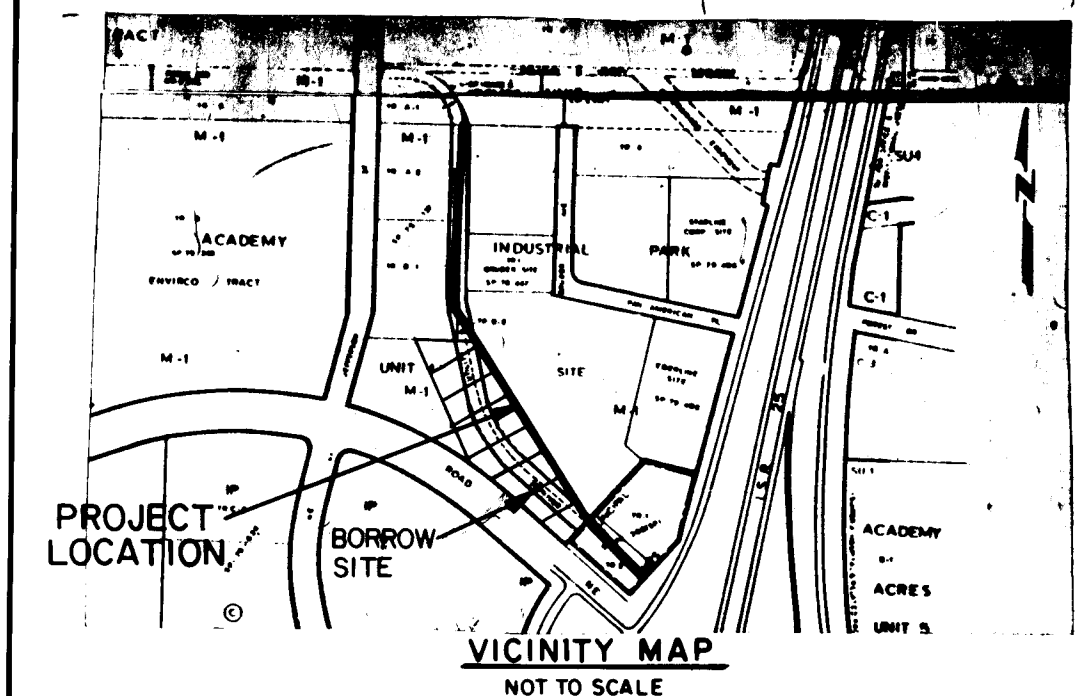


BETA ARROYO IMPROVEMENTS

PINO ARROYO-INTERSTATE 25

INDEX

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	STA. 2+57.92 TO STA. 11+50.00 PLAN AND PROFILE
3	STA. 11+50.00 TO STA. 21+54.84 PLAN AND PROFILE
4	TYPICAL CHANNEL SECTIONS
5	EXPANSION JOINT DETAILS
6-7	MISCELLANEOUS CONSTRUCTION DETAILS
8	SURVEY RIGHT-OF-WAY MAP
9-10	CROSS SECTIONS



GENERAL NOTES

NOTICE TO CONTRACTORS

1. CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION 1986 EDITION WILL BE REFERRED TO HEREON AS THE STANDARD SPECIFICATION.
2. THE CONTRACTOR WILL SUPPLY BORROW FOR THE PROJECT. THE BORROW WILL BE PAID FOR UNDER BID ITEM BORROW AND BE MEASURED AND PAID FOR AS BANK COMPACTED FILL BASED ON AS BUILT SURVEY CROSS SECTION.
3. TWO WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICE, 765-1234, FOR LOCATION OF EXISTING UTILITIES.
4. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL OBSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER OR SURVEYOR SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.
5. NO CONSTRUCTION WILL BE ALLOWED DURING THE MONTHS OF JULY, AUGUST OR SEPTEMBER UNLESS THE CONTRACTOR PROVIDES AND OBTAINS APPROVAL OF AN EROSION CONTROL FOR THE SAFE PASSAGE OF THE 10 YEAR DESIGN STORM RUNOFF.

THE FOLLOWING NOTES ALSO APPLY WHEN CHECKED

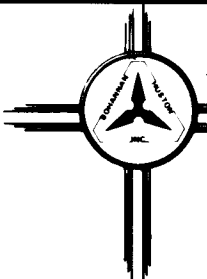
- ☐ ALL UTILITIES AND UTILITY SERVICE LINES SHALL BE INSTALLED PRIOR TO PAVING.
- ☐ BACKFILL COMPACTION SHALL BE ACCORDING TO SPECIFIED STREET USE.
- ☐ TACK COAT REQUIREMENTS SHALL BE DETERMINED BY THE CITY ENGINEER.
- ☐ SIDEWALKS AND WHEELCHAIR RAMPS WITHIN THE CURB RETURNS SHALL BE CONSTRUCTED WHEREVER A NEW CURB RETURN IS CONSTRUCTED.
- ☐ IF CURB IS DEPRESSED FOR A DRIVEPAD, THE DRIVEPAD SHALL BE CONSTRUCTED PRIOR TO ACCEPTANCE OF CURB AND GUTTER.
- ☒ ALL STORM DRAINAGE FACILITIES SHALL BE COMPLETED PRIOR TO FINAL ACCEPTANCE.
- ☐ THE REQUESTOR OR DEVELOPER SHALL BE RESPONSIBLE FOR REPAIR OR REPLACEMENT OF ALL CURB AND GUTTER OR SIDEWALK DAMAGED AFTER APPROVAL BY THE CITY ENGINEER OF WORK COMPLETED BY THE CONTRACTOR.

NOT AS-BUILT
APPROVAL OF DRAWINGS
CHIEF CONSTRUCTION ENGINEER
[Signature]
DATE 4/14/84

26 18540192

REV	SHEETS	CITY ENGINEER	DATE	USER	DEPT.	DATE	USER	DEPT.	DATE

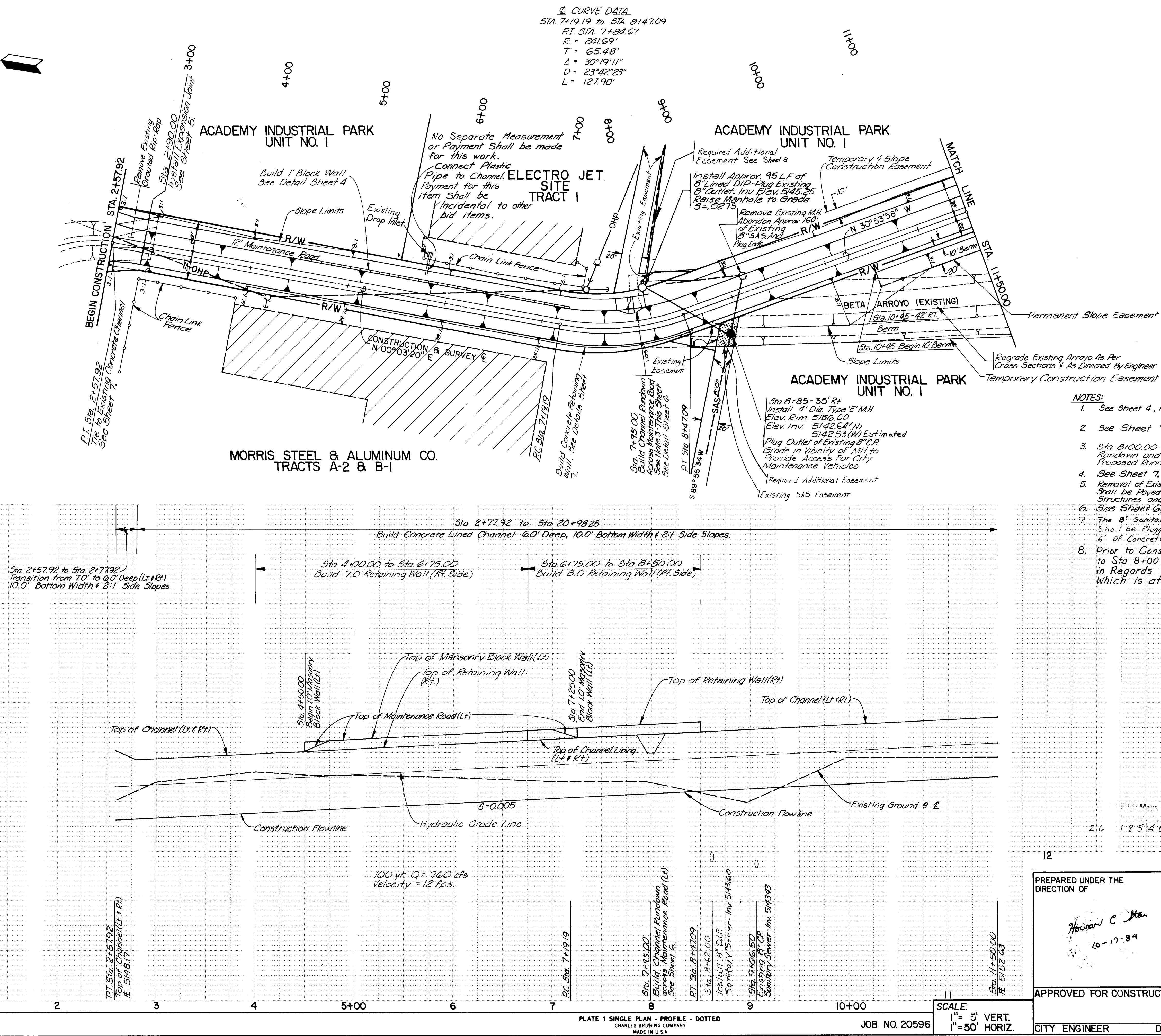
APPROVAL OF REVISIONS

<i>Howard C. Ma</i> 10-17-84	 BOHANNAN - HUSTON INC. ALBUQUERQUE - SANTA FE - EL PASO ENGINEERS PLANNERS PHOTOGRAMMETRISTS	APPROVED FOR CONSTRUCTION CE
	PROJECT NUMBER 1854	SHEET 1 OF 10

PLAN	DATE	BY	DATE
SURVEYED			
PLOTTED			
CHECKED			
NO.			

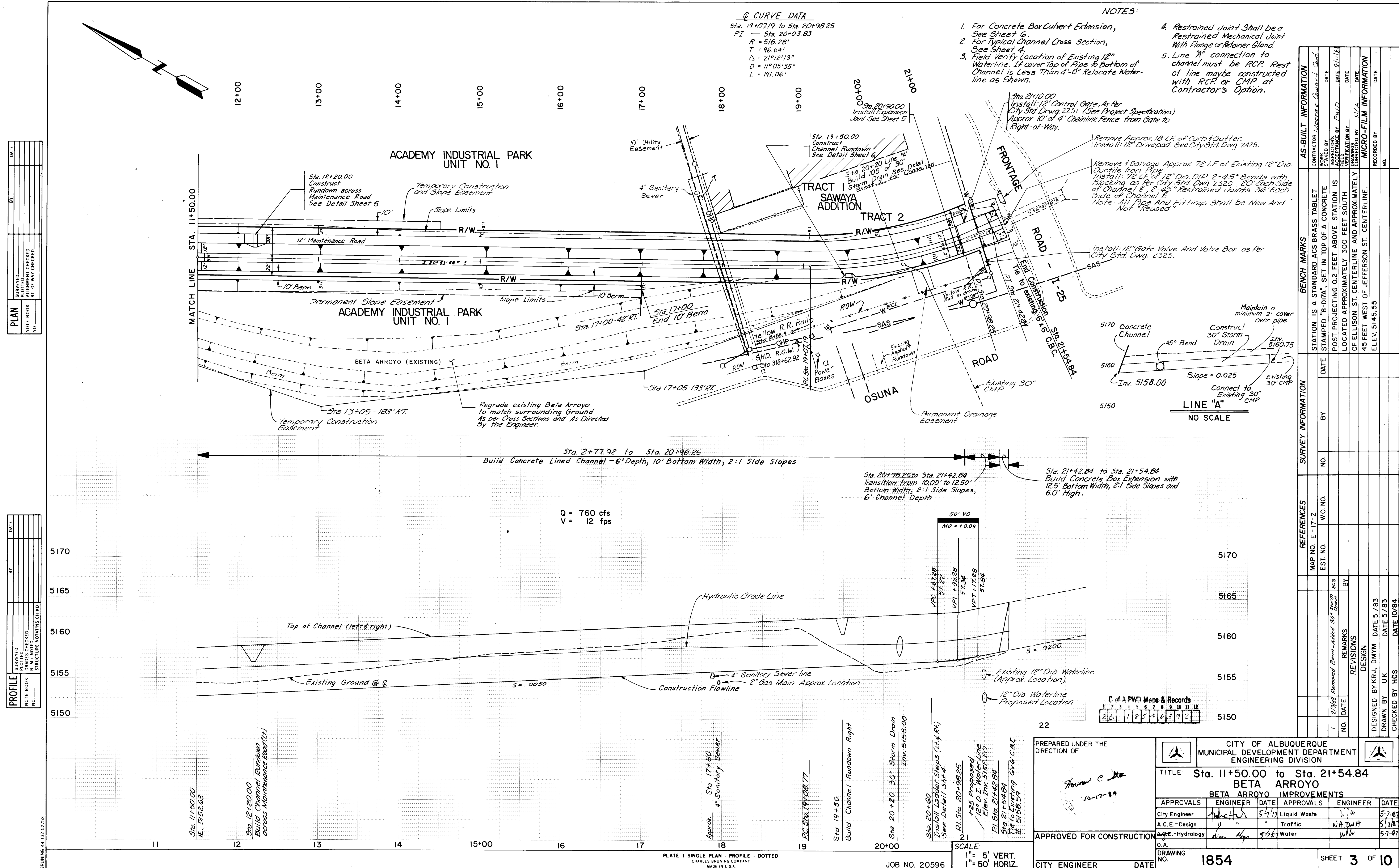
PROFILE	DATE	BY	DATE
SURVEYED			
PLOTTED			
CHECKED			
NO.			

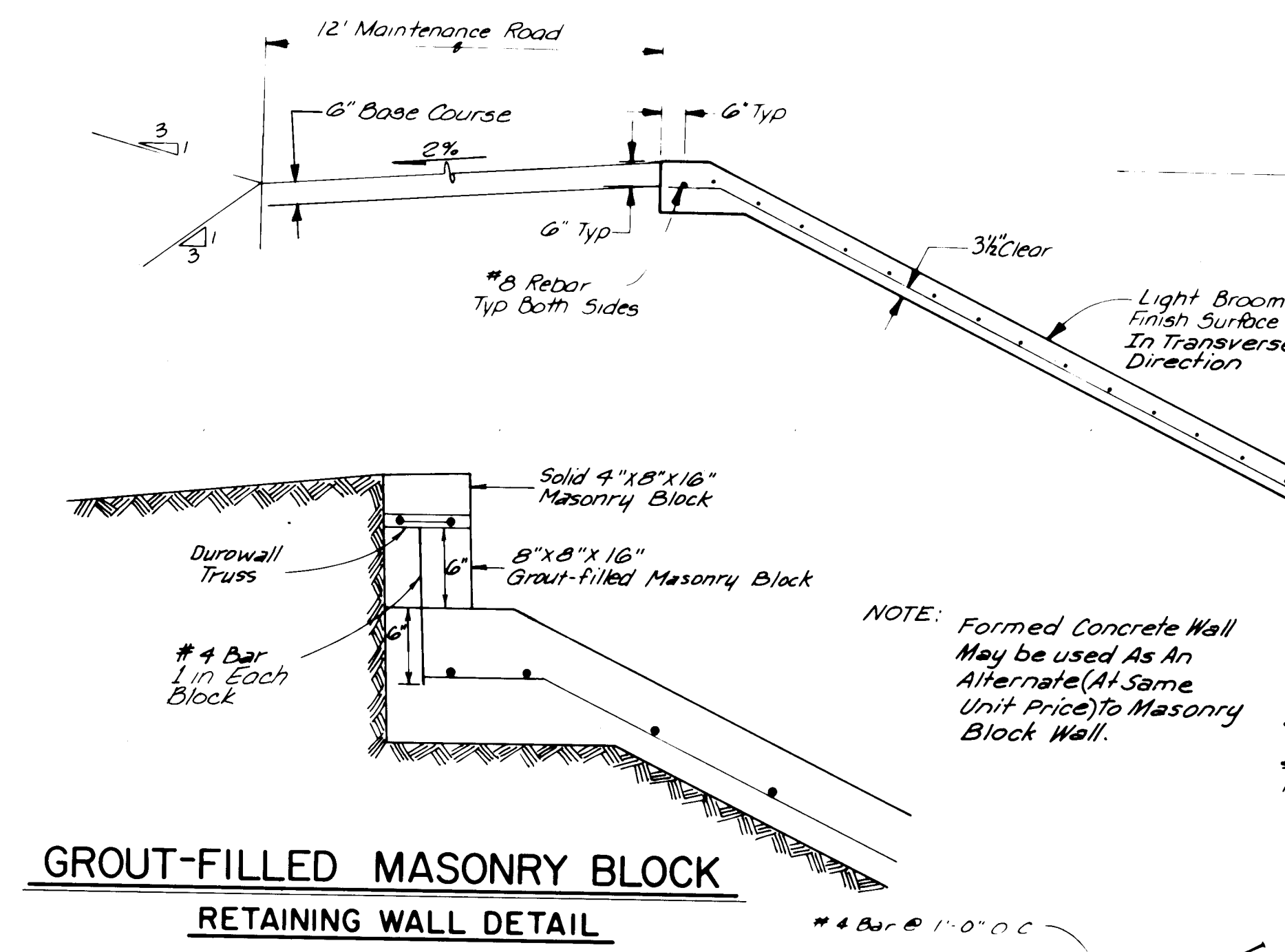
BRUNING 44 132 52753



- NOTES:**
1. See Sheet 4, For Typical Channel Cross Section.
 2. See Sheet 7, For Retaining Wall Details.
 3. Sta 8+00.00 - Remove Existing Concrete Run-down and Grade Existing Swale to Proposed Run-down Across Maintenance Road.
 4. See Sheet 7, For Tie to Existing Channel @ Sta 2+57.92.
 5. Removal of Existing Manhole and Grouted Rip-Rap Shall be Paved under Bid Item "Removal of Structures and Obstructions".
 6. See Sheet 6, For Block Wall Details.
 7. The 8" Sanitary Sewer line to be Abandoned Shall be Plugged with a Minimum of 6' of Concrete in Ends of Lines.
 8. Prior to Construction Between Sta 4+00 to Sta 8+00 Contact PNM at 701-3489 in Regards to PNM Powerline which is at minimum clearance.

