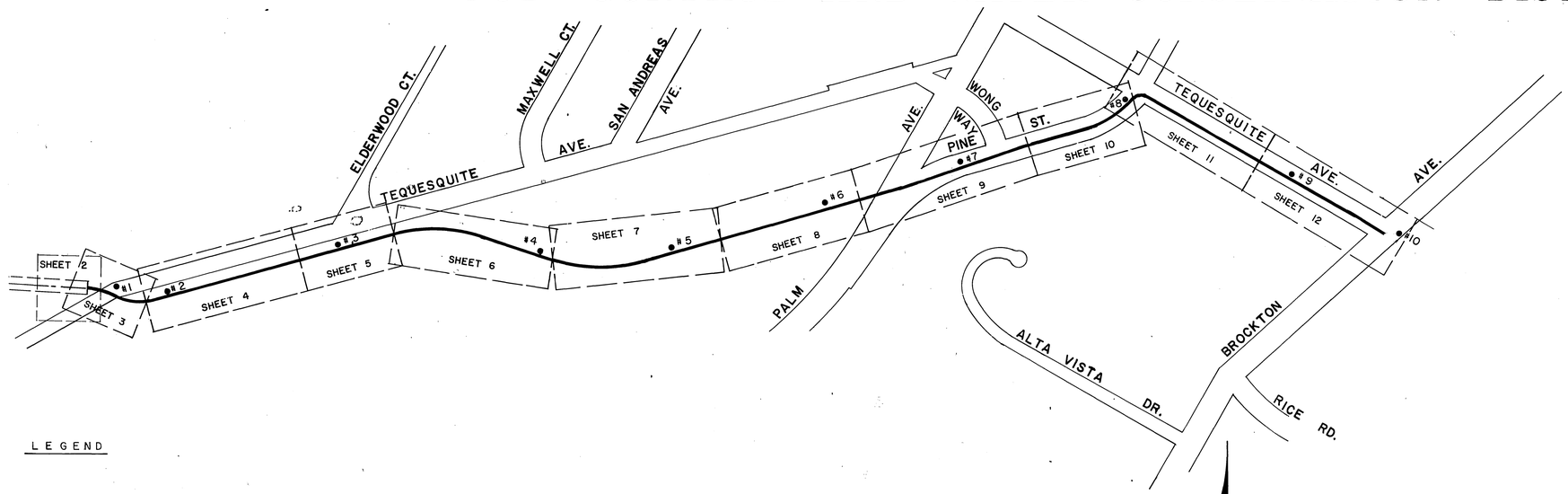
RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT



CITY OF RIVERSIDE

LEGEND

PRIVATE OR SECONDARY ROAD	
EXISTING FLOW LINE	
SANITARY SEWER LINE	SS 8
GAS LINE	G 2
WATER LINE	W 6
STORM DRAIN LINE	SD 24
INLETS AND CONNECTOR PIPE	
BURIED TELEPHONE CABLE	T
ELECTRIC UNDERGROUND	E
STREET LIGHT UNDERGROUND	S L
STREET LIGHT STANDARD	
CULVERT WITH HEADWALLS	
POWER POLES	
ANCHOR & POLE	
GAS METER	
WATER METER	
WATER VALVE	
FIRE HYDRANT	
MANHOLE	
FENCE (not chain link)	X
WALL - BLOCK OR MASONRY	
CATCH BASIN	
RIGHT OF WAY (flood control)	R/W
TEMPORARY CONST. EASEMENT	T.C.E.
STREET RIGHT OF WAY	
FENCE (chain link to be const.)	
FENCE (chain link exist.)	
SOIL TEST BORINGS	
WATER SURFACE	
HYDRAULIC GRADE LINE	

ABBREVIATIONS

C.M.P.	CORRUGATED METAL PIPE
R.C.P.	REINFORCED CONCRETE PIPE
L. D.	LOCAL DEPRESSION
C.B.	CATCH BASIN
J.B.	JUNCTION BOX
S.D.	STORM DRAIN
J.S.	JUNCTION STRUCTURE
T.S.	TRANSITION STRUCTURE
M.H.	MANHOLE
H.W.	HEAD WALL
R.C.B.	REINFORCED CONCRETE BOX
T.W.	TOP OF WALL
F.L.	FLOW LINE
C. & G.	CURB AND GUTTER
A.C.	ASPHALTIC CONCRETE
T.P	TOP OF PAVEMENT
E.P	EDGE OF PAVEMENT
B.C.	BEGIN CURVE
E.C.	END CURVE
P.I.	POINT OF INTERSECTION
P.C.C.	POINT OF COMPOUND CURVE
P.R.C.	POINT OF REVERSE CURVE
G.S.	GAS SERVICE HOUSE CONNECTION
W.S.	WATER SERVICE HOUSE CONNECTION
C/R	CITY OF RIVERSIDE
H.G.L.	HYDRAULIC GRADE LINE

INDEX

1	TITLE SHEET
2-12	PLANS & PROFILES
13-15	DETAIL SHEETS
16	CONNECTOR PIPE PROFILES
17-20	SEWER PLANS
21-24	TEMPORARY EASEMENTS
25-32	TRAFFIC PLANS AND CONSTRUCTION SIGNING

STANDARD DRAWINGS

33	CB100	CATCH BASIN NO. 1
34	LD201	LOCAL DEPRESSION NO. 2
35	CB105	DETAIL OF CATCH BASIN OPENING
36	CB106	CATCH BASIN REINFORCEMENT
37	JS226	JUNCTION STRUCTURE NO. 1
38	JS228	JUNCTION STRUCTURE NO. 3
39	MH253	MANHOLE NO. 3
40	MH255	MANHOLE FRAME AND COVER NON-ROCKING
41	MH257	MANHOLE SHAFT FOR CAST PIPE
42	CB 103	MANHOLE FRAME AND COVER FOR C. B.
43	CB 107	INLET TYPE IX (CHECKERED PLATE)
44	M 802	PIPE BEDDING DETAILS
45	MH259	STANDARD DROP STEP
46	TS 302	TRANSITION STRUCTURE NO.2
47	CH 326	TRAPEZOIDAL CHANNEL DETAILS
48-49	CH 327	RECTANGULAR CHANNEL STRUCTURAL DETAILS
50	CH 329	TRANSITION STRUCTURAL DETAILS
51	BX 401	SINGLE CELL R.C.B. STRUCTURAL DETAILS
52-53	BX 402	DOUBLE CELL R.C.B. STRUCTURAL DETAILS
54	M 801	CHAIN LINK FENCE DETAILS
55	M 804	TIMBER BULKHEADS.
56	M 812	RC BOX EXCAVATION AND BACKFILL PAY LINES.
57	M 803	CONCRETE COLLAR FOR PIPE 12 INCHES THROUGH 66 INCHES.

CITY OF RIVERSIDE STANDARD DRAWINGS

58	C/R500	MANHOLE
59	C/R540	MANHOLE CASTINGS
60	C/R560	STANDARD CLEANOUT

200 0 200

GENERAL NOTES:

1. ELEVATIONS SHOWN ARE IN FEET ABOVE THE U.S.G.S. MEAN SEA LEVEL DATUM.
2. DIMENSIONS FOR LOCATING CATCH BASINS ARE MEASURED FROM CURB RETURN TO CENTER LINE OF CATCH BASIN, UNLESS OTHERWISE SHOWN.
3. LOCATIONS OF CATCH BASIN CONNECTOR PIPE JUNCTIONS WITH CATCH BASINS AS SHOWN ON THE DRAWINGS ARE SCHEMATIC. IT IS INTENDED THAT SUCH JUNCTIONS BE LOCATED AT THE DOWNSTREAM ENDS OF THE CATCH BASINS, UNLESS OTHERWISE SHOWN. IN ALL CASES, THE EXACT LOCATIONS WILL BE DETERMINED IN THE FIELD BY THE ENGINEER TO MEET FIELD CONDITIONS.
4. EXISTING UTILITIES SHALL BE PROTECTED IN PLACE BY THE CONTRACTOR, UNLESS OTHERWISE NOTED.
5. LOCATIONS SHOWN ON THE PLANS FOR EXISTING SANITARY SEWER HOUSE CONNECTIONS ARE APPROXIMATE ONLY.
6. ALL OPENINGS RESULTING FROM CUTTING OR PARTIAL REMOVAL OF EXISTING CULVERTS, PIPES OR SIMILAR STRUCTURES SHALL BE SEALED WITH 8 INCHES OF BRICK AND MORTAR OR 6 INCHES OF CONCRETE, UNLESS OTHERWISE SHOWN.
7. ALL CURBS, GUTTERS, SIDEWALKS, DRIVEWAYS AND OTHER IMPROVEMENTS SHALL BE RECONSTRUCTED TO THEIR ORIGINAL GRADE, ELEVATION AND LOCATION UNLESS OTHERWISE NOTED.
8. FOR RIGHT OF WAY DATA REFER TO SHEETS 21 THRU 24.
9. SOIL TEST BORINGS FOR THIS PROJECT WERE MADE SEPTEMBER 1971.
10. PIPE CONNECTIONS TO MAIN LINE SHALL CONFORM TO STANDARD DRAWING J. S. NO. 3 UNLESS OTHERWISE SHOWN.
11. PAVEMENT REPLACEMENT SHALL BE 3" OF ASPHALTIC CONCRETE AND 6" OF CLASS 3 BASE.

INDEXED

J.F. DAVIDSON ASSOCIATES
CIVIL ENGINEERS SURVEYORS PLANNERS
3426 TENTH STREET RIVERSIDE, CALIFORNIA
APPROVED BY: John W Canty
REGISTERED CIVIL ENGINEER NO. 17560
DATE: JANUARY 1973

REVISIONS

REF.	DESCRIPTION	APPR.	DATE

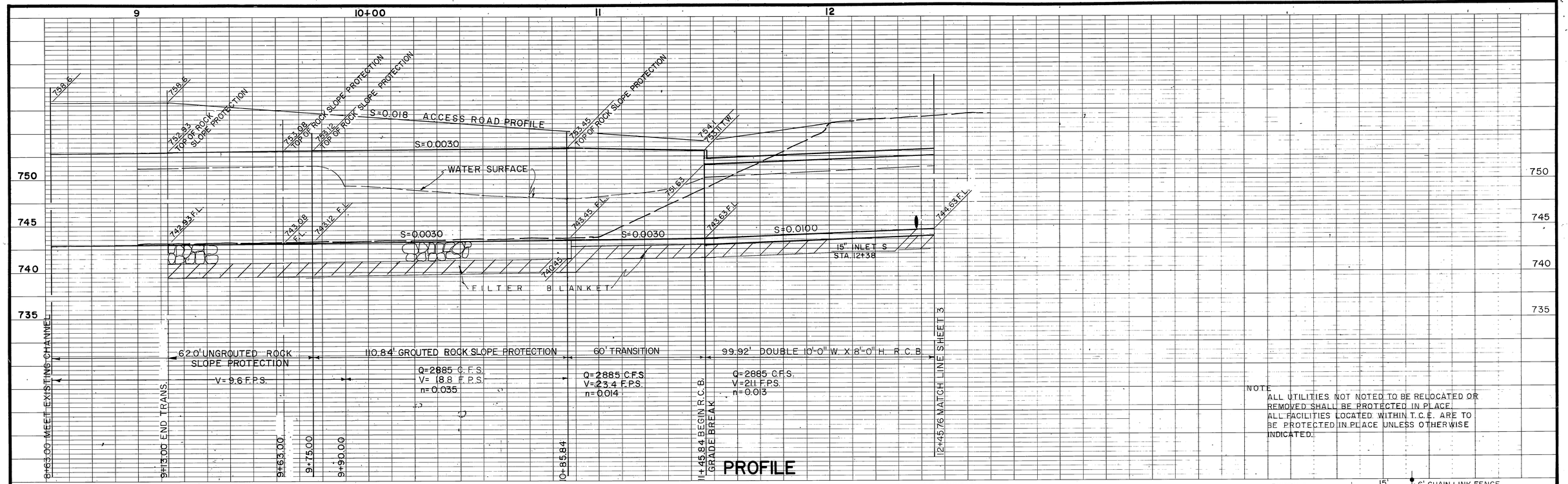
AS BUILT

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT
DESIGNED BY:
DRAWN BY:
DATE DRAWN:
CHECKED BY:
APPROVED BY: John Bryant
CHIEF ENGINEER R.E. NO. 8822
DATE: 1-30-74

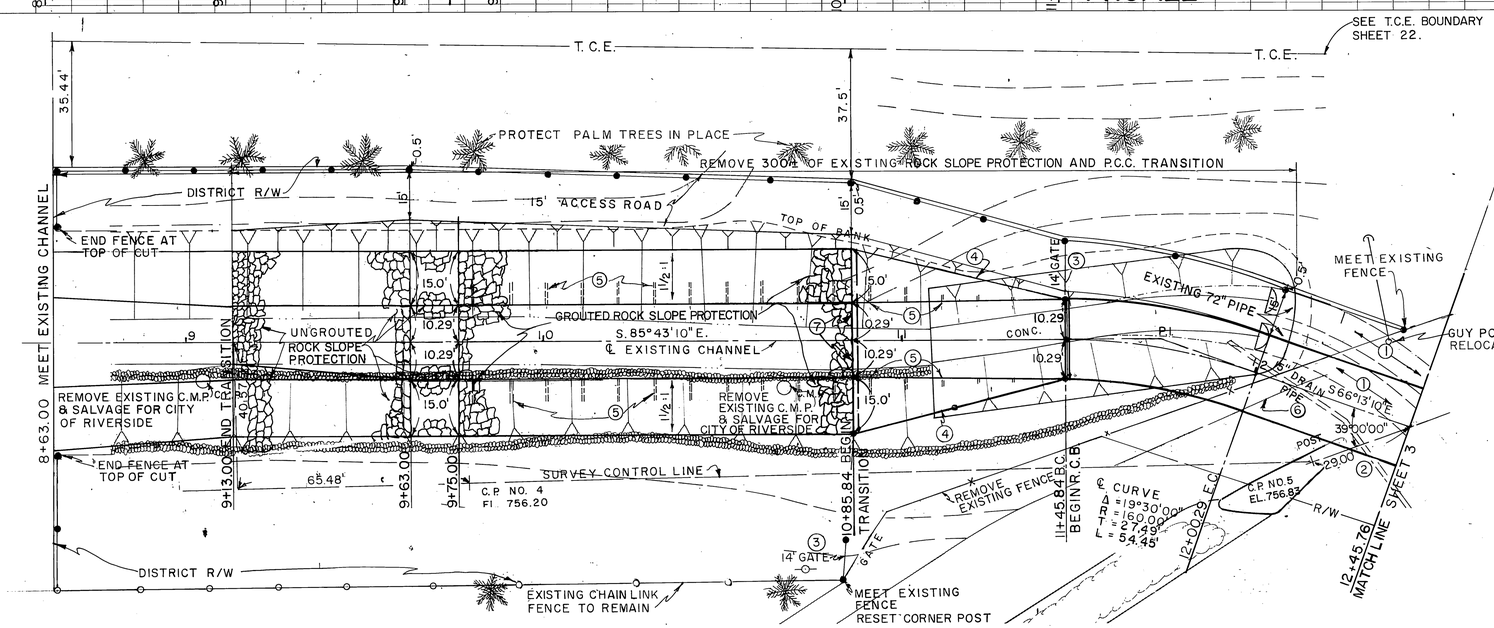
BOX SPRINGS DRAIN
STAGE I
TITLE SHEET
1979 STORM DRAIN BOND ISSUE PROJECT NO. 6

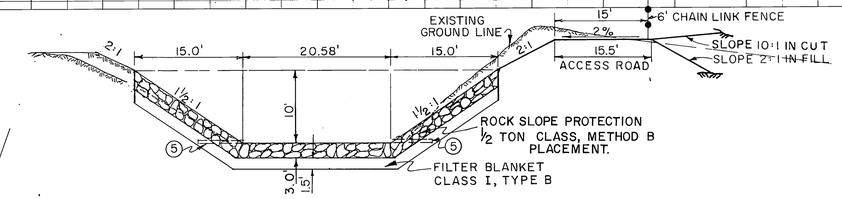
PROJECT NO. 1-0-220
DRAWING NO. 1-287
SHEET NO. 1 OF 60

D-286



NOTE
ALL UTILITIES NOT NOTED TO BE RELOCATED OR REMOVED SHALL BE PROTECTED IN PLACE. ALL FACILITIES LOCATED WITHIN T.C.E. ARE TO BE PROTECTED IN PLACE UNLESS OTHERWISE INDICATED.





