON ON NEW TYPE XIX STD. AS DIRECTED.

ALL WORK SHALL BE DONE IN ACCORDANCE WITH SECTION 86 "SIGNALS AND LIGHTING" OF THE "STANDARD SPECIFICATIONS", DATED JULY, 1973 OF THE STATE OF CALIFORNIA, DEPT. OF HIGHWAYS, AND APPLICABLE CITY OF RIVERSIDE STANDARD SPECIFICATIONS, SPECIAL PROVISIONS, AND STREET LIGHTING STANDARD "HS".

CONDUCTOR SCHEDULE					
	CONDUCTORS		CONDUIT R/W		
CONTROL FUNCTION	VEH	PEDESTRIAN	1	2	3
VEHICLE HEADS	#12	THW			
Ø 4			5	3	3
Ø 8					
PED. HEADS					
Ø 4W				2	2
Ø 8W			2	2	2
PED. PUSH BUTTON					
Ø 4W				1	1
Ø 8W			1	1	1
SPLICES			5	5	5
DETECTOR CABLE	#12/2	PE			
Ø 4					
Ø 8				2	2
120 V COMMON	#12	THW	1	1	1
120 V COMMON	#10		1	1	1
SIGNAL SERVICE	#8				
LUMINAIRES		THW	2	2	
TOTALS	#12	THW	9	12	12
	#12/2	PE		2	2
	#12	THW	1	1	1
	#10		1	1	1
	#8				
	#8	THWN	2	2	
CONDUIT			2" NMW	2" NMW	3/4" 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: 714-684-0777 OR 714-547-6404

MARK	REVISIONS	APPR	DATE
Δ	CORR. REFERENCE: UNDERGROUND SERVICE ALERT	VLV	6-14-79
1	1A BOXT		6-17-79

DESIGNED BY ____ DRAWN BY ____ CHECKED BY ____

CITY OF RIVERSIDE, CALIFORNIA
DEPARTMENT OF PUBLIC WORKS

APPROVED BY	BY	DATE
PRINCIPAL ENGINEER		7/12
PARK DEPARTMENT		7/12
TRAFFIC DIVISION		7/16
CHIEF P. W. ENGR.		10-8

APPROVED BY: DIRECTOR OF PUBLIC WORKS

DATE: 4-9-75

Palm Avenue Widening

Bandini Avenue to Pine Street

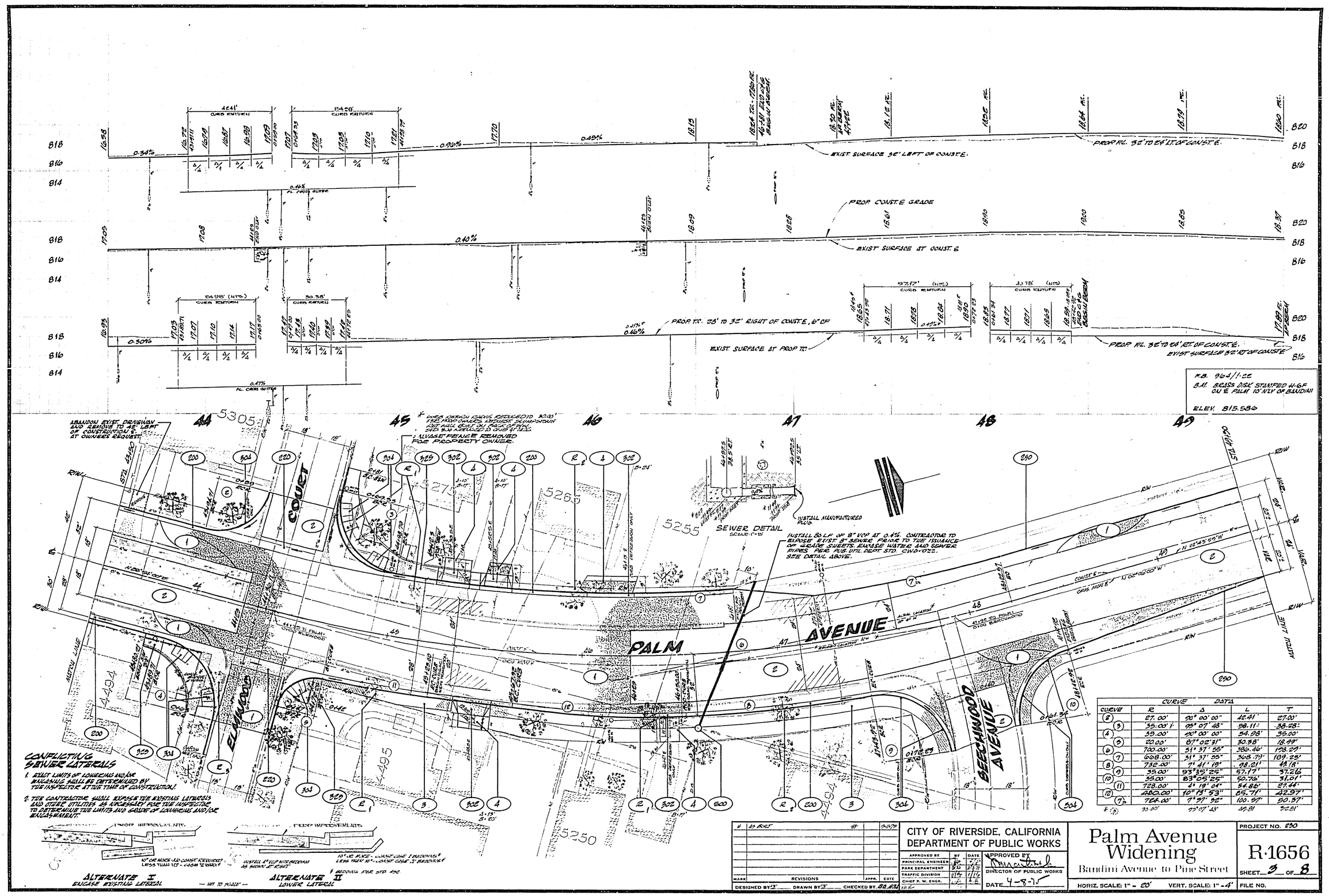
HORIZ. SCALE: 1" = 20' VERT. SCALE: 1" = 4'

