

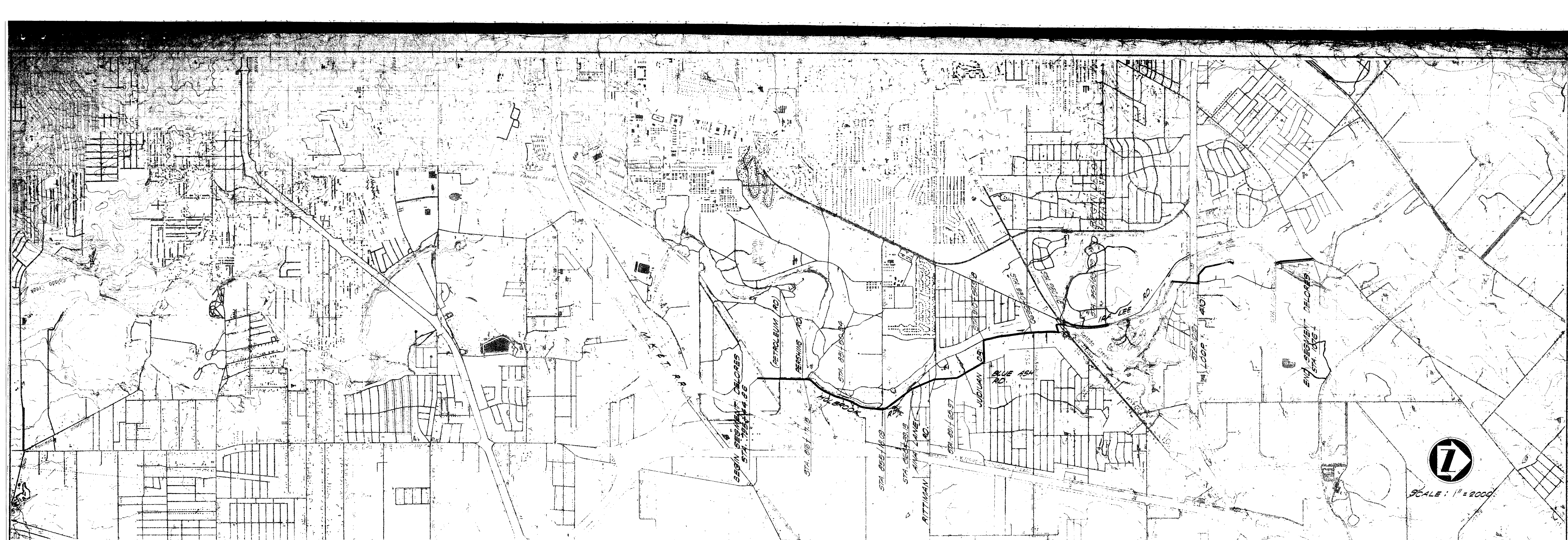
WPC TEX 432

CONSTRUCTION PLANS
FOR
SALADO CREEK OUTFALL SANITARY SEWER
SEGMENT DELORES
PHASE "B"
DEPARTMENT OF PUBLIC WORKS
CITY OF SAN ANTONIO, TEXAS

PREPARED BY
W. F. CASTELLA AND ASSOCIATES
CONSULTING CIVIL ENGINEERS



AS BUILT JUNE, 1974



ESTIMATED QUANTITIES

BID PROPOSAL ITEM	ITEM NO.	DESCRIPTION OF ITEM	UNIT	QUANTITY
101	1	CONCRETE COLLARS	EACH	0
102	1	15" R.C.P., 8'-10" DEEP, COMPRESSION JOINT	L.F.	17
103	1	42" REINFORCED CONCRETE PIPE, 0'-8" DEEP	L.F.	855.03
104	1	42" 8'-10" DEEP	L.F.	1048.52
105	1	42" 10'-12" DEEP	L.F.	1804.67
106	1	42" 12'-14" DEEP	L.F.	1708.78
107	1	42" EXTRA STRENGTH R.C.P., 14'-16" DEEP	L.F.	1232.08
108	1	42" 14'-18" DEEP	L.F.	520.77
109	1	42" 18'-20" DEEP	L.F.	1081.71
110	1	42" 20'-22" DEEP	L.F.	897.87
111	1	42" 22'-24" DEEP	L.F.	989.73
112	1	42" 24'-26" DEEP	L.F.	58.36
113	1	42" EXTRA STRENGTH R.C.P., 0'-8" DEEP	L.F.	330.00
114	1	8'-10" DEEP	L.F.	130.49
115	1	10'-12" DEEP	L.F.	182.43
116	2	MANHOLES, TYPE A, IN PLACE	EACH	2
117	2	MANHOLES, TYPE B, IN PLACE	EACH	2
118	2	MANHOLES, TYPE C, IN PLACE	EACH	2
119	2	SPECIAL INTERCEPT M.H., SR-1, STA. 955+83.79	LUMP SUM	2
120	2	INTERCEPT DROP M.H., I-1, STA. 949+15.83	LUMP SUM	2
121	2	INTERCEPT DROP M.H., I-2, STA. 934+12	LUMP SUM	2
122	2	INTERCEPT DROP M.H., I-3, STA. 1076+43.45	LUMP SUM	2
123	2	SIPHON MANHOLE BOX, IN PLACE	EACH	2
124	2	EXTRA MANHOLE DEPTH	V.F.	115.76
125	2	ADDITIONAL CLASS "A" CONCRETE	CU. YD.	
126	3	36" CONCRETE PRESSURE PIPE, C-302 GRA OR EQUAL	L.F.	400
127	4	CONCRETE ENCASEMENT	CU. YD.	610.40
128	5	HIGHWAY CROSSING, 42" C-302 REINFORCED CENTRIFUGAL CONCRETE PRESSURE PIPE	L.F.	302.2

ESTIMATED QUANTITIES

BID PROPOSAL ITEM	ITEM NO.	DESCRIPTION OF ITEM	UNIT	QUANTITY
132	11	WASHED GRAVEL SUBGRADE FILLER	CU. YD.	1170.00
133		6" DROP CONNECTION RISER	V.L.F.	15.76
134	1	42" EXTRA STRENGTH R.C.P., 12'-14" DEEP	L.F.	560.54

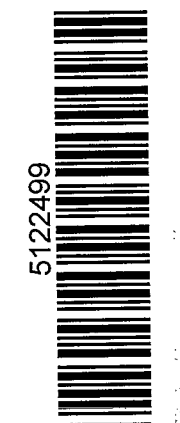
Siphon 45761

INDEX OF DRAWINGS

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- 2 LOCATION MAP
- ESTIMATED QUANTITIES
- INDEX OF DRAWINGS
- 3-11 PLAN & PROFILE SHEETS
- 12 MANHOLE DETAILS
- 13 MANHOLE DETAILS
- TYPICAL SECTIONS
- 14 SIPHON BOX
- 15 ALTERNATE MANHOLE DETAILS
- 16 INTERCEPT MANHOLES
- 17 MISCELLANEOUS DETAILS
- 18 BARRICADES & SIGNS
- STANDARD SANITARY SEWER DETAILS

AS BUILT JUNE, 1974

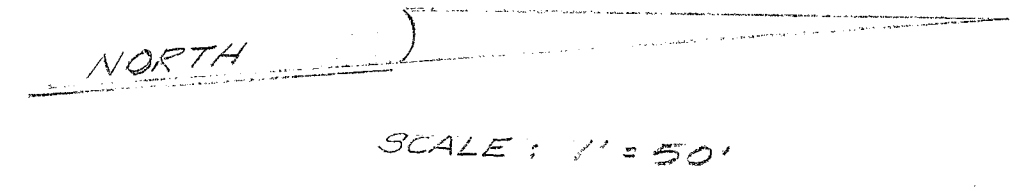
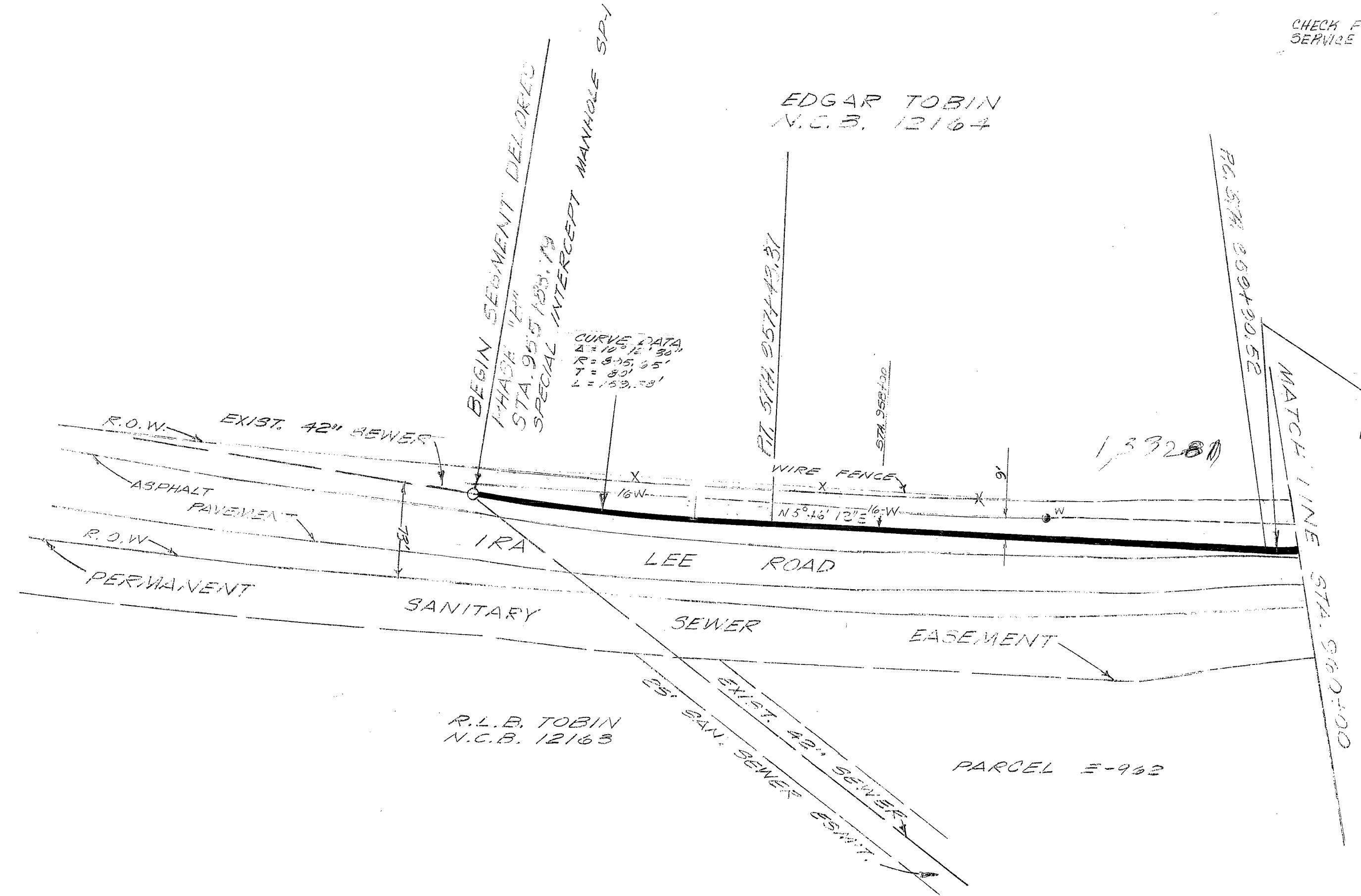
CITY OF SAN ANTONIO		DATE
DEPARTMENT OF PUBLIC WORKS		3 20 74
SALADO OUTFALL SANITARY SEWER		SHEET
DESIGN	W. F. CASTELLA & ASSOCIATES	3569
DRAWN	CONSULTING ENGINEERS	28
CHECKED	1039 W. HILDBRAND	
	SAN ANTONIO, TEXAS	