TYPICAL SECTION ROCK SLOPE PROTECTED CHANNEL

NOTE

1. REMOVE EXISTING 72" S. D. PIPE.
2. STA. 12+38 REMOVE 55' OF EXISTING 15" DRAIN AND CONNECT TO R. C. B.
3. PLACE 14' GATE IN 6' CHAIN LINK FENCE.
4. CONSTRUCT 6" X 24" CUTOFF WALL PER TYPICAL TRAPEZOIDAL CHANNEL DETAILS. (SEE TRANSITION STRUCTURE DETAILS, SHEET 50.)
5. PLACE 4" STEEL PIPE AT APPROXIMATELY 10' ON CENTER AS DIRECTED BY ENGINEER.
6. REMOVE AND REPLACE A. C. BERM. SEE SHEET 13.
7. CUTOFF WALL DETAIL SEE SHEET 13.

PLAN

1" = 20'

20' 0 20'

BENCH MARK C.P. NO. 5 NAIL AND FLASH AND TAG ON ℄ OF TESQUESQUITE AVE. EL. 756.83	J. F. DAVIDSON ASSOCIATES CIVIL ENGINEERS SURVEYORS PLANNERS 3426 TENTH STREET RIVERSIDE, CALIFORNIA	REVISIONS	RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT
SCALE: 1" = 5' VERTICAL 1" = 20' HORIZONTAL	APPROVED BY: John W. Canty	REF. / DESCRIPTION / APPR. / DATE: No Change	DESIGNED BY: / DRAWN BY: / DATE DRAWN: / CHECKED BY:
DATE:	DATE: JANUARY 1973 REGISTERED CIVIL ENGINEER NO. 17550		APPROVED BY: John W. Bryant CHIEF ENGINEER R.E. NO. 8822 DATE: 1-30-74

BOX SPRINGS DRAIN

STAGE I

STA. 9+13.00 TO STA. 12+45.76

1970 STORM DRAIN BOND ISSUE PROJECT NO. 6

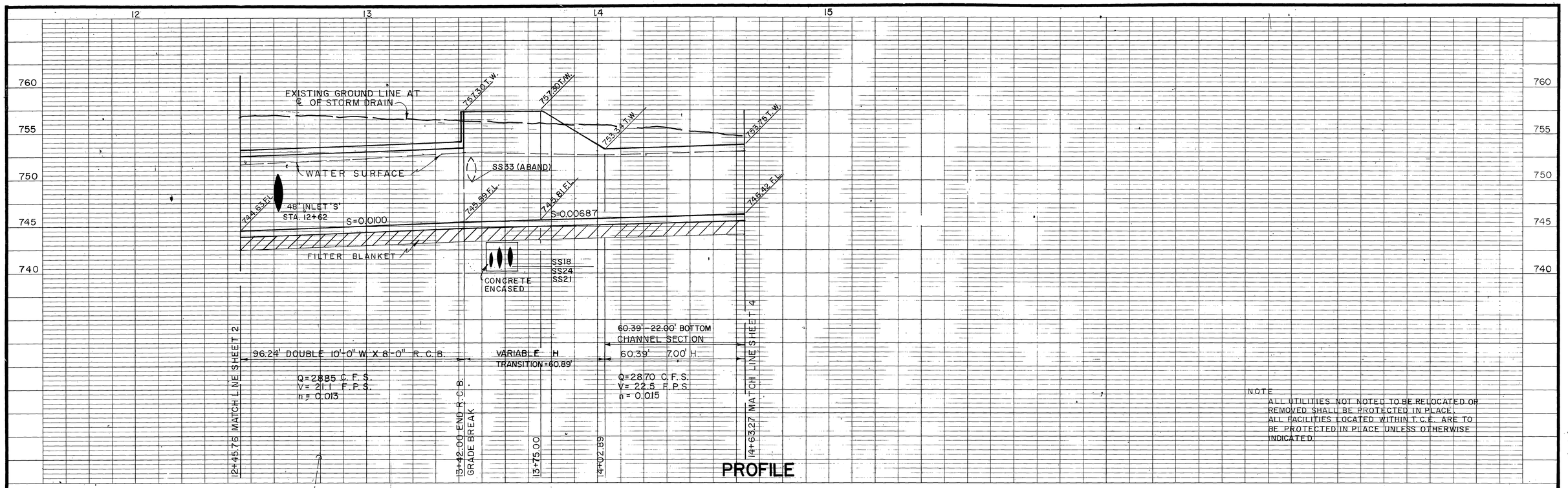
PROJECT NO. 1-0-220

DRAWING NO. 1-287

SHEET NO. 2 OF 60

AS BUILT

D-286



NOTE
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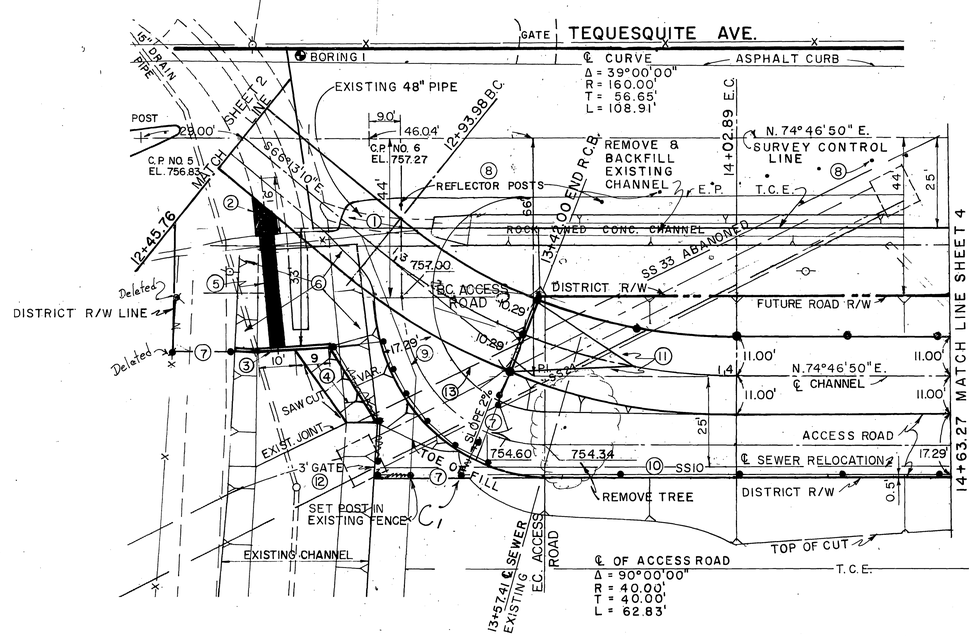
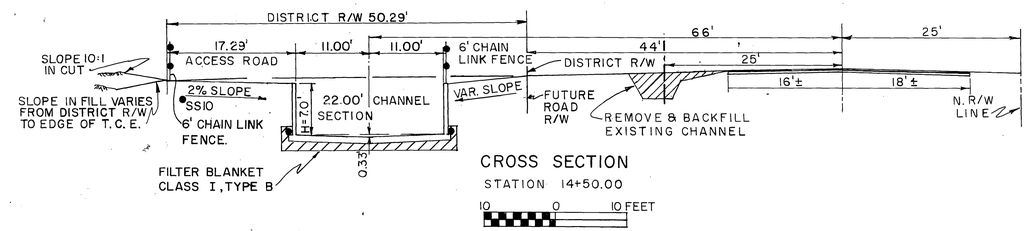




NOTES

1. REMOVE EXISTING 48" S. D. PIPE.
2. STA. 12+62 J.S. NO. 1, A=45°, B=48", C=16', S=746.95, R=747.22.
3. CONSTRUCT H. W. AT EXISTING JOINT PER DETAIL SHEET 13.
4. CONSTRUCT 4" NONREINFORCED CONCRETE SLOPE PAVING.
5. PLACE 32' OF 48" R.C.P. 1100 D.
6. REMOVE EXISTING HEADWALL & CHANNEL AND BACKFILL AS DIRECTED.
7. C1 PLACE 14' GATE IN 6' CHAIN LINK FENCE.
8. REFLECTOR POSTS TO BE PROTECTED IN PLACE TO STA. 14+63.27 – TOTAL OF 10 THIS SHEET.
9. REMOVE EXISTING FENCE.
10. ℄ SEWER RELOCATION. SEE SHEET 17. FOR SEWER PLAN
11. TRANSITION FROM FLAT BOTTOM AT R.C.B. TO STANDARD SECTION AT 13+75.
12. PLACE 3' GATE IN 6' CHAIN LINK FENCE.
13. REMOVE INTERFERING PORTIONS OF ABANDONED 33" SEWER SIPHON & PLUG WITH 6" CONCRETE.

PLAN

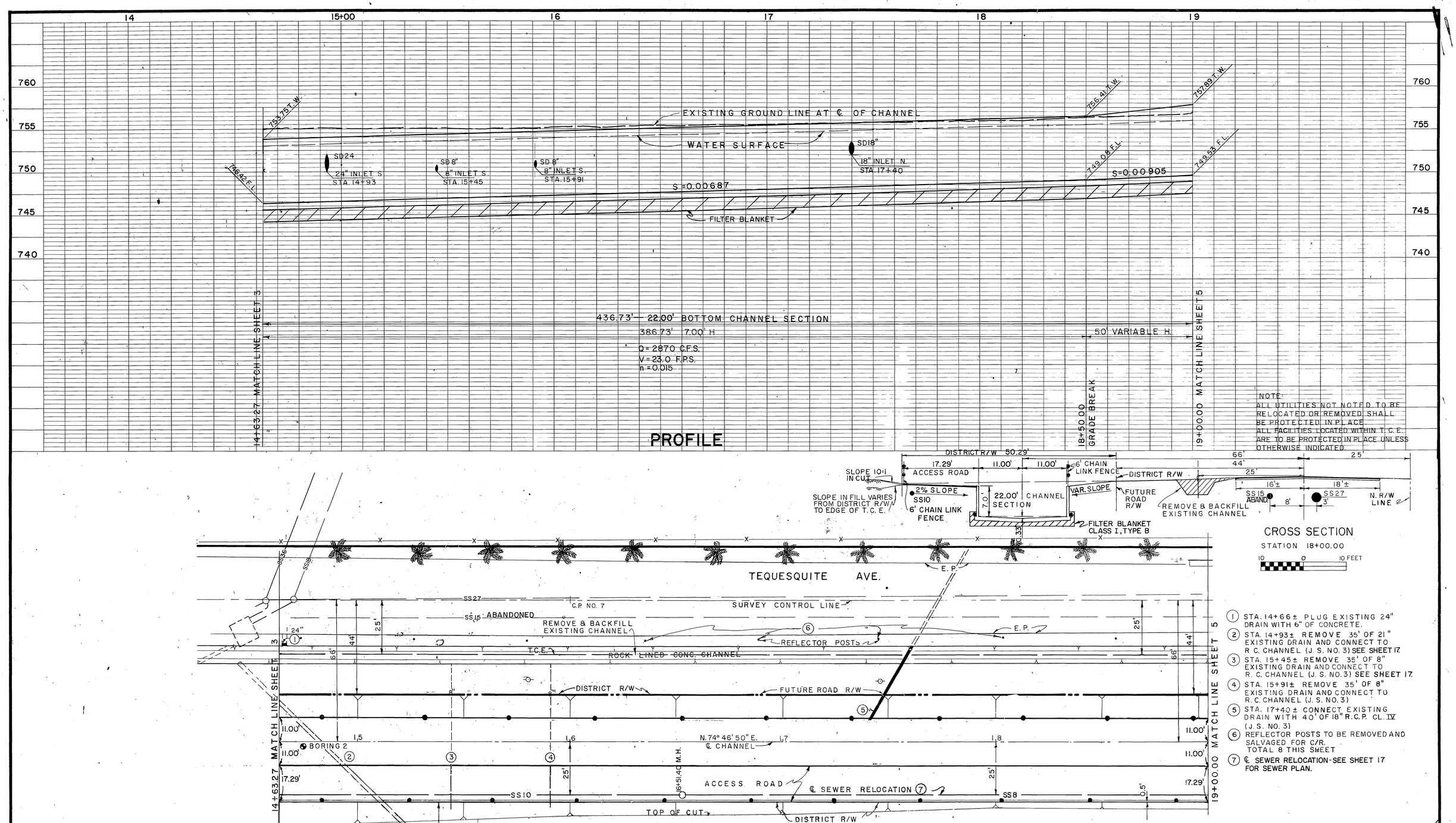
1"=20'

20' 0 20'

BENCH MARK C.P. NO. 5 NAIL AND FLASH AND TAG ON ℄ OF TESQUESQUITE AVE. EL. 756.83	J. F. DAVIDSON ASSOCIATES CIVIL ENGINEERS SURVEYORS PLANNERS 3426 TENTH STREET RIVERSIDE, CALIFORNIA	REVISIONS	RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT	BOX SPRINGS DRAIN STAGE I STA. 12+45.76 TO STA. 14+63.27 1970 STORM DRAIN BOND ISSUE PROJECT NO. 6	PROJECT NO 1-0-220
SCALE: 1"= 5' VERTICAL 1"= 20' HORIZONTAL	APPROVED BY: John W. Cantz REGISTERED CIVIL ENGINEER NO. 17550	C1 Relocate G.C.L.F. and 14' Gate (JD) 11-27-73	DESIGNED BY: DRAWN BY: DATE DRAWN: CHECKED BY:	APPROVED BY: John W. Bryant CHIEF ENGINEER R.E. NO. 8822 DATE: 1-30-74	DRAWING NO. 1-287
DATE:	DATE: JANUARY 1973	REF. DESCRIPTION APPR. DATE			SHEET NO. 3 OF 60