PROJECT NO. 250

R-1656

SHEET 2 OF 8

FILE NO. 1



CURVE DATA				
CURVE	R	Δ	L	T
2	27.00'	90° 00' 00"	42.41'	27.00'
3	35.00'	95° 07' 48"	58.11'	38.28'
4	35.00'	90° 00' 00"	54.98'	35.00'
5	20.00'	87° 02' 31"	30.38'	18.99'
6	700.00'	31° 37' 55"	386.46'	198.29'
7	608.00'	31° 37' 55"	368.79'	189.25'
8	732.00'	7° 41' 19"	98.21'	49.18'
9	35.00'	93° 35' 25"	57.17'	37.26'
10	35.00'	83° 05' 25"	50.76'	31.01'
11	728.00'	4° 19' 04"	54.86'	27.44'
12	480.00'	10° 13' 53"	85.71'	42.97'
7	724.00'	7° 37' 32"	100.57'	50.37'
*	35.00'	95° 07' 48"	49.81	32.81'

MARK	REVISIONS	APPR.	DATE
*	AS BUILT		9-11-79

DESIGNED BY ___ DRAWN BY ___ CHECKED BY ___

CITY OF RIVERSIDE, CALIFORNIA
DEPARTMENT OF PUBLIC WORKS

APPROVED BY	BY	DATE
PRINCIPAL ENGINEER		
PARK DEPARTMENT		2-7-77
TRAFFIC DIVISION		1/16
CHIEF P. W. ENGR.		