Siphon 45761



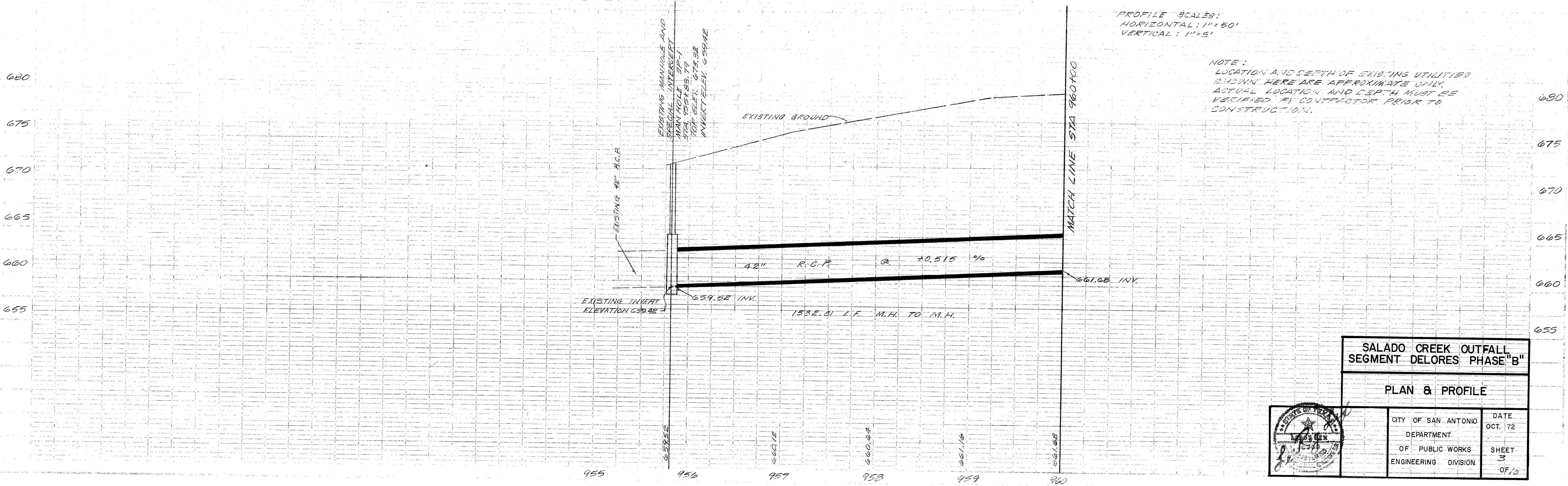
CHECK FOR PRIVATE COASTAL STATES GAS SERVICE TO TOBIN PROPERTY AND RESIDENCE.



NOTE:
PRESENT AVERAGE SEWER FLOW HAS BEEN MEASURED TO BE 7" DEEP (SEPTEMBER, 1970) OF AN AVERAGE OF 2.2 CUBIC FEET PER SECOND OF 1.4 MILLION GALLONS PER DAY.

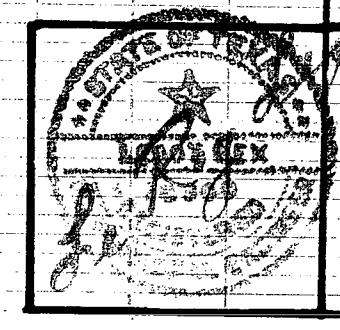
PROFILE SCALES:
HORIZONTAL: 1" = 50'
VERTICAL: 1" = 5'

NOTE:
LOCATION AND DEPTH OF EXISTING UTILITIES SHOWN HERE ARE APPROXIMATE ONLY. ACTUAL LOCATION AND DEPTH MUST BE VERIFIED BY CONTRACTOR PRIOR TO CONSTRUCTION.

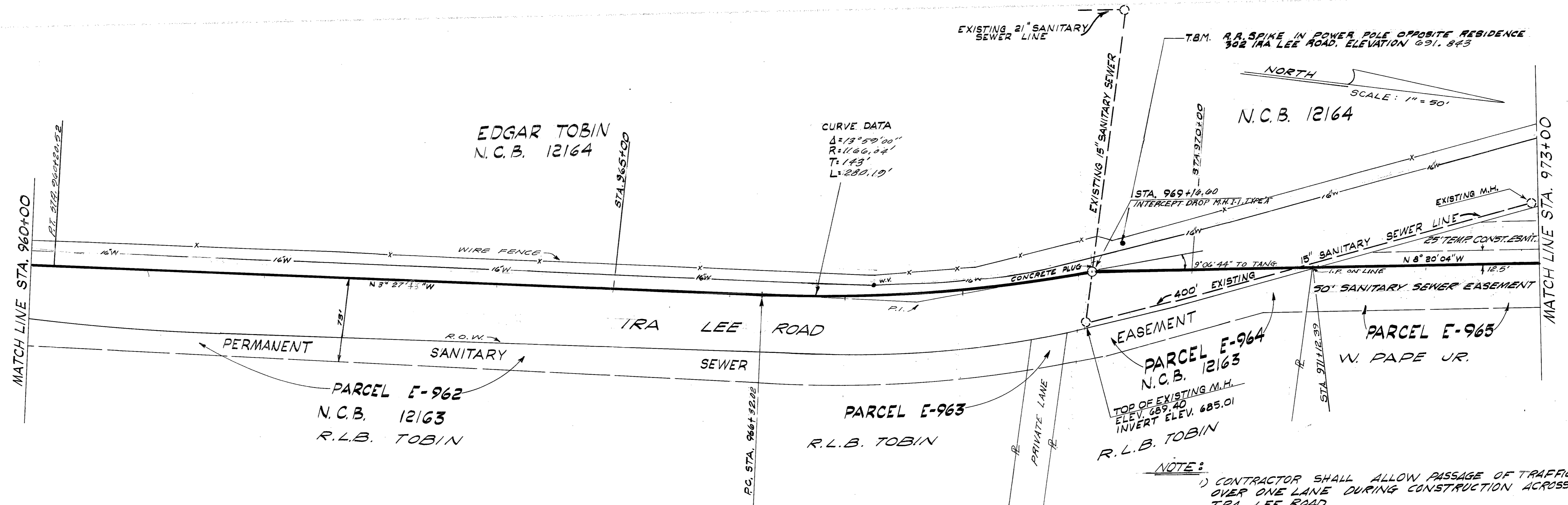


SALADO CREEK OUTFALL
SEGMENT DELORES PHASE "B"

PLAN & PROFILE



CITY OF SAN ANTONIO	DATE
DEPARTMENT	OCT. 72
OF PUBLIC WORKS	SHEET
ENGINEERING DIVISION	3
	OF 3



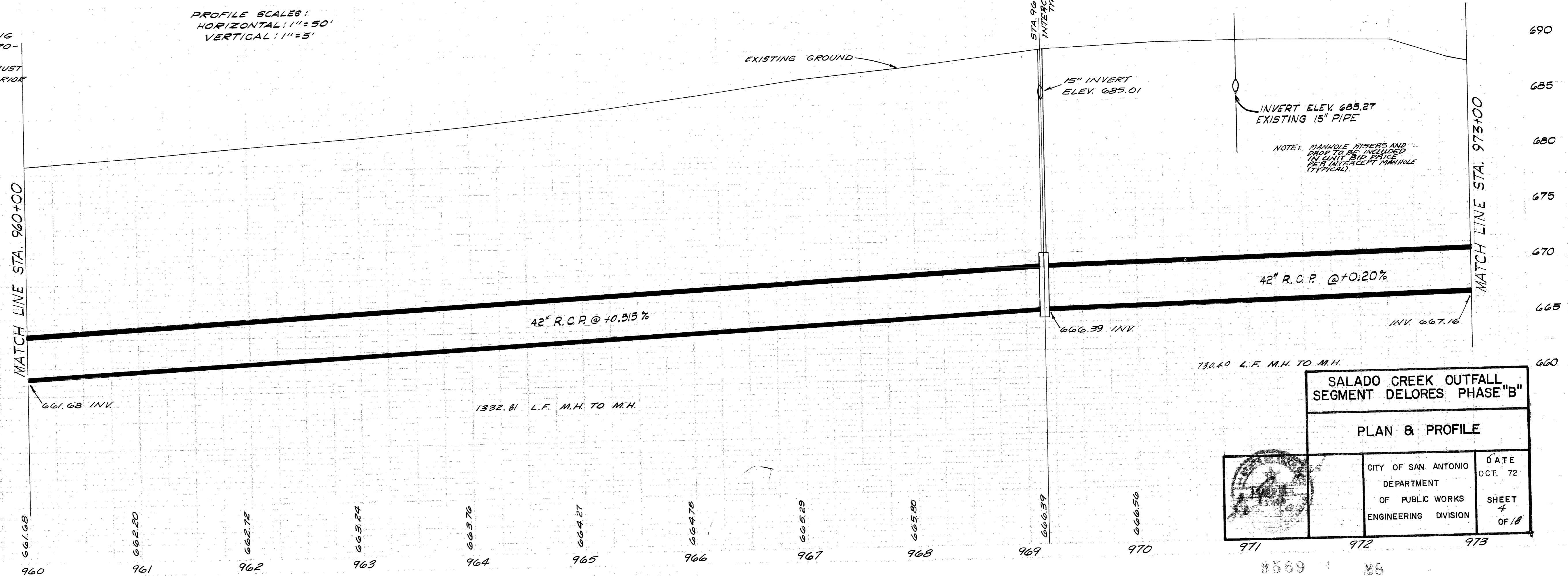
NORTH
SCALE: 1" = 50'

N.C.B. 12164

CURVE DATA
Δ: 13° 59' 00"
R: 1166.02'
T: 143'
L: 280.19'

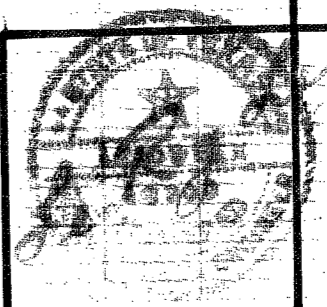
PROFILE SCALES:
HORIZONTAL: 1" = 50'
VERTICAL: 1" = 5'

NOTE:
LOCATION AND DEPTH OF EXISTING UTILITIES SHOWN HERE ARE APPROXIMATE ONLY. ACTUAL LOCATION AND DEPTH MUST BE VERIFIED BY CONTRACTOR PRIOR TO CONSTRUCTION.



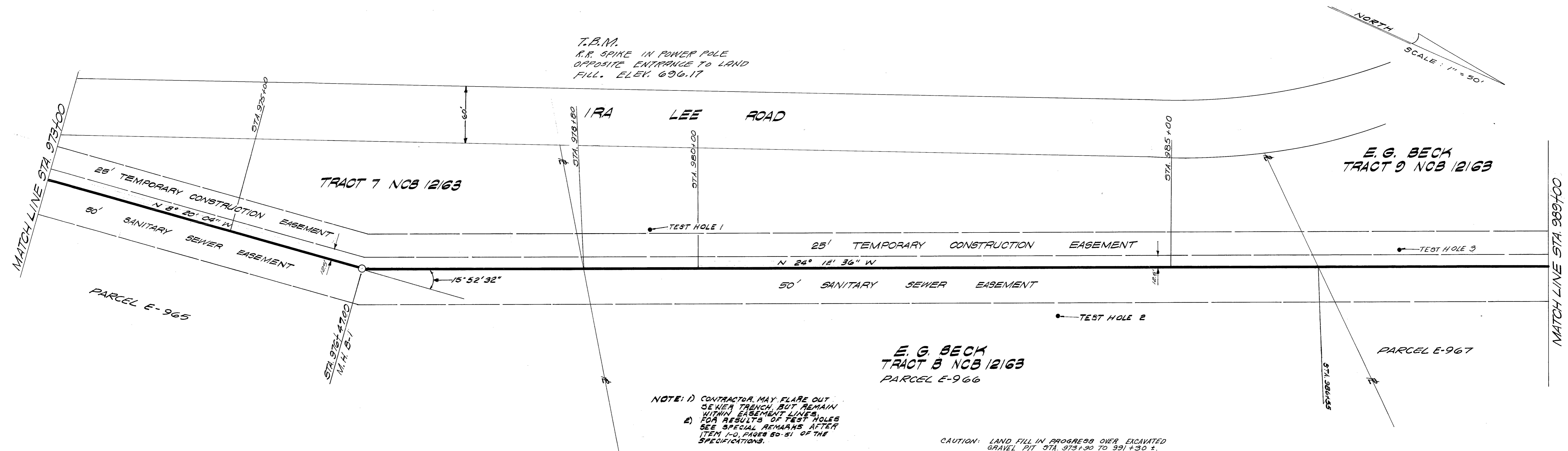
SALADO CREEK OUTFALL
SEGMENT DELORES PHASE "B"