AS BUILT

D-286



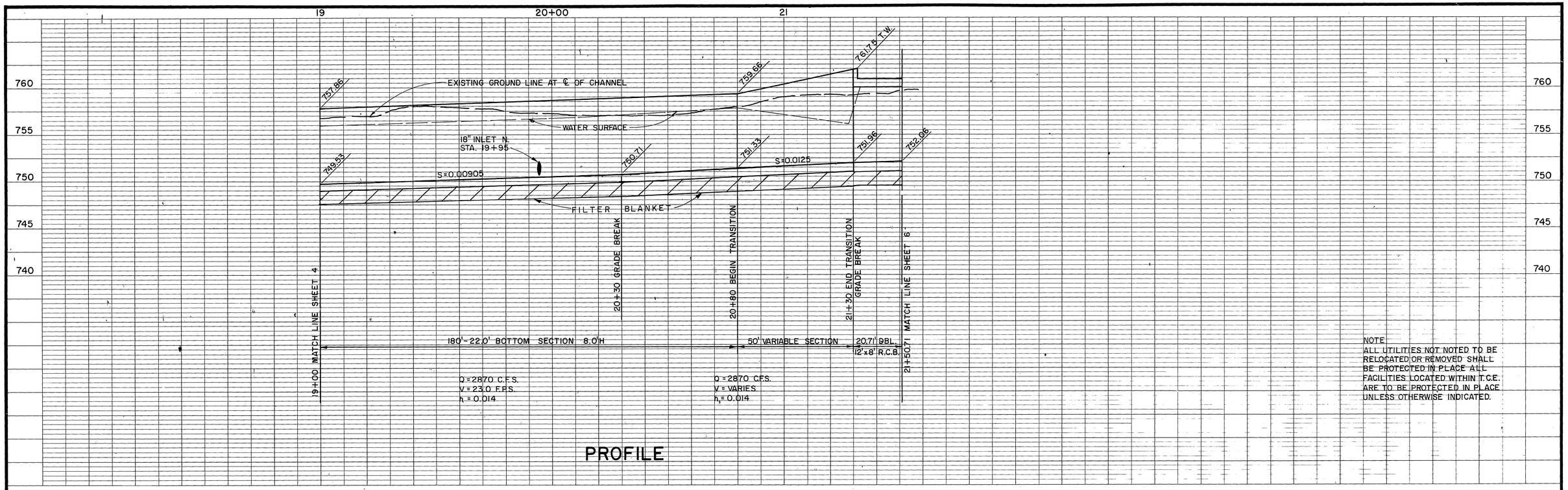
BENCH MARK C.P. NO. 7 NAIL AND FLASH AND TAG ON ℄ OF TESQUESQUITE AVE. EL. 757.74	J.F. DAVIDSON ASSOCIATES CIVIL ENGINEERS SURVEYORS PLANNERS 3426 TENTH STREET RIVERSIDE, CALIFORNIA	REVISIONS	RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT
SCALE: 1" = 5' VERTICAL 1" = 20' HORIZONTAL	APPROVED BY:		DESIGNED BY:
DATE:	DATE: JANUARY 1973 REGISTERED CIVIL ENGINEER NO. 17580	REF. No Change DESCRIPTION APPR. DATE	DRAWN BY:
			DATE DRAWN:
			CHECKED BY:
			APPROVED BY: John V. Bryant CHIEF ENGINEER R.E. NO. 8822 DATE: 1-30-74

BOX SPRINGS DRAIN
STAGE I
STA. 14+63.27 TO STA. 19+00.00
1970 STORM DRAIN BOND ISSUE PROJECT NO. 6

PROJECT NO. 1-0-220
DRAWING NO. 1-287
SHEET NO. 4 OF 60

AS BUILT

D-286



NOTE
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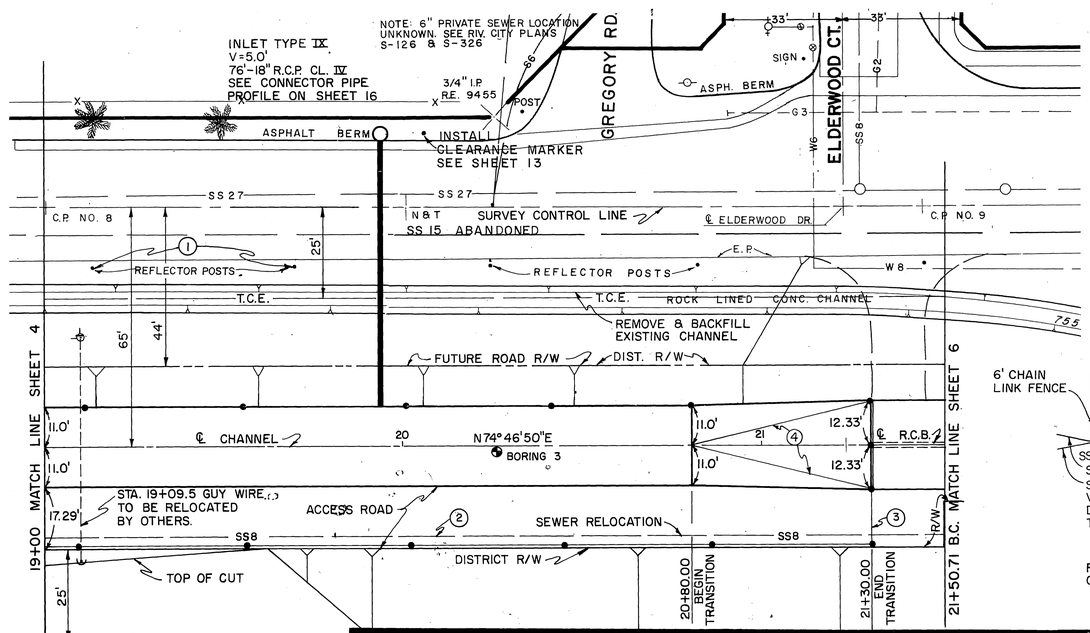
PROFILE

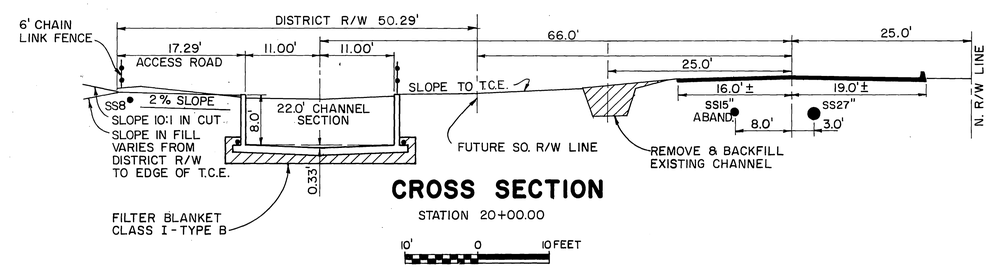


PLAN

1"=20'

NOTE:

1. REFLECTOR POSTS TO BE REMOVED AND SALVAGED FOR C/R. TOTAL 5 THIS SHEET.
2. ℄ SEWER RELOCATION. SEE SHEET 18 FOR SEWER PLAN.
3. PLACE 14' GATE IN 6' CHAIN LINK FENCE.
4. TRANSITION FROM FLAT BOTTOM AT DOUBLE RCB. TO STANDARD SECTION AT STA. 20+80.



CROSS SECTION

STATION 20+00.00

10' 0 10 FEET

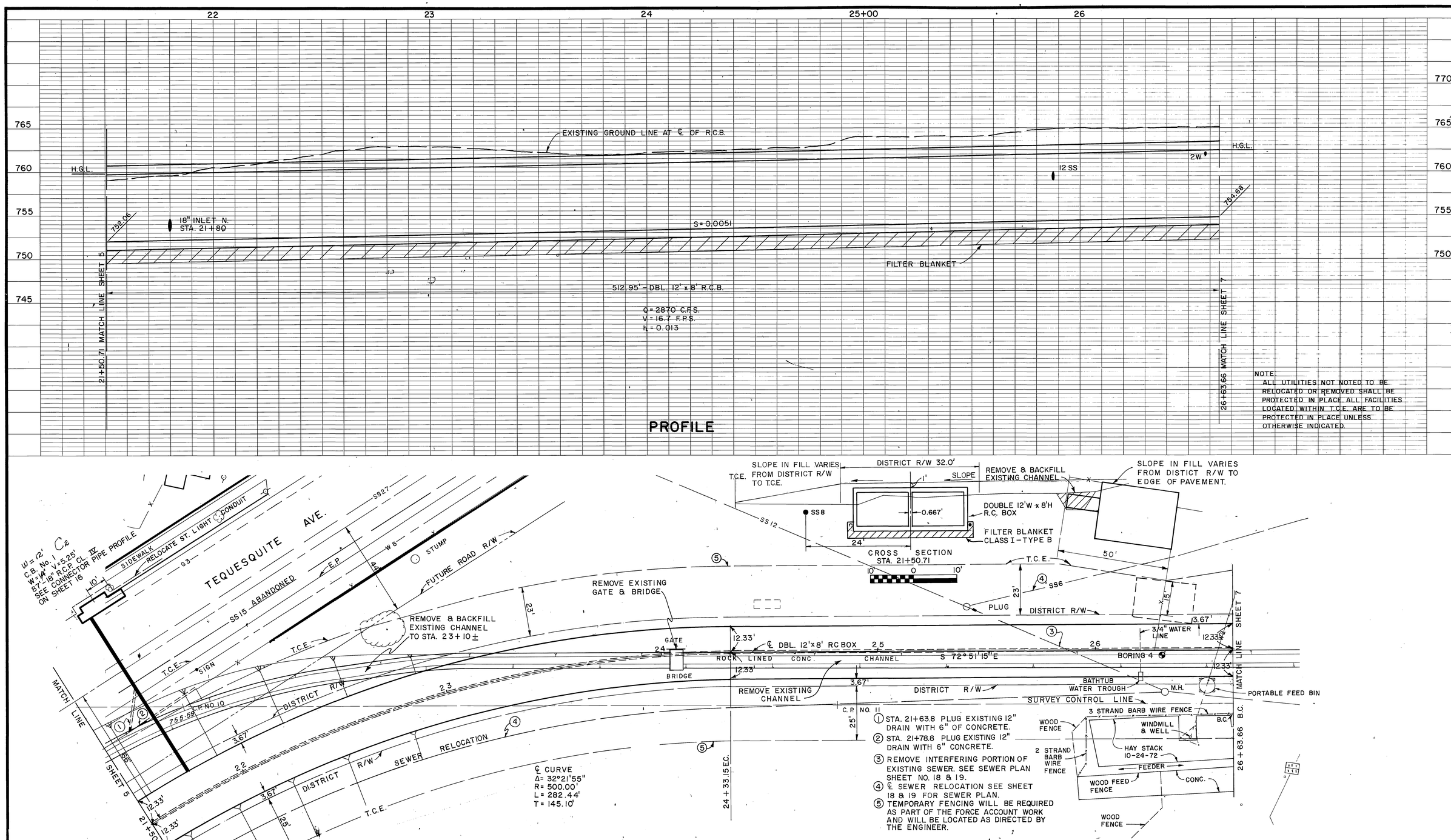
BENCH MARK C.P. NO. 10 NAIL AND FLASH AND TAG NORTH EDGE EXIST. CHANNEL EL. 759.84	J. F. DAVIDSON ASSOCIATES CIVIL ENGINEERS - SURVEYORS - PLANNERS RIVERSIDE, CALIFORNIA	REVISIONS	RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT
SCALE: 1" = 6' VERTICAL 1" = 20' HORIZONTAL	APPROVED BY:		DESIGNED BY: / DRAWN BY: / DATE DRAWN: / CHECKED BY:
DATE:	DATE: REGISTERED CIVIL ENGINEER NO. 17550	No Change — REF. / DESCRIPTION / APPR. / DATE	APPROVED BY: John W. Bryant, CHIEF ENGINEER R.E. NO. 8822 — DATE: 1-30-74

BOX SPRINGS DRAIN
STAGE I
STA. 19+00.00 TO STA. 21+50.71
1970 STORM DRAIN BOND ISSUE PROJECT NO. 6

PROJECT NO. 1-0-220
DRAWING NO. 1-287
SHEET NO. 5 OF 60

AS BUILT

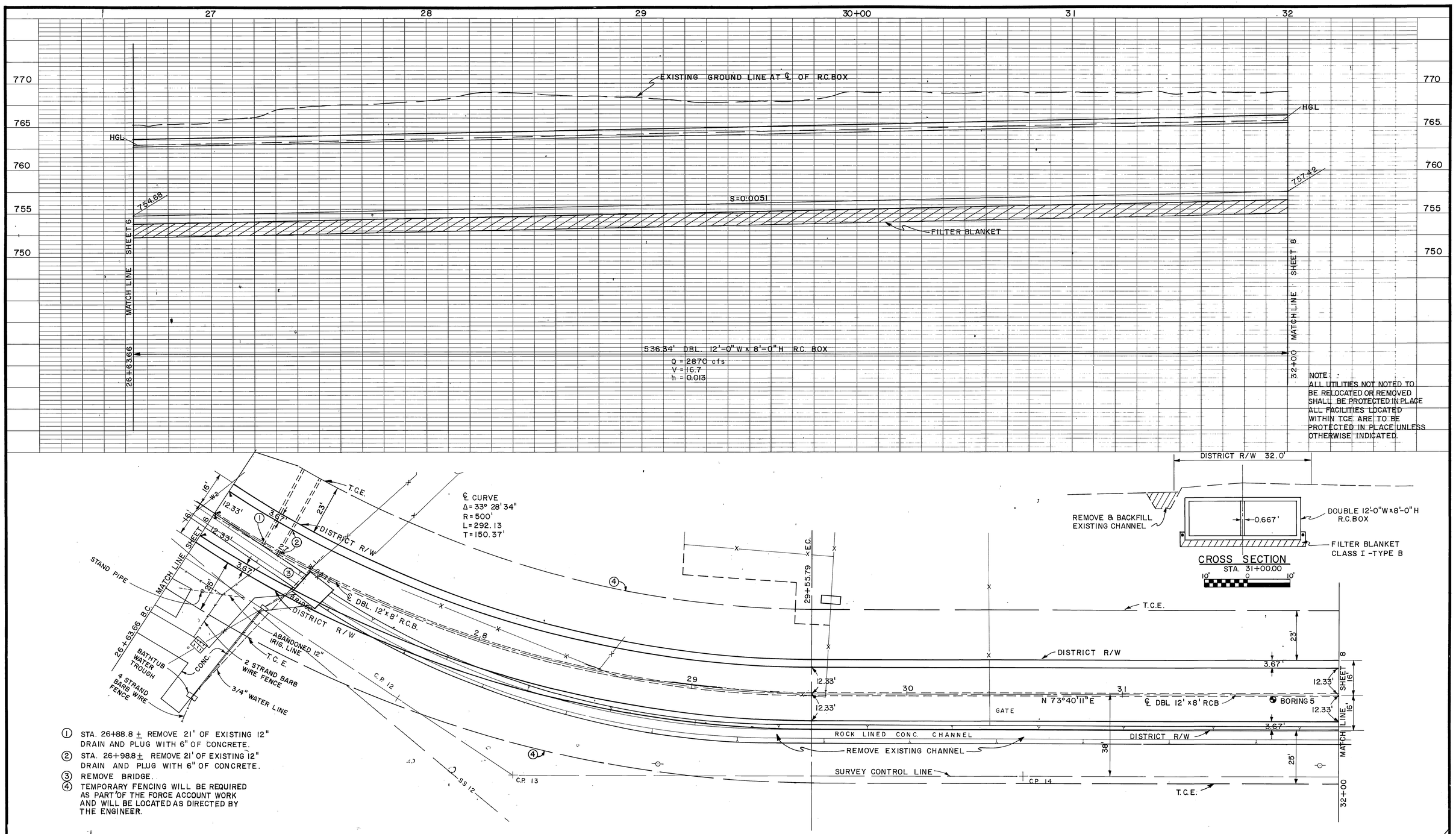
D-286



BENCH MARK C.P. NO. 10 NAIL AND FLASH AND TAG NORTH EDGE EXIST. CHANNEL EL. 759.84	J. F. DAVIDSON ASSOCIATES CIVIL ENGINEERS - SURVEYORS - PLANNERS RIVERSIDE, CALIFORNIA	REVISIONS	RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT	BOX SPRINGS DRAIN STAGE I STA. 21+50.71 TO STA. 26+63.66 1970 STORM DRAIN BOND ISSUE PROJECT NO. 6	PROJECT NO. 1-0-220
SCALE: 1"= 5' VERTICAL 1"= 20' HORIZONTAL	APPROVED BY:		DESIGNED BY: / DRAWN BY: / DATE DRAWN: / CHECKED BY:	APPROVED BY: Jules W. Bryant CHIEF ENGINEER R.E. NO. 8822 DATE: 1-30-74	DRAWING NO. 1-287
DATE:	DATE: REGISTERED CIVIL ENGINEER NO. 17559	C2 Change C.B. No. 1 W=14' to W12' 11-22-74 REF. DESCRIPTION APPR. DATE			SHEET NO. 6 OF 60