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

Palm Avenue Widening

Bandini Avenue to Pine Street

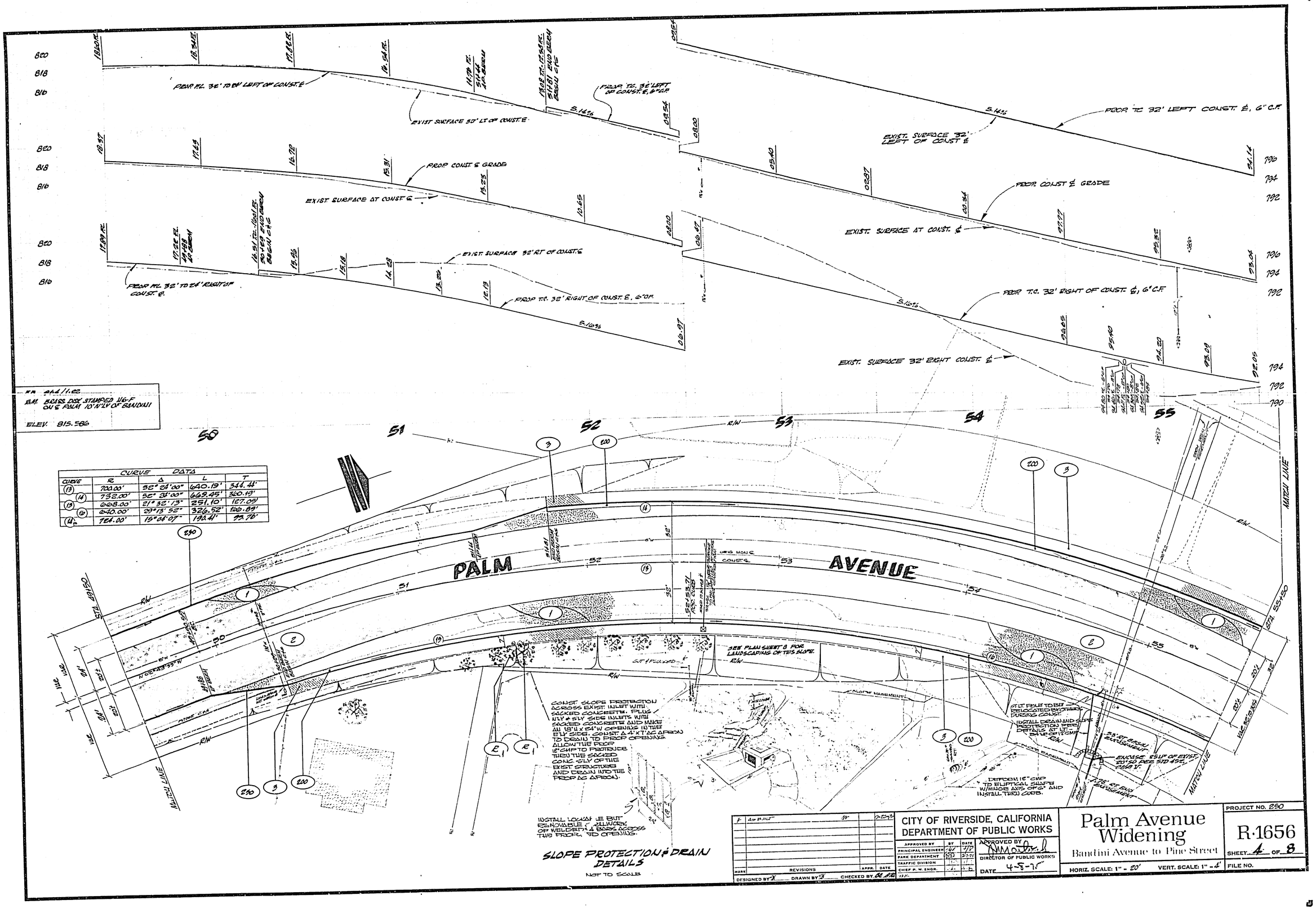
HORIZ. SCALE: 1" = 20' VERT. SCALE: 1" = 4'

PROJECT NO. 230

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'	52° 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'
(14)	724.00'	15° 04' 07"	190.41'	95.76'