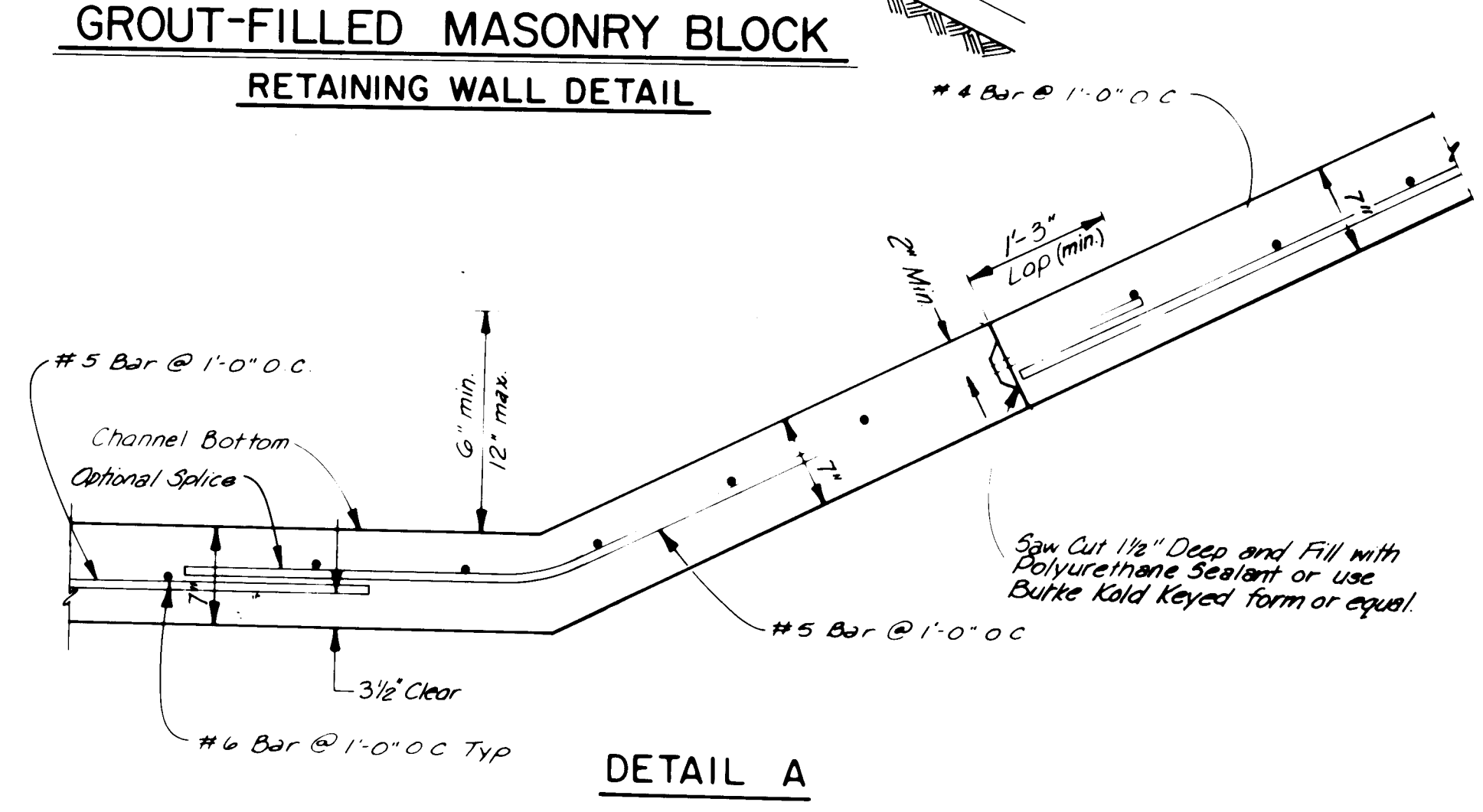
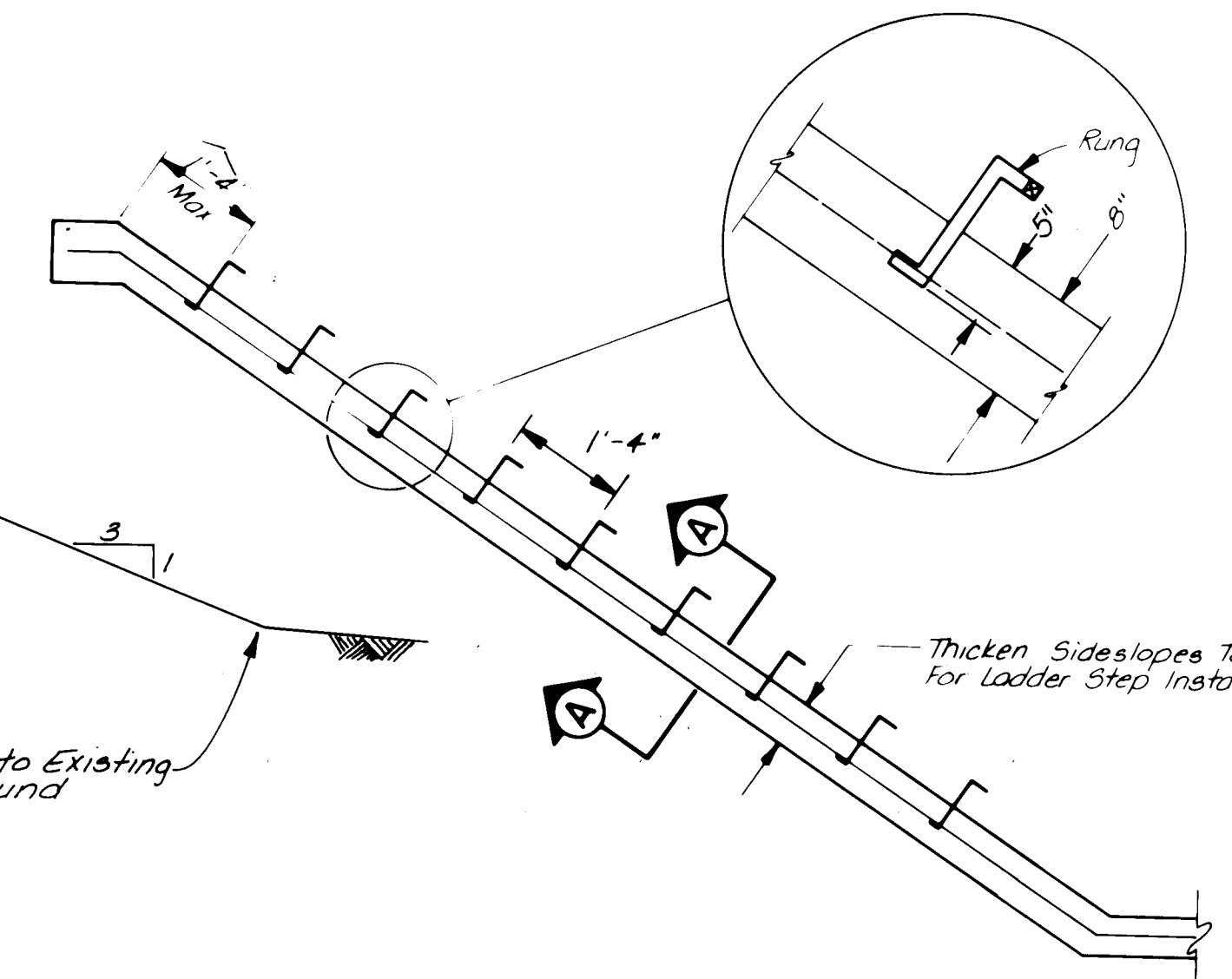
PREPARED UNDER THE DIRECTION OF <i>Howard C. [Signature]</i> 10-17-84		CITY OF ALBUQUERQUE MUNICIPAL DEVELOPMENT DEPARTMENT ENGINEERING DIVISION	
TITLE: Sta. 2+57.92 to Sta. 11+50.00 BETA ARROYO IMPROVEMENTS			
APPROVALS	ENGINEER	DATE	APPROVALS
DESIGNER	Hydrology	5/7/87	UTILITIES
DESIGNED BY	KRJ, HCS	DATE	10-84
DRAWN BY	NAW	DATE	10-84
CHECKED BY	HCS	DATE	10-84
APPROVED FOR CONSTRUCTION		CITY ENGINEER	
DRAWING NO. 1854		SHEET 2 OF 10	



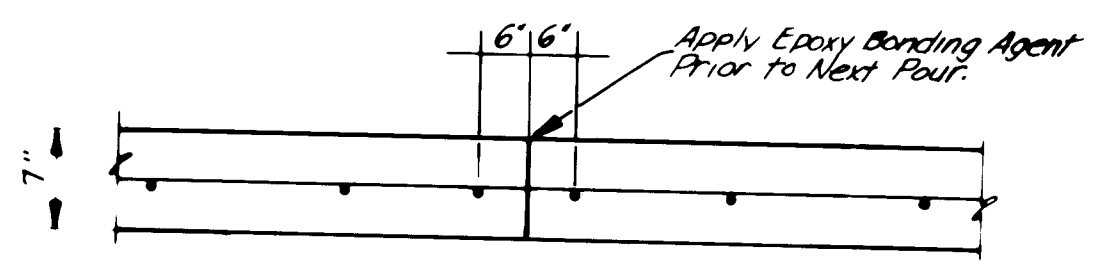


TYPICAL CHANNEL CROSS SECTION
 Note: Reinforced with No. 5 bars @ 1'-0" O.C. transverse and No. 6 bars @ 1'-0" O.C. longitudinal.