PLAN & PROFILE



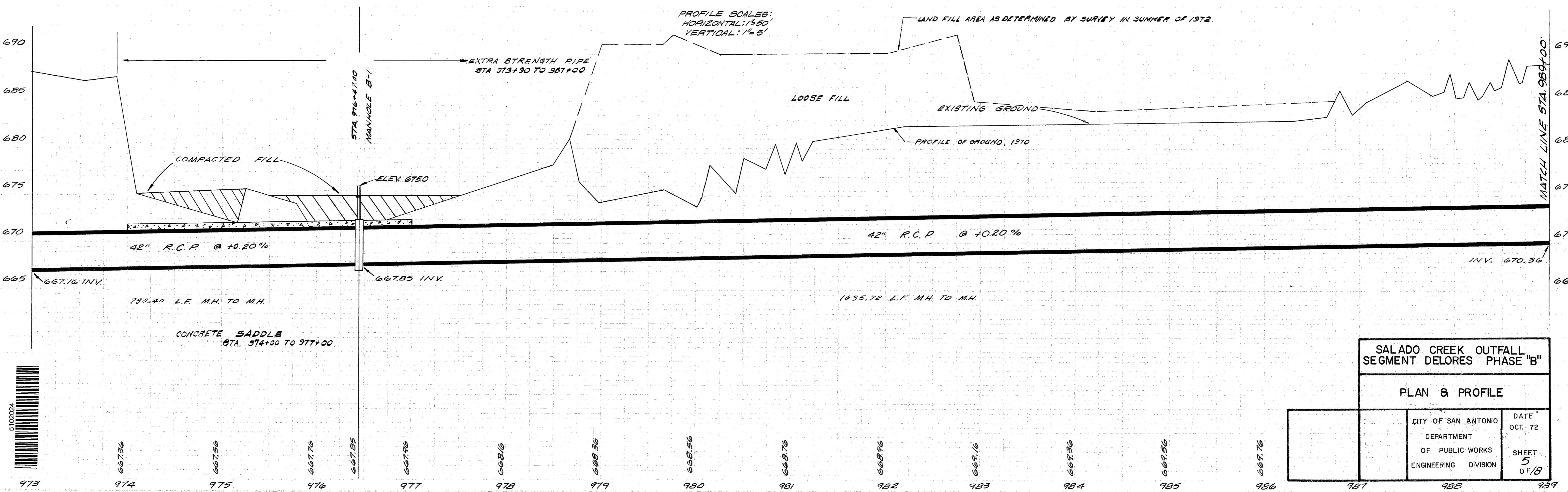
CITY OF SAN ANTONIO DEPARTMENT OF PUBLIC WORKS ENGINEERING DIVISION	DATE OCT. 72 SHEET 7 OF 18
--	--





NOTE: 1) CONTRACTOR MAY FLARE OUT SEWER TRENCH BUT REMAIN WITHIN EASEMENT LINES.
 2) FOR RESULTS OF TEST HOLES SEE SPECIAL REMARKS AFTER ITEM 1-0, PAGES 50-51 OF THE SPECIFICATIONS.

CAUTION: LAND FILL IN PROGRESS OVER EXCAVATED GRAVEL PIT STA. 973+30 TO 991+30 ±.



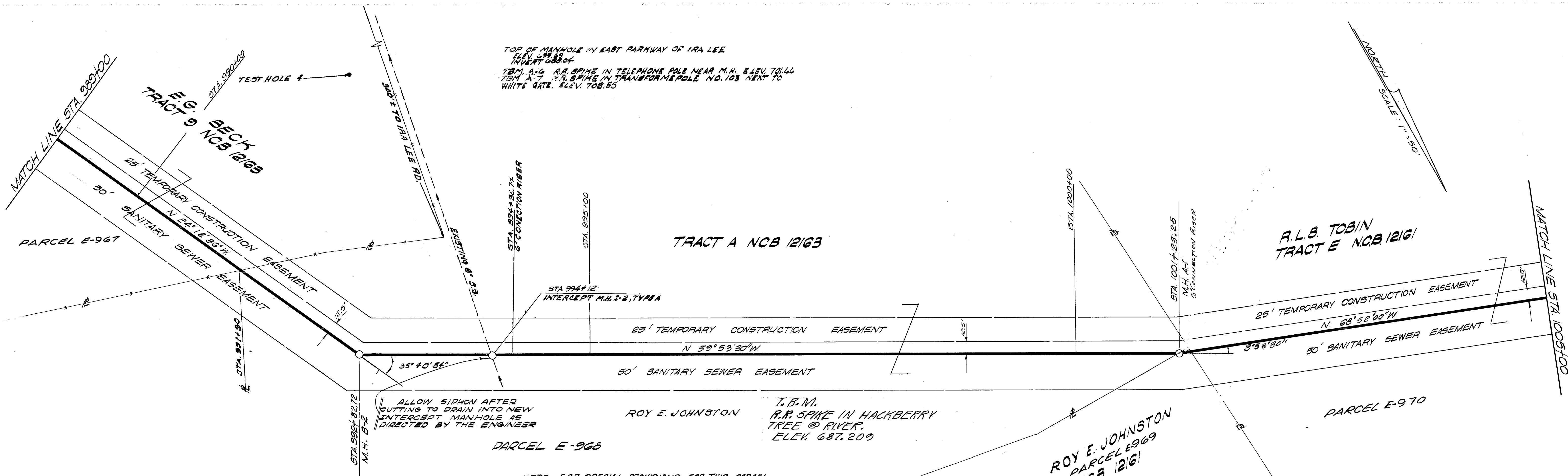
SALADO CREEK OUTFALL
 SEGMENT DELORES PHASE "B"

PLAN & PROFILE

CITY OF SAN ANTONIO	DATE
DEPARTMENT	OCT. 72
OF PUBLIC WORKS	SHEET
ENGINEERING DIVISION	5
	OF 18



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TOP OF MANHOLE IN EAST PARKWAY OF IRA LEE
 ELEV. 688.93
 INVERT 688.04

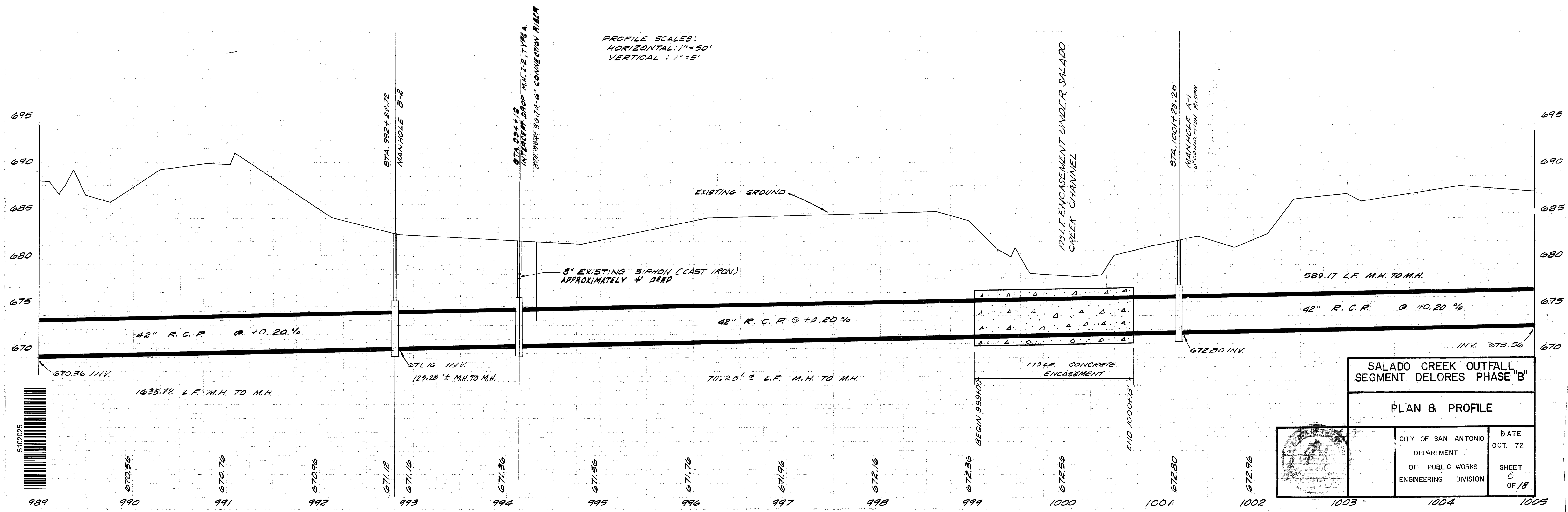
T.B.M. A-6 R.R. SPIKE IN TELEPHONE POLE NEAR M.H. ELEV. 701.46
 T.B.M. A-7 R.R. SPIKE IN TRANSFORMER POLE NO. 103 NEXT TO
 WHITE GATE. ELEV. 708.55

ALLOW SIPHON AFTER CUTTING TO DRAIN INTO NEW INTERCEPT MANHOLE AS DIRECTED BY THE ENGINEER

ROY E. JOHNSTON T.B.M. R.R. SPIKE IN HACKBERRY TREE @ RIVER. ELEV. 687.20

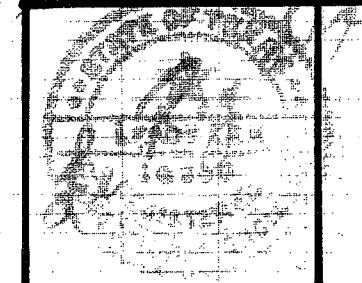
NOTE: FOR SPECIAL PROVISIONS FOR THIS PARCEL SEE SPECIFICATIONS PAGE 32.

PROFILE SCALES:
 HORIZONTAL: 1" = 50'
 VERTICAL: 1" = 5'



SALADO CREEK OUTFALL
 SEGMENT DELORES PHASE "B"

PLAN & PROFILE

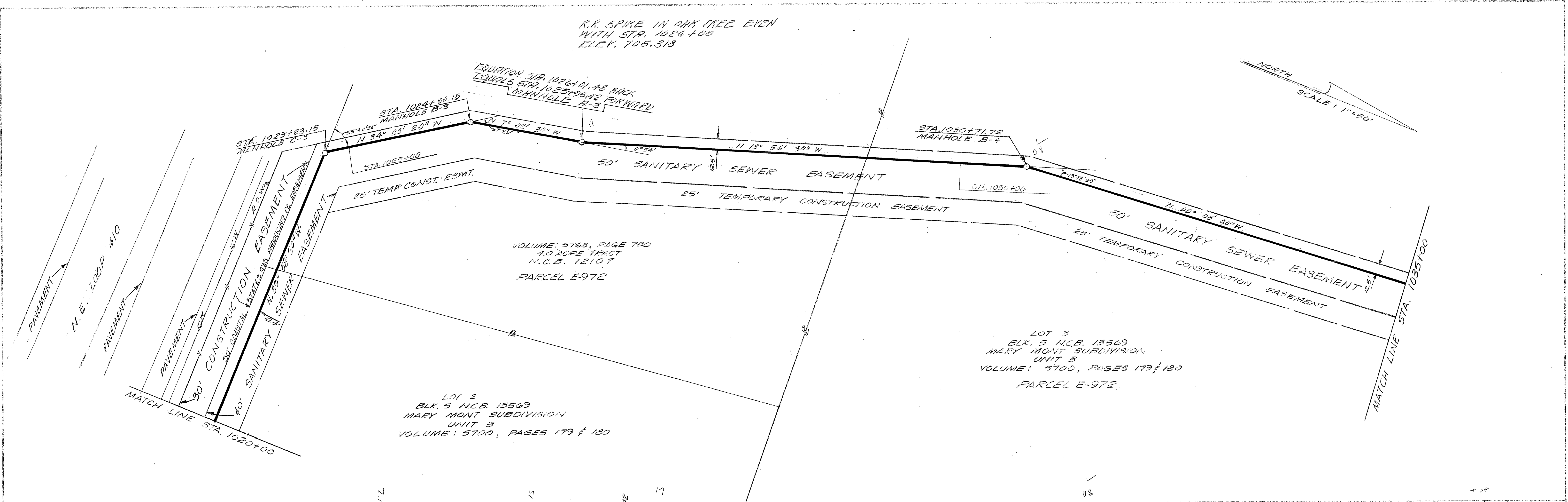
	CITY OF SAN ANTONIO	DATE
	DEPARTMENT	OCT. 72
	OF PUBLIC WORKS	SHEET
ENGINEERING DIVISION	6	OF 18