MARK	REVISIONS	APPR.	DATE
F	AS BUILT		7-23-75

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

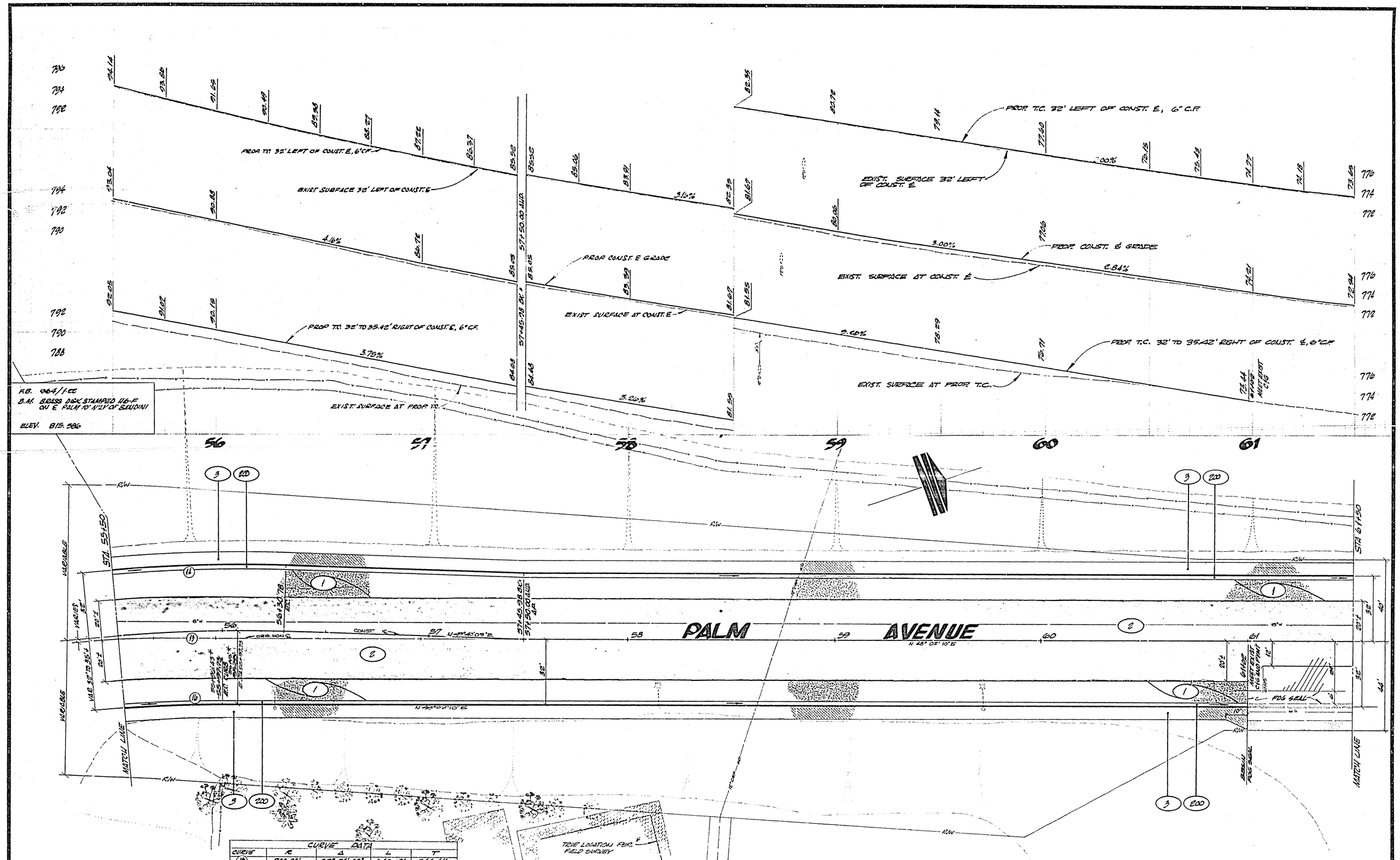
HORIZ. SCALE: 1" = 20' VERT. SCALE: 1" = 4'

PROJECT NO. 250

R-1656

SHEET 4 OF 8

FILE NO.