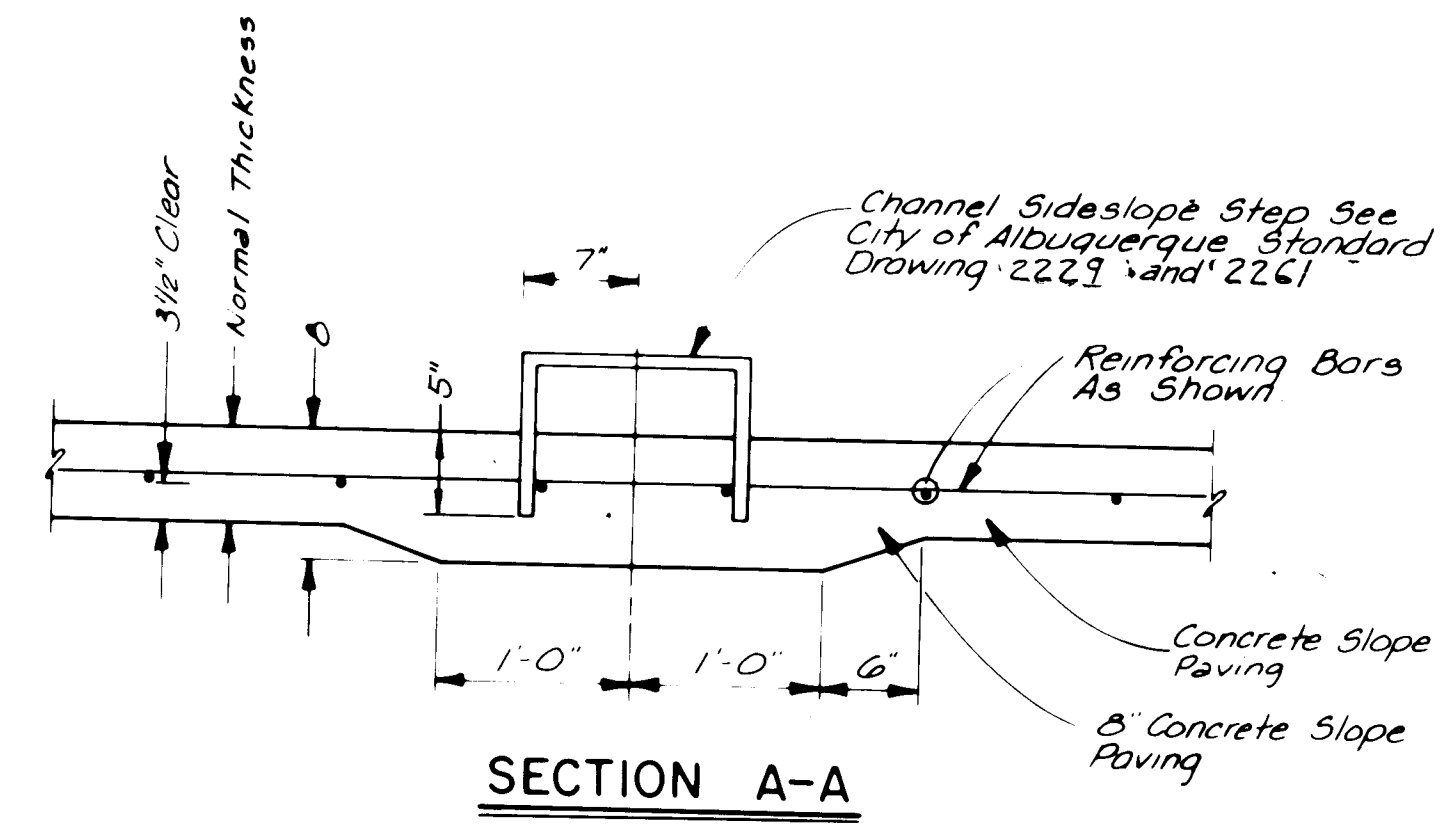
CHANNEL SIDESLOPE LADDER DETAILS



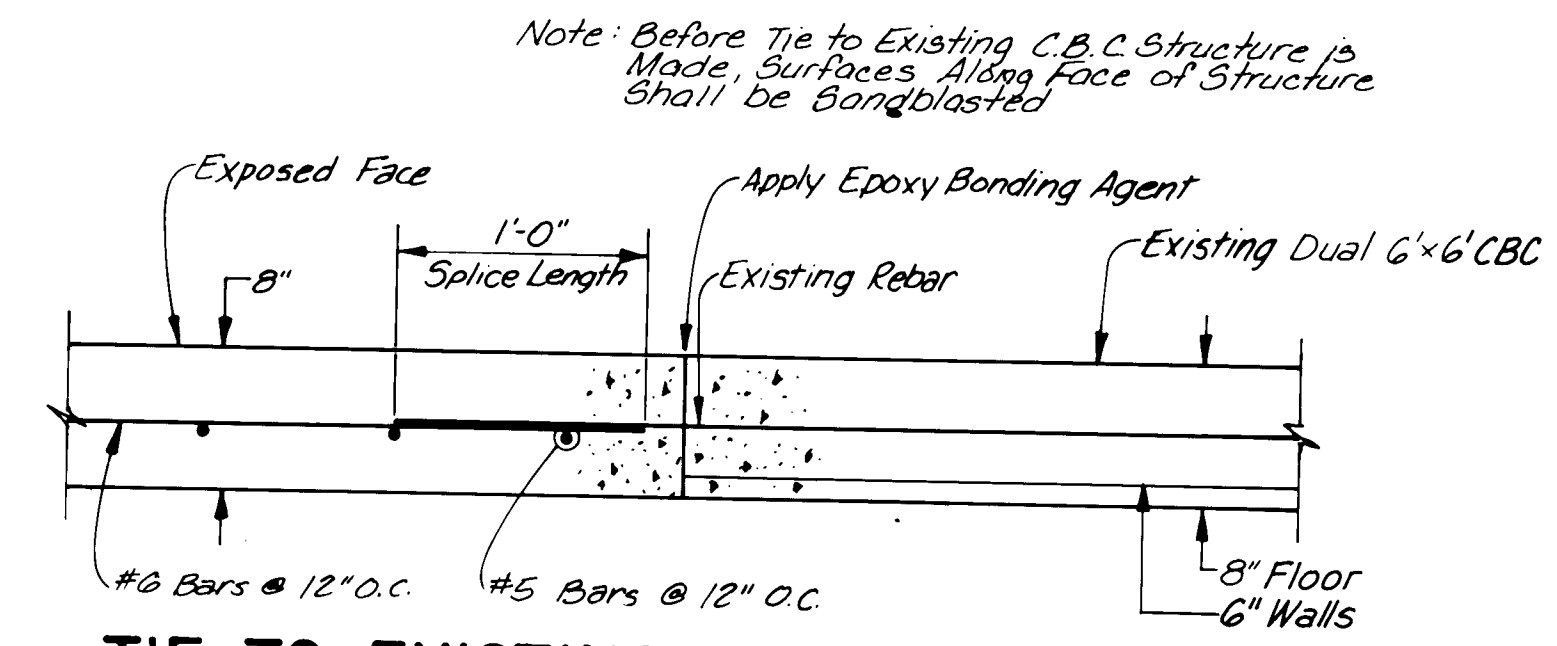
DETAIL A



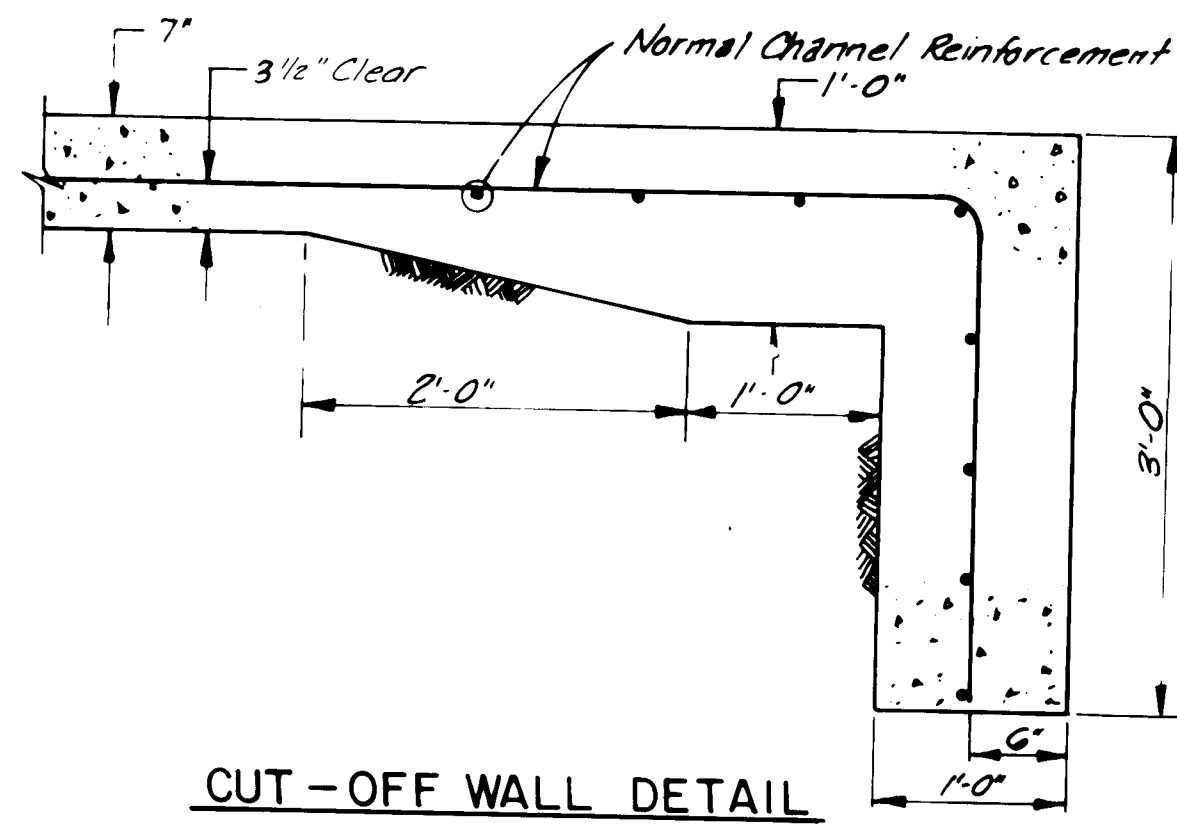
CONSTRUCTION JOINT DETAIL
 AS REQUIRED BY CHANNEL CONSTRUCTION



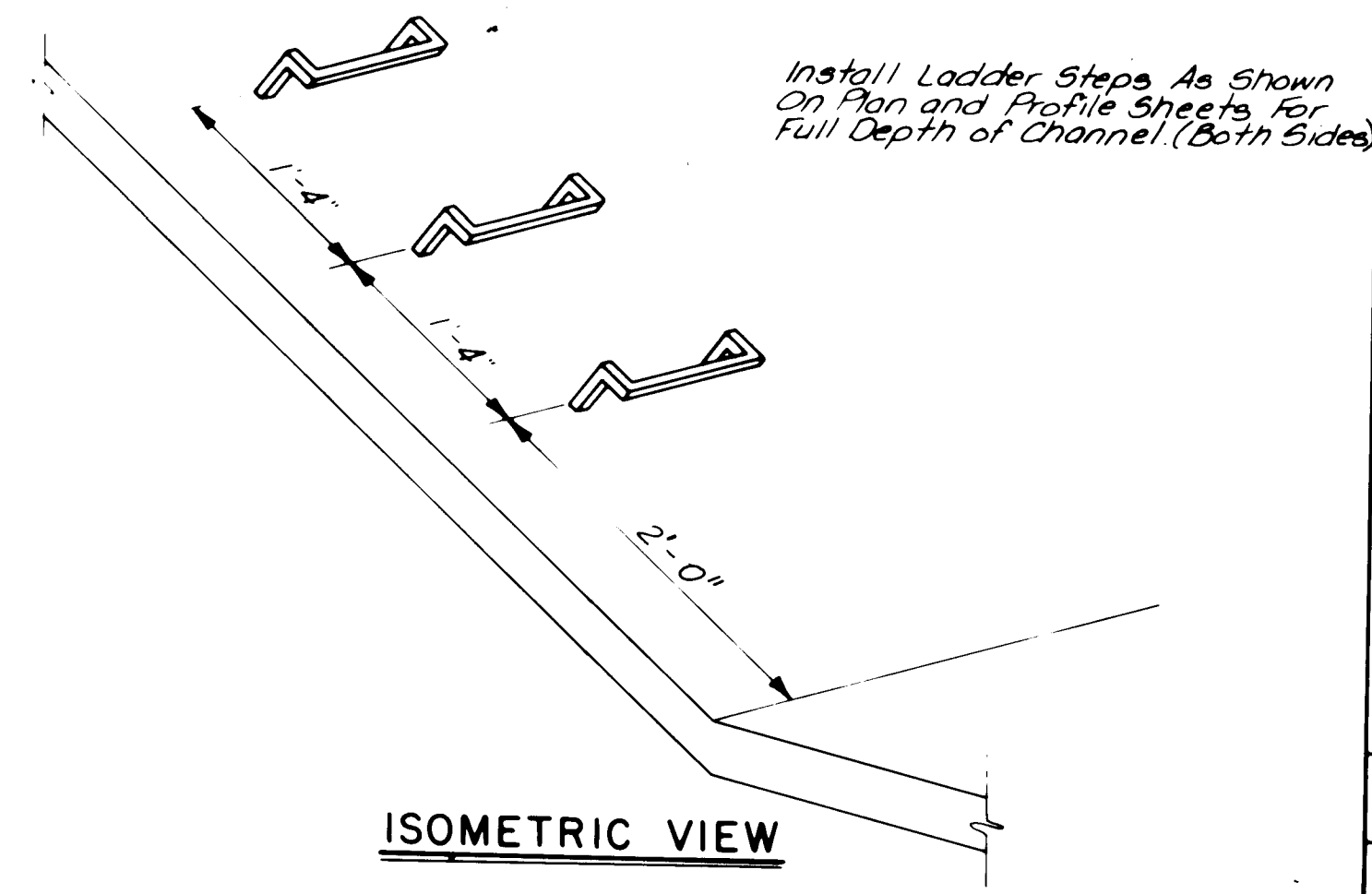
SECTION A-A



TIE TO EXISTING C.B.C. STRUCTURE
 STA. 21+54.84



CUT-OFF WALL DETAIL



ISOMETRIC VIEW

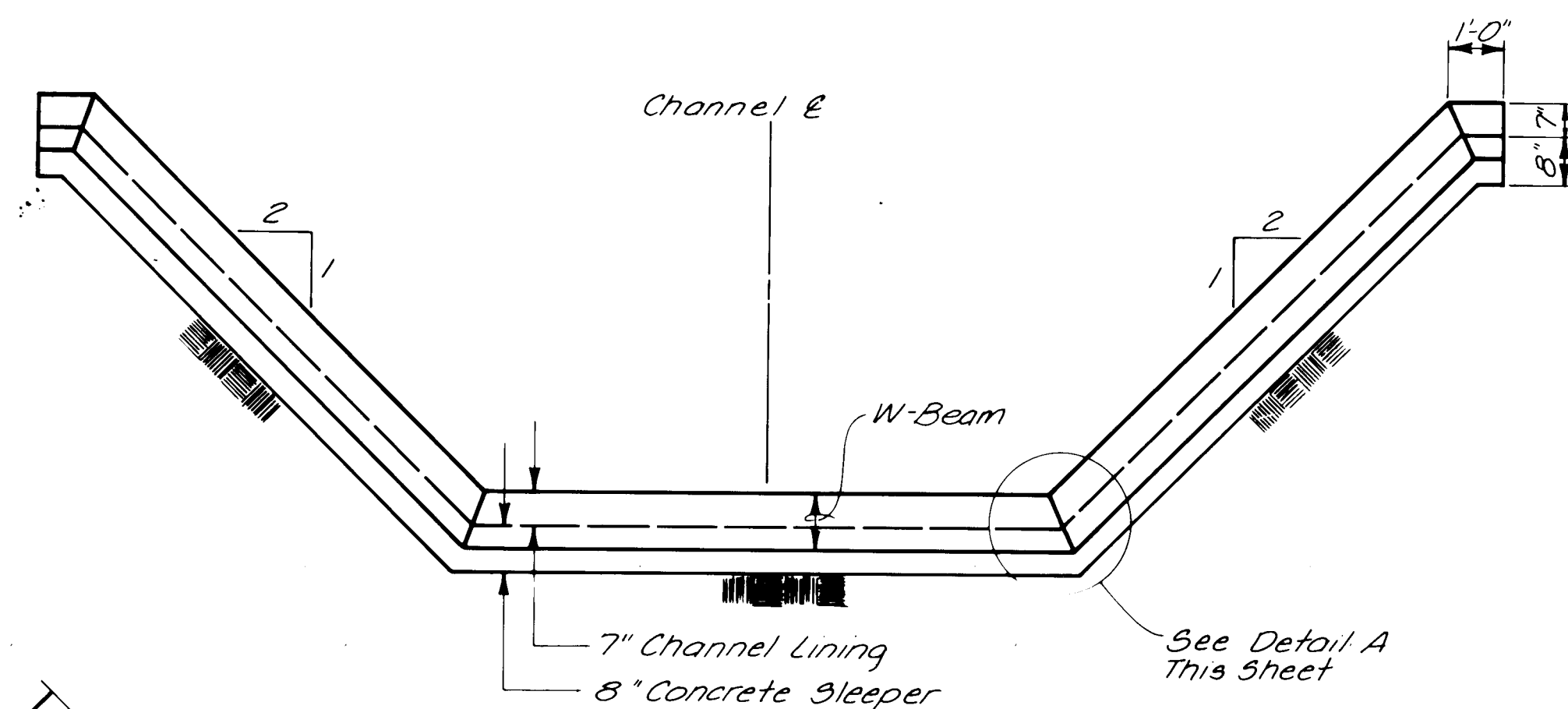
- NOTES:
1. Concrete shall be 3000 psi, 28 day strength with maximum aggregate size as stated in the specifications.
 2. All steel shall be Grade 60 deformed bars unless noted otherwise.
 3. Splices in rebar in typical channel section shall be 1'-0" or greater for No. 3 and No. 4 bars, 1'-3" for No. 5 bars, 1'-8" for No. 6 bars, and 2'-0" for No. 8 bars.
 4. All steel spacings are given to the centerline of the bar.
 5. All exposed edges shall have a 3/4" chamfer.
 6. All rebar shall be supported on 3/4" sand chairs at a maximum spacing of 5' perpendicular to the channel centerline.
 7. Place ladder steps as shown on plan and profile sheets on both sides of channel.
 8. Subgrade minimum compaction 90% per ASTM D-1557.
 9. Maintenance Road to be surfaced with 6" Class I-B Crushed Gravel Base Course as stated in the specifications.

C of A PWD Maps & Records
 26 18 54 04 9 2

SCALE:
 NO SCALE

JOB NO. 20596

PREPARED UNDER THE DIRECTION OF		CITY OF ALBUQUERQUE MUNICIPAL DEVELOPMENT DEPARTMENT ENGINEERING DIVISION	
TITLE: TYPICAL CHANNEL SECTIONS BETA ARROYO IMPROVEMENTS		APPROVALS	
ENGINEER	DATE	ENGINEER	DATE
City Engineer	5/7/87	Liquid Waste	U/W
ACE-Design		Traffic	NAD/H
ACE-Hydrology	5/7/87	Water	N/W
Q.A.			
DRAWING NO.	1854	CITY ENGINEER	DATE
SHEET 4 OF 10			



TYPICAL W-BEAM JOINT DETAIL

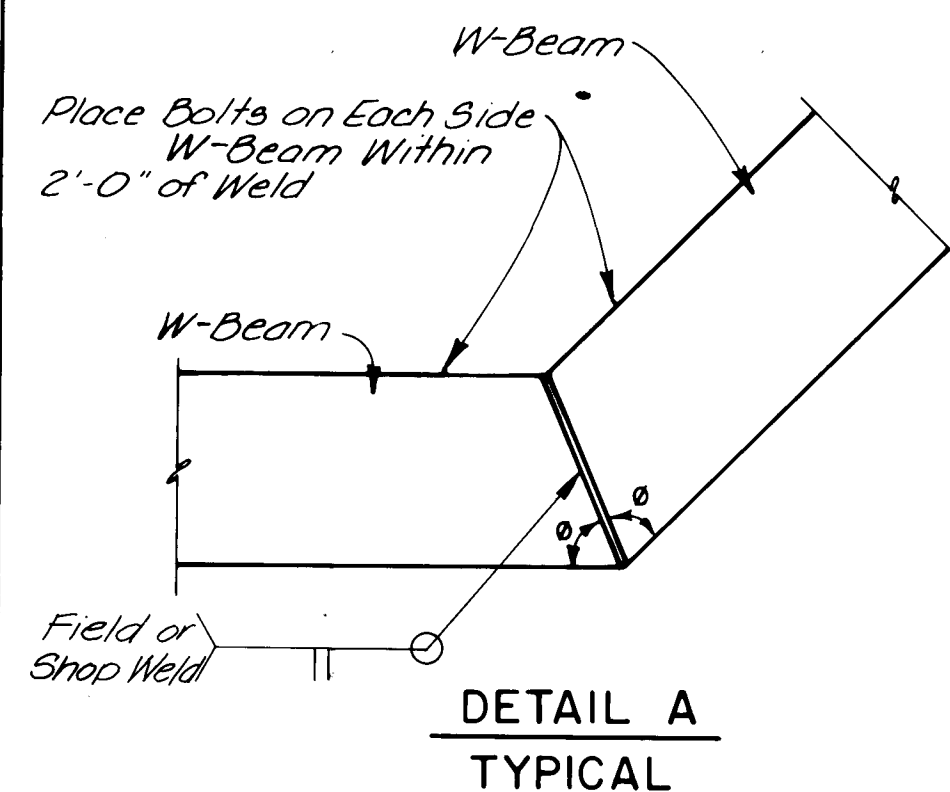
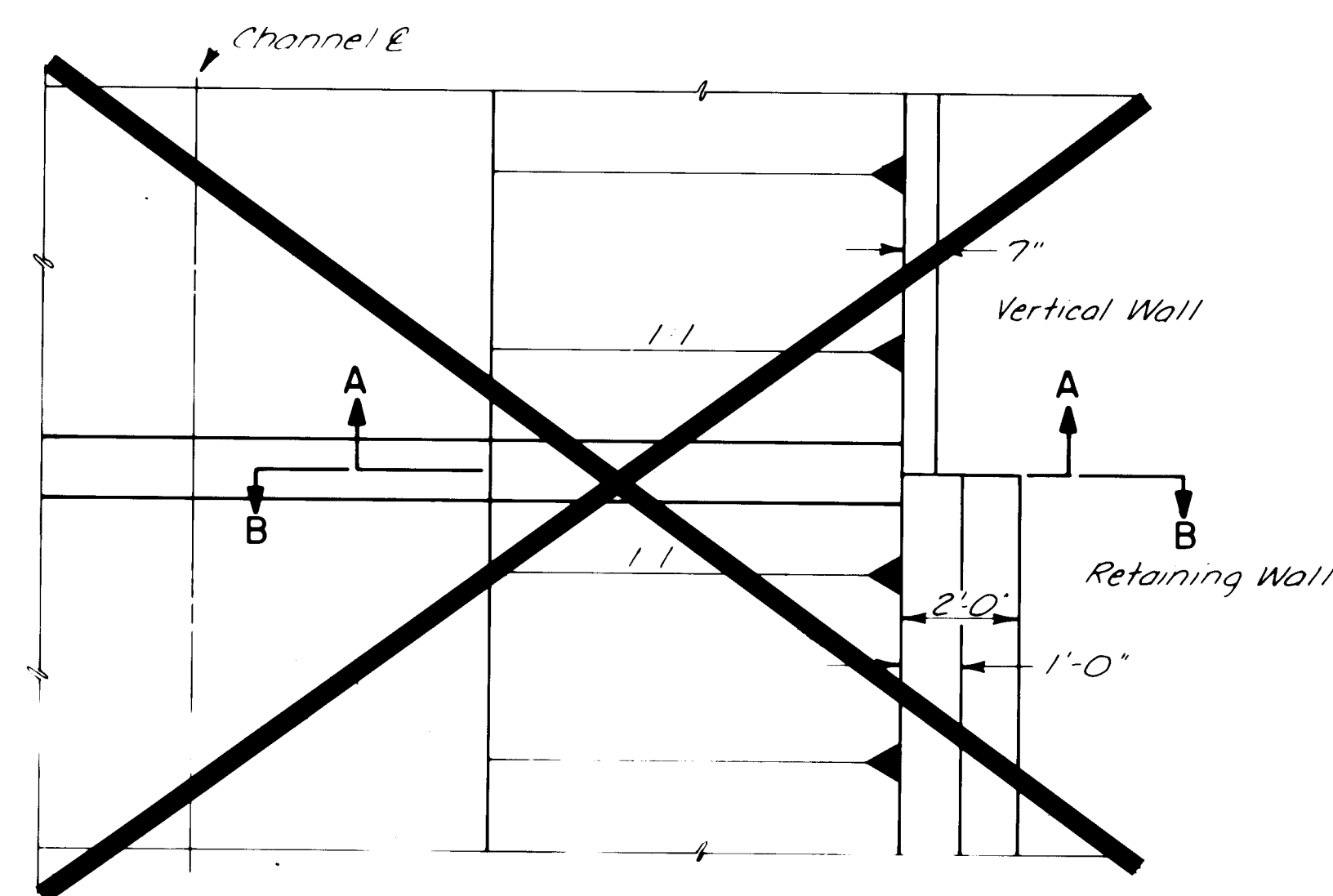
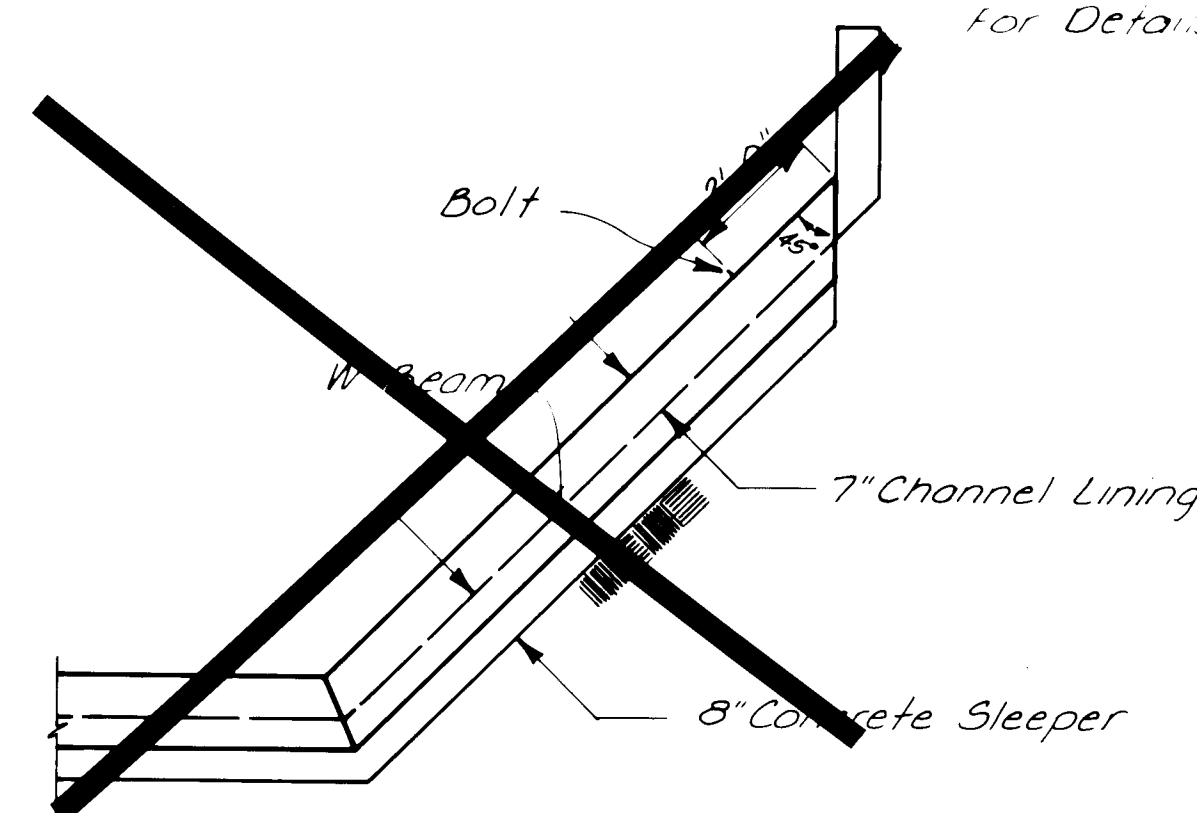