AS BUILT

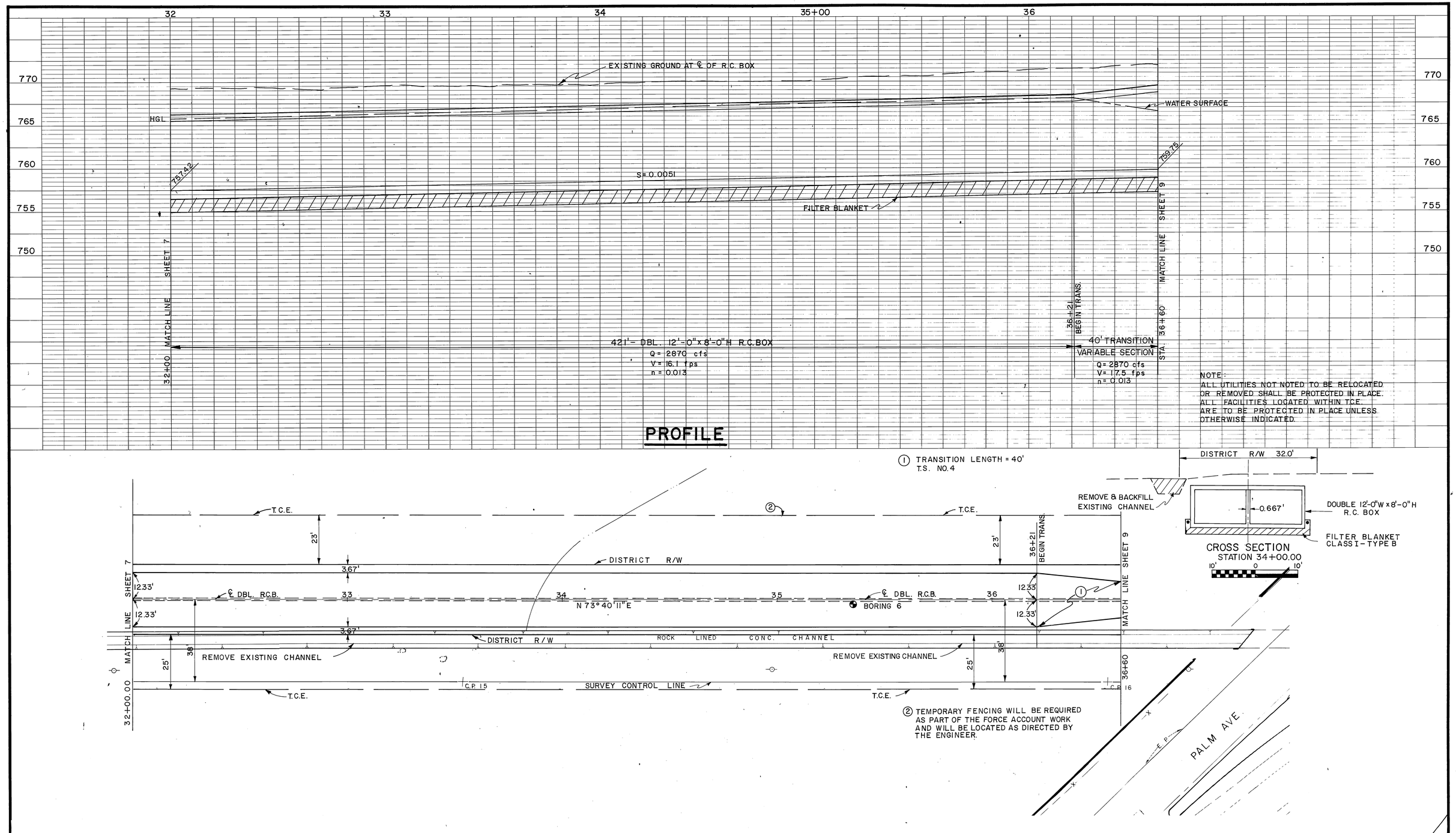
D-286



BENCH MARK C.P. NO. 13 3¼" I.P. WITH CAP EL. 766.08	J. F. DAVIDSON ASSOCIATES CIVIL ENGINEERS - SURVEYORS - PLANNERS RIVERSIDE, CALIFORNIA	REVISIONS	RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT	BOX SPRINGS DRAIN STAGE I STA. 26+63.66 TO STA. 32+00.00 1970 STORM DRAIN BOND ISSUE PROJECT NO. 6
SCALE: 1" = 5' VERTICAL 1" = 20' HORIZONTAL	APPROVED BY:	No Change	DESIGNED BY:	PROJECT NO. 1-0-220
DATE:	DATE: REGISTERED CIVIL ENGINEER NO. 17550	REF. DESCRIPTION APPR. DATE	DRAWN BY:	DRAWING NO. 1-287
			DATE DRAWN:	SHEET NO. 7 OF 60
			CHECKED BY:	APPROVED BY: John W. Bryant CHIEF ENGINEER R.E. NO. 8822 DATE: 1-30-74

AS BUILT

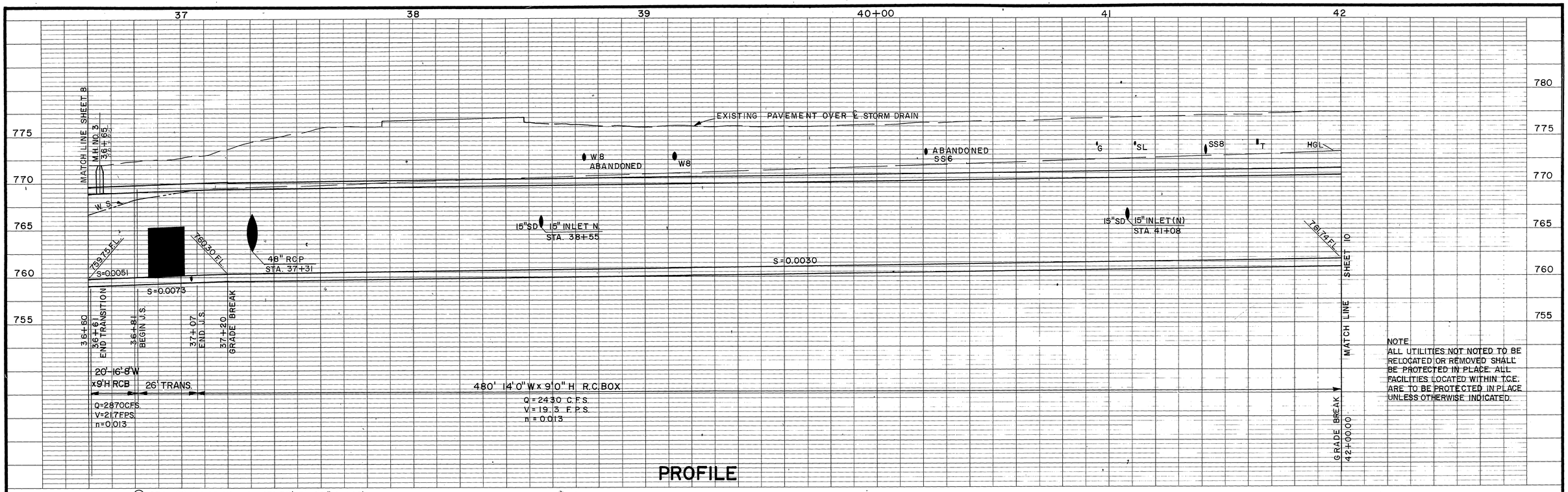
D-286



BENCH MARK	J. F. DAVIDSON ASSOCIATES	REVISIONS	RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT	BOX SPRINGS DRAIN	PROJECT NO. 1-0-220
C.P. NO. 16 3/4" I.P. WITH CAP EL. 771.99	CIVIL ENGINEERS - SURVEYORS - PLANNERS RIVERSIDE, CALIFORNIA	No Change	DESIGNED BY:	STAGE I	DRAWING NO. 1-287
SCALE: 1"=5' VERTICAL 1"=20' HORIZONTAL	APPROVED BY:	REF. DESCRIPTION APPR. DATE	DRAWN BY:	STA. 32+00.00 TO STA. 36+60.00	SHEET NO. 8 OF 60
DATE:	DATE: REGISTERED CIVIL ENGINEER NO. 17550		DATE DRAWN:	1970 STORM DRAIN BOND ISSUE PROJECT NO. 6	
			CHECKED BY:	APPROVED BY: John H. Bryant CHIEF ENGINEER R.E. NO. 8822 DATE: 1-30-74	

AS BUILT

D-286



NOTE
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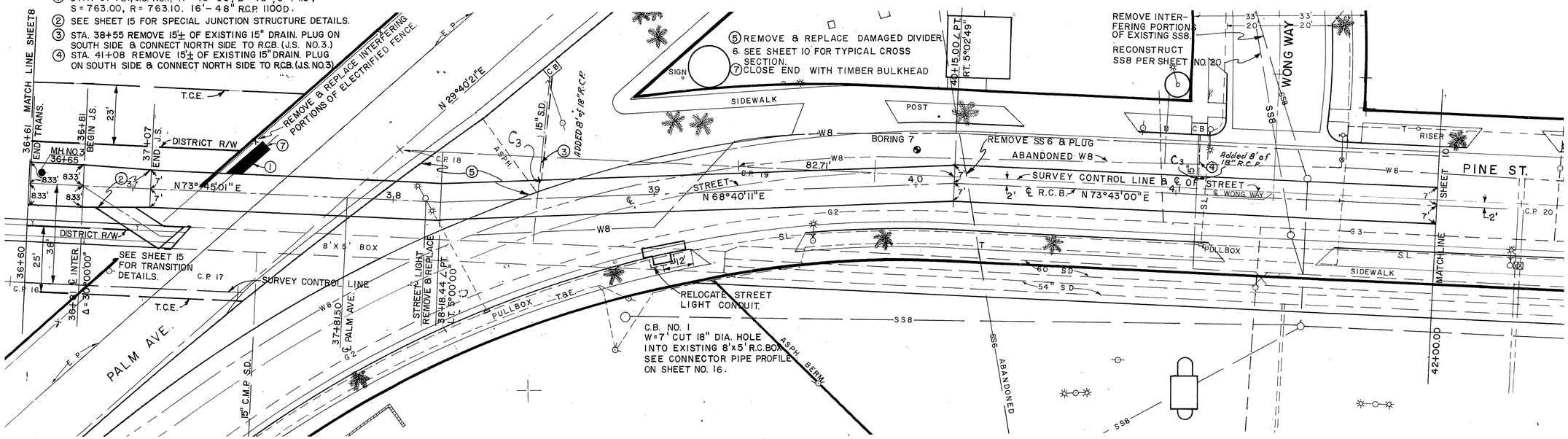
PROFILE



PLAN

1" = 20'

20' 0 20'

BENCH MARK C.P. NO. 16 3/4" I.P. WITH CAP EL. 771.99	J. F. DAVIDSON ASSOCIATES CIVIL ENGINEERS - SURVEYORS - PLANNERS RIVERSIDE, CALIFORNIA	REVISIONS	RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT
SCALE: 1" = 5' VERTICAL 1" = 20' HORIZONTAL	APPROVED BY:	C3 Added 8' of 18" R.C.P. KD 11-27-74 REF. DESCRIPTION APPR. DATE	DESIGNED BY: DRAWN BY: DATE DRAWN: CHECKED BY:
DATE:	DATE: REGISTERED CIVIL ENGINEER NO. 17550		APPROVED BY: CHIEF ENGINEER R.E. NO. 8822 DATE: 1-30-74

BOX SPRINGS DRAIN

STAGE I

STA. 36+60.00 TO STA. 42+00.00

1970 STORM DRAIN BOND ISSUE PROJECT NO. 6

PROJECT NO. 1- -220

DRAWING NO. 1-287

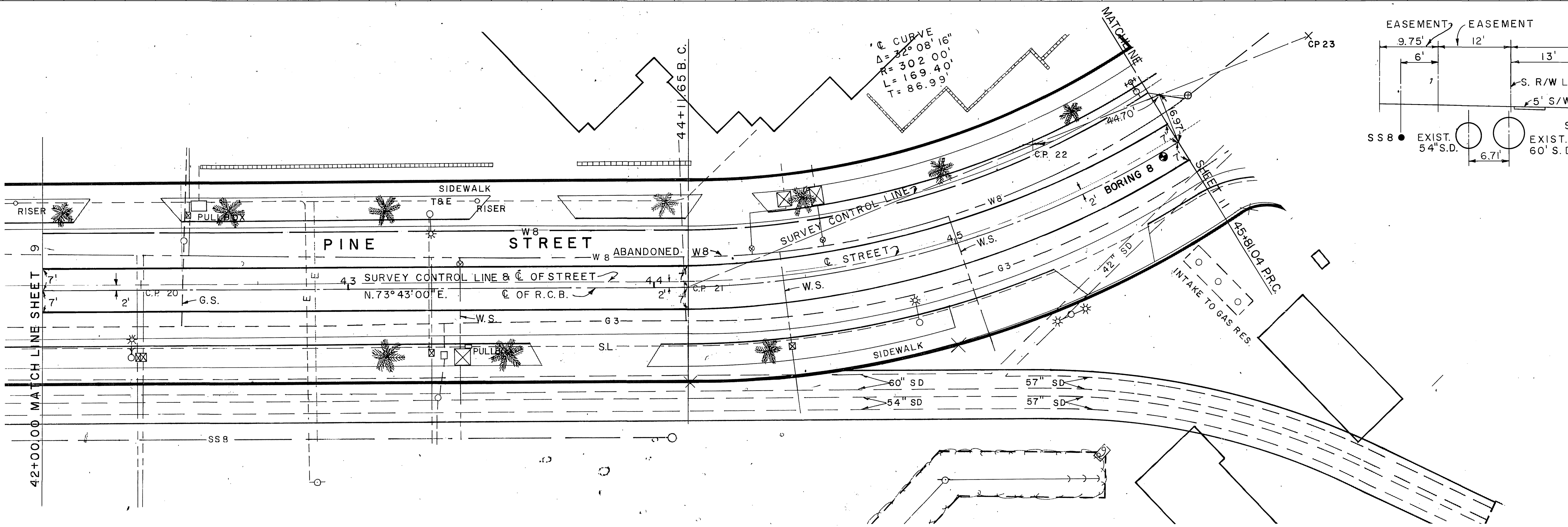
SHEET NO. 9 OF 60

AS BUILT

D-286

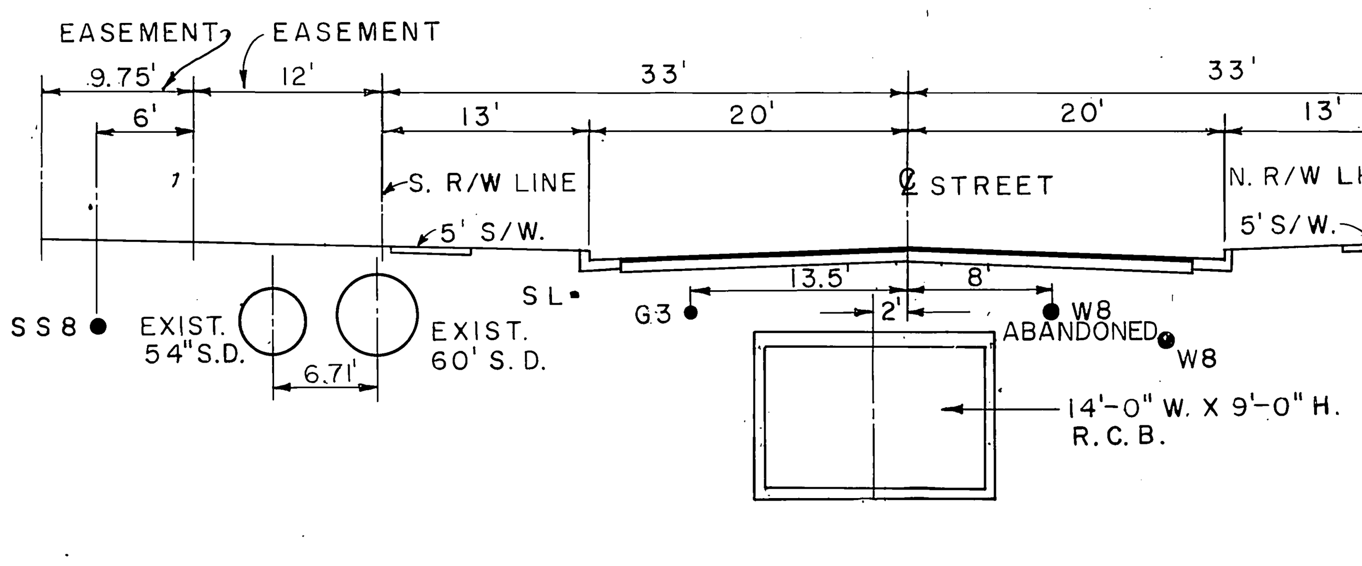
PROFILE

NOTE
ALL UTILITIES NOT NOTED TO BE RELOCATED OR REMOVED SHALL BE PROTECTED IN PLACE.