MARK	REVISIONS	APPR.	DATE
1	ADD EXCT	AP	1-23-72

DESIGNED BY ____ DRAWN BY ____ CHECKED BY ____

CITY OF RIVERSIDE, CALIFORNIA
DEPARTMENT OF PUBLIC WORKS

APPROVED BY	BY	DATE
PRINCIPAL ENGINEER		4-72
PARK DEPARTMENT		4-7-72
TRAFFIC DIVISION		11-1-16
CHIEF P. W. ENGR.		4-8

APPROVED BY
DIRECTOR OF PUBLIC WORKS
DATE 4-9-72

Palm Avenue Widening

Bandini Avenue to Pine Street

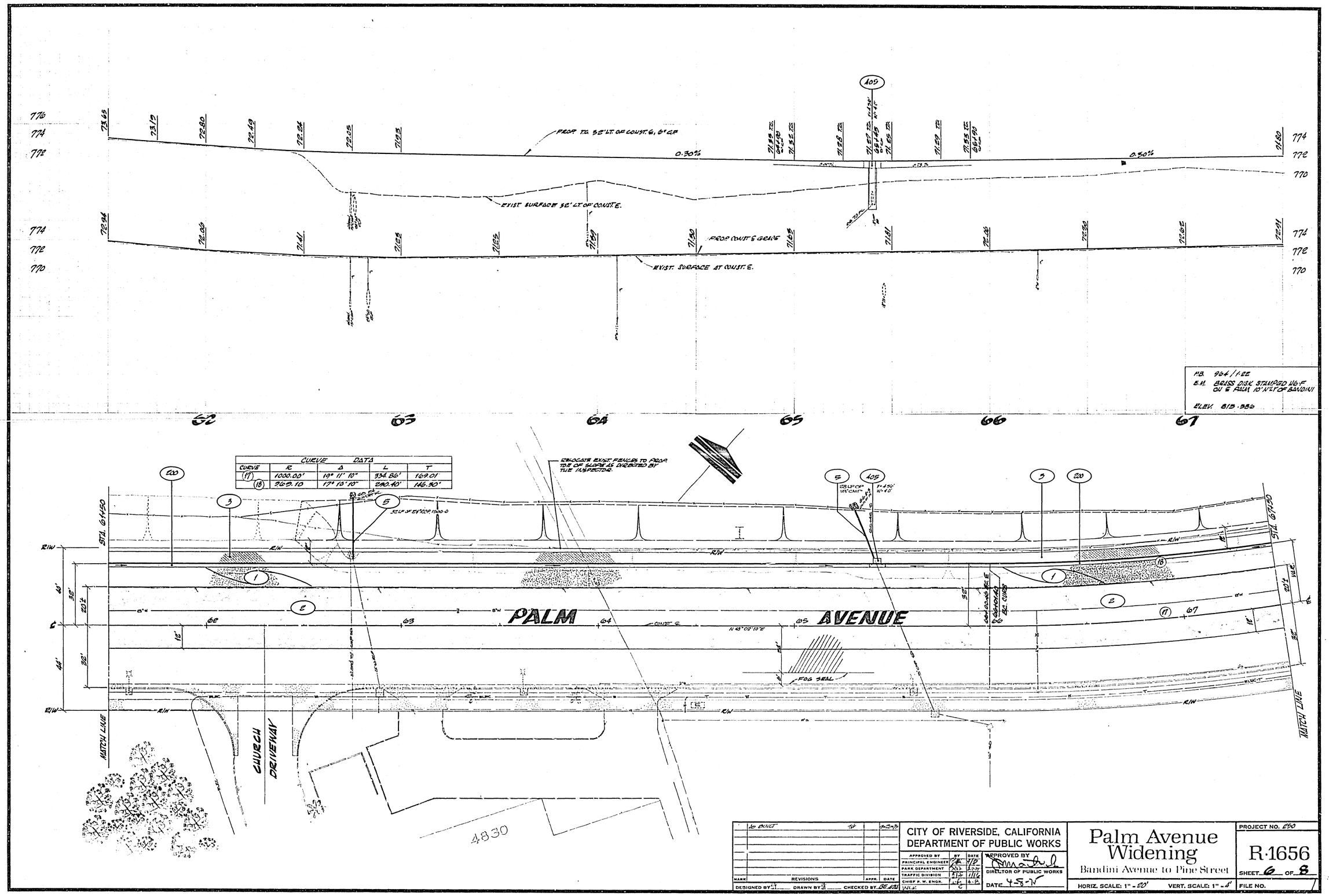
HORIZ. SCALE: 1" = 20' VERT. SCALE: 1" = 4'

PROJECT NO. 290

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)	269.10	17° 10' 10"	290.40'	146.30'