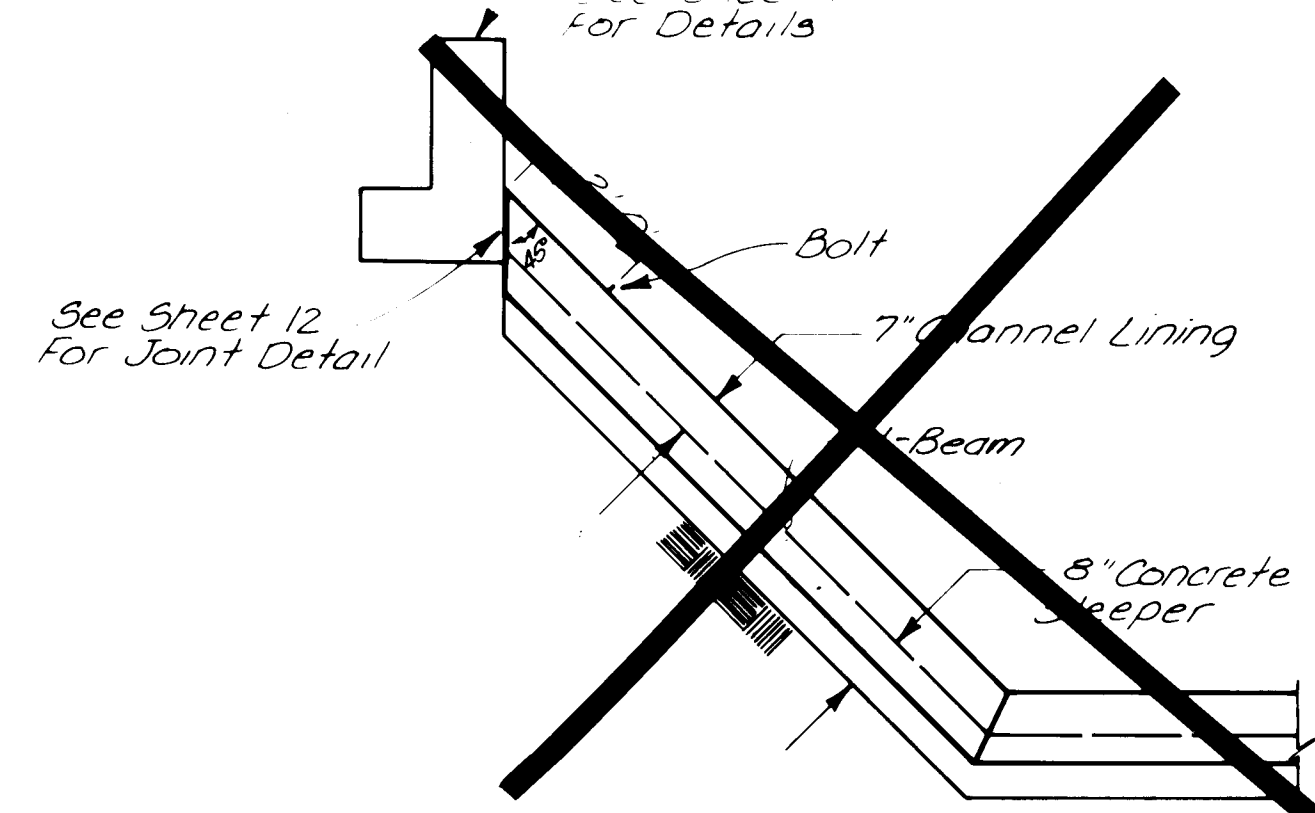
TABLE 1		
SIDE	SLOPE	θ
2:1	13.3°	
1:1	27.5°	



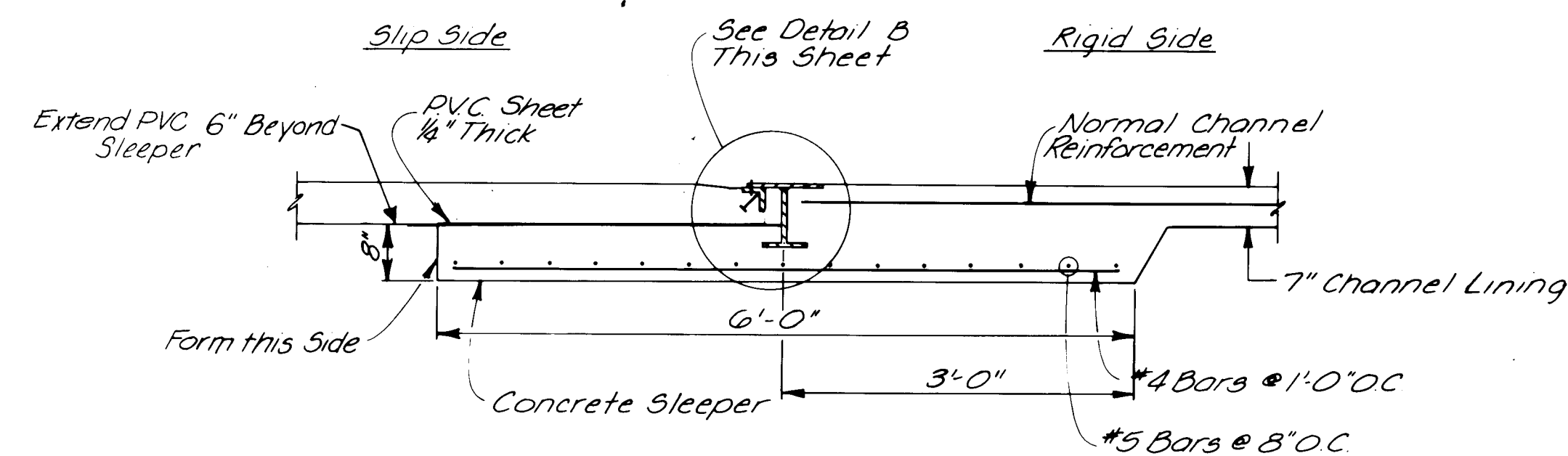
W-BEAM JOINT DETAIL AT RETAINING WALL



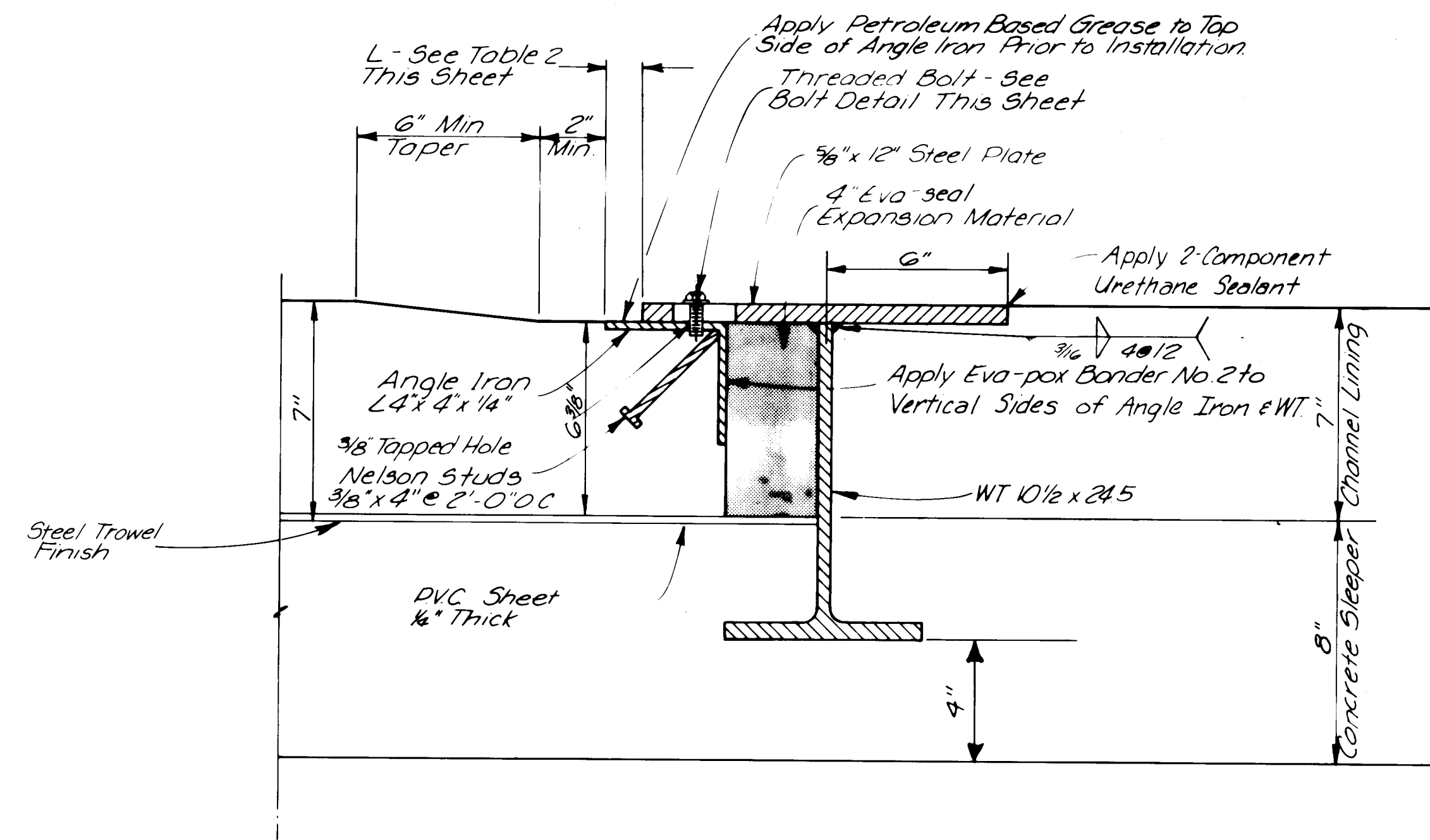
SECTION A-A



SECTION B-B



W-BEAM EXPANSION JOINT DETAIL



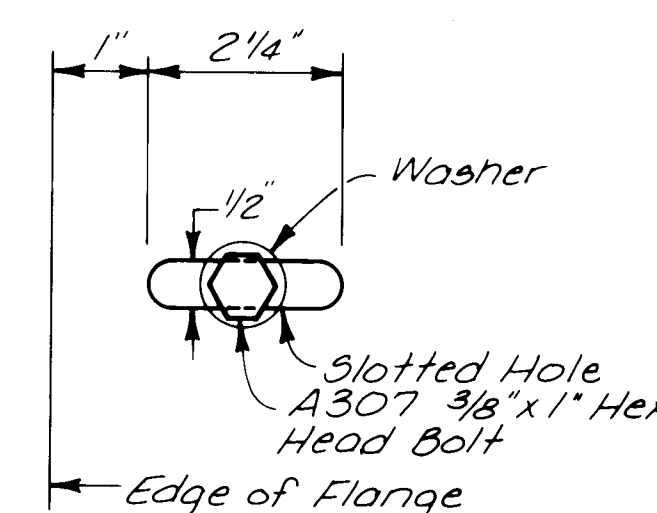
DETAIL B

ORIENTATION OF W-BEAM EXPANSION JOINT	
Station	Location of Rigid Side
20+90.00	Upstream

TABLE 2		
Average Daily Maximum Temperature (°F)	L (Inches)	
90°	0.9	
70°	1.3	
50°	1.5	

Note: On same day as concrete pour, Bander No 2 shall be applied to angle iron and Eva-seal. And angle iron shall be installed as directed on Table 2.

Bolt Requirements
2 on Bottom
2 on Each Side Slope
1 on Top Slope



BOLT DETAIL PLAN

NOTE:

- EVA-POX BINDER NO 2 AND EVA-SEAL MANUFACTURED BY E-POXY INDUSTRIES MAY BE SUBSTITUTED WITH ENGINEER APPROVED EQUAL.
- ANGLE IRON BOLTS MUST BE REMOVED BETWEEN 24-36 HOURS AFTER CONCRETE POUR.
- AFTER REMOVAL OF ANGLE IRON BOLTS, COVER SLOTTED HOLE WITH 1/8" METAL PLATE AND WELD.
- INSTALLATION OF E-POXY MATERIALS MUST BE PER MANUFACTURER'S INSTRUCTIONS.