PLAN

1"=20'



CROSS SECTION
STATION 43+00.00
10' 0 10 FEET

BENCH MARK C.P. NO. 22
X CHISELED ON TOP OF WEST CURB ON PINE ST.
EL. 782.81

SCALE: 1" = 5' VERTICAL
1" = 20' HORIZONTAL

DATE:

J.F. DAVIDSON ASSOCIATES
CIVIL ENGINEERS SURVEYORS PLANNERS
3426 TENTH STREET RIVERSIDE, CALIFORNIA

APPROVED BY: John W. Canty
REGISTERED CIVIL ENGINEER NO. 17560
DATE: JANUARY 1973

REVISIONS			
REF.	DESCRIPTION	APPR.	DATE
	No Change		

AS BUILT

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

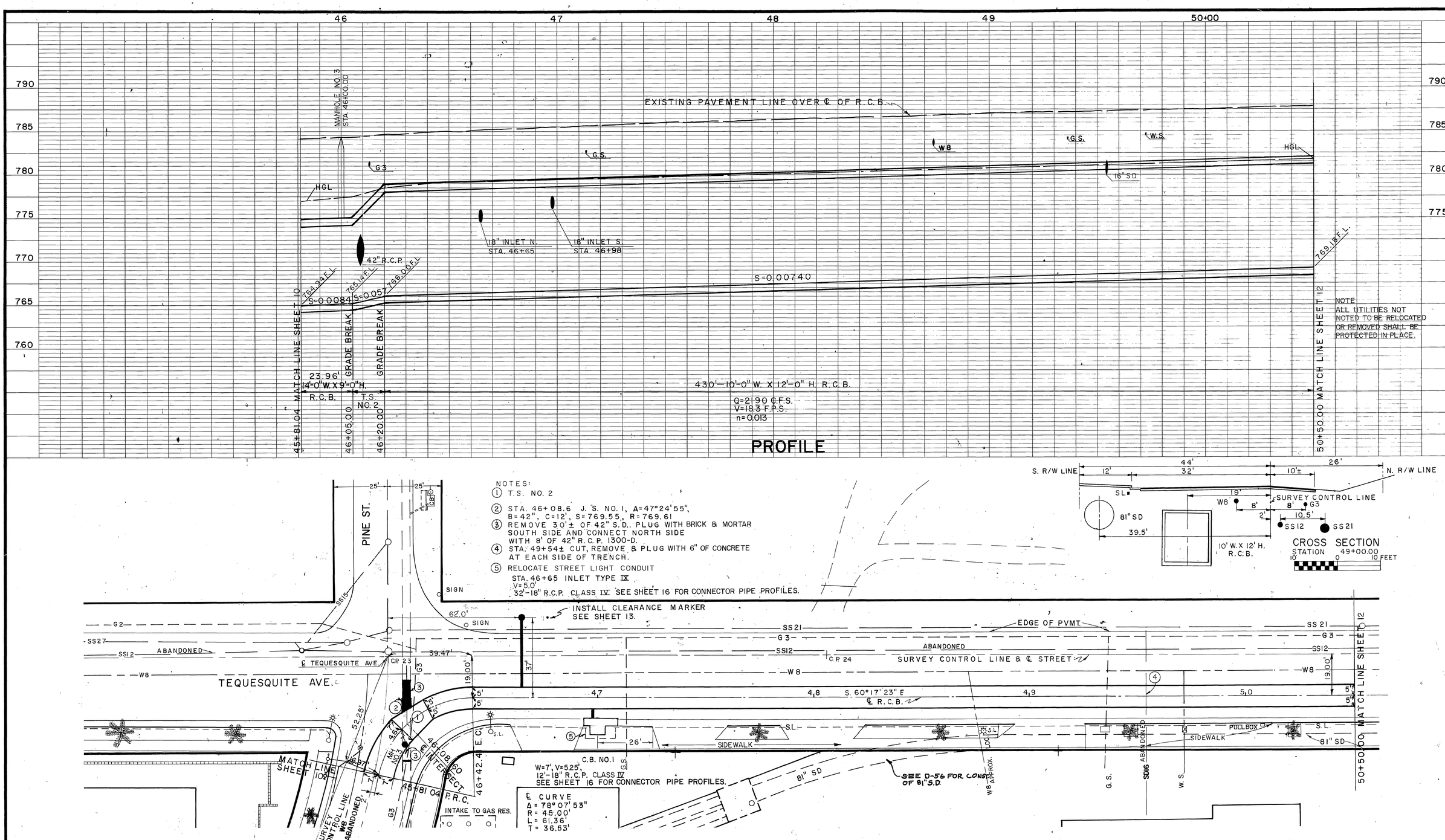
DESIGNED BY:
DRAWN BY:
DATE DRAWN:
CHECKED BY:

APPROVED BY:
CHIEF ENGINEER R.E. NO. 8822
DATE: 1-30-74

BOX SPRINGS DRAIN
STAGE I
STA. 42+00.00 TO STA. 45+81.04
1970 STORM DRAIN BOND ISSUE PROJECT NO. 6

PROJECT NO. 1-0-220
DRAWING NO. 1-287
SHEET NO. 10 OF 60

D-286

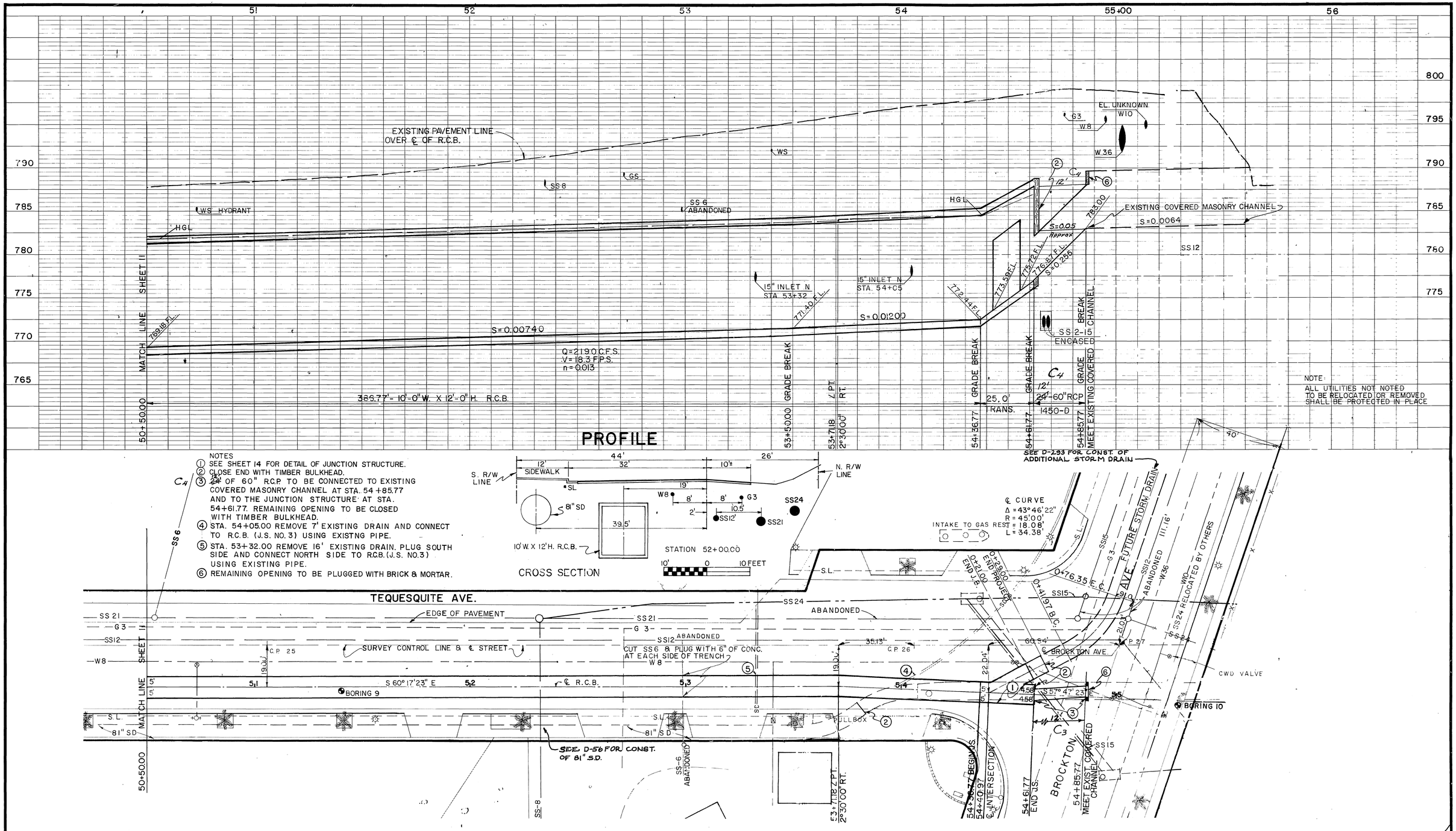


BENCH MARK CP NO 23 EL. 784.75 CONCRETE NAIL ON S S OF M.H. AT INTERSECTION OF PINE ST. AND TEQUESQUITE AVE.	J. F. DAVIDSON ASSOCIATES CIVIL ENGINEERS SURVEYORS PLANNERS 3426 TENTH STREET RIVERSIDE, CALIFORNIA	REVISIONS	RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT	BOX SPRINGS DRAIN STAGE I STA. 45+81.04 TO STA. 50+50.00 1970 STORM DRAIN BOND ISSUE PROJECT NO. 6
SCALE: 1" = 5' VERTICAL 1" = 20' HORIZONTAL	APPROVED BY: John W. Carty REGISTERED CIVIL ENGINEER NO. 17550	No Change	DESIGNED BY: DRAWN BY: DATE DRAWN: CHECKED BY:	APPROVED BY: John W. Dugant CHIEF ENGINEER R.E. NO. 8822 DATE: 1-30-74
DATE:	DATE: JANUARY 1973	REF. DESCRIPTION APPR. DATE		

PROJECT NO. 1-0-220
DRAWING NO. 1-287
SHEET NO. 11 OF 60

AS BUILT

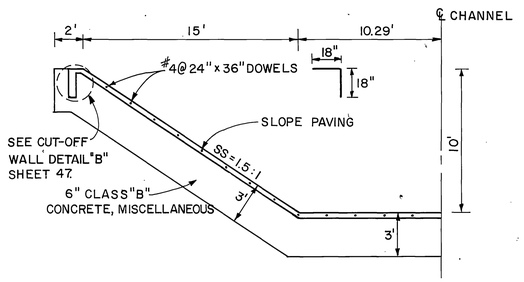
D-286



BENCH MARK C.P. NO 27 EL. 798.28 NAIL AND FLASH IN PATCH AT INTERSECTION OF BROCKTON AVE. AND TEQUESQUITE AVE.	J. F. DAVIDSON ASSOCIATES CIVIL ENGINEERS SURVEYORS PLANNERS 3426 TENTH STREET RIVERSIDE, CALIFORNIA	REVISIONS	RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT	BOX SPRINGS DRAIN STAGE I STA. 50+50.00 TO STA. 55+75.00	PROJECT NO. 1-0-220
SCALE: 1"= 6' VERTICAL 1"= 20' HORIZONTAL	APPROVED BY:	C4 Length change of ③ 60" R.C.P.	DESIGNED BY:	1970 STORM DRAIN BOND ISSUE PROJECT NO. 6	DRAWING NO. 1-287
DATE:	DATE: JANUARY 1973 REGISTERED CIVIL ENGINEER NO. 17560	REF. DESCRIPTION APPR. DATE	DRAWN BY:		SHEET NO. 12 OF 60
			DATE DRAWN:		
			CHECKED BY:		
			APPROVED BY: CHIEF ENGINEER, R.E. NO. 8822 DATE: 1-30-74		

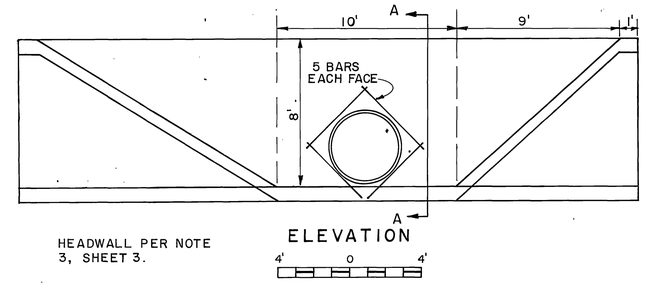
AS BUILT

D-286

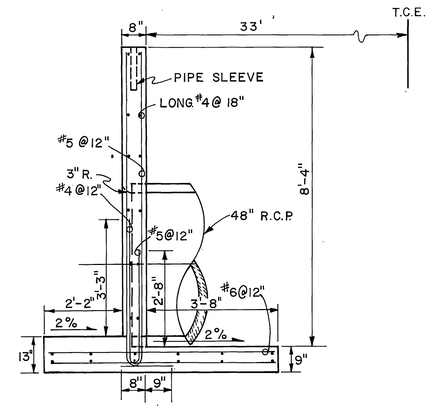


CUT-OFF WALL AT STA. 10+85.84

5' 0 5'

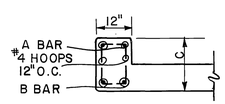


ELEVATION



HEADWALL SECTION A-A

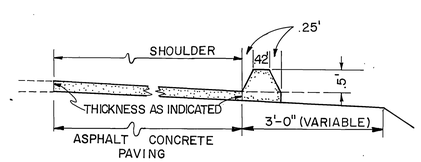
PARAPET BARS			
℄ STATION	A	B	C
11 + 45.84	#9	#9	1 48'
13 + 42.00	#6	#6	3.79'
21 + 30	#6	#6	1.79'



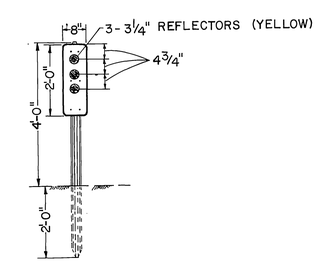
TYP. PARAPET DETAIL

NO SCALE

NOTE
STA. 13+42 SHALL HAVE 2-#6 BARS AT MIDPOINT OF "C". BEND BOTTOM R.C.B. BARS IN TOP SLAB 18" UP FACE OF PARAPET WALL.