MARK	REVISIONS	APPR.	DATE
	No BUILT		9-23-75

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

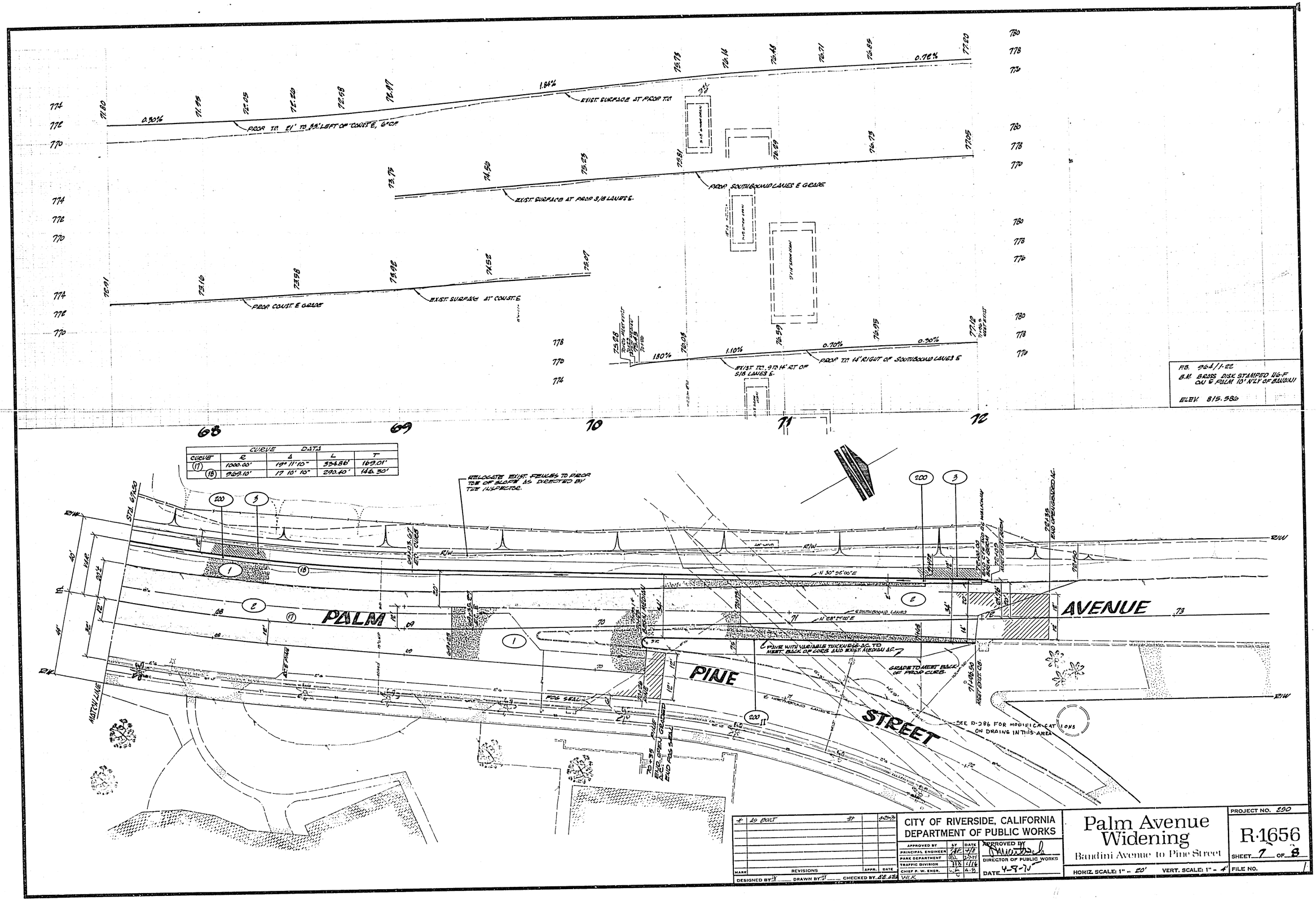
HORIZ. SCALE: 1" = 20' VERT. SCALE: 1" = 4'