20 18540592

JOB NO. 20596

SCALE: NO SCALE

PREPARED UNDER THE DIRECTION OF



APPROVED FOR CONSTRUCTION

CITY ENGINEER DATE

CITY OF ALBUQUERQUE
MUNICIPAL DEVELOPMENT DEPARTMENT
ENGINEERING DIVISION

TITLE: EXPANSION JOINT DETAILS
W-BEAM TRANSVERSE JOINT
BETA ARROYO IMPROVEMENTS

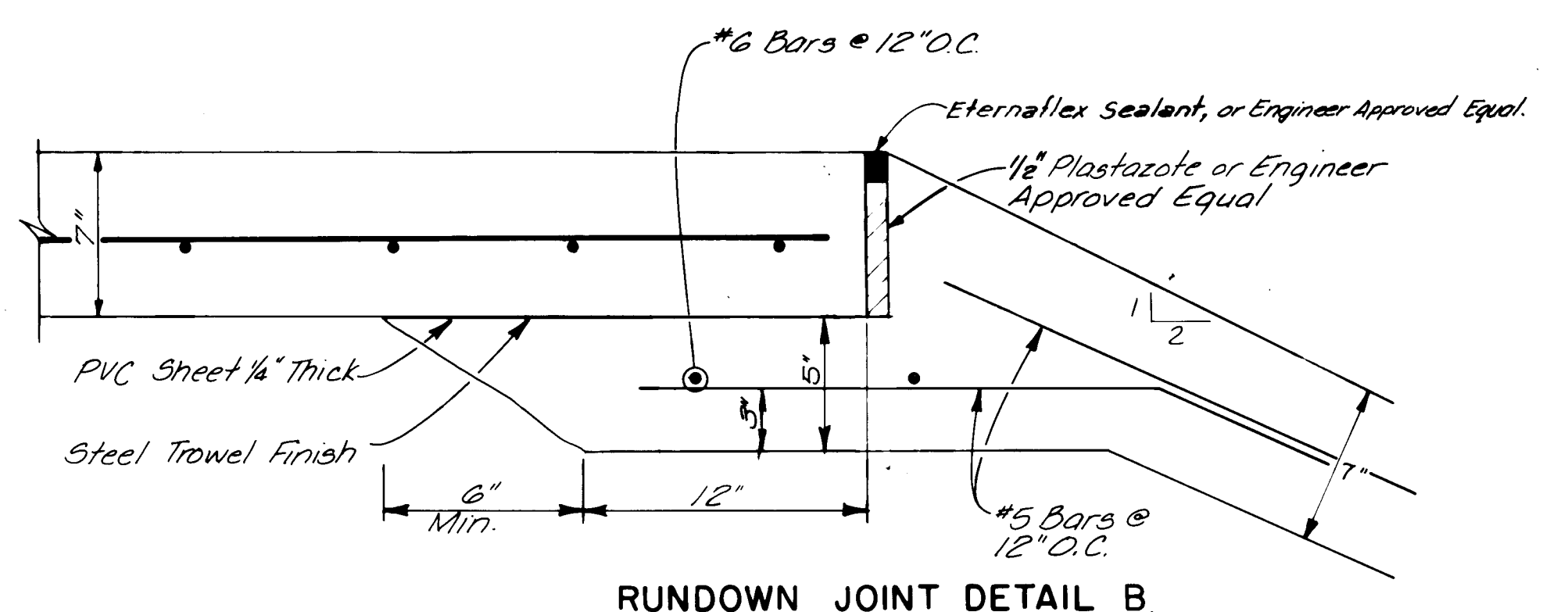
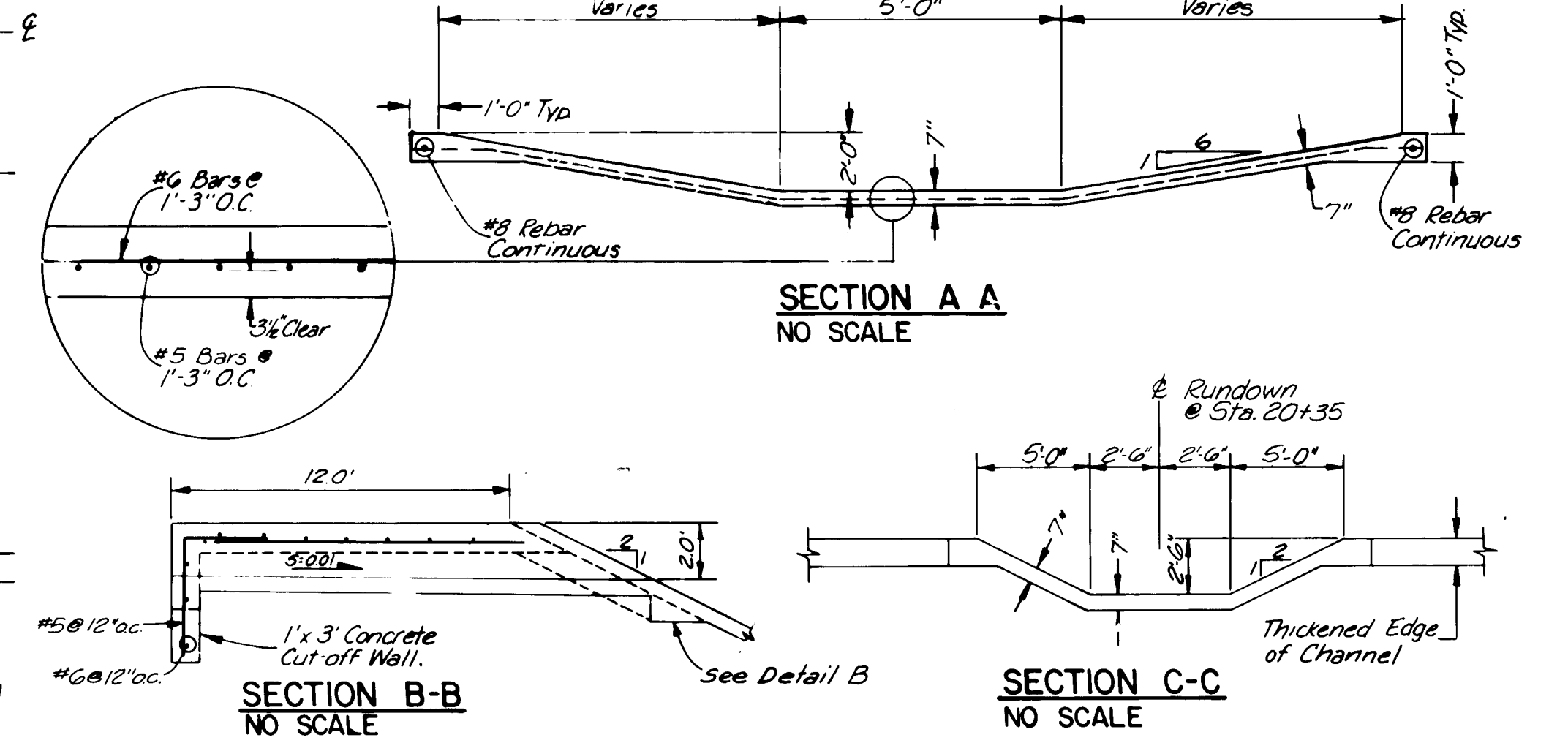
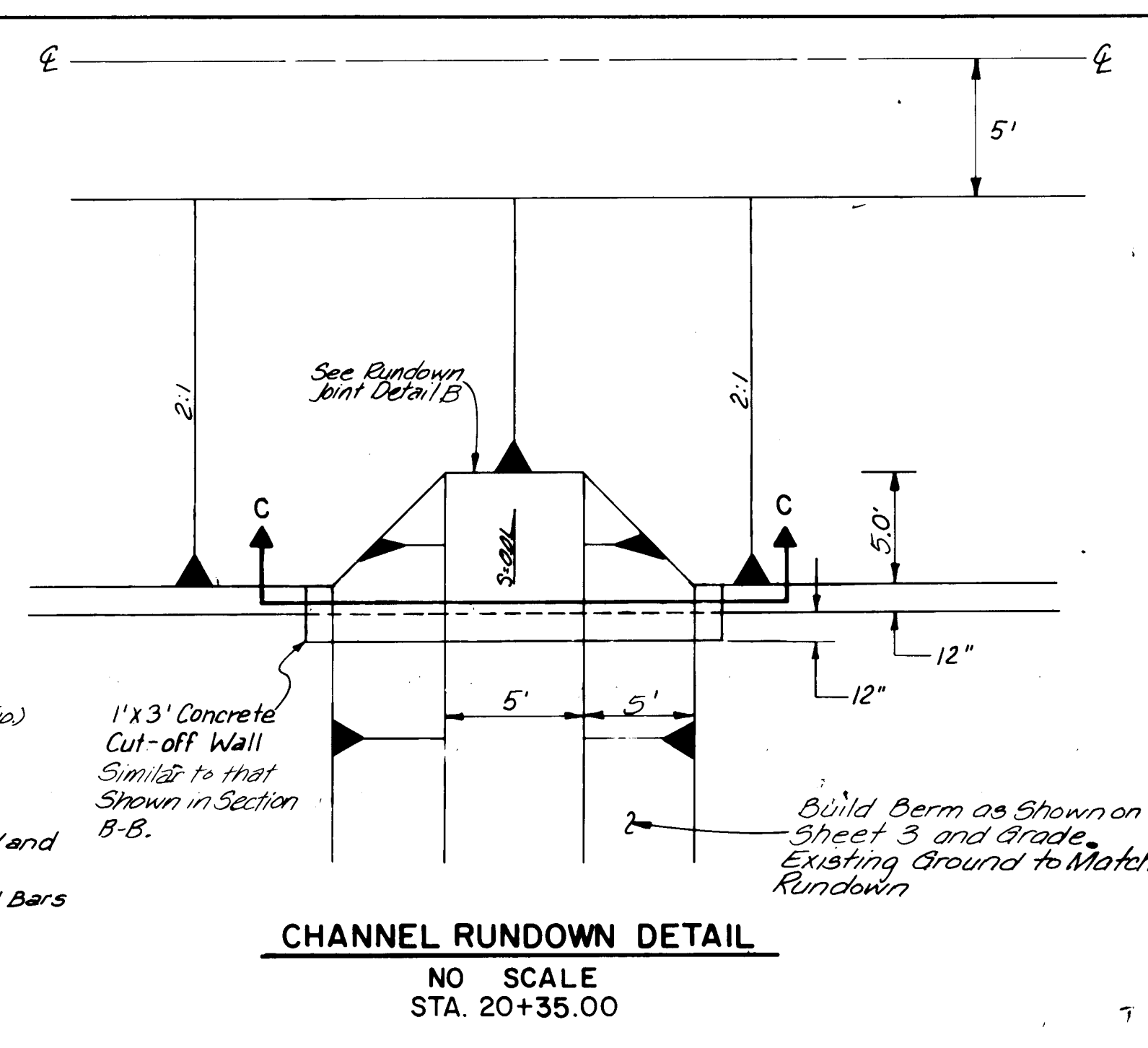
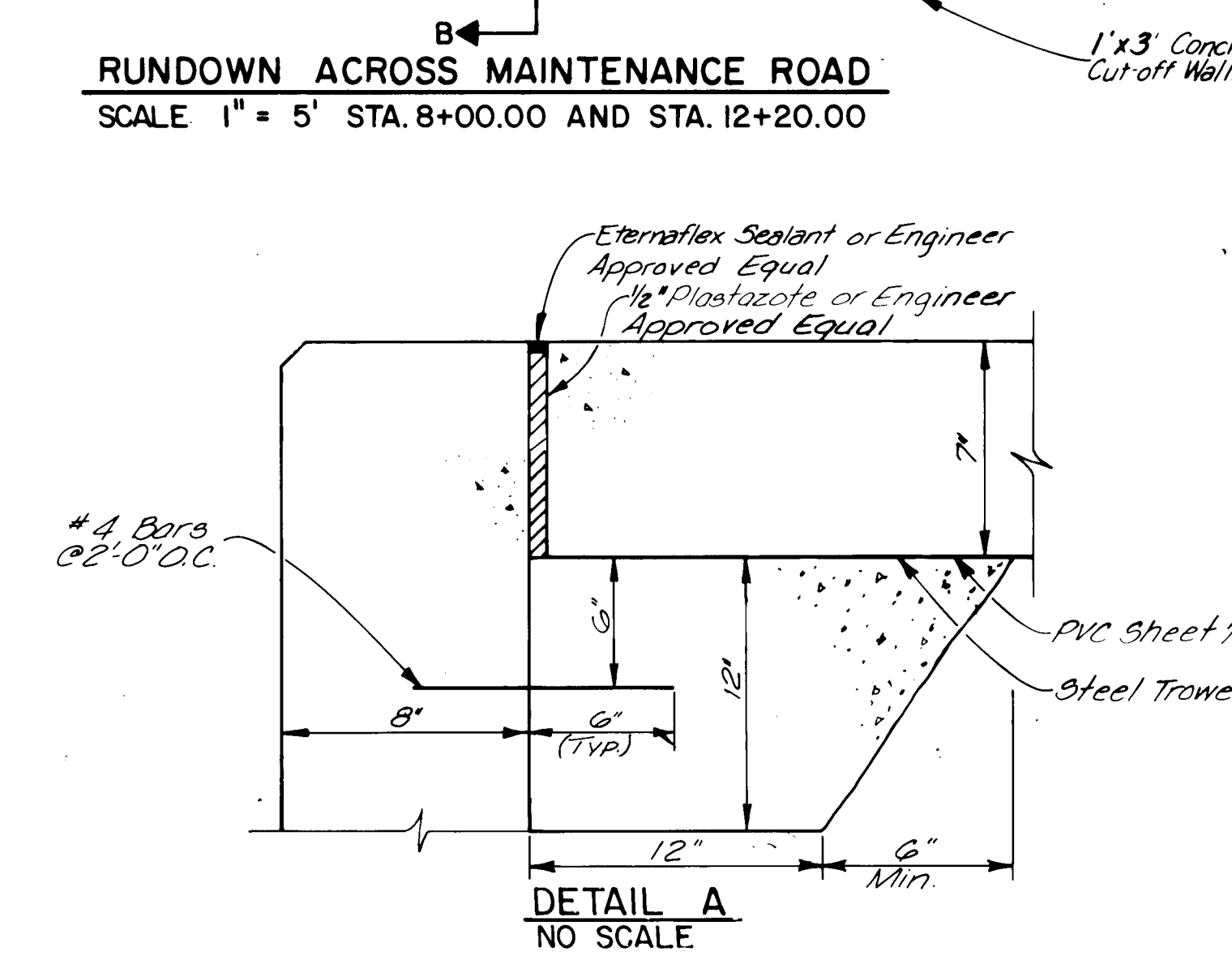
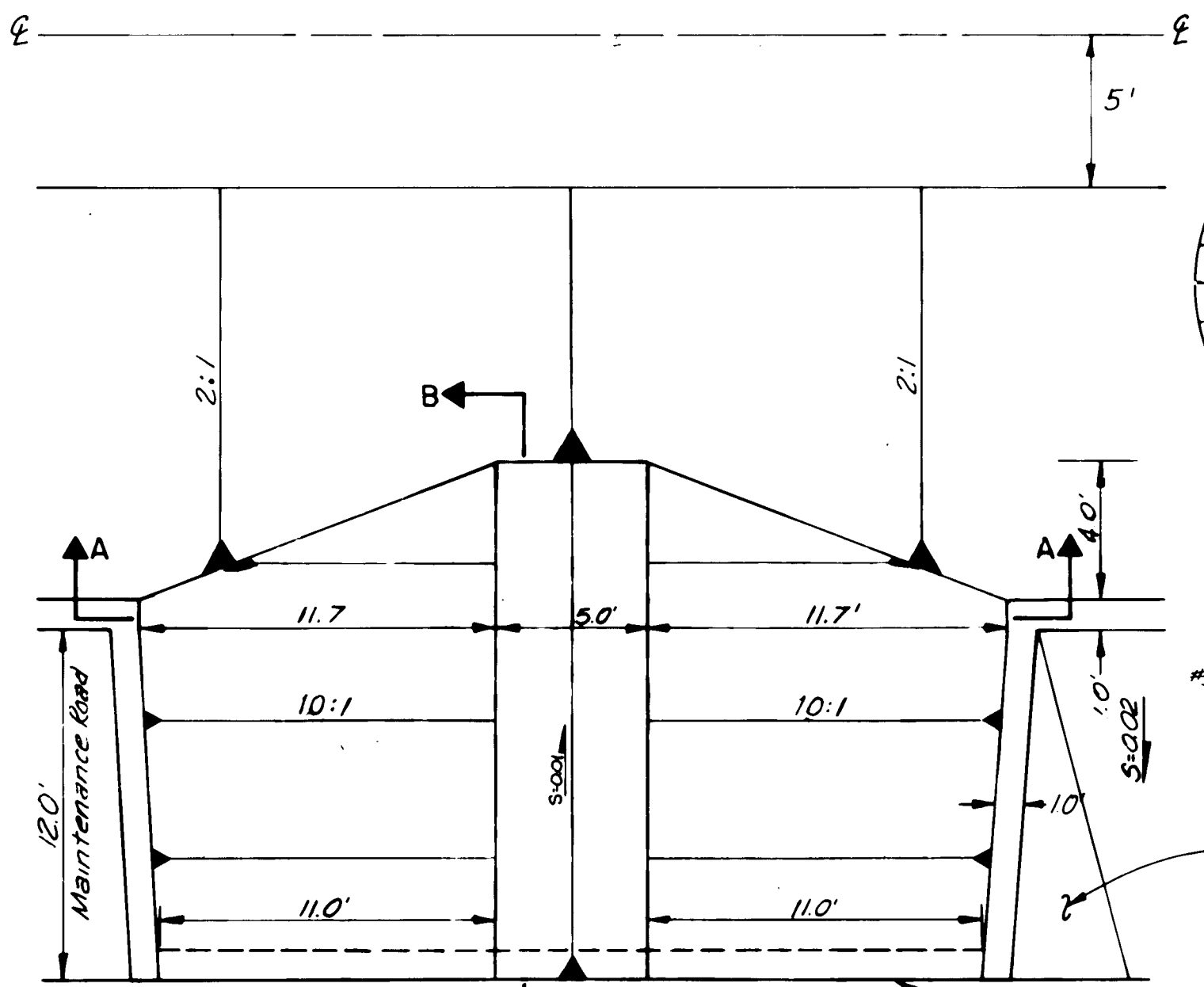
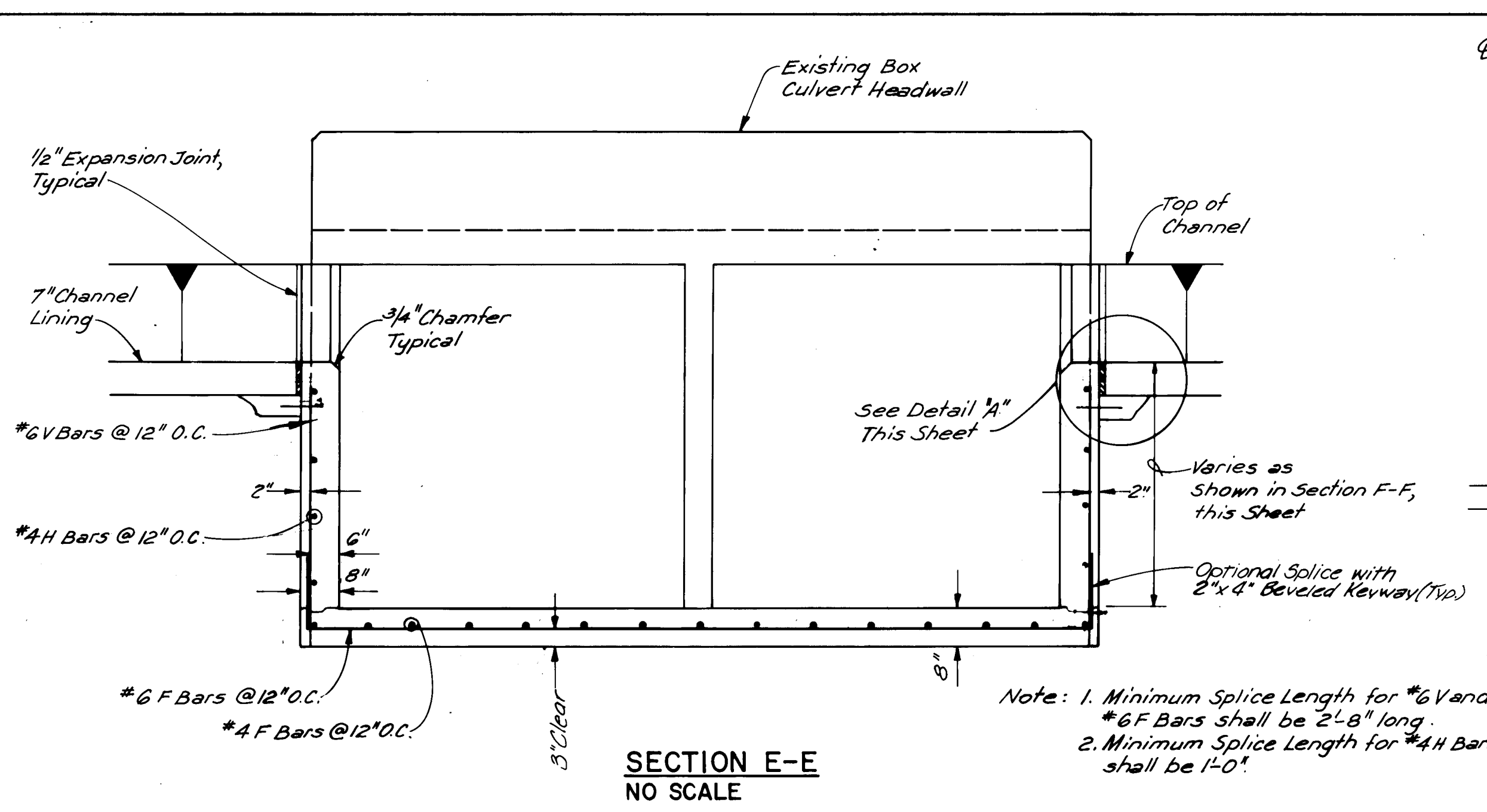
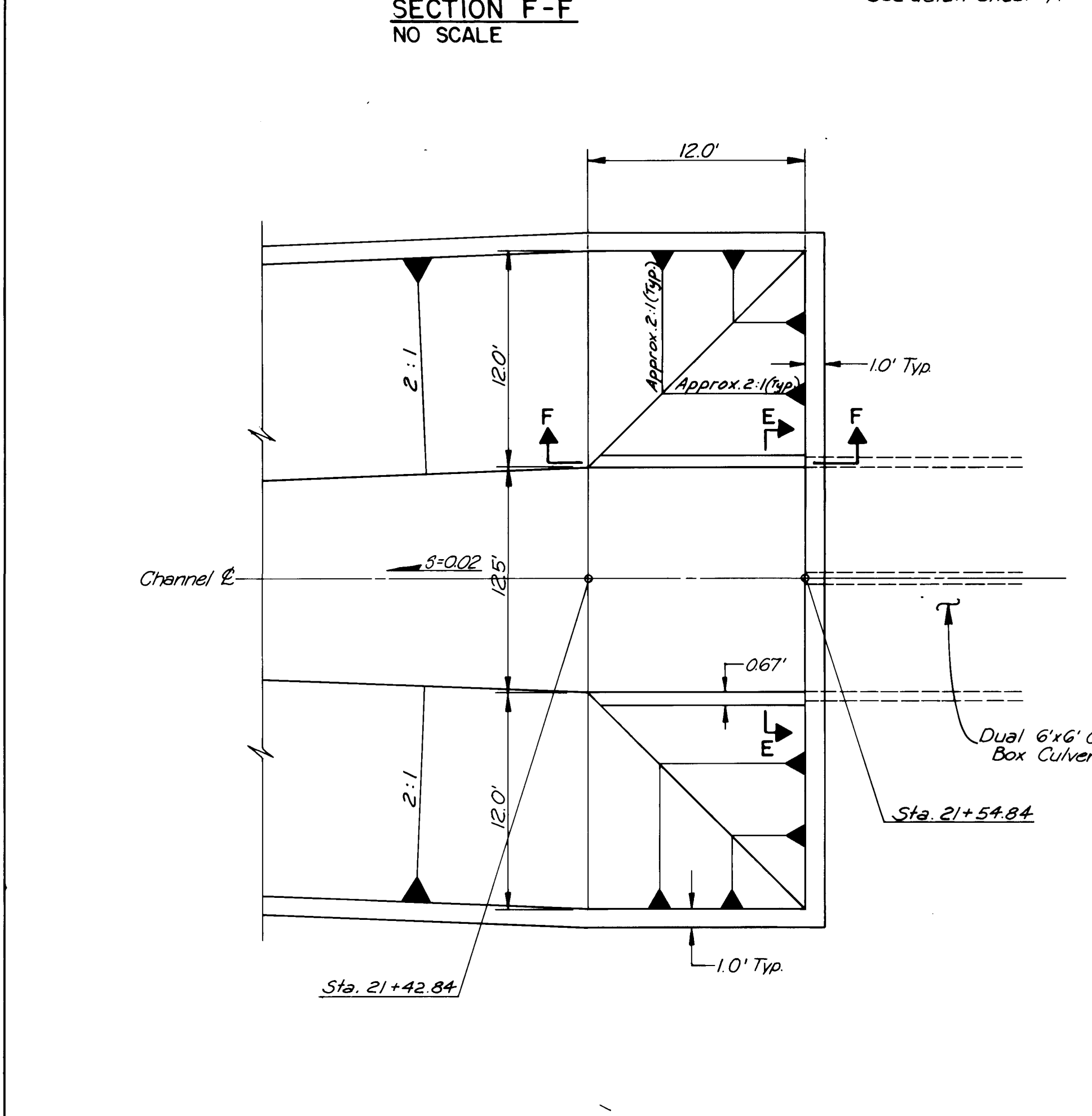
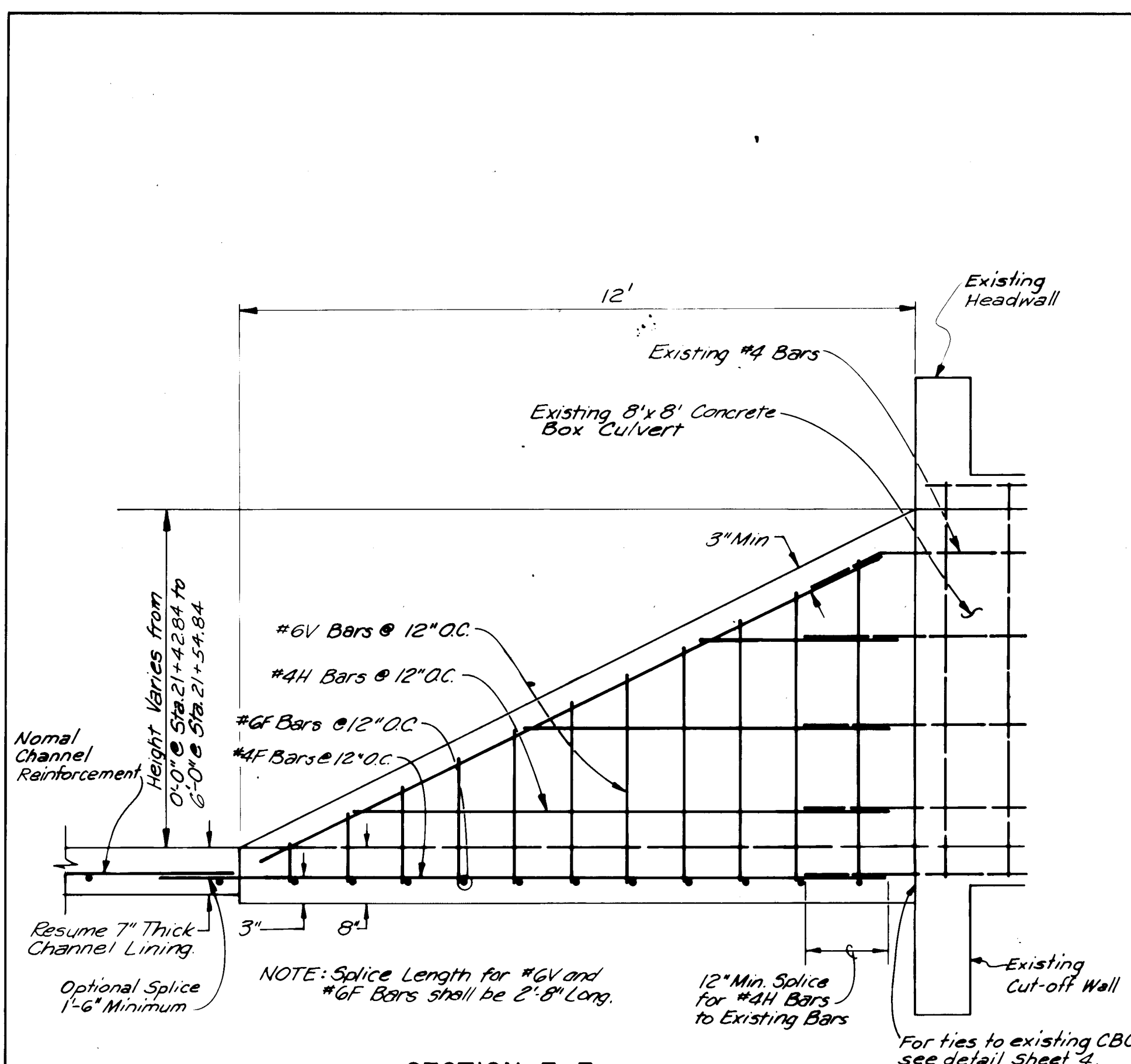
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
City Engineer	Adrian R.	5/2/87	Liquid Waste	WJW	5/7/87
A.C.E.-Design	"	"	Traffic	NADJH	5/7/87
A.C.E.-Hydrology	Don Hagan	5/7/87	Water	WJW	5/7/87