ASPHALT CONCRETE BERM



CLEARANCE MARKER

J. F. DAVIDSON ASSOCIATES
CIVIL ENGINEERS - SURVEYORS - PLANNERS
RIVERSIDE, CALIFORNIA

APPROVED BY:

DATE: _____ REGISTERED CIVIL ENGINEER NO. 17550

REVISIONS			
REF.	DESCRIPTION	APPR.	DATE
	No Change		

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

DESIGNED BY:
DRAWN BY:
DATE DRAWN:
CHECKED BY:

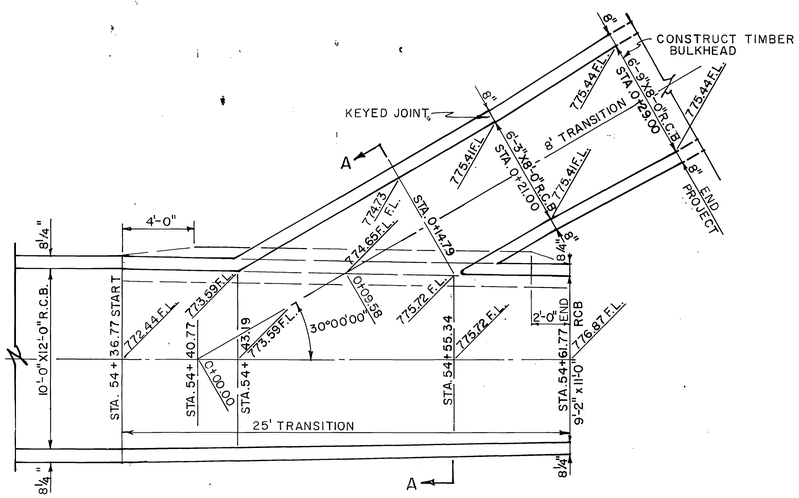
APPROVED BY: John W. Bryant
CHIEF ENGINEER R.E. NO. 8822
DATE: 1-30-74

BOX SPRINGS DRAIN
STAGE I
DETAIL SHEET
1970 STORM DRAIN BOND ISSUE PROJECT NO. 6

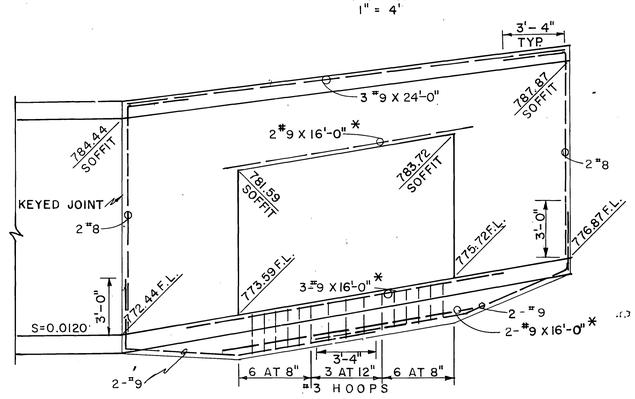
PROJECT NO. 1-0-220
DRAWING NO. 1-287
SHEET NO. 13 OF 60

AS BUILT

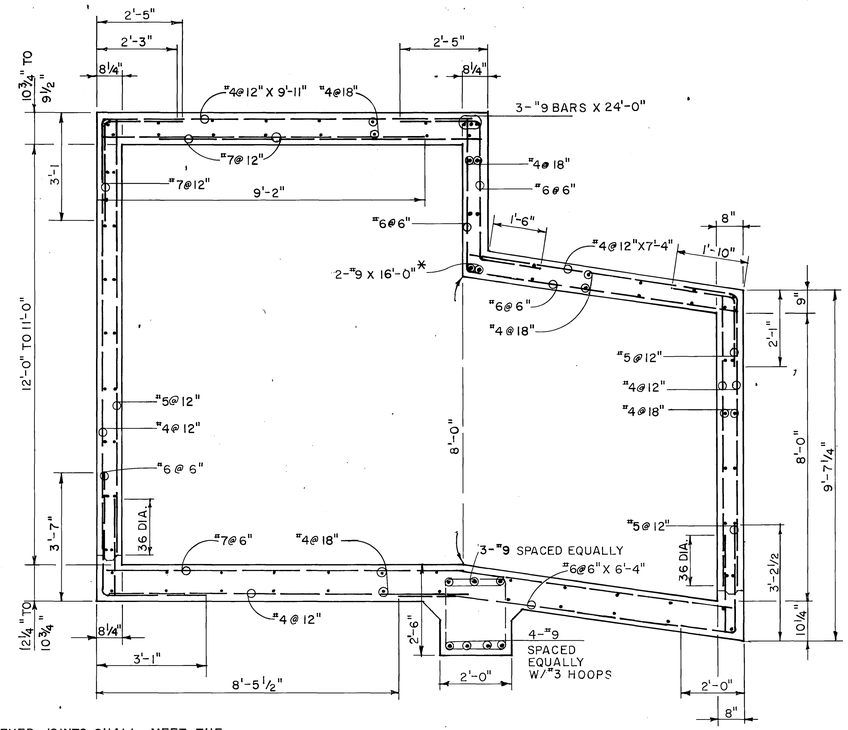
D-286



PLAN
1" = 4'



℄ SECTION
1" = 4'

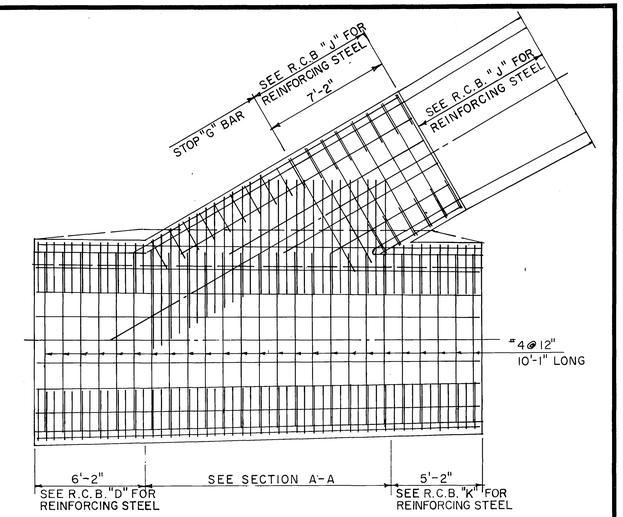


NOTE:

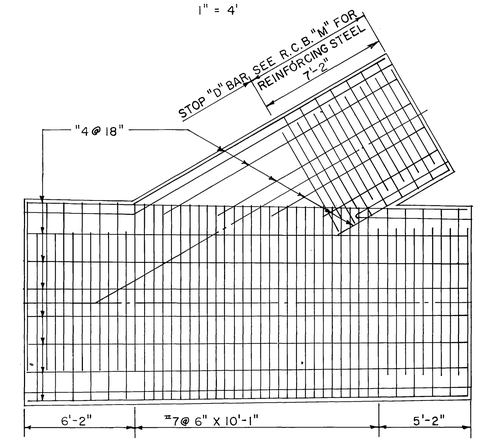
1. KEYED JOINTS SHALL MEET THE REQUIREMENTS FOR TRANSVERSE CONSTRUCTION JOINTS FOR R.C.B.

SECTION A-A
1" = 2'

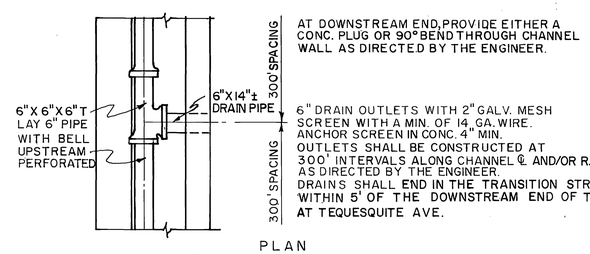
DETAIL OF JUNCTION STRUCTURE AT BROCKTON AVE.



BOTTOM STEEL IN BOTTOM SLAB
1" = 4'



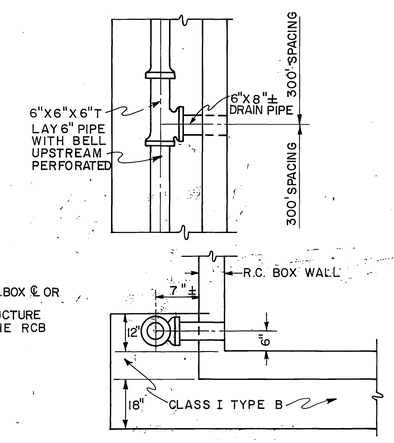
TOP STEEL IN BOTTOM SLAB
1" = 4'



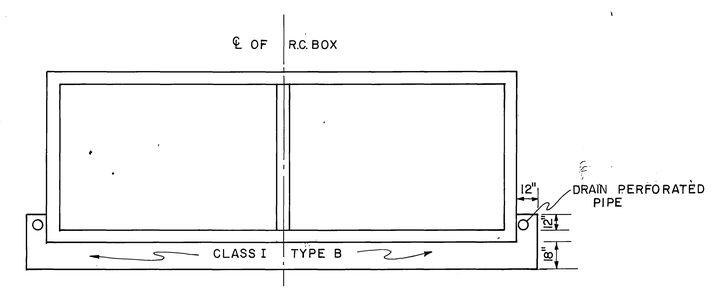
AT DOWNSTREAM END, PROVIDE EITHER A CONC. PLUG OR 90° BEND THROUGH CHANNEL WALL AS DIRECTED BY THE ENGINEER.

6" DRAIN OUTLETS WITH 2" GALV. MESH SCREEN WITH A MIN. OF 14 GA. WIRE. ANCHOR SCREEN IN CONC. 4" MIN.
OUTLETS SHALL BE CONSTRUCTED AT 300' INTERVALS ALONG CHANNEL ℄ AND/OR R.C.BOX ℄ OR AS DIRECTED BY THE ENGINEER.
DRAINS SHALL END IN THE TRANSITION STRUCTURE WITHIN 5' OF THE DOWNSTREAM END OF THE RCB AT TEQUESQUITE AVE.

PLAN

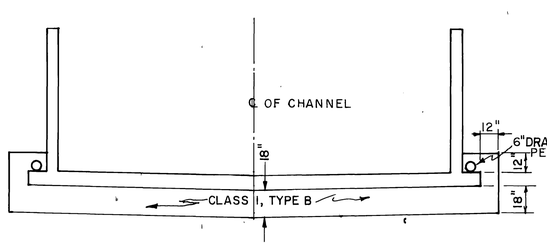


R.C. BOX SECTION



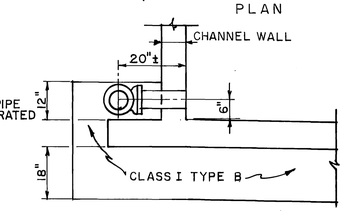
R.C. BOX SECTION

SUBDRAIN DETAIL STA. 21+30.00 TO STA. 36+61.00



CHANNEL SECTION
STA. 13+42.00 TO STA. 21+30.00

SUBDRAIN DETAIL



HEEL SECTION

J. F. DAVIDSON ASSOCIATES
CIVIL ENGINEERS - SURVEYORS - PLANNERS
RIVERSIDE, CALIFORNIA

APPROVED BY: John W. Carter
DATE: JANUARY 1973 REGISTERED CIVIL ENGINEER NO. 17550

REVISIONS			
*	Revised Bar Length		4-10-74
	No Change		
REF.	DESCRIPTION	APPR.	DATE

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

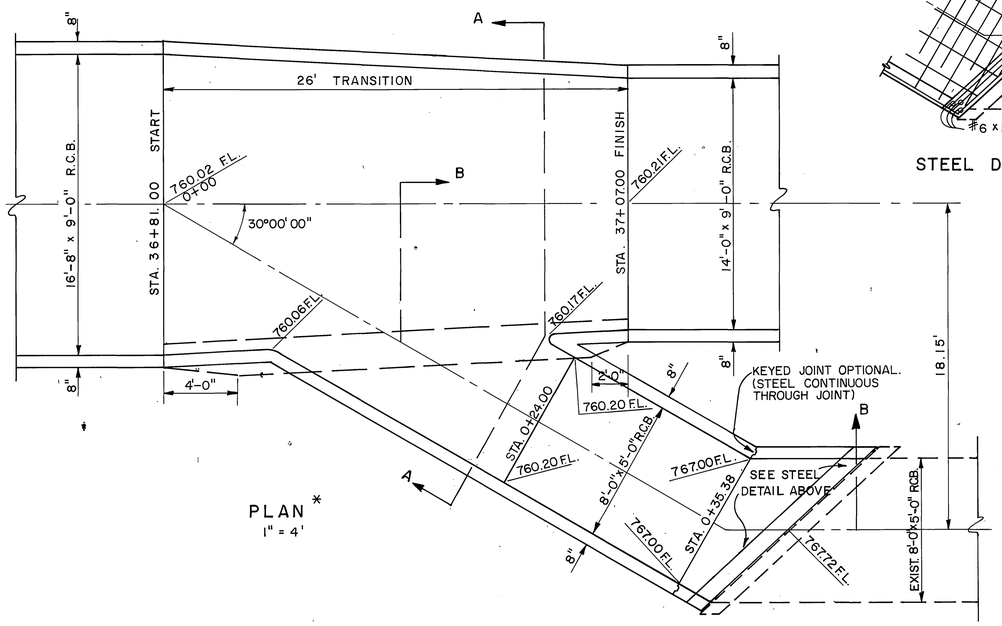
DESIGNED BY:
DRAWN BY:
DATE DRAWN:
CHECKED BY:
APPROVED BY: John E. Bryant
CHIEF ENGINEER R.E. NO. 8822
DATE: 1-30-74

BOX SPRINGS DRAIN
STAGE I
DETAIL SHEET
1970 STORM DRAIN BOND ISSUE PROJECT NO. 6

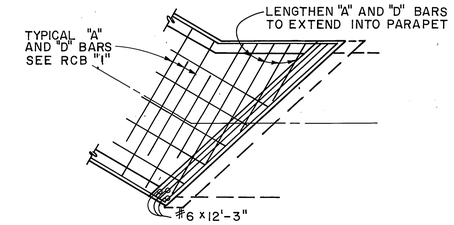
PROJECT NO. 1-0-220
DRAWING NO. 1-287
SHEET NO. 14 OF 60

AS BUILT

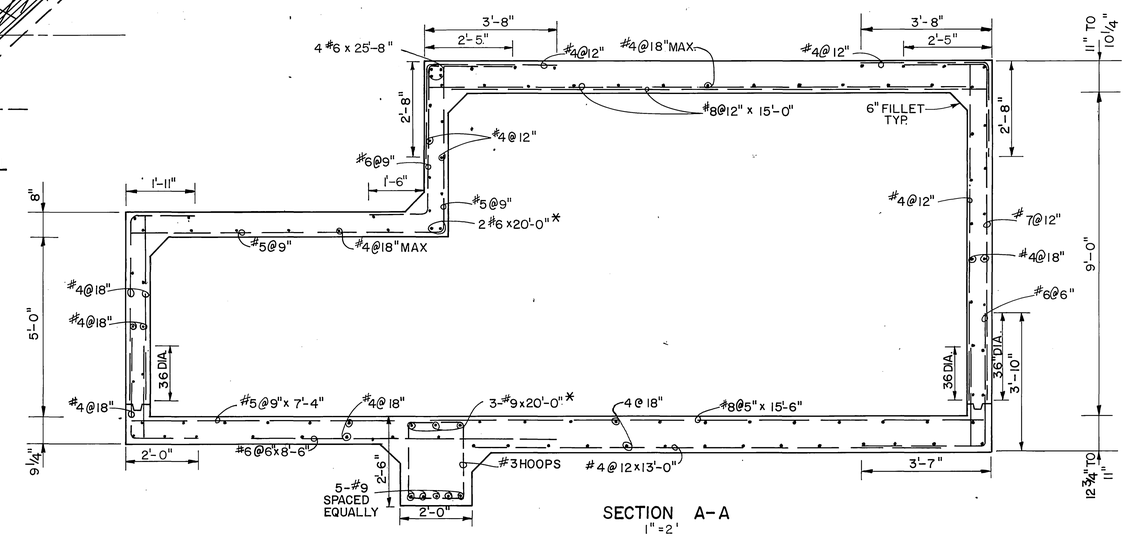
D-286



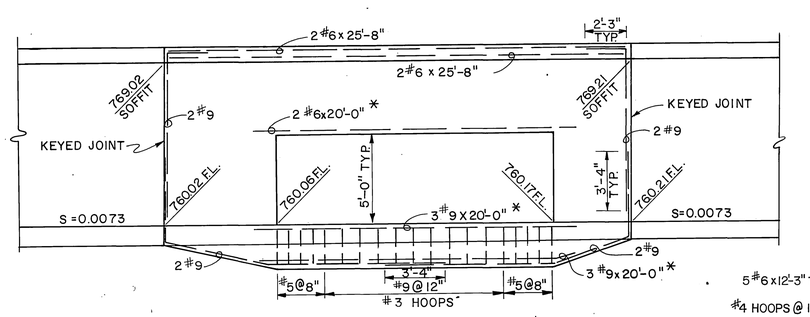
PLAN *
1" = 4'