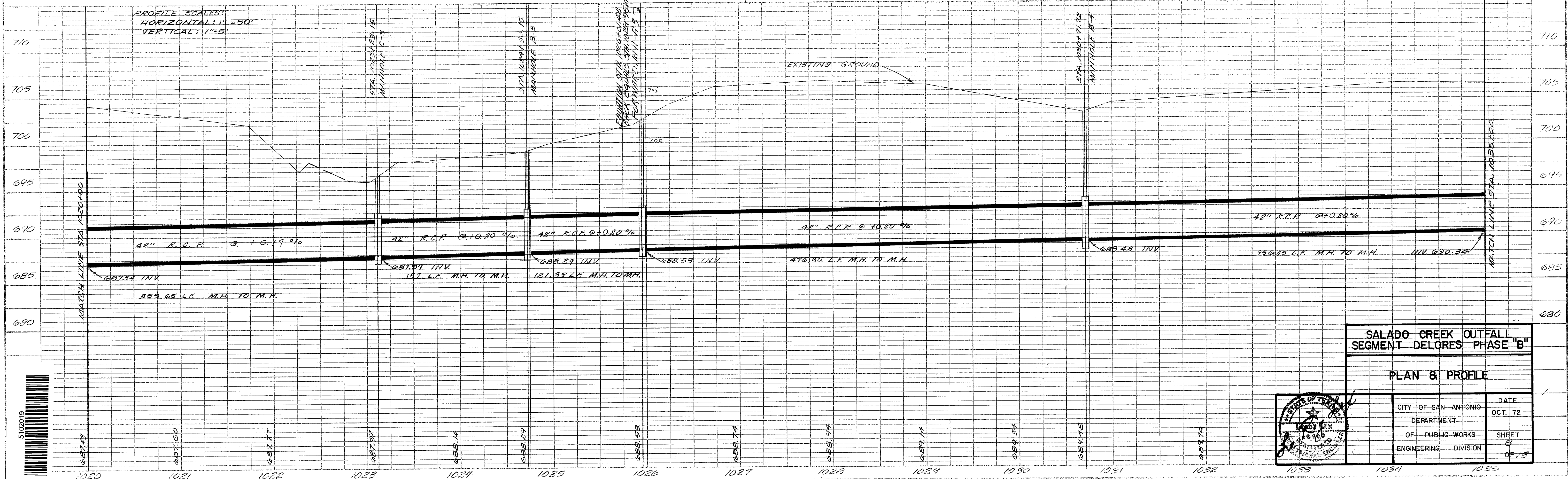
989 990 991 992 993 994 995 996 997 998 999 1000 1001 1002 1003 1004 1005

Siphon 45761

PLAN	DATE
APPROVED	
DESIGNED	
CHECKED	
BY	
DATE	

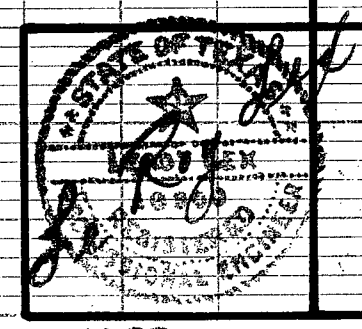


PROFILE	DATE
APPROVED	
DESIGNED	
CHECKED	
BY	
DATE	



SALADO CREEK OUTFALL
SEGMENT DELORES PHASE "B"

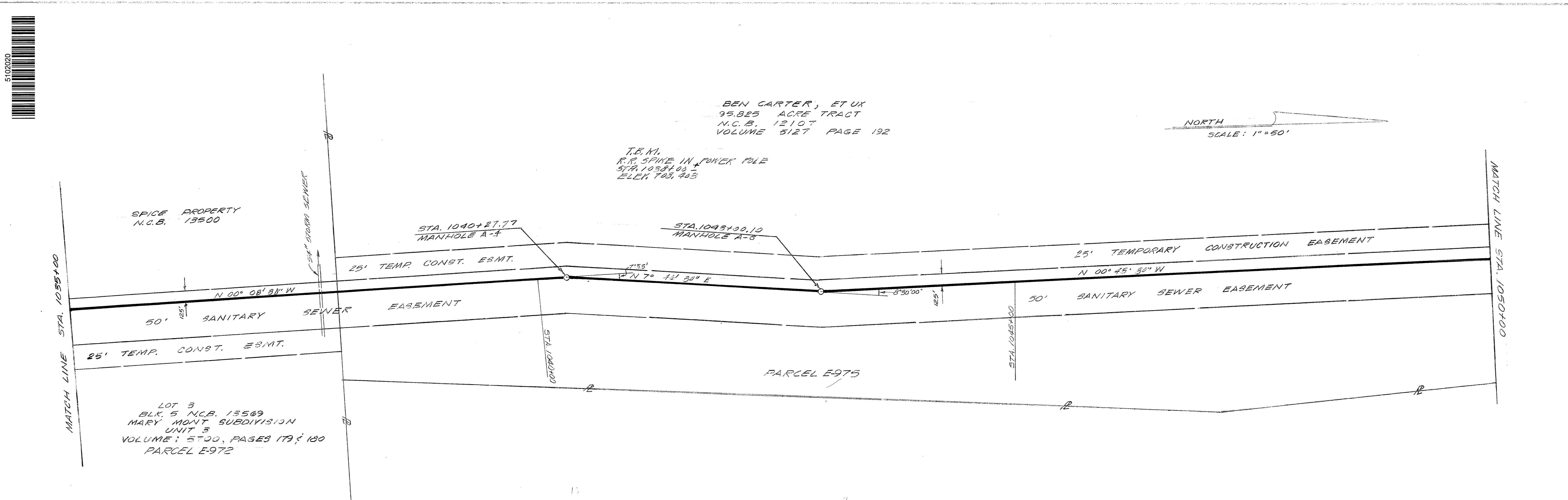
PLAN & PROFILE



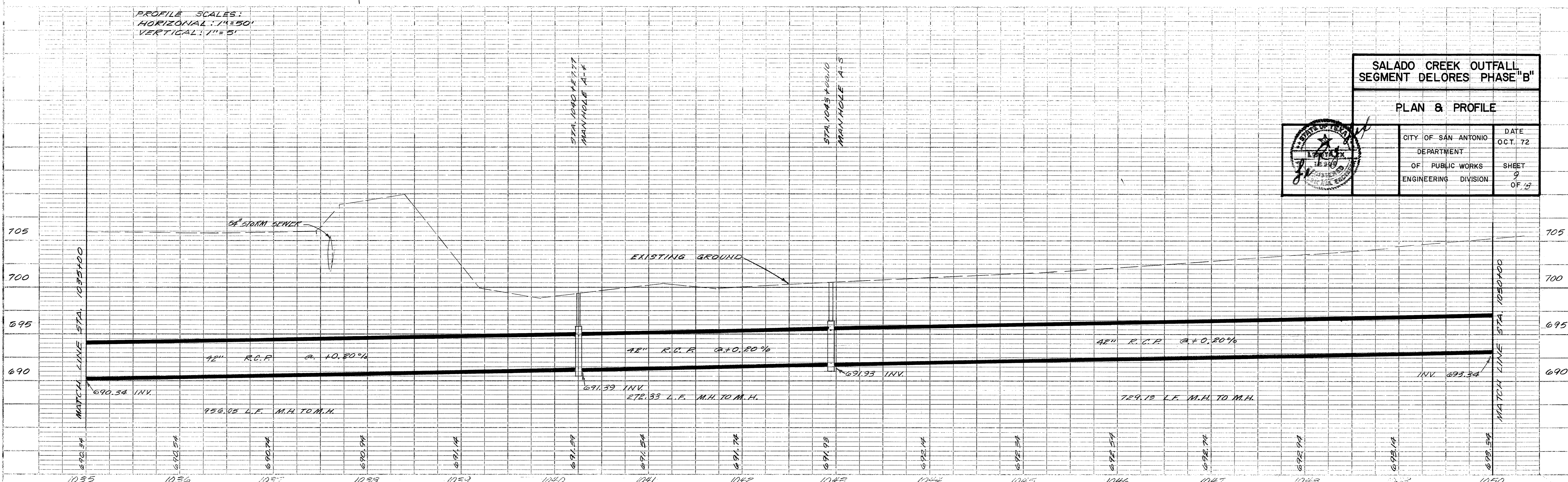
CITY OF SAN ANTONIO	DATE
DEPARTMENT	OCT. 72
OF PUBLIC WORKS	SHEET
ENGINEERING DIVISION	OF 73



Siphon 45761

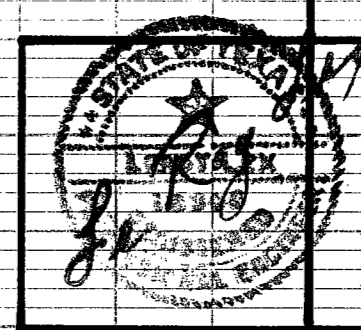


PROFILE SCALES:
HORIZONTAL: 1"=50'
VERTICAL: 1"=5'



SALADO CREEK OUTFALL
SEGMENT DELORES PHASE "B"

PLAN & PROFILE

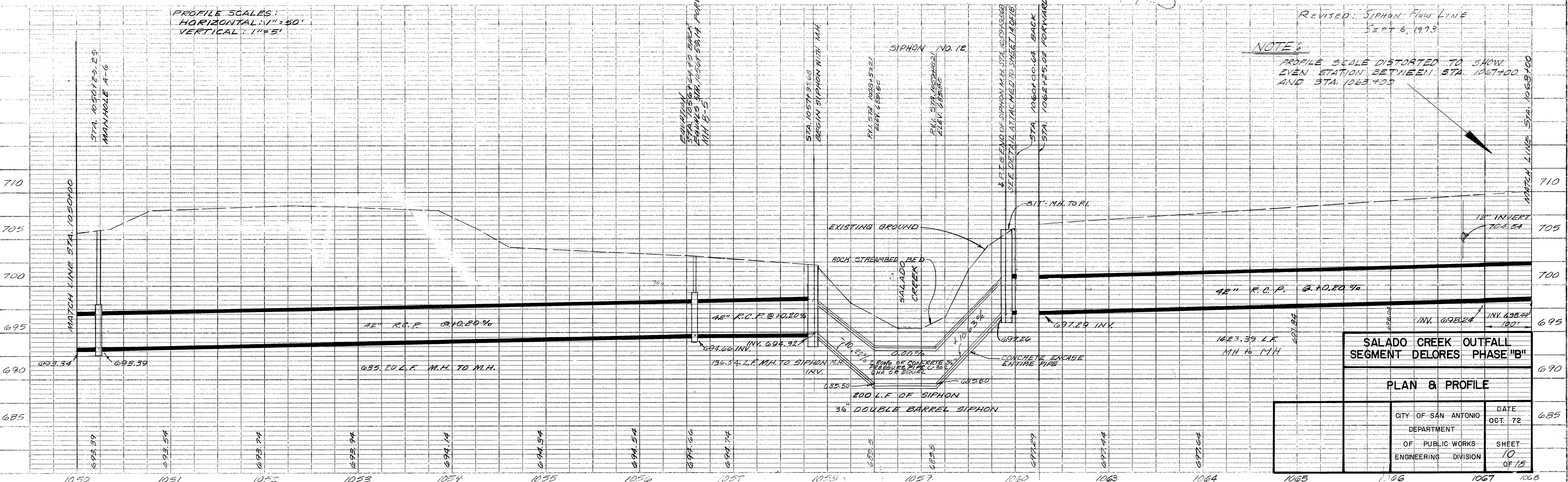
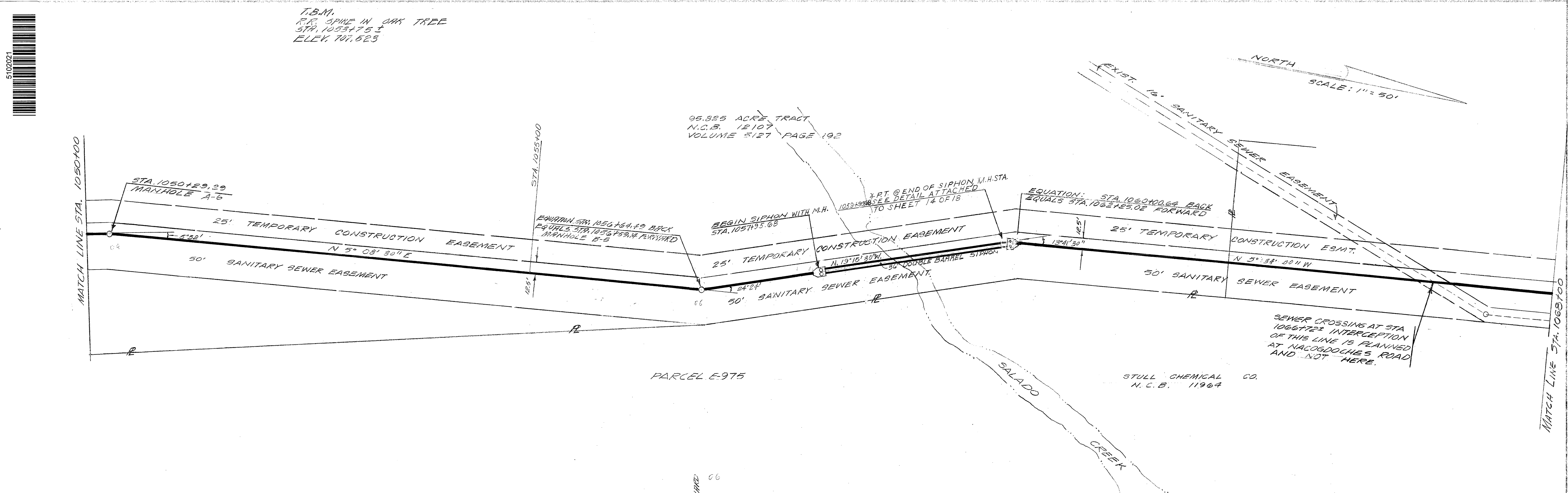