DRAWING NO. 1854

SHEET 5 OF 10

AS-BUILT INFORMATION		BENCH MARKS		SURVEY INFORMATION		REFERENCES		REVISIONS		DESIGN	
CONTRACTOR	Moore & Cowart Const.	NO.		MAP NO.		W.O. NO.		NO.		DESIGNED BY	HCS
STARTED BY		DATE		EST. NO.				DATE		DRAWN BY	PMT
ACCEPTANCE BY	P.W.D.	DATE 8/11/87						REMARKS		CHECKED BY	HCS
FIELD VERIFICATION BY		DATE									
DRAWINGS CORRECTED BY	W/A	DATE									
RECORDED BY		DATE									
NO.											

BRUNING 44 12 52753



CITY OF ALBUQUERQUE
MUNICIPAL DEVELOPMENT DEPARTMENT
ENGINEERING DIVISION
26 1854 0692

JOB No 20596
SCALE: AS SHOWN

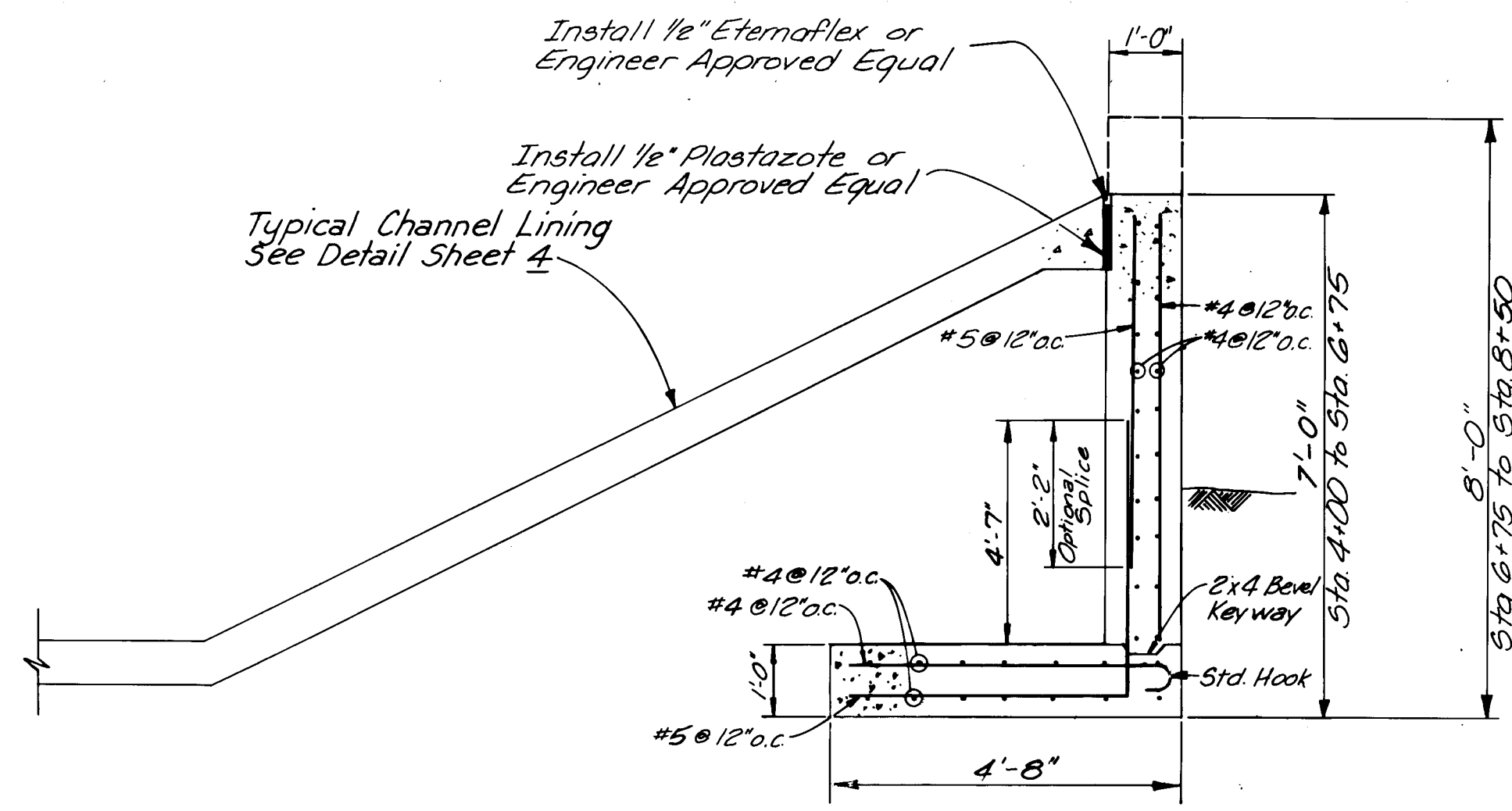
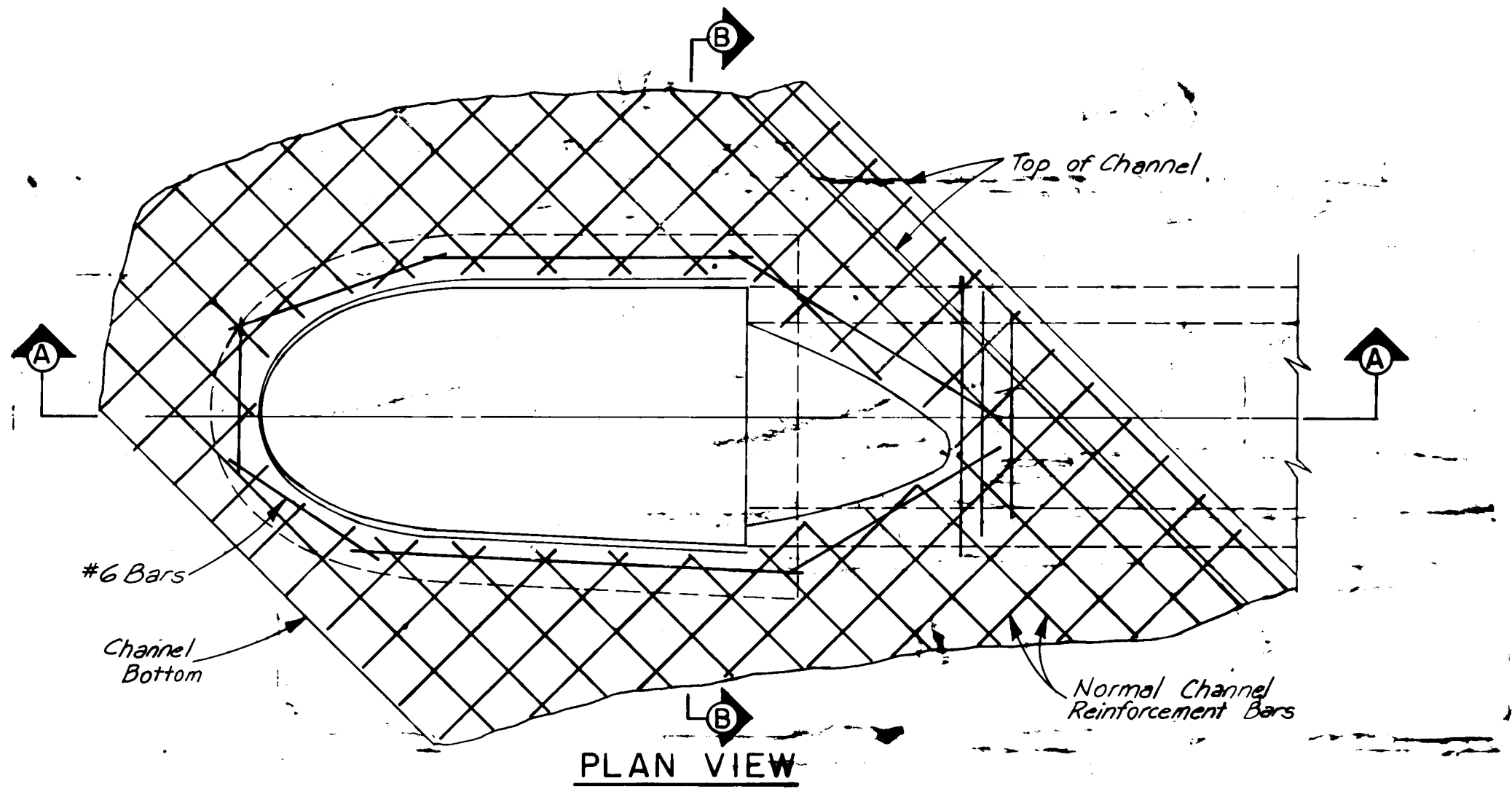
PREPARED UNDER THE DIRECTION OF
CITY ENGINEER
DATE

APPROVALS				APPROVALS			
DESIGNED	ENGINEER	DATE	APPROVED	ENGINEER	DATE	DESIGNED	ENGINEER
DR. CHAIR	5/7/84	Utilities	W. W.	5/7/84	5/7/84	DR. CHAIR	5/7/84
Design	Hydrology	5/7/84	Transp. Div.	5/7/84	5/7/84	Design	Hydrology
DRAWING NO. 1854				SHEET 6 OF 10			