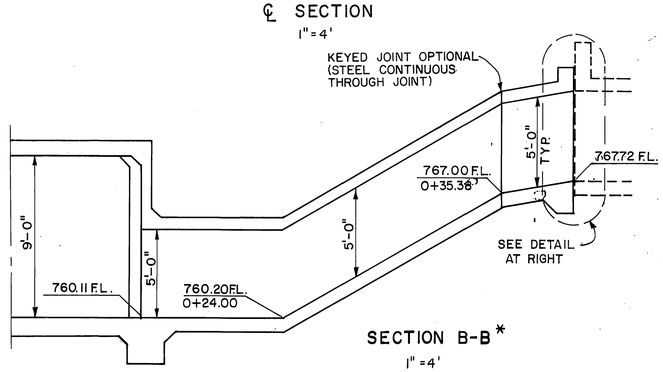
STEEL DETAIL



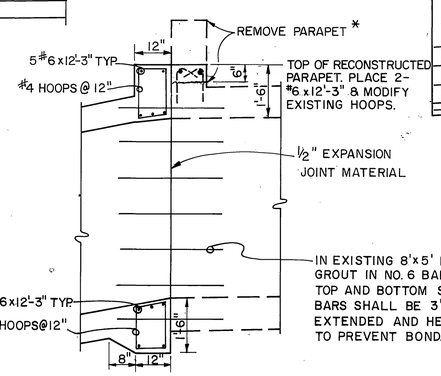
SECTION A-A
1" = 2'



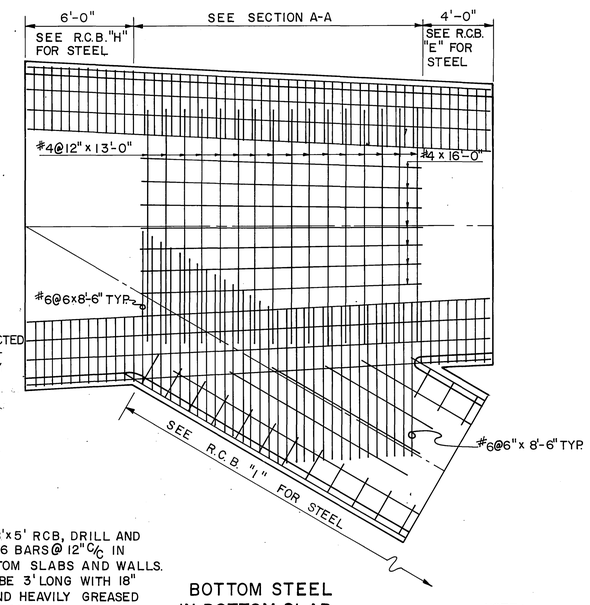
℄ SECTION
1" = 4'



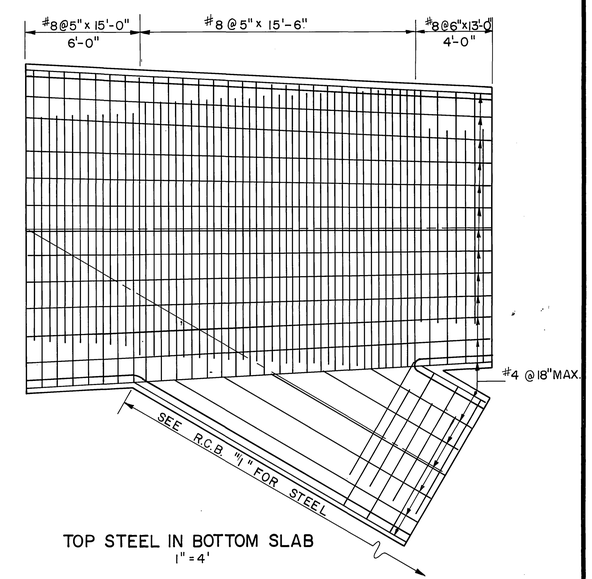
SECTION B-B *
1" = 4'



DETAIL
1" = 2'



BOTTOM STEEL IN BOTTOM SLAB
1" = 4"



TOP STEEL IN BOTTOM SLAB
1" = 4'

NOTE:
1. KEYED JOINTS SHALL MEET THE REQUIREMENTS FOR TRANSVERSE CONSTRUCTION JOINTS FOR R.C.B.

J. F. DAVIDSON ASSOCIATES
CIVIL ENGINEERS - SURVEYORS - PLANNERS
RIVERSIDE, CALIFORNIA

APPROVED BY:
DATE:
REGISTERED CIVIL ENGINEER NO. 17560

REVISIONS		
*	Clarified Plan View & Sections A-A & B-B, Parapet Detail & Revised Bar Length.	4-10-74
REF.	DESCRIPTION	APPR. DATE

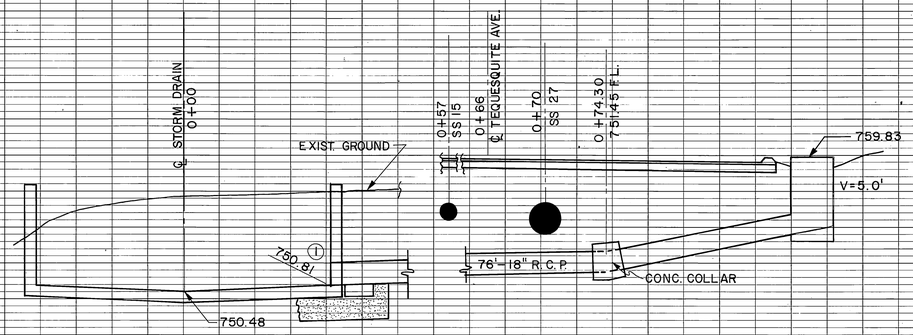
No Change
AS BUILT

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT
DESIGNED BY:
DRAWN BY:
DATE DRAWN:
CHECKED BY:
APPROVED BY: John R. Bryant
CHIEF ENGINEER R.E. NO. 8822
DATE: 4-23-74

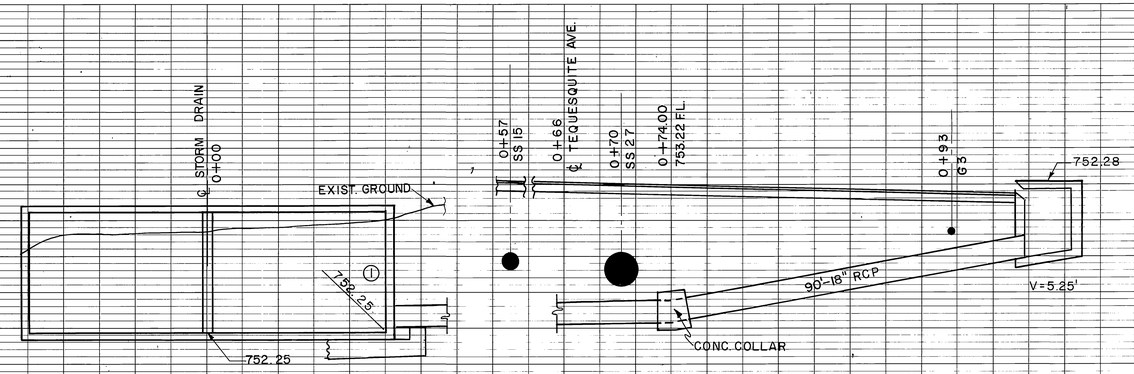
BOX SPRINGS DRAIN
STAGE I
DETAIL SHEET
1970 STORM DRAIN BOND ISSUE PROJECT NO. 6

PROJECT NO. 1-0-220
DRAWING NO. 1-287
SHEET NO. 15 OF 60

D-286



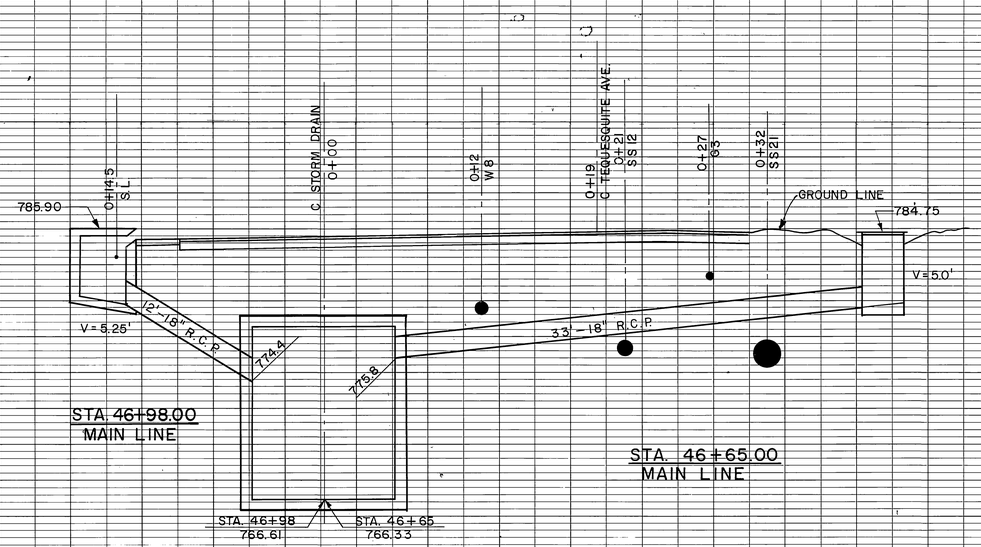
STA. 19+96.00
MAIN LINE



STA. 21+80.00
MAIN LINE

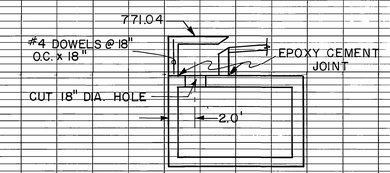
NOTE:

(1) DELETE 3' OF SUBDRAIN AT 18" RCP LATERALS. TURN DOWNSTREAM END THROUGH CHANNEL OR RCB WALL WITH 90° ELBOW. PLUG UPSTREAM END.



STA. 46+98.00
MAIN LINE

STA. 46+65.00
MAIN LINE

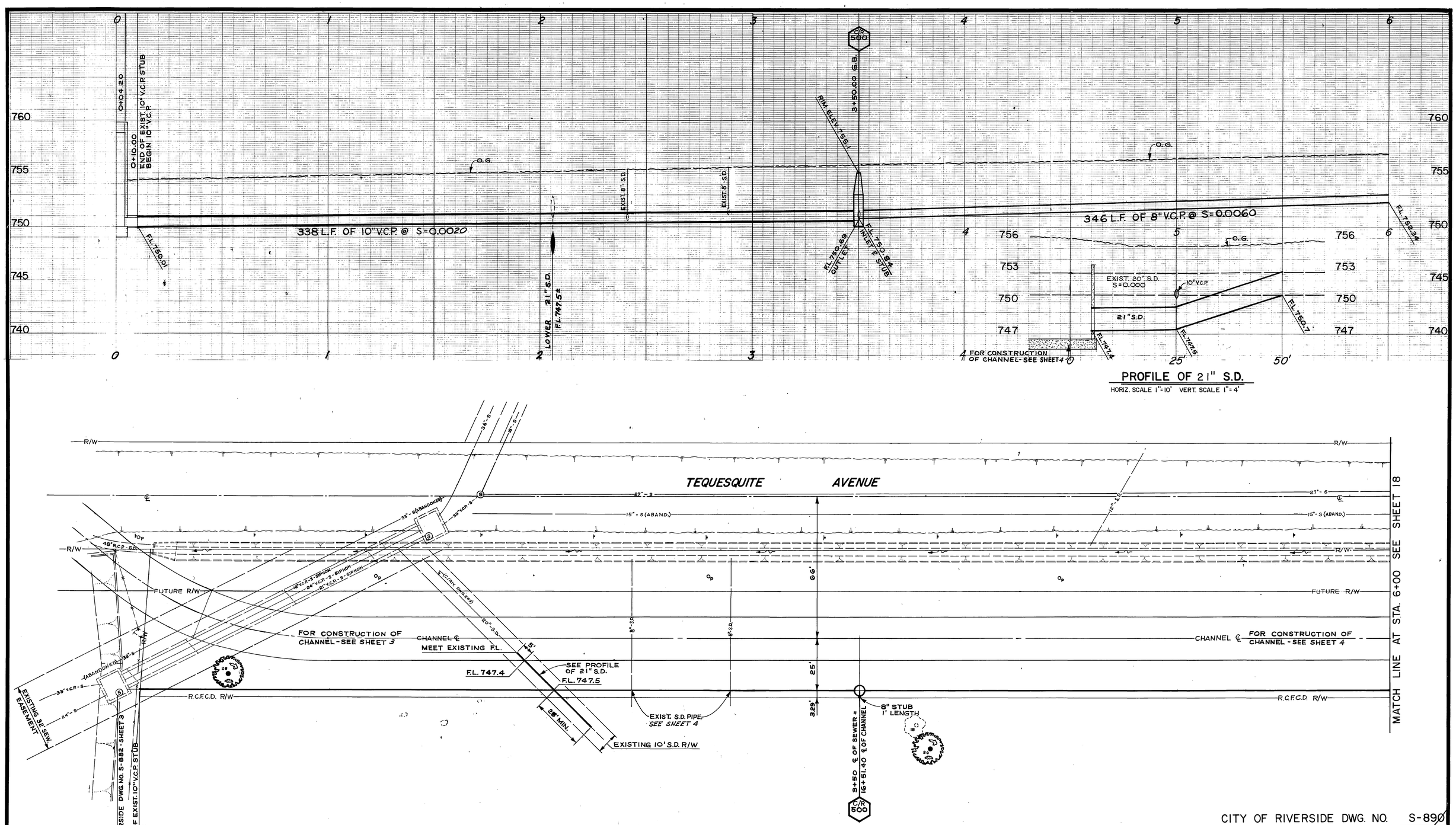


STA. 38+92.00
MAIN LINE

BENCH MARK	J. F. DAVIDSON ASSOCIATES CIVIL ENGINEERS - SURVEYORS - PLANNERS RIVERSIDE, CALIFORNIA	REVISIONS	RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT	BOX SPRINGS DRAIN STAGE I CONNECTOR PIPE PROFILES 1970 STORM DRAIN BOND ISSUE PROJECT NO. 6
SCALE: 1" = 5'	APPROVED BY:	No Change REF. DESCRIPTION APPR. DATE	DESIGNED BY: DRAWN BY: DATE DRAWN: CHECKED BY:	PROJECT NO. 1-0-220
DATE:	DATE: REGISTERED CIVIL ENGINEER NO. 17550		APPROVED BY: John W. Bryant CHIEF ENGINEER R.E. NO. 8822 DATE: 1-30-74	DRAWING NO. 1-287
				SHEET NO. 16 OF 60

AS BUILT

D-286



CITY OF RIVERSIDE DWG. NO. S-890

BENCH MARK 759.84
C.P. NO. 10 NAIL & FLASH & TAG NORTH EDGE OF EXISTING CHANNEL.