CITY OF SAN ANTONIO	DATE OCT. 72
DEPARTMENT OF PUBLIC WORKS	SHEET 9 OF 13
ENGINEERING DIVISION	

DATE	BY

DATE	BY

Siphon 45761

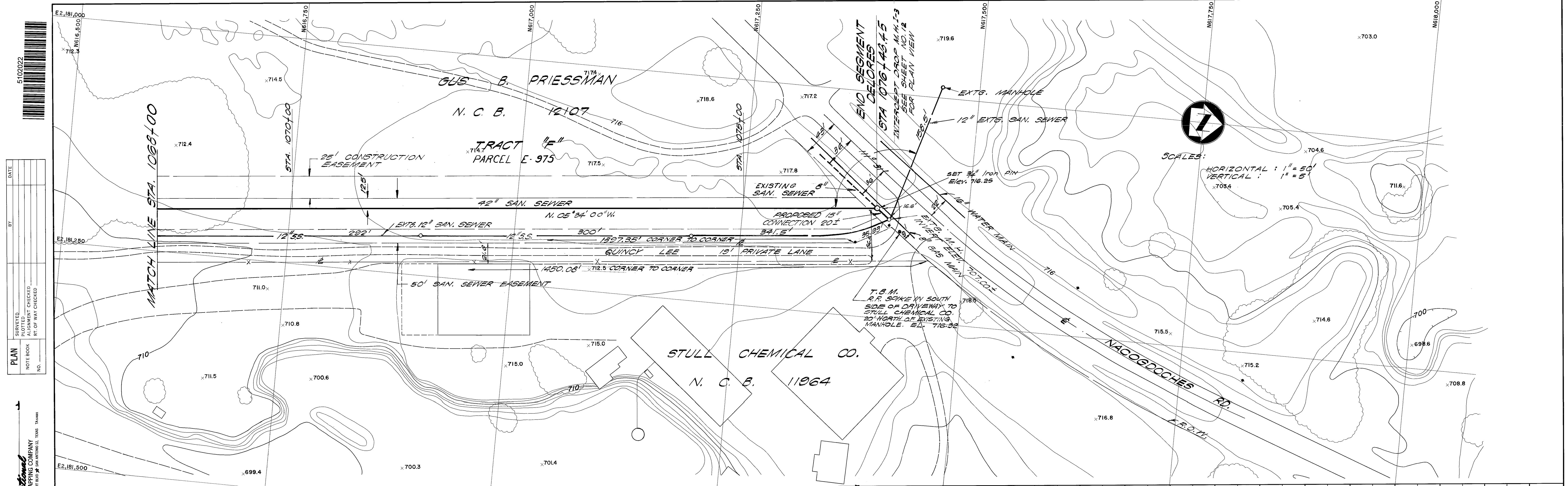


SALADO CREEK OUTFALL SEGMENT DELORES PHASE "B"	
PLAN & PROFILE	
CITY OF SAN ANTONIO DEPARTMENT OF PUBLIC WORKS ENGINEERING DIVISION	DATE OCT. 72 SHEET 10 OF 15

5102921
 DATE: _____
 BY: _____
 CHECKED: _____
 IN CHARGE: _____
 NOTE BOOK: _____
 NO. _____
 REVISIONS: _____

PROFILE
 DATE: _____
 BY: _____
 CHECKED: _____
 IN CHARGE: _____
 NOTE BOOK: _____
 NO. _____
 REVISIONS: _____

Siphon 45761



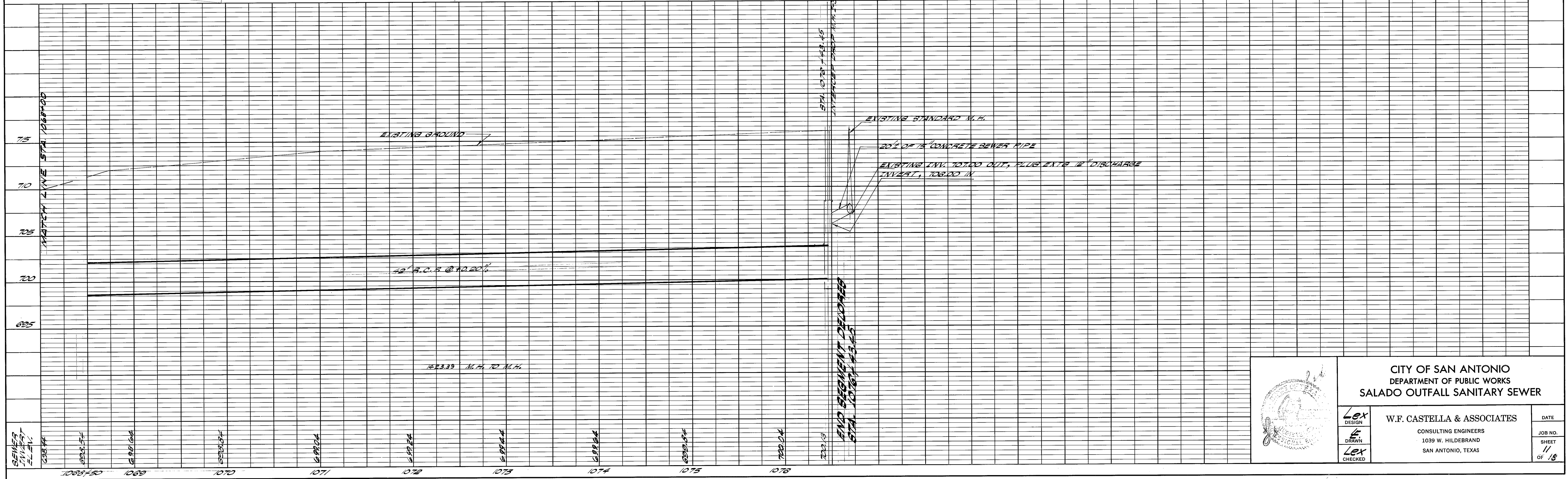
PLAN

DATE	BY
SURVEYED	PLOTTED
NOTE BOOK	RT. OF WAY CHECKED
NO.	



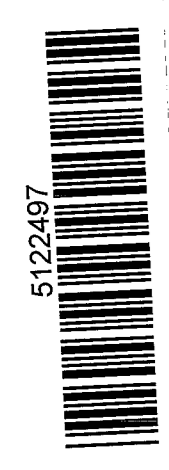
PROFILE

DATE	BY
SURVEYED	PLOTTED
NOTE BOOK	GRADES CHECKED
NO.	STRUCTURE NOTATIONS CHECK



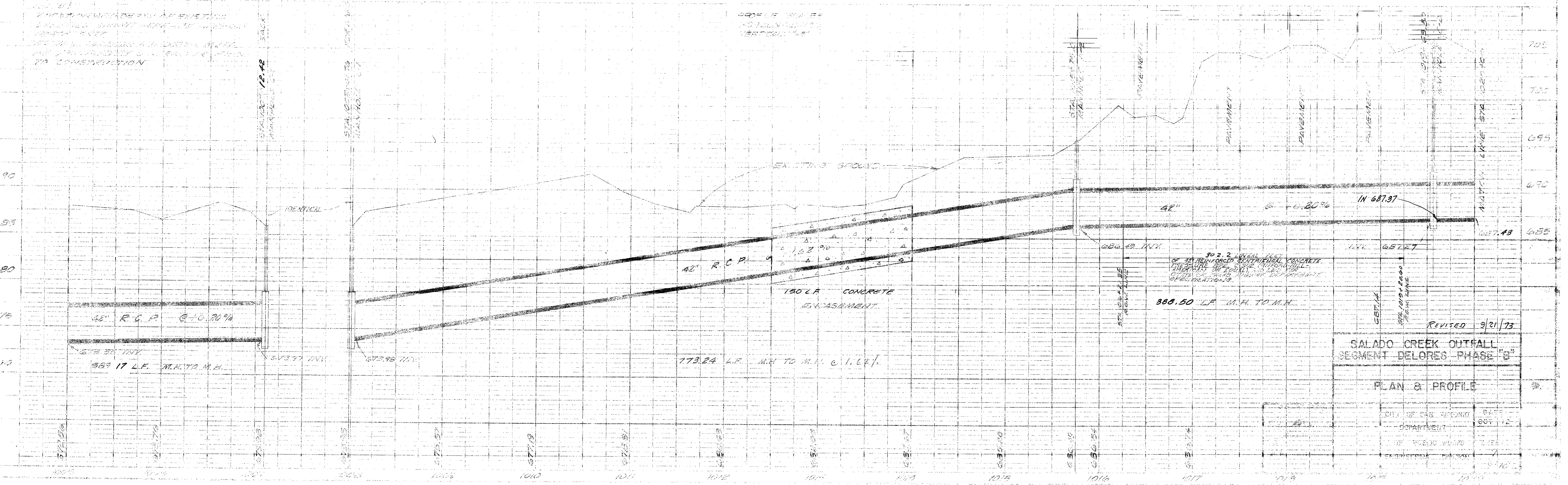
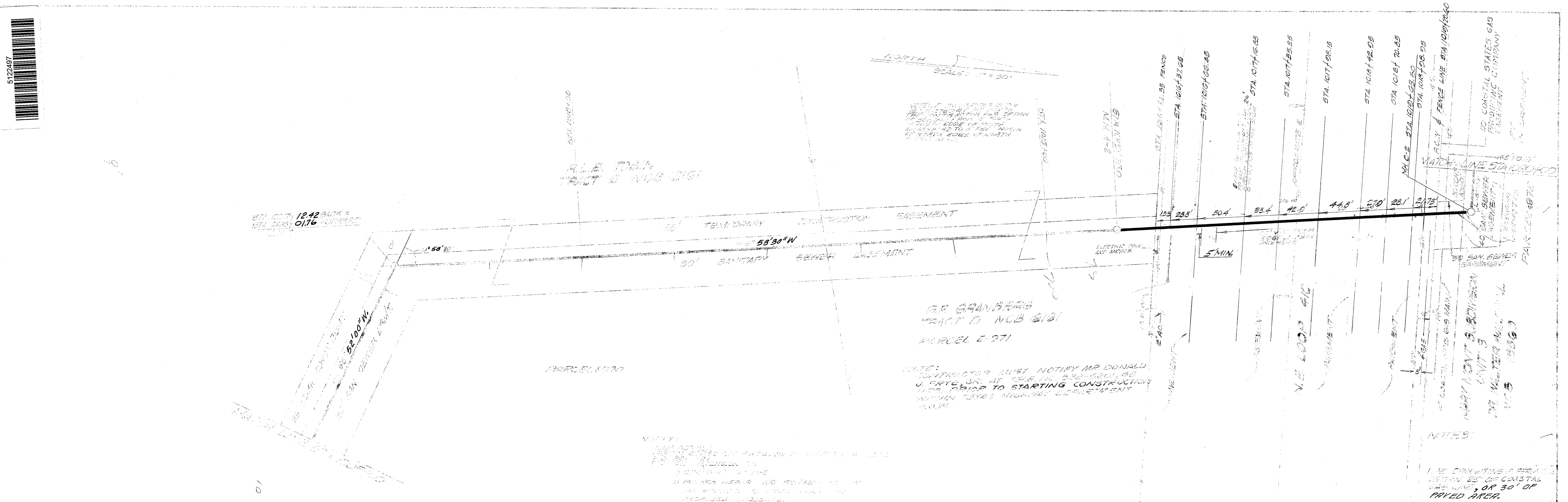
	CITY OF SAN ANTONIO DEPARTMENT OF PUBLIC WORKS SALADO OUTFALL SANITARY SEWER	
	Lex DESIGN Lex DRAWN Lex CHECKED	W.F. CASTELLA & ASSOCIATES CONSULTING ENGINEERS 1039 W. HILDEBRAND SAN ANTONIO, TEXAS

Siphon 45761



6

01



REVISED 9/21/73
 SALADO CREEK OUTFALL
 SEGMENT DELORES PHASE "B"
 PLAN & PROFILE

CITY OF SAN ANTONIO	DATE
DEPARTMENT	66712
BY	66712
ENGINEER	66712

1. NO EXISTING PAVEMENT WITHIN 50' OF CORSTAL GAS LINE, OR 30' OF PAVED AREA.

NOTE: CONTRACTOR MUST NOTIFY MR DONALD J. CRYE, JR. AT 1245 W. 24TH ST. DALLAS, TEXAS 75219 PRIOR TO STARTING CONSTRUCTION WITHIN TEMPORARY EASEMENT ZONE.