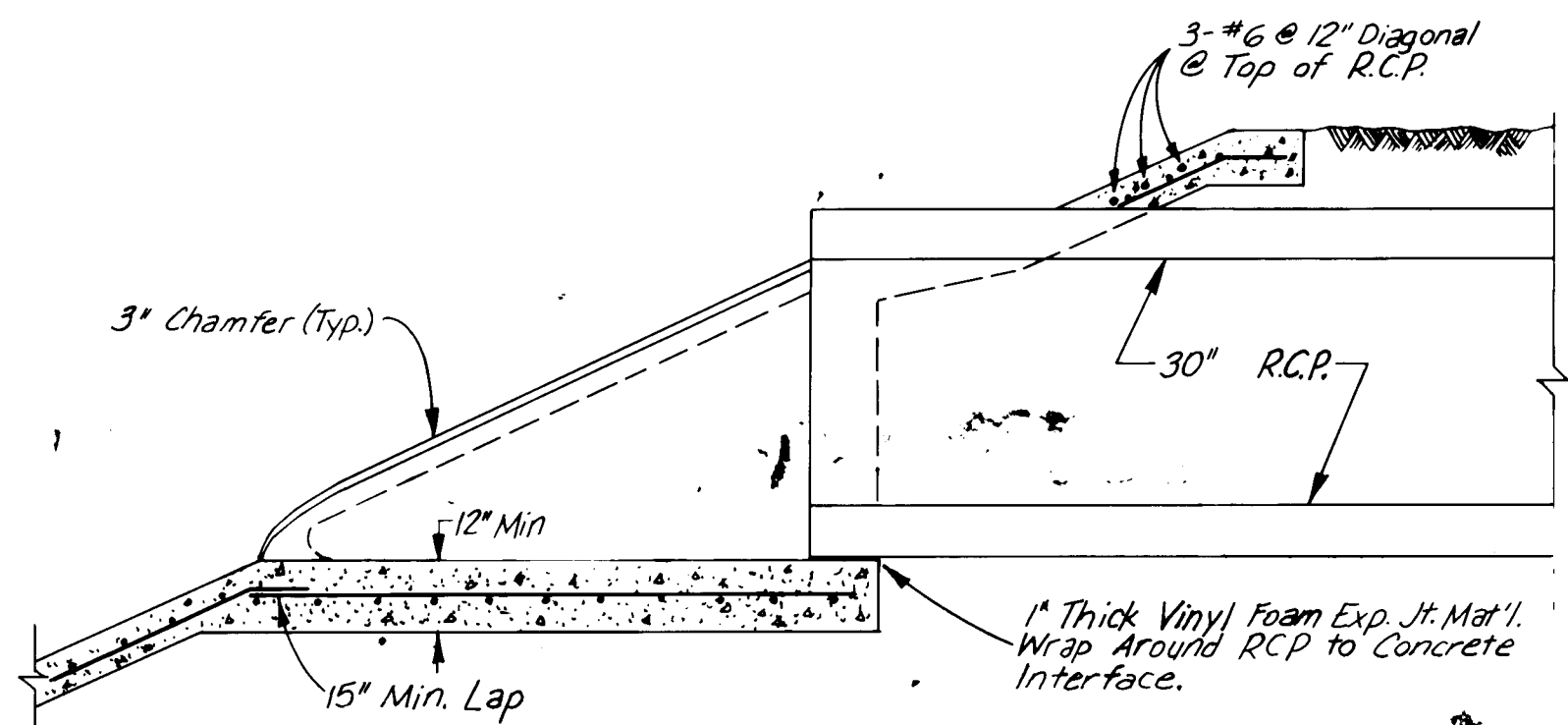
RETAINING WALL GEOMETRIC DATA

BEGINNING STA.	ELEV. TOP WALL	ELEV. BOTTOM FOOT.	ENDING STA.	ELEV. TOP WALL	ELEV. BOTTOM FOOT.
STA. 4+00.00-17.0' RT.	5154.88	5147.88	STA. 6+75.00-17.0' RT.	5156.26	5149.26
STA. 6+75.00-17.0' RT.	5157.26	5149.26	STA. 8+50.00-17.0' RT.	5157.89	5149.89

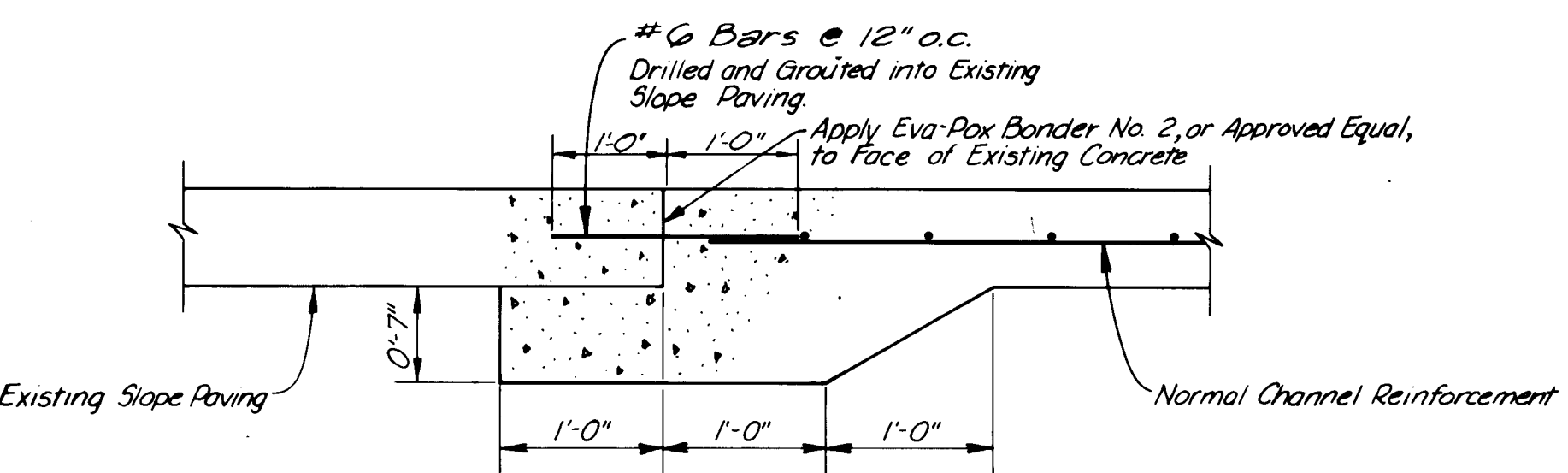
NOTE:
Distances are from $\mathcal{L}$ to inside of vertical wall.



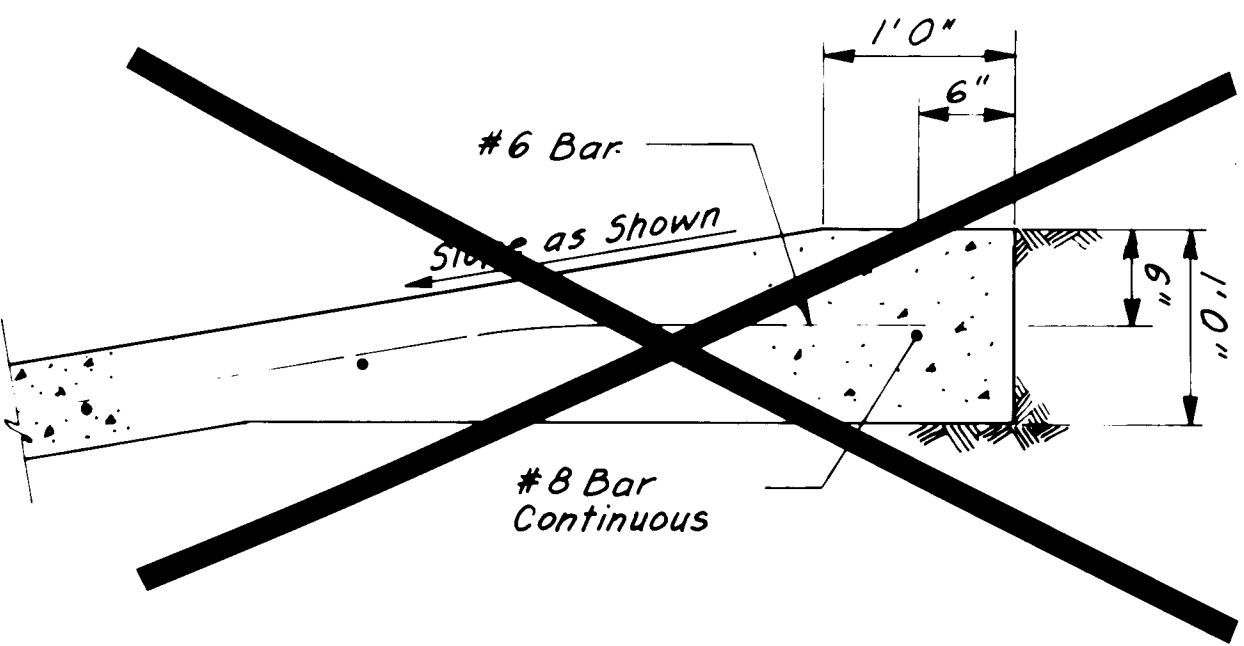
RETAINING WALL CONSTRUCTION DETAIL



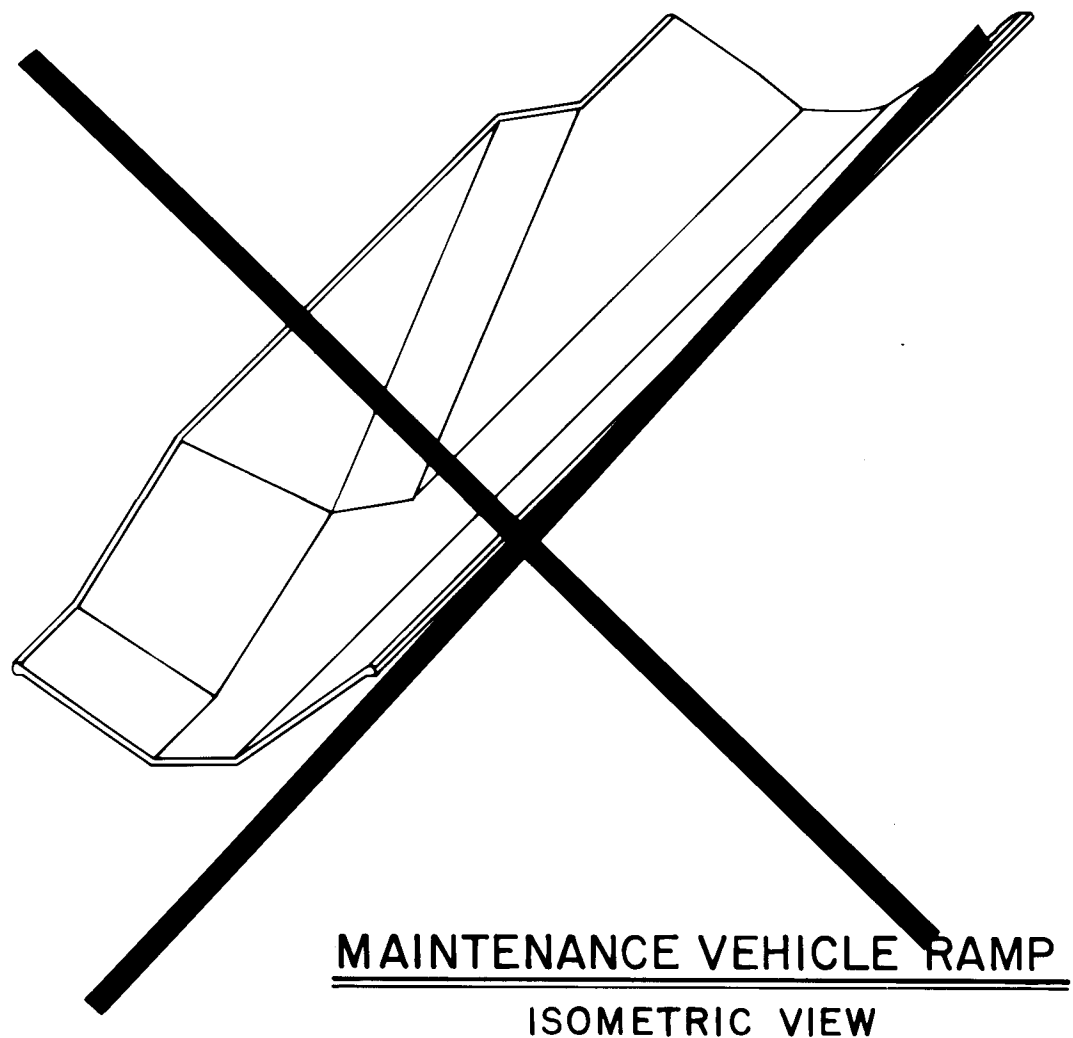
SECTION A-A



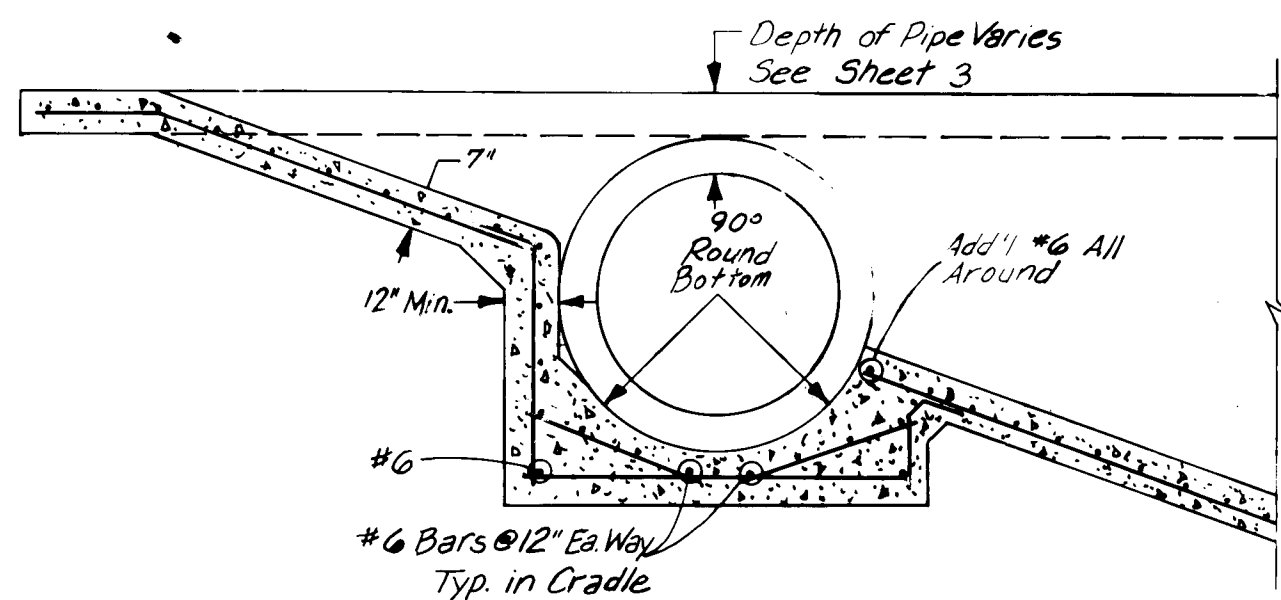
TIE TO EXISTING 7" SLOPE PAVING
STA. 2+57.92



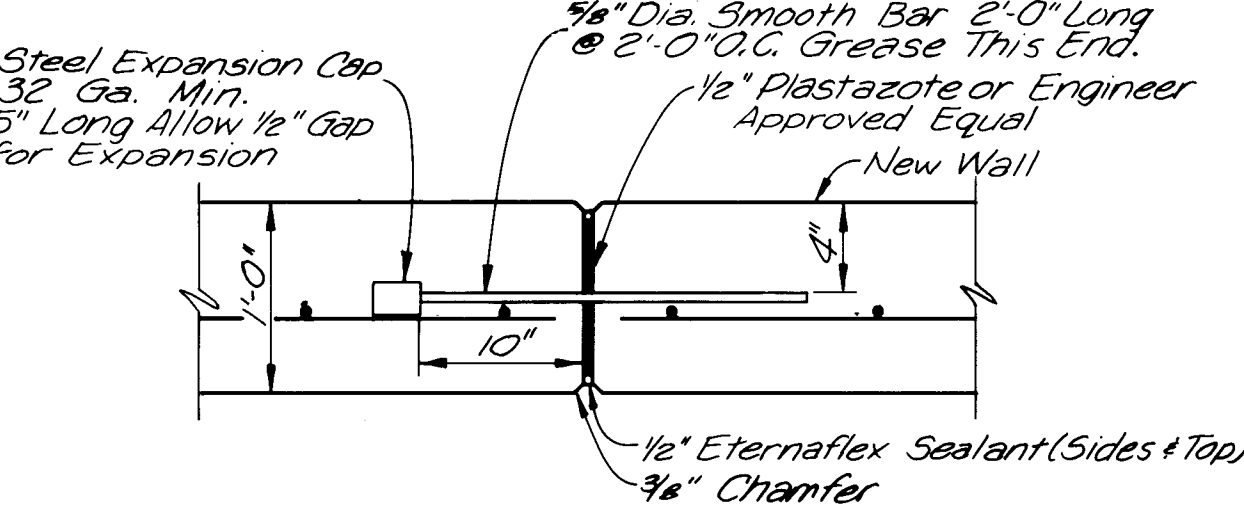
SECTION B-B



MAINTENANCE VEHICLE RAMP
ISOMETRIC VIEW



SECTION B-B



TYPICAL RETAINING WALL 1/2" EXPANSION JOINT
For Footing No Eternaflex or Chamfer is Required on Bottom
Expansion Joint in Retaining Wall Required at a Minimum of 100 Feet.