SCALE: AS SHOWN

DATE:

CITY OF RIVERSIDE, CALIFORNIA
DEPARTMENT OF PUBLIC WORKS

APPROVED BY	BY	DATE
PRINCIPAL ENGINEER		8/8/72
PARK DEPARTMENT		
TRAFFIC DIVISION		
CHIEF P. W. ENGR.		

APPROVED BY
DIRECTOR OF PUBLIC WORKS
DATE 8-30-72

REVISIONS

REF.	DESCRIPTION	APPR.	DATE
	No Change		

AS BUILT

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

DESIGNED BY: GAT
DRAWN BY: JPGoetz
DATE DRAWN: SEPT. 1972
CHECKED BY: DH

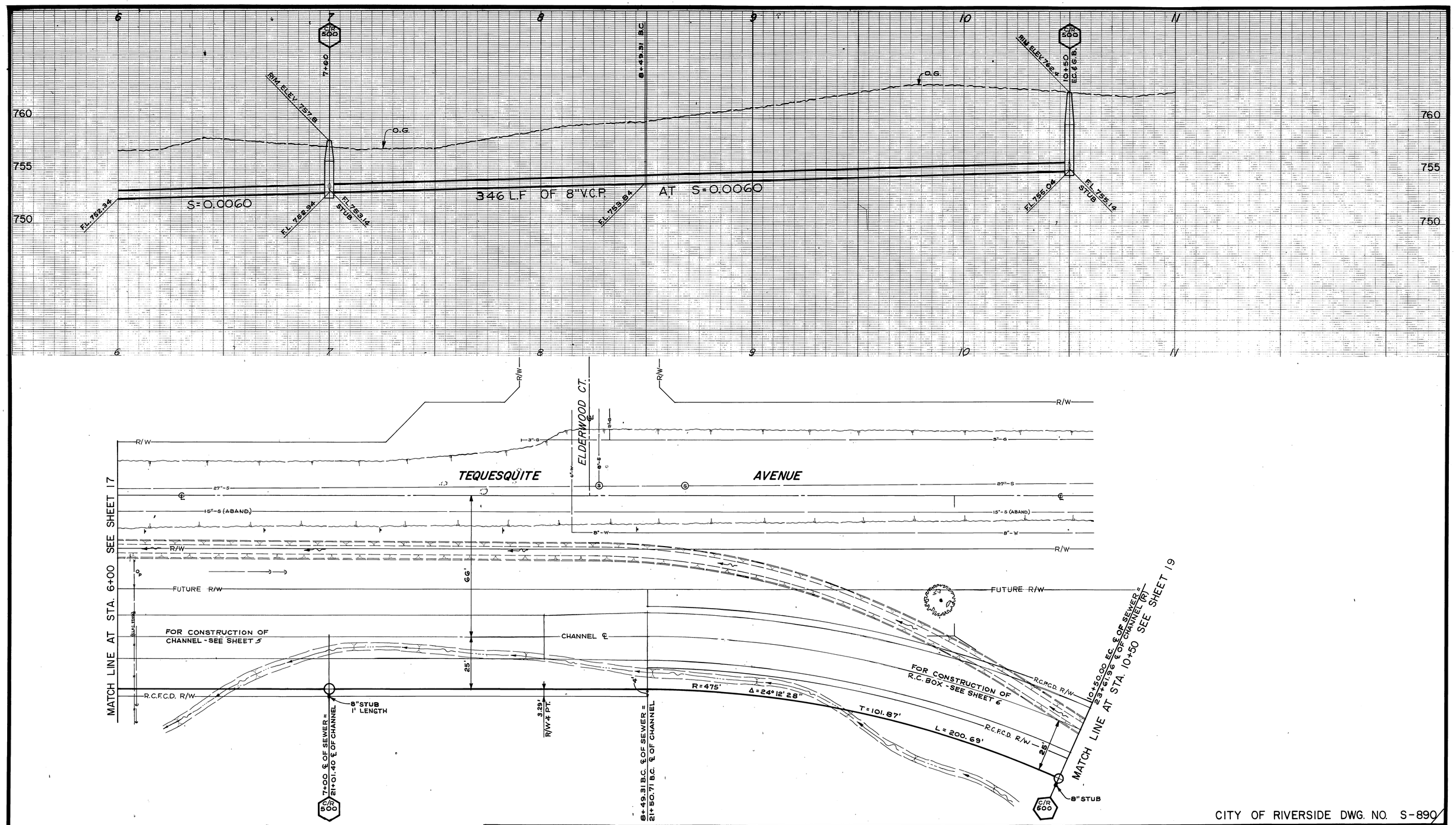
APPROVED BY:
John W. Bryant
CHIEF ENGINEER R.E. NO. 8822
DATE: 1-30-74

BOX SPRINGS DRAIN
STAGE I
SEWER RELOCATIONS

1970 STORM DRAIN BOND ISSUE PROJECT NO. 6

PROJECT NO. 1-0-220
DRAWING NO. 1-287
SHEET NO. 17 OF 60

D-286



CITY OF RIVERSIDE DWG. NO. S-890

PLAN

1" = 20'

20' 0 20'

BENCH MARK 759.84
C.P. NO. 10 NAIL & FLASH & TAG
NORTH EDGE OF EXISTING CHANNEL.

SCALE: AS SHOWN

DATE:

CITY OF RIVERSIDE, CALIFORNIA
DEPARTMENT OF PUBLIC WORKS

APPROVED BY	BY	DATE
PRINCIPAL ENGINEER		8/8/74
PARK DEPARTMENT		
TRAFFIC DIVISION		
CHIEF P. W. ENGR.		

APPROVED BY
DIRECTOR OF PUBLIC WORKS
DATE 8-30-74

REVISIONS			
REF.	DESCRIPTION	APPR.	DATE
	No Change		

AS BUILT

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

DESIGNED BY: RJT
DRAWN BY: J.P.G.
DATE DRAWN: SEPT. 1972
CHECKED BY: BCH

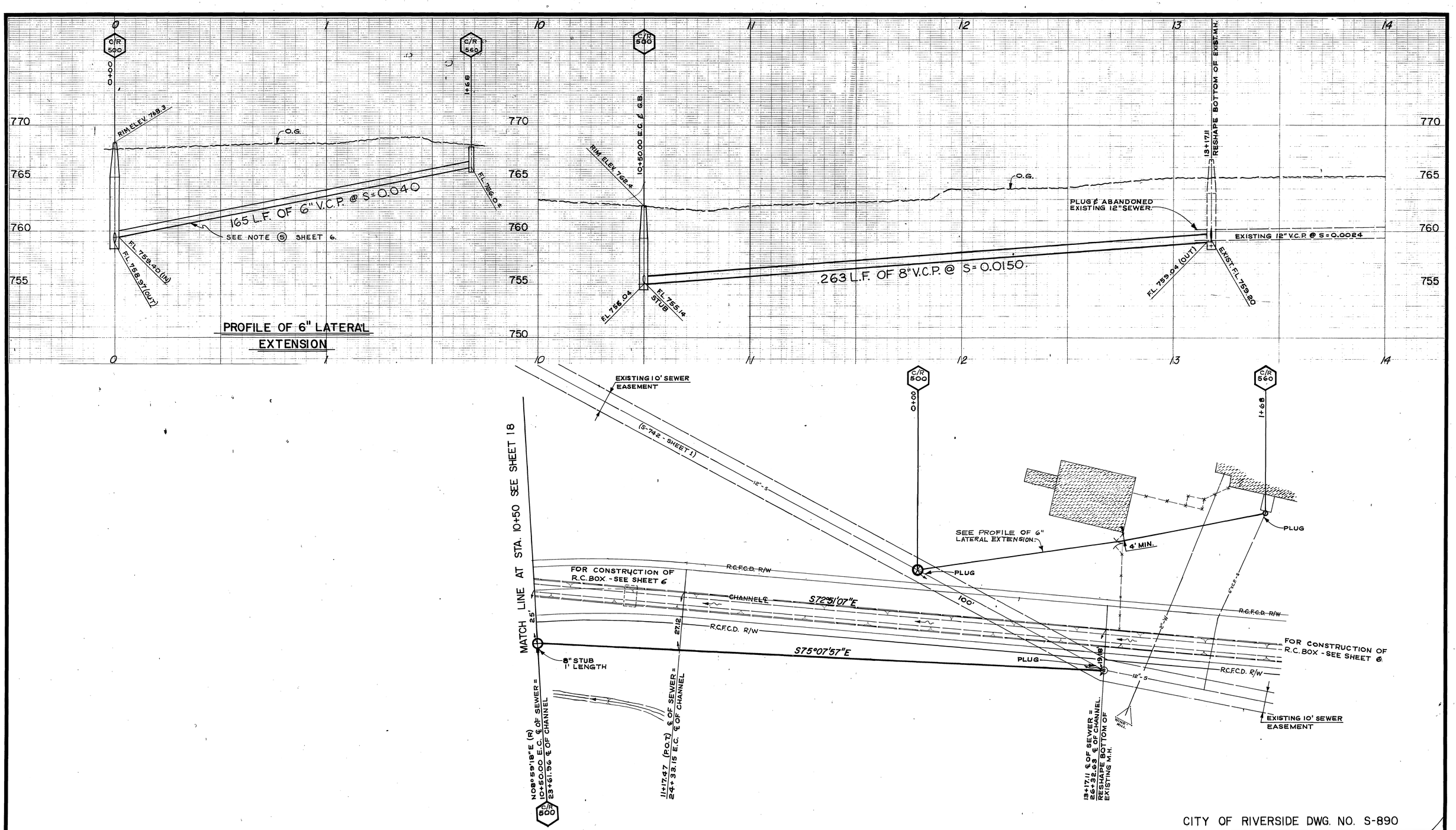
APPROVED BY:
CHIEF ENGINEER R.E. NO. 8822
DATE: 1-30-74

BOX SPRINGS DRAIN
STAGE I
SEWER RELOCATIONS

1970 STORM DRAIN BOND ISSUE PROJECT NO. 6

PROJECT NO. 1-0-220
DRAWING NO. 1-287
SHEET NO. 18 OF 60

D-286



CITY OF RIVERSIDE DWG. NO. S-890

PLAN

1" = 20'

20' 0 20'

BENCH MARK 759.84
C.P. NO. 10 NAIL & FLASH & TAG
NORTH EDGE OF EXISTING CHANNEL

SCALE: AS SHOWN

DATE:

CITY OF RIVERSIDE, CALIFORNIA
DEPARTMENT OF PUBLIC WORKS

APPROVED BY	BY	DATE
PRINCIPAL ENGINEER		8/8/71
PARK DEPARTMENT		
TRAFFIC DIVISION		
CHIEF P. W. ENGR.		

APPROVED BY
DIRECTOR OF PUBLIC WORKS
DATE 8-30-71

REVISIONS

REF.	DESCRIPTION	APPR.	DATE
	No Change		

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

DESIGNED BY:
DRAWN BY: JRG
DATE DRAWN: SEPT 1972
CHECKED BY:

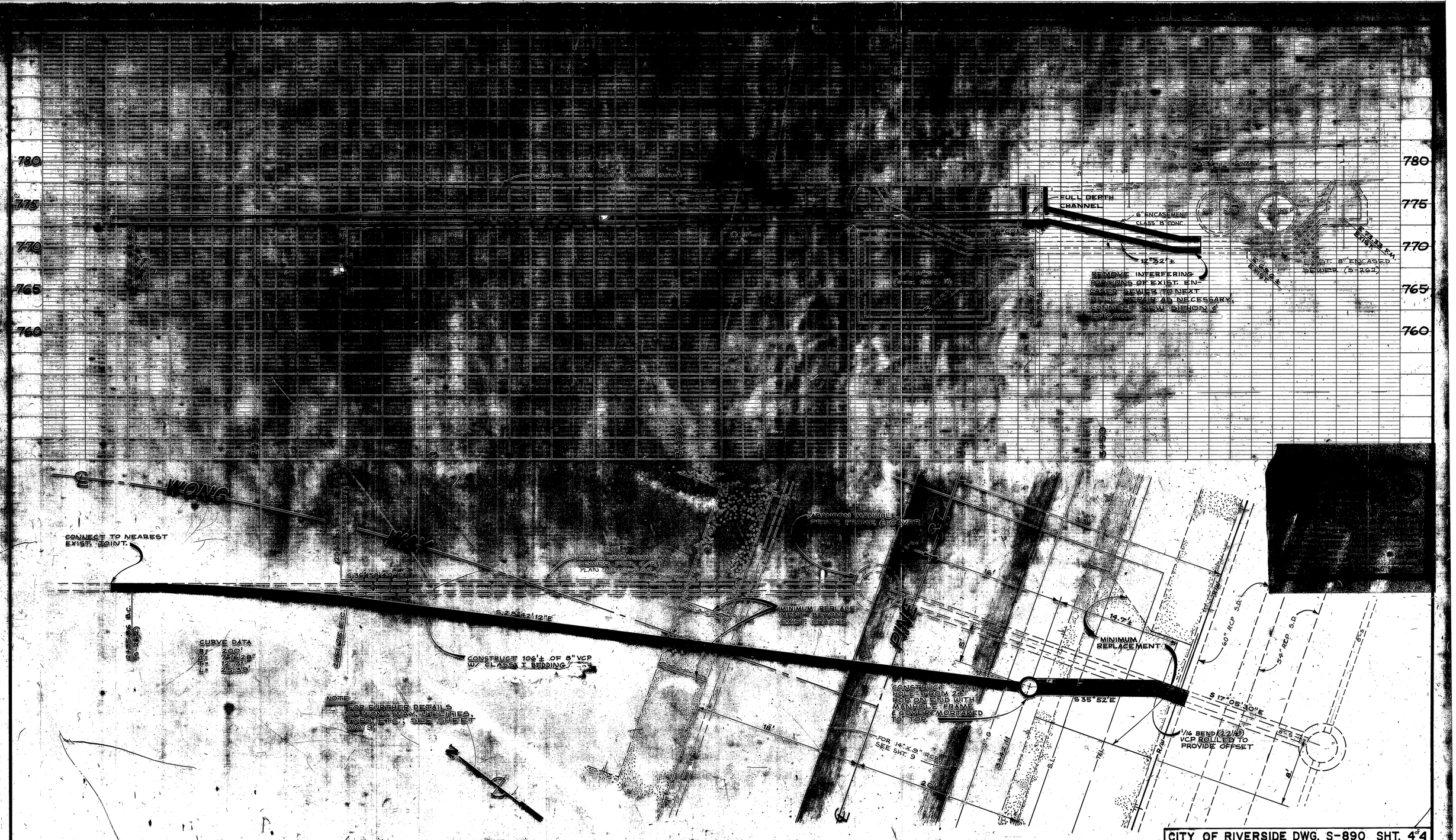
APPROVED BY:
CHIEF ENGINEER R.F. NO. 8822
DATE: 1-18-74

BOX SPRINGS DRAIN STAGE I
SEWER RELOCATIONS
1970 STORM DRAIN BOND ISSUE PROJECT NO. 6

PROJECT NO. 1-0-220
DRAWING NO. 1-287
SHEET NO. 19 OF 60

AS BUILT

D-286



CITY OF RIVERSIDE DWG. S-890 SHT. 4 of 4

WONG WAY CAP KLM 17.18 (SEE SHEET 3)	CITY OF RIVERSIDE, CALIFORNIA PUBLIC WORKS DEPARTMENT	REVISIONS	RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT
			DESIGNED BY: R.W.A. DRAWN: R.W.A.

BOX SPRINGS DRAIN STAGE I

SIPHON MOD. AT PINE ST. & WONG WAY

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