NOTE: CONTRACTOR MUST NOTIFY MR DONALD J. CRYE, JR. AT 1245 W. 24TH ST. DALLAS, TEXAS 75219 PRIOR TO STARTING CONSTRUCTION WITHIN TEMPORARY EASEMENT ZONE.

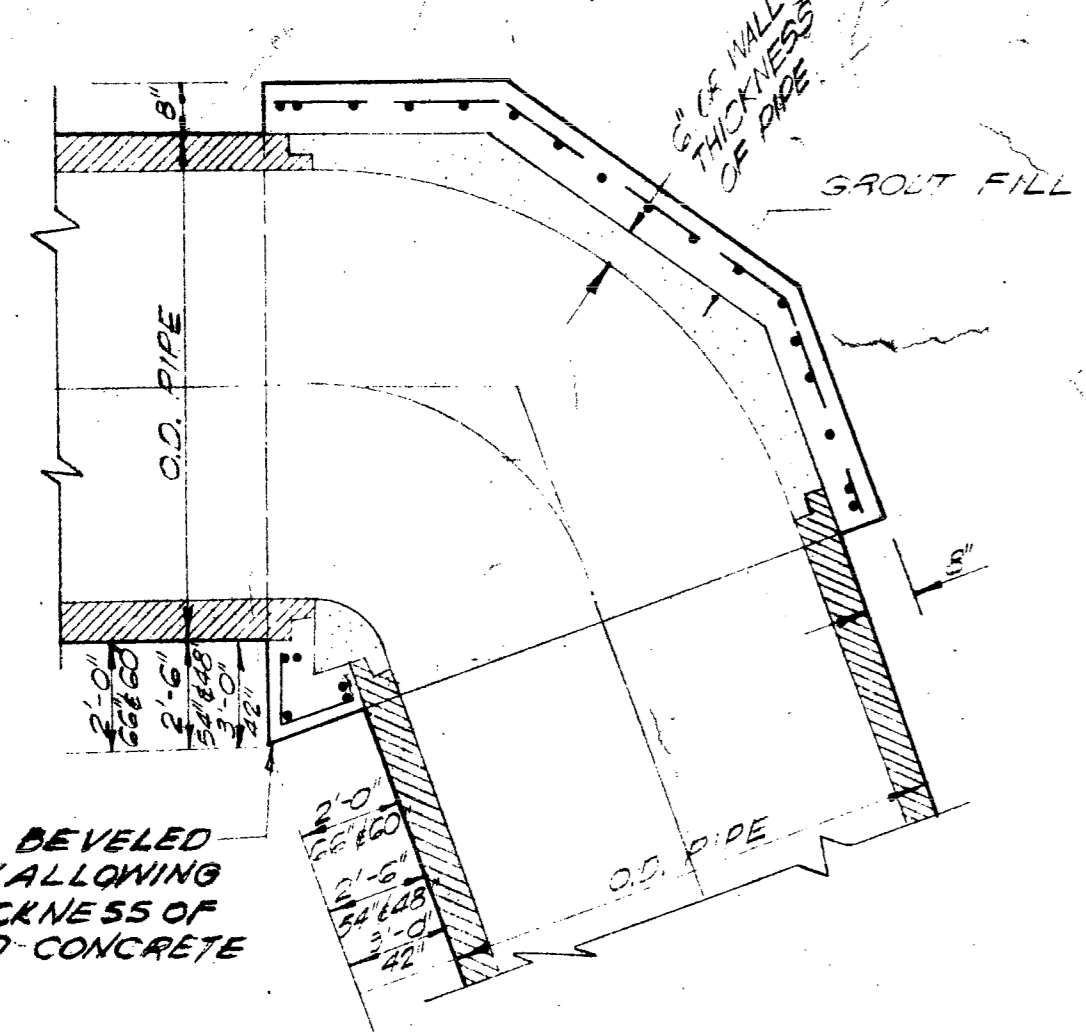
90 CORSTAL STATES GAS PIPING COMPANY
 90 SAN SEBASTIAN AVENUE
 HOUSTON, TEXAS 77002
 1986