CITY OF ALBUQUERQUE
26 18540792

JOB NO. 20596

SCALE:
NO SCALE

PREPARED UNDER THE DIRECTION OF

APPROVED FOR CONSTRUCTION

CITY ENGINEER DATE

CITY OF ALBUQUERQUE
MUNICIPAL DEVELOPMENT DEPARTMENT
ENGINEERING DIVISION

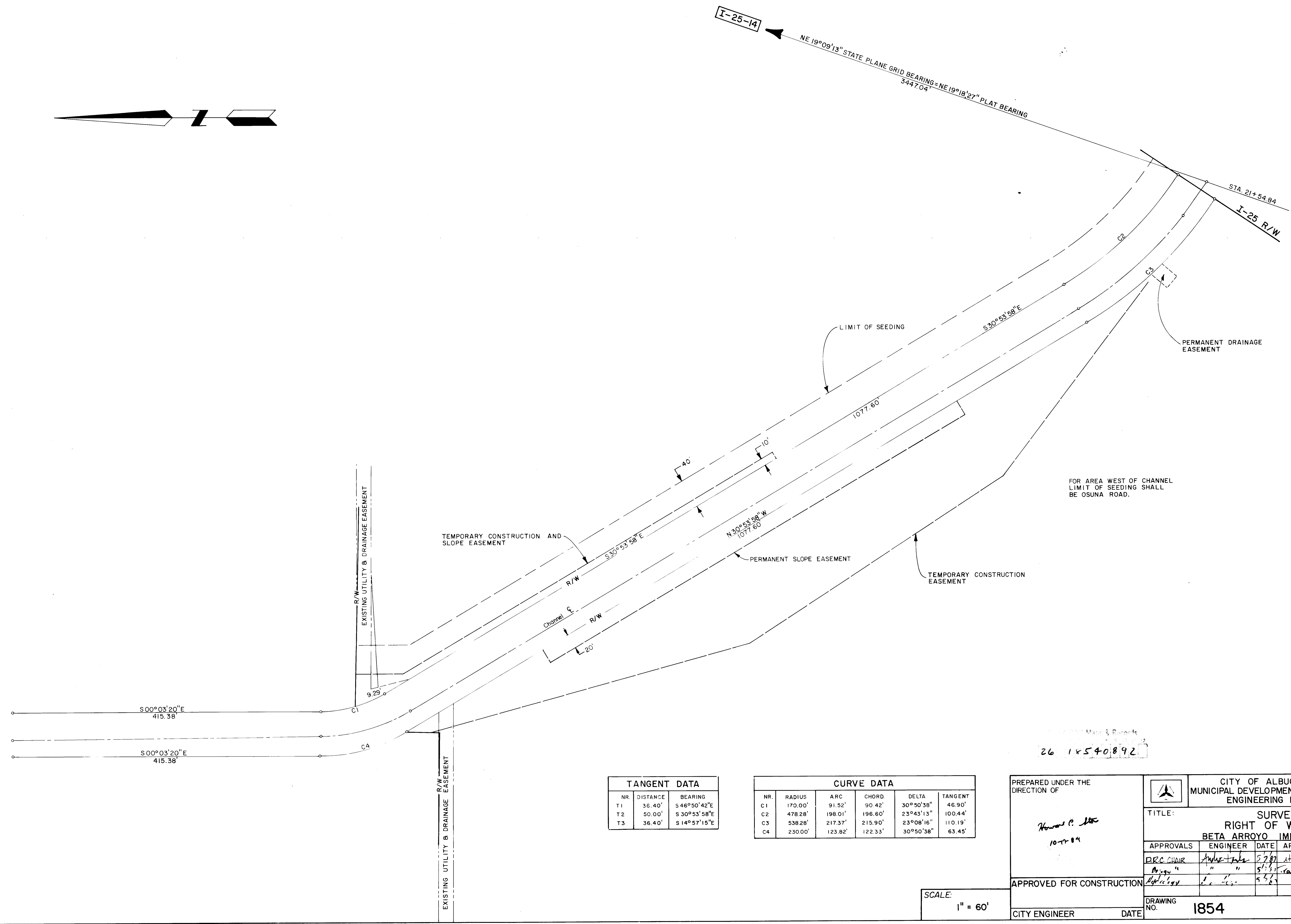
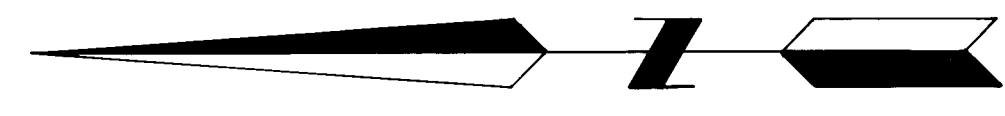
TITLE:
MISCELLANEOUS CONSTRUCTION DETAILS
BETA ARROYO IMPROVEMENTS

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
City Engineer	W. J. W.	5/7/84	Liquid Waste	W. J. W.	5/7/84
A.C.E.-Design	W. J. W.	5/7/84	Traffic	W. J. W.	5/7/84
A.C.E.-Hydrology	W. J. W.	5/7/84	Water	W. J. W.	5/7/84

DRAWING NO. 1854

SHEET 7 OF 10

AS-BUILT INFORMATION		BENCH MARKS		SURVEY INFORMATION		REFERENCES	
CONTRACTOR	MOORE & GOSWAMI	NO.	DATE	NO.	DATE	MAP NO.	E-17-Z
WORKED BY		NO.	DATE	NO.	DATE	EST. NO.	
INSPECTED BY	P.W.D.	NO.	DATE	NO.	DATE		
ACCEPTANCE BY		NO.	DATE	NO.	DATE		
VERIFICATION BY		NO.	DATE	NO.	DATE		
DRAWING NO.	1854	NO.	DATE	NO.	DATE		
RECORDED BY		NO.	DATE	NO.	DATE		
		NO.	DATE	NO.	DATE		



TANGENT DATA		
NR.	DISTANCE	BEARING
T1	36.40'	S 46°50'42"E
T2	50.00'	S 30°53'58"E
T3	36.40'	S 14°57'15"E

CURVE DATA				
NR.	RADIUS	ARC	CHORD	DELTA
C1	170.00'	91.52'	90.42'	30°50'38"
C2	478.28'	198.01'	196.60'	23°43'13"
C3	538.28'	217.37'	215.90'	23°08'16"
C4	230.00'	123.82'	122.33'	30°50'38"

26 18540892

SCALE: 1" = 60'

PREPARED UNDER THE DIRECTION OF

10-11-84

APPROVED FOR CONSTRUCTION
CITY ENGINEER
DATE

CITY OF ALBUQUERQUE
MUNICIPAL DEVELOPMENT DEPARTMENT
ENGINEERING DIVISION

TITLE:
SURVEY
RIGHT OF WAY MAP
BETA ARROYO IMPROVEMENTS

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
PRC CHAIR		5/2/87	At-Large	NW	5-7-87
PRG "	"	5/1/87	Comp. Dev.	NA DuH	5/7/87
PRG "	"	5/1/87			

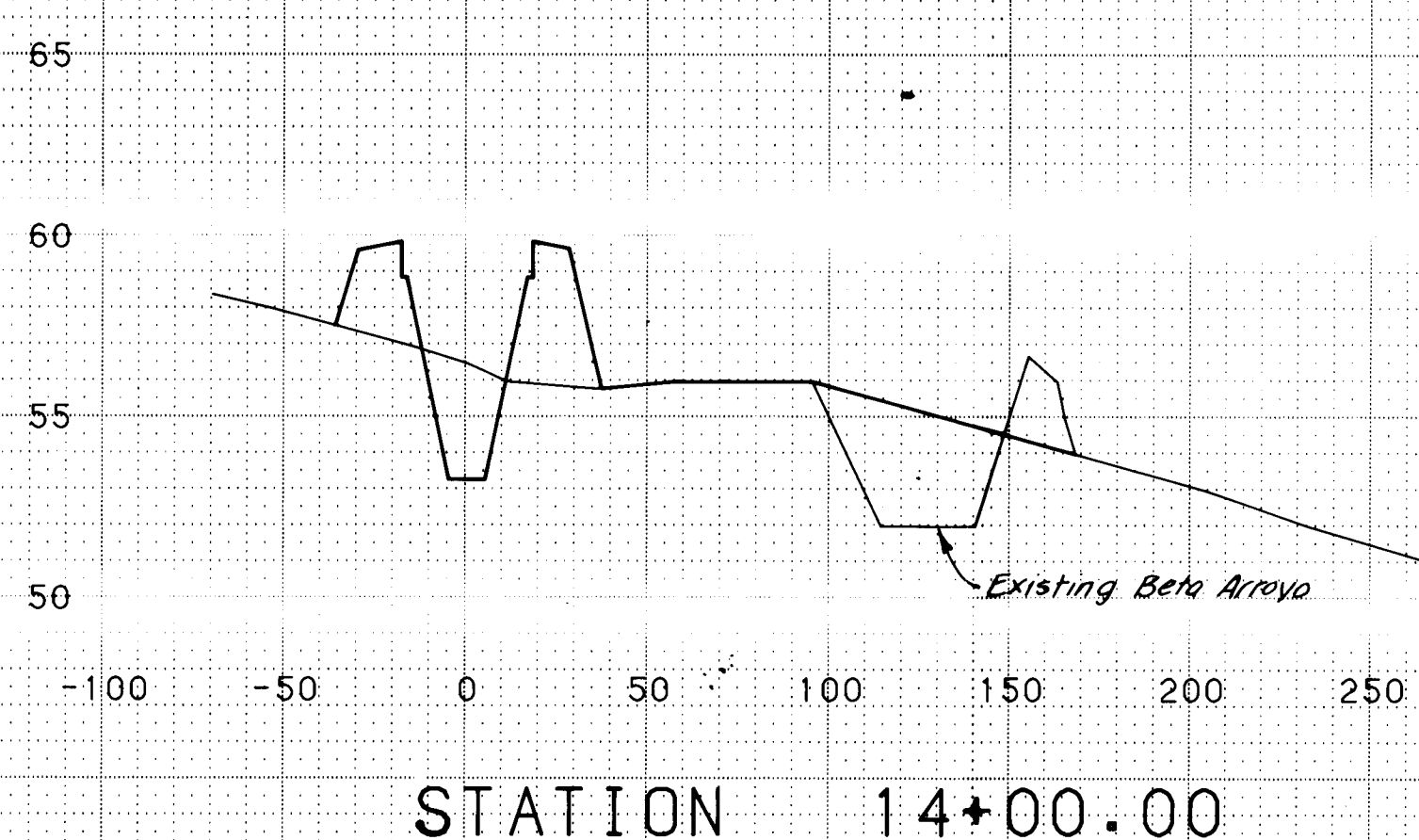
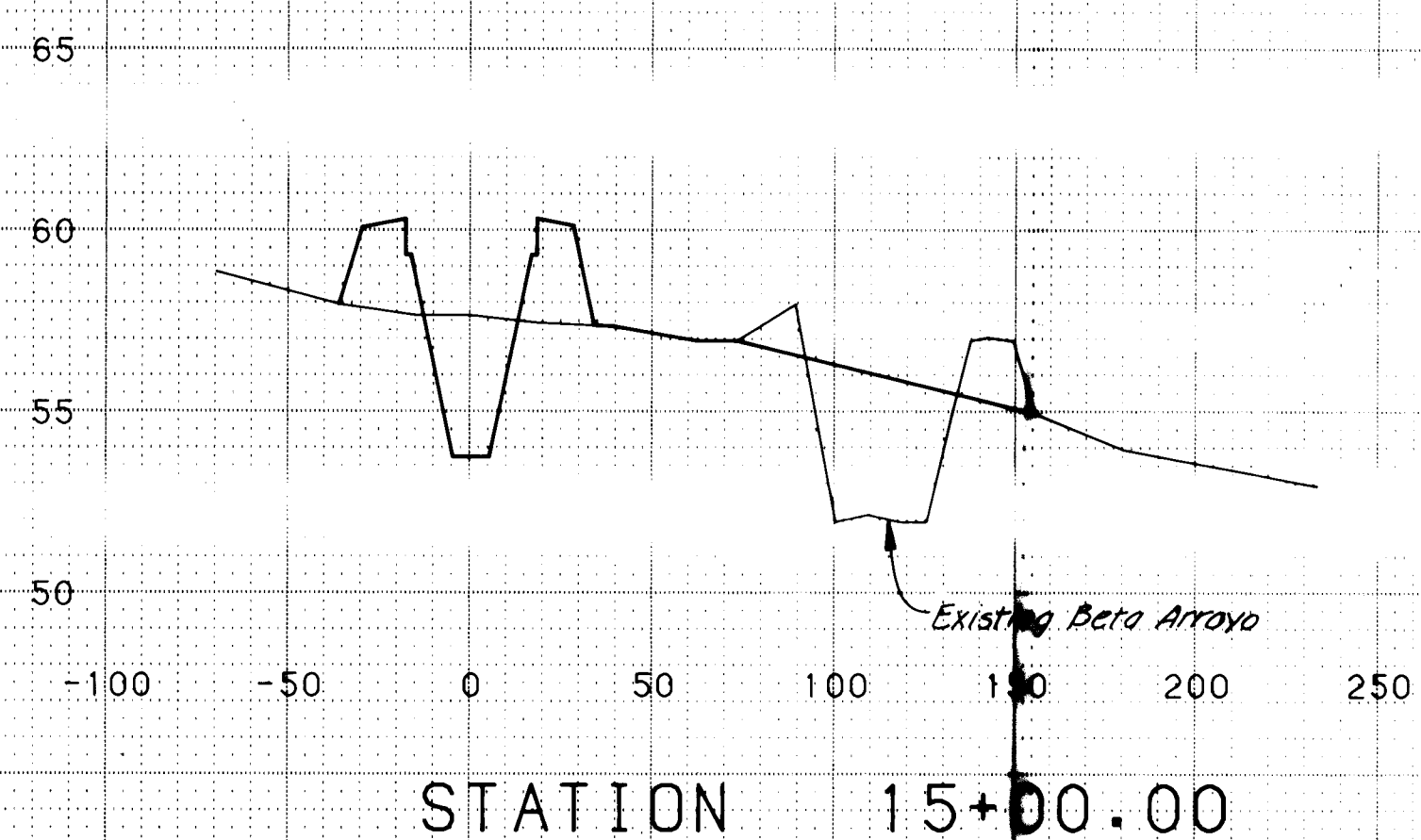
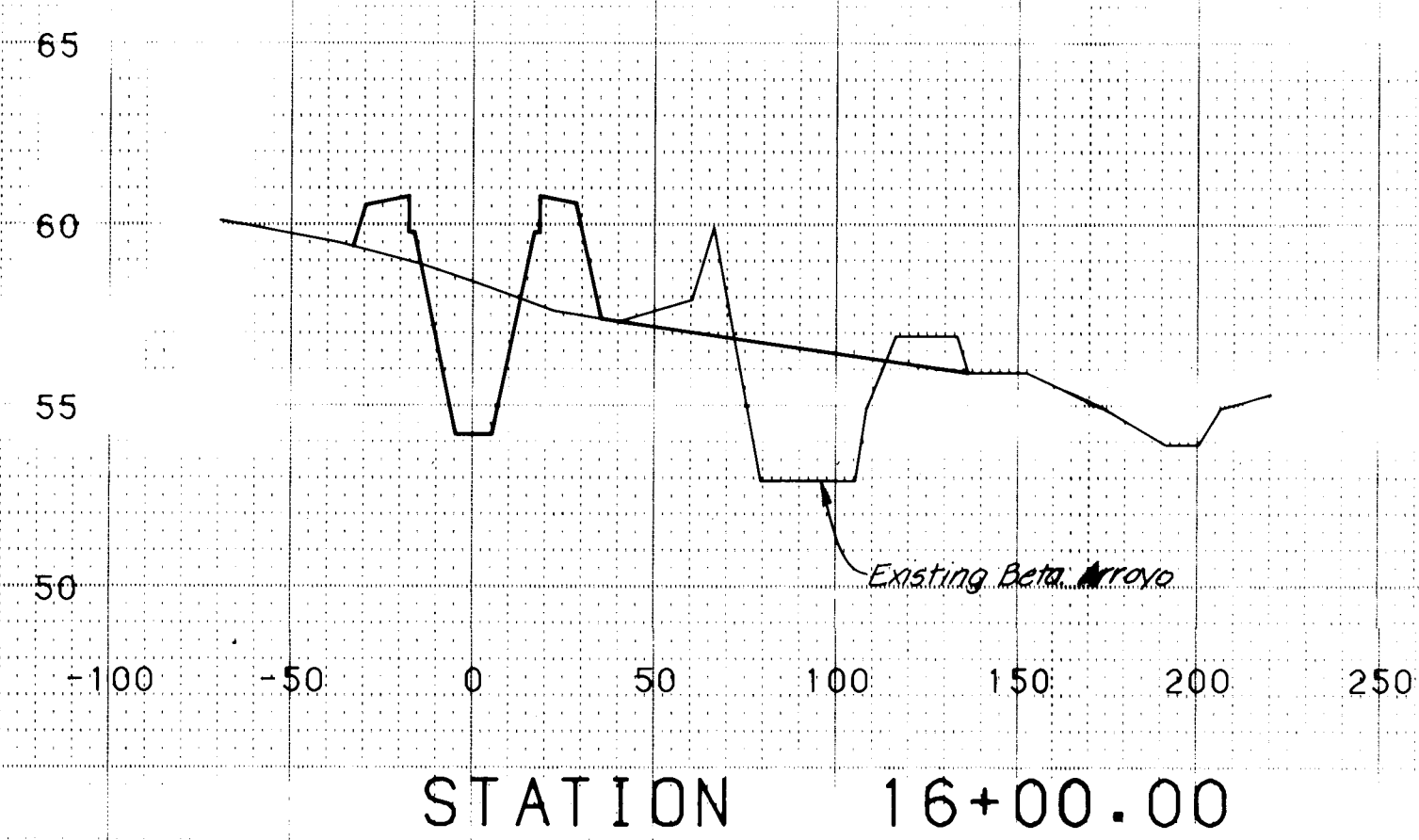
DRAWING NO. 1854

SHEET 8 OF 10

AS-BUILT INFORMATION		BENCH MARKS		SURVEY INFORMATION		REFERENCES		REVISIONS		DESIGN	
CONTRACTOR	Moore & Guard, Inc.	1-25-14-Brass Cap is located N.E. of Intersection of the I-25 East Frontage Road and the NMSHD District N 3 Offices driveway. Elev. 5196.899		DATE		MAP NO.		NO.	DATE	DESIGNED BY	HCS
WORK ORDER NO.				BY		EST. NO.		BY		DRAWN BY	MF
INSPECTOR				NO		W.O. NO.				CHECKED BY	HCS
ACCEPTANCE BY	P.W.O.										
DATE	11/1/87										
VERIFICATION BY											
DATE											
DRAWING NO.	11/1/87										
DATE											
MICRO-FILM INFORMATION											
RECORDED BY											
DATE											
NO.											

ORIGINAL				
SURVEY	SURVEYED _____	BY _____	DATE _____	
NOTE BOOK	PLOTTED _____			
	TEMPLATE _____			
	AREAS _____			
	AREAS CHECKED _____			
NO. _____				

FINAL			
SURVEY			
NOTE BOOK			
NO.			
	SURVEYED	BY	DATE
	PLOTTED		
	TEMPLATE		
	AREAS		
	AREAS CHECKED		



C of A PWD M & Records

1	2	3	4	5	6	7	8	9	10	11
2	6		1	8	5	4	1	0	9	2

Sta. 14+00.00 to Sta. 21+54.84
BETA ARROYO
BETA ARROYO IMPROVEMENTS