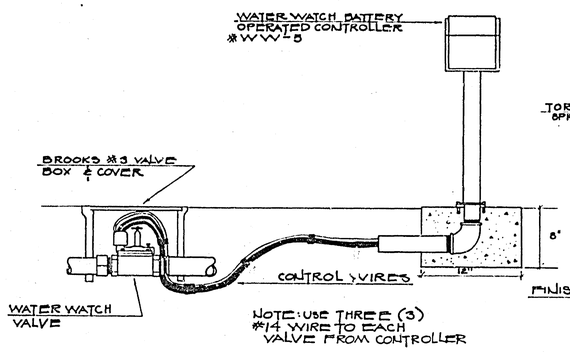
PROJECT NO. 250

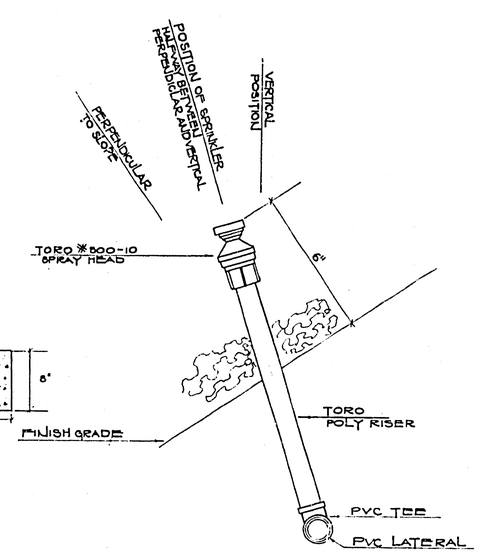
R-1656

SHEET 6 OF 8

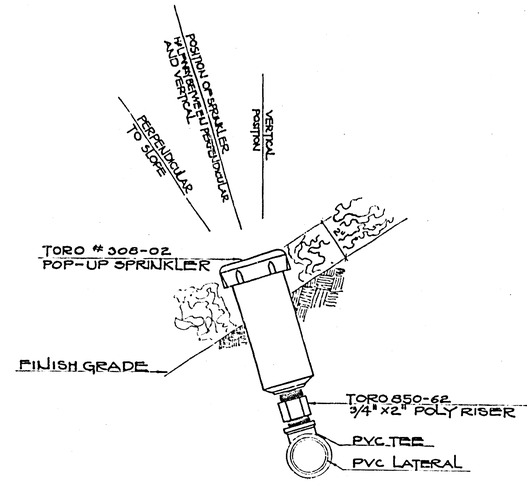
FILE NO.


PROP. T.C. 21' TO 33' LEFT OF CONST'D, 6" C.P.
EXIST. SURFACE AT PROP. T.C.
PROP. SOUTHBOUND LANES E GRADE
EXIST. SURFACE AT PROP. S/B LANES E.
PROP. CONST. E GRADE
EXIST. SURFACE AT CONST. E.
EXIST. T.C. 9 TO 14' RT OF S/B LANES E.
PROP. T.C. 14' RIGHT OF SOUTHBOUND LANES E
B.M. BRASS DISK STAMPED U.G.F. ON E FLOW 10' N'LY OF BANDINI
ELEV. 815.586
CURVE DATA
CURVE R Δ L T
(17) 1000.00' 19° 11' 10" 334.88' 169.01'
(18) 969.10' 17 10' 10" 290.40' 146.30'
RELOCATE EXIST. FENCES TO PROP. TOE OF SLOPE AS DIRECTED BY THE INSPECTOR.
PALM AVENUE
PINE STREET
N 30° 25' 00" E
N 28° 24' 00" E
SOUTHBOUND LANES
PAVE WITH VARIABLE THICKNESS A.C. TO MEET BACK OF CURB AND EXIST. MEDIAN S.C.
GRADE TO MEET BACK OF PROP. CURB.
SEE D-286 FOR MODIFICATIONS ON DRAINS IN THIS AREA
MATCH LINE
FOG SEAL
EXIST. MEDIAN
PROP. MEDIAN
END OF CURB
END OF WALKWAY
END OF CONC. CURB
END OPEN GRADED
END FOG SEAL
EXIST. CB.
R/W
STA. 67+50
AS BUILT
CITY OF RIVERSIDE, CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
APPROVED BY
PRINCIPAL ENGINEER
PARK DEPARTMENT
TRAFFIC DIVISION
CHIEF P. W. ENGR.
DIRECTOR OF PUBLIC WORKS
DATE 4-9-70
Palm Avenue Widening
Bandini Avenue to Pine Street
HORIZ. SCALE: 1" = 20'
VERT. SCALE: 1" = 4'
PROJECT NO. 290
R-1656
SHEET 7 OF 8
FILE NO.
DESIGNED BY
DRAWN BY
CHECKED BY