MARY ANN'S SUBDIVISION
 UNIT 3
 377 WALTER MALL
 DALLAS, TEXAS 75219
 1986

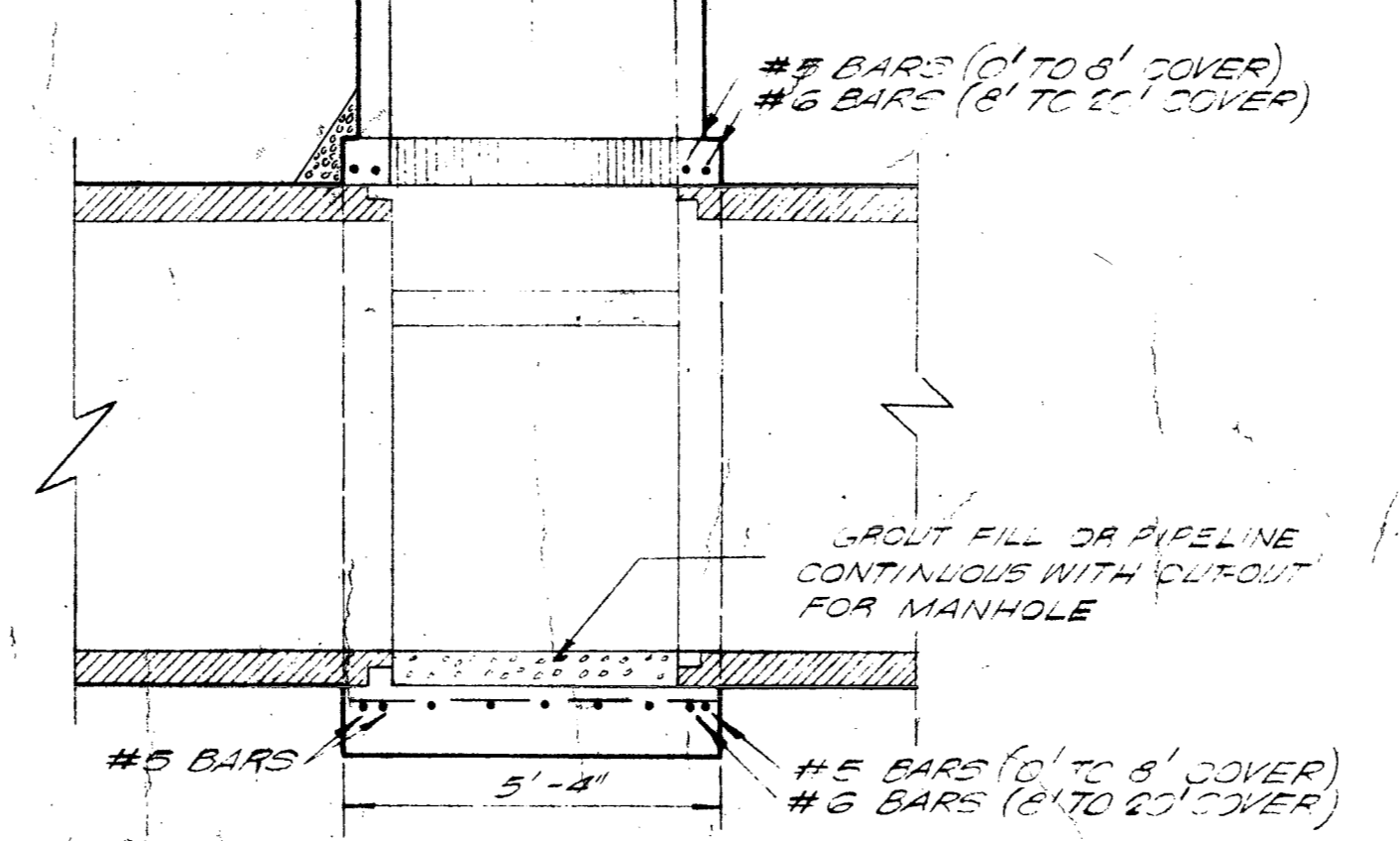
5122182

CORNER MAY BE DEVELOPED FOR 48" THRU 54" ALLOWING A MINIMUM THICKNESS OF 12" OF REINFORCED CONCRETE

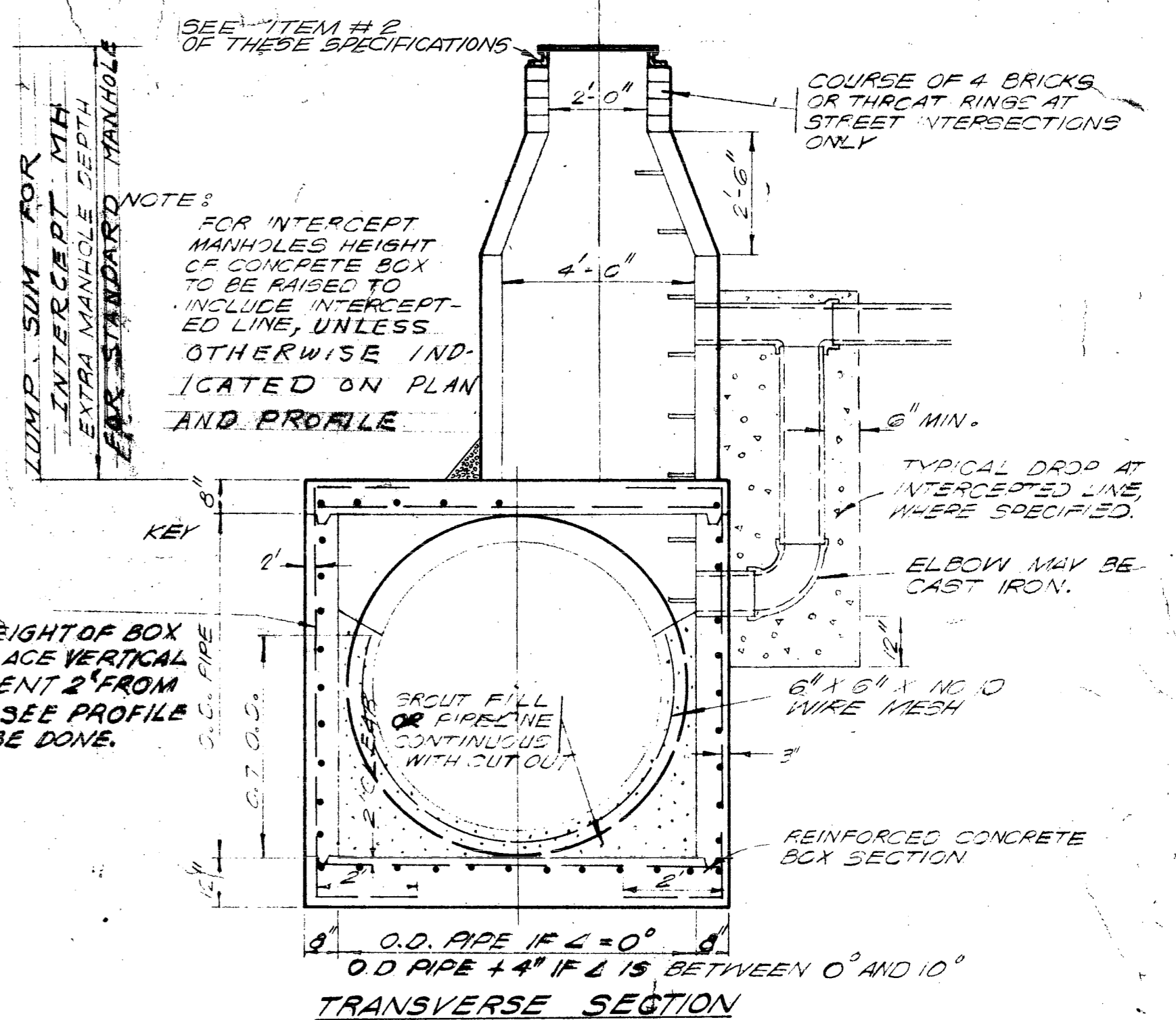
LONGITUDINAL HORIZONTAL SECTION @ HORIZONTAL DIAMETER OF PIPE



MANHOLE STEPS AS SHOWN IN TRANSVERSE SECTION



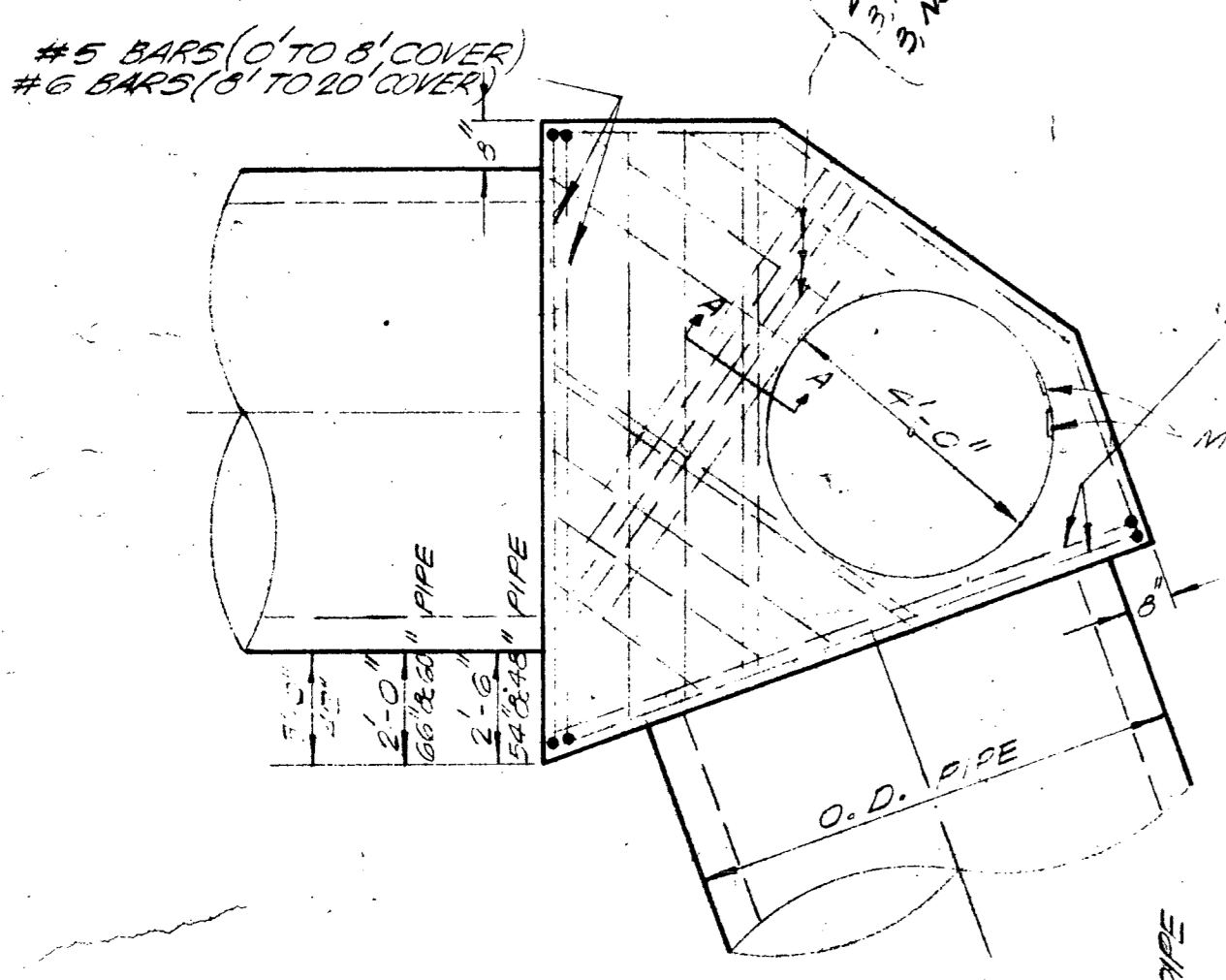
LONGITUDINAL VERTICAL SECTION



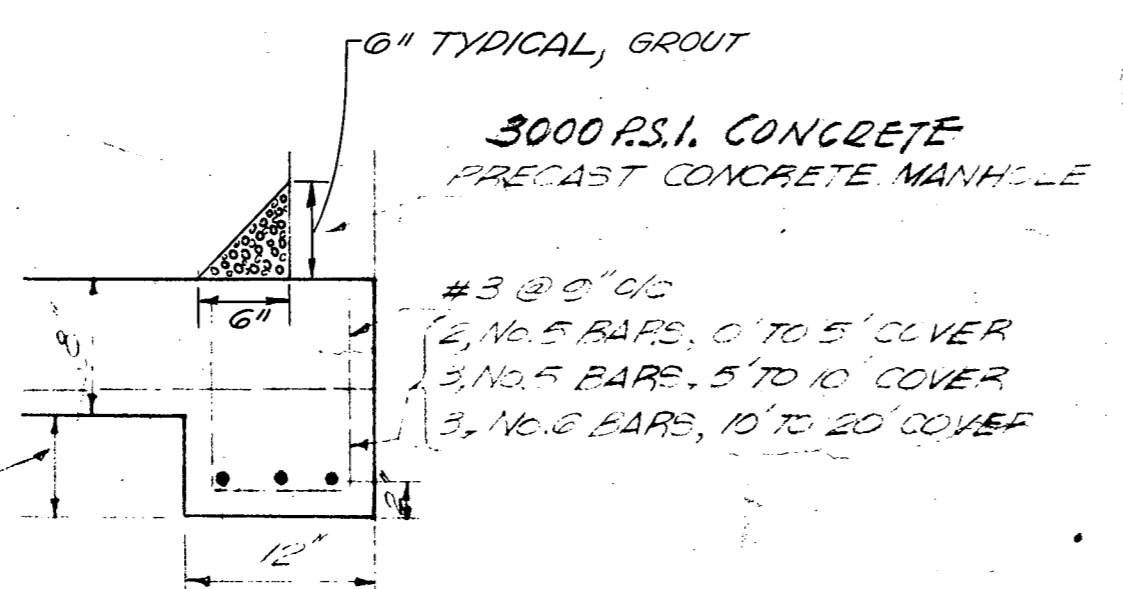
NOTE: FOR INTERCEPT MANHOLES HEIGHT OF CONCRETE BOX TO BE RAISED TO INCLUDE INTERCEPTED LINE, UNLESS OTHERWISE INDICATED ON PLAN AND PROFILE

NOTE: IF HEIGHT OF BOX IS RAISED, PLACE VERTICAL REINFORCEMENT 2" FROM INSIDE FACE. SEE PROFILE IF THIS IS TO BE DONE.

STA. 969+15.89, MH I-1
STA. 994+12.00, MH I-2
STA. 1076+45.89, MH I-3

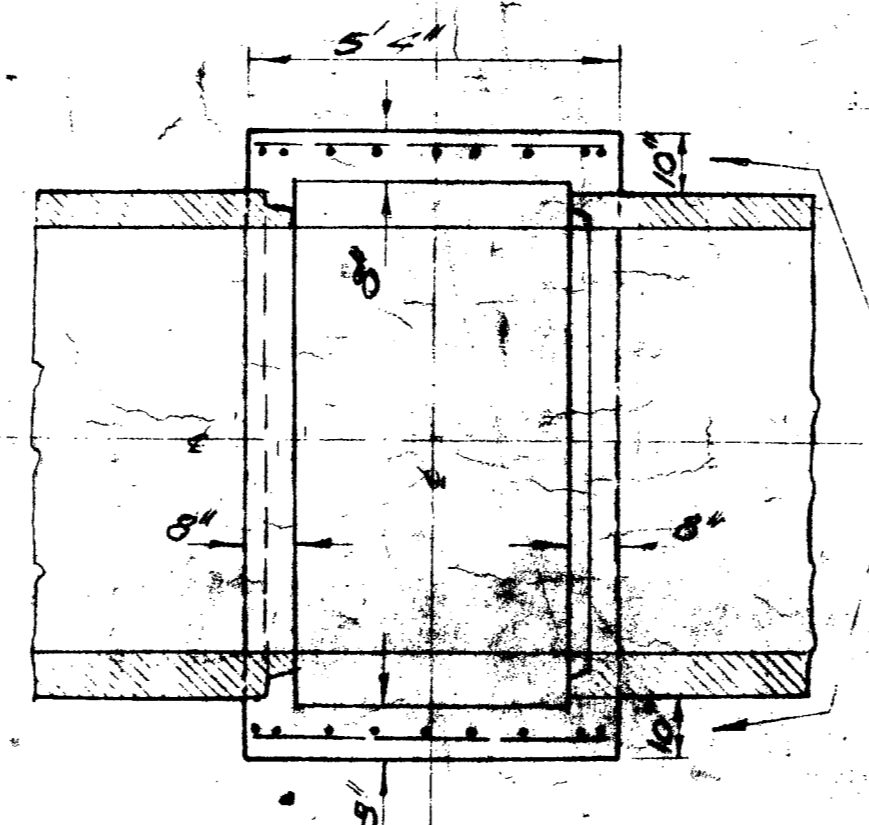


PLAN - TOP



SECTION 4-A

NOTE: SEE FOLLOWING SHEET FOR SCHEDULE OF REINFORCEMENT

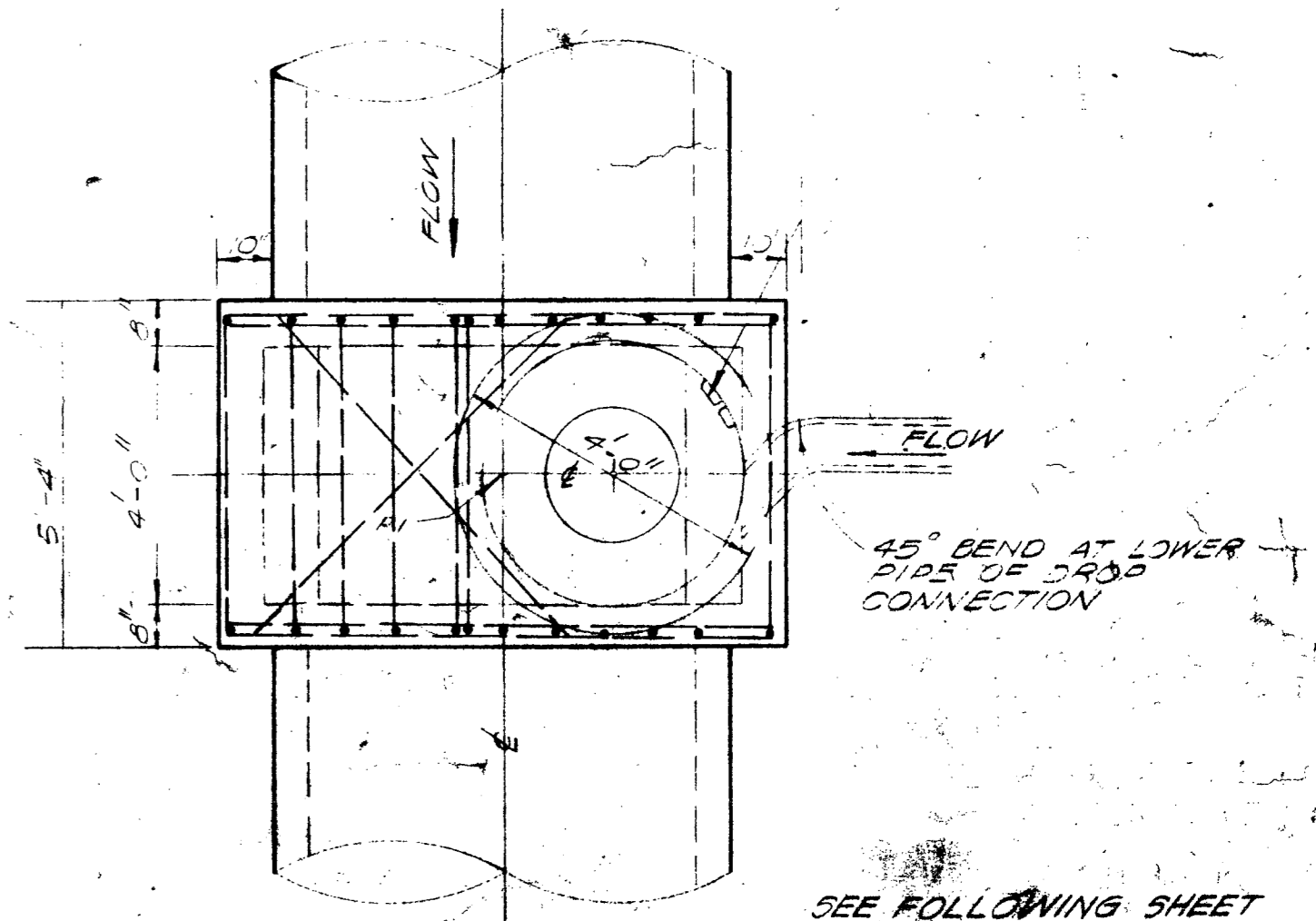


LONGITUDINAL HORIZONTAL SECTION @ HORIZONTAL DIAMETER OF PIPE

TYPE "A" MANHOLE FOR DEFLECTIONS OF 0" TO 10"