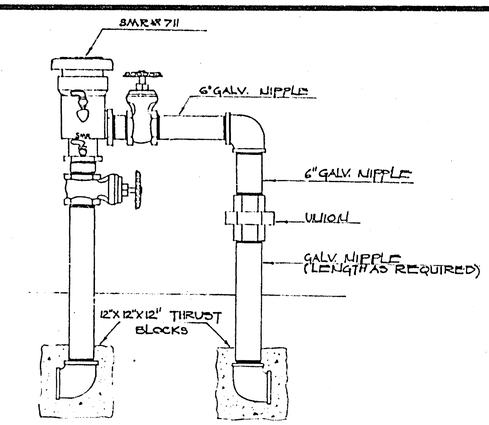




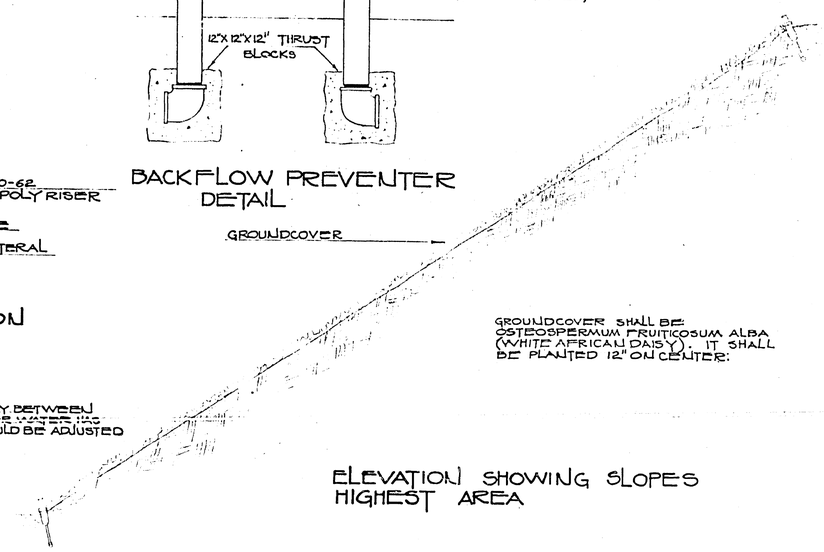
TYPICAL INSTALLATION DETAIL



TYPICAL INSTALLATION DETAIL



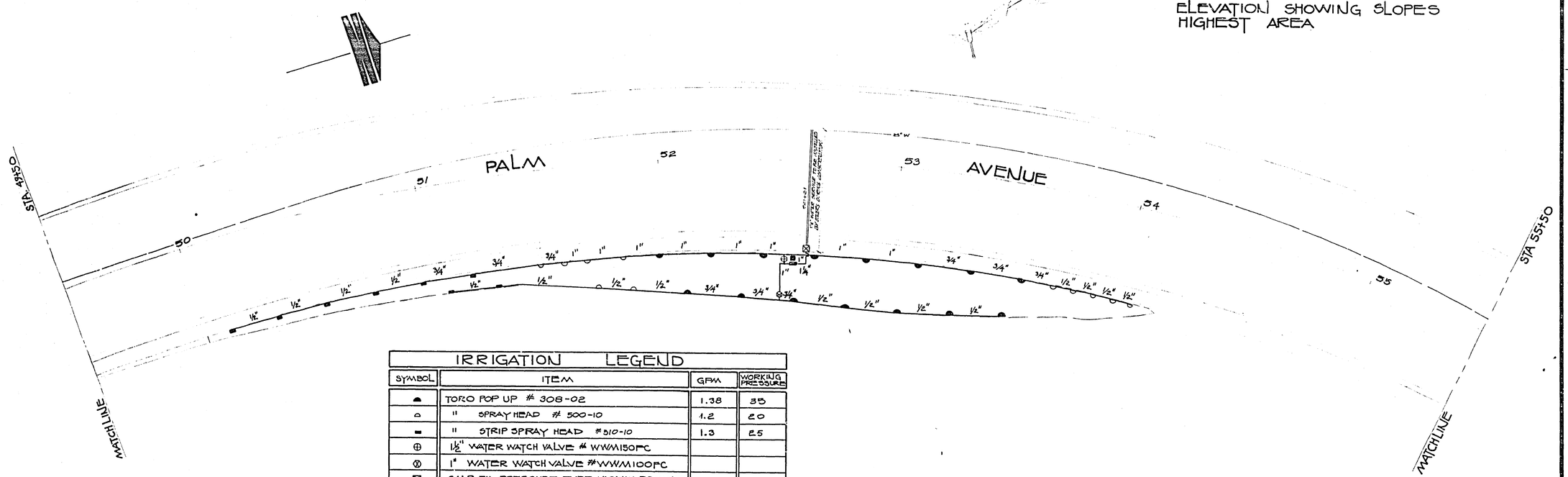
BACKFLOW PREVENTER DETAIL



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

ELEVATION SHOWING SLOPES HIGHEST AREA

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.



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 # WWM150FC		
⊗	1" WATER WATCH VALVE #WWM100FC		
⊠	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		
PARK DEPARTMENT		
TRAFFIC DIVISION		
CHIEF PUB. WKS. ENGR.		
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