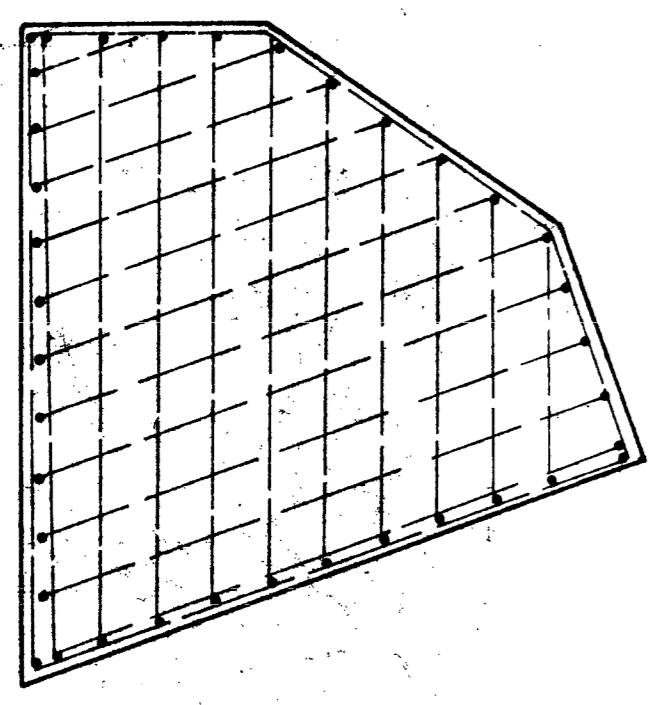
MANHOLE STEPS USE ITEM 404.2 (6) STANDARD SPECIFICATIONS OF CITY OF SAN ANTONIO

THIS DIMENSION MAY BE 8" WHEN ANGLE OF DEFLECTION IS 15°



PLAN - TOP

SEE FOLLOWING SHEET FOR SCHEDULE OF REINFORCEMENT



PLAN - FLOOR

TYPE "C" MANHOLE FOR DEFLECTIONS OF 50" TO 90"

NOTE: TRANSVERSE SECTION AND LONGITUDINAL VERTICAL SECTION SIMILAR TO TYPE B MANHOLE

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6. Manhole Steps: Manhole steps are to be provided in all manholes exceeding ten (10) feet in depth measured from invert to top of rim and in any other locations designated on the plans. Unless otherwise shown on the plans steps are to be spaced fifteen inches apart vertically with alternate steps offset twelve inches horizontally. Steps shall be corrosion proof steps equal to LOW Perma-step 100-1 as manufactured by Utility Products Incorporated, San Antonio, Texas. Steps shall be installed as directed in preformed or drilled holes and after installation they shall be completely filled with non-shrink grout equal to Emoco grout, mixed and applied in accordance with manufacturer's recommendation. Where manholes exceed 15 feet a yellow Perma-step shall be used. No additional compensation will be paid for installation of manhole steps.

Manhole steps may be cast into manhole concrete rings at the manufacturing plant when the concrete is still green - sealed, mortared and grouted and subject to inspection and approval or rejection at the plant before delivery to the job site. Should damage be done to the manhole steps either in transit or assembly they shall be reinstalled according to directions in the preceding paragraph.

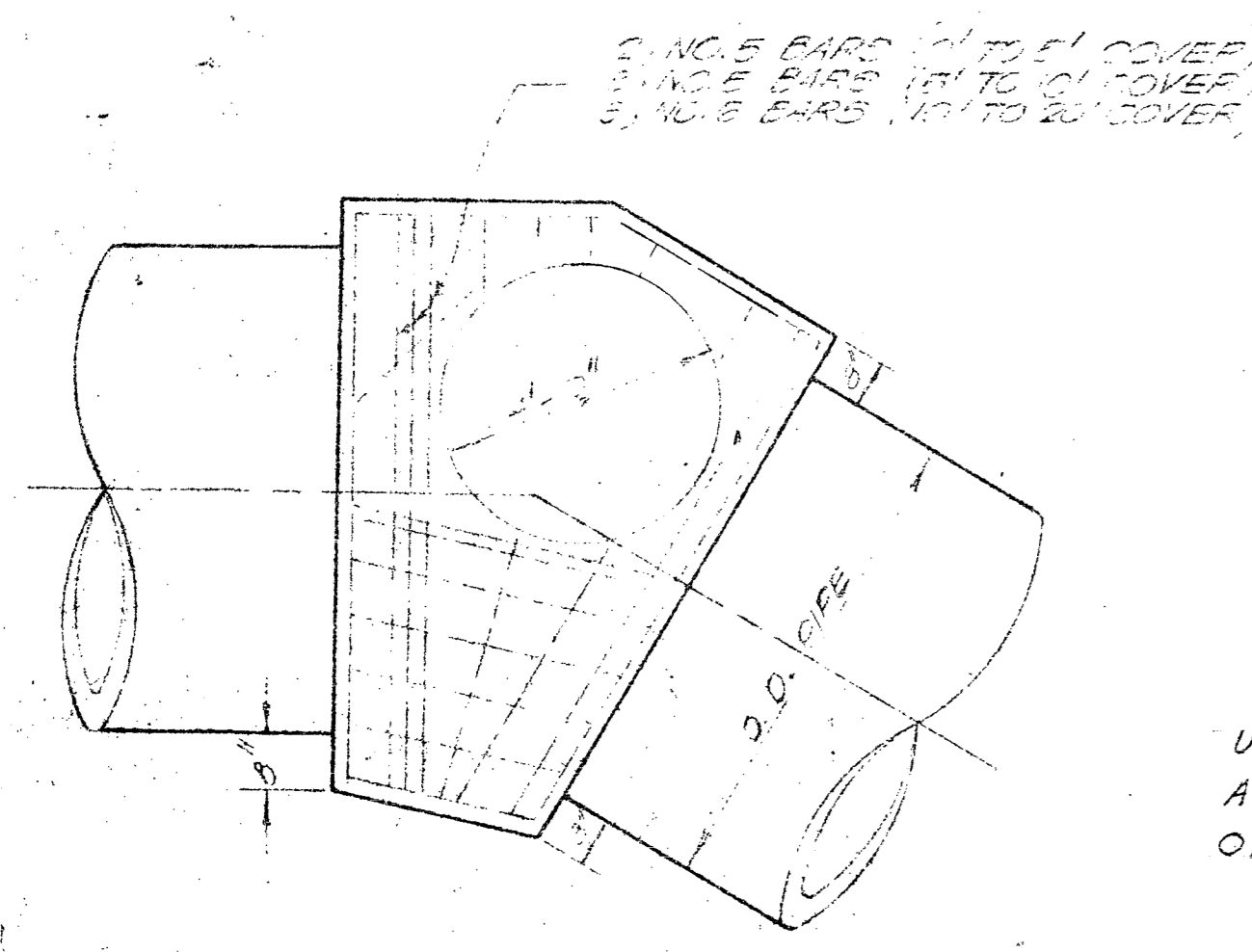
MANHOLE DETAILS

CITY OF SAN ANTONIO
DEPARTMENT OF PUBLIC WORKS
SALADO OUTFALL SANITARY SEWER

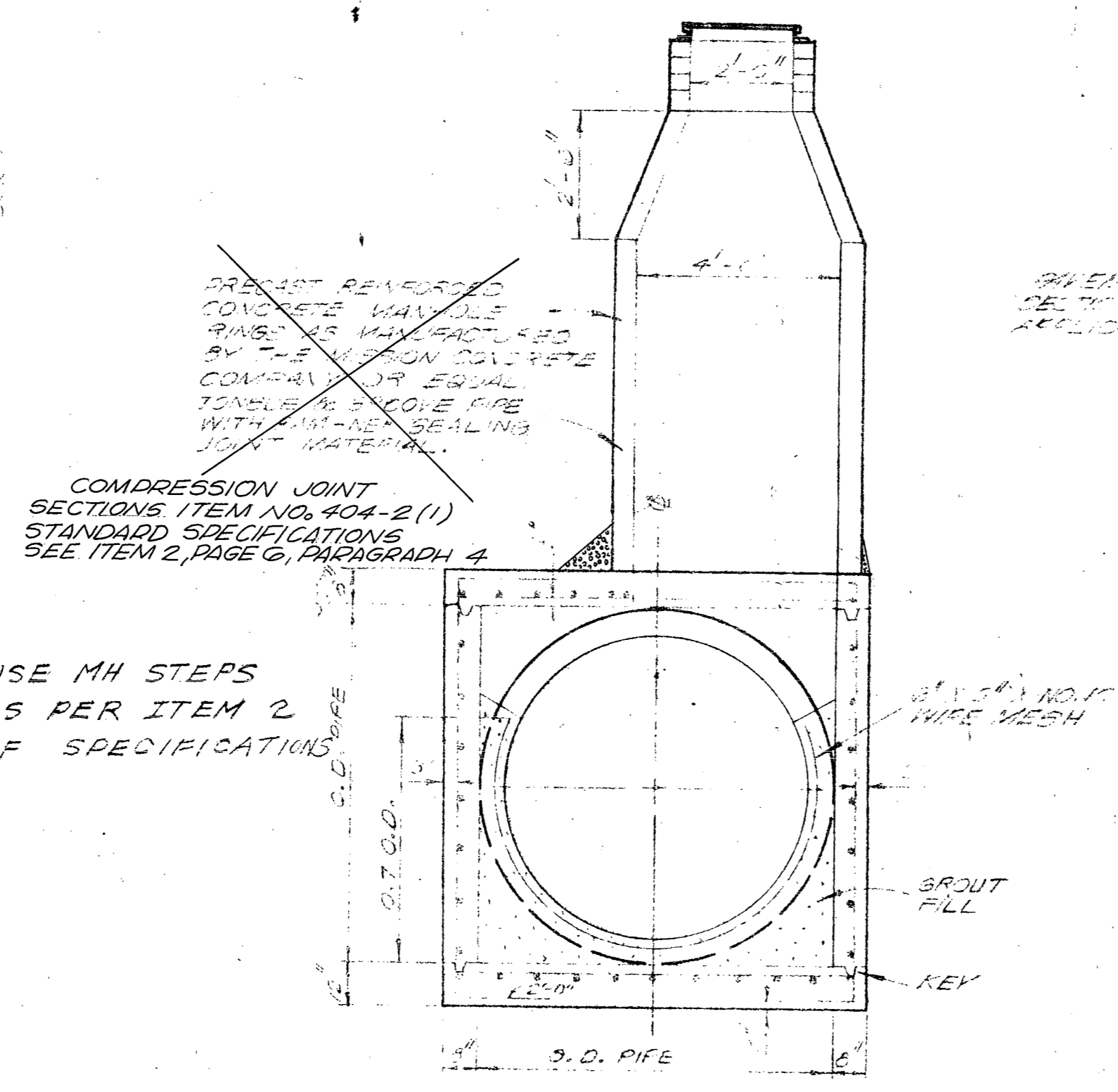
W. E. CASTELLA & ASSOCIATES
CONSULTING ENGINEERS
1039 W. HILDEBRAND
SAN ANTONIO, TEXAS

DESIGN: CAESAR
DRAWN: [Signature]
CHECKED: [Signature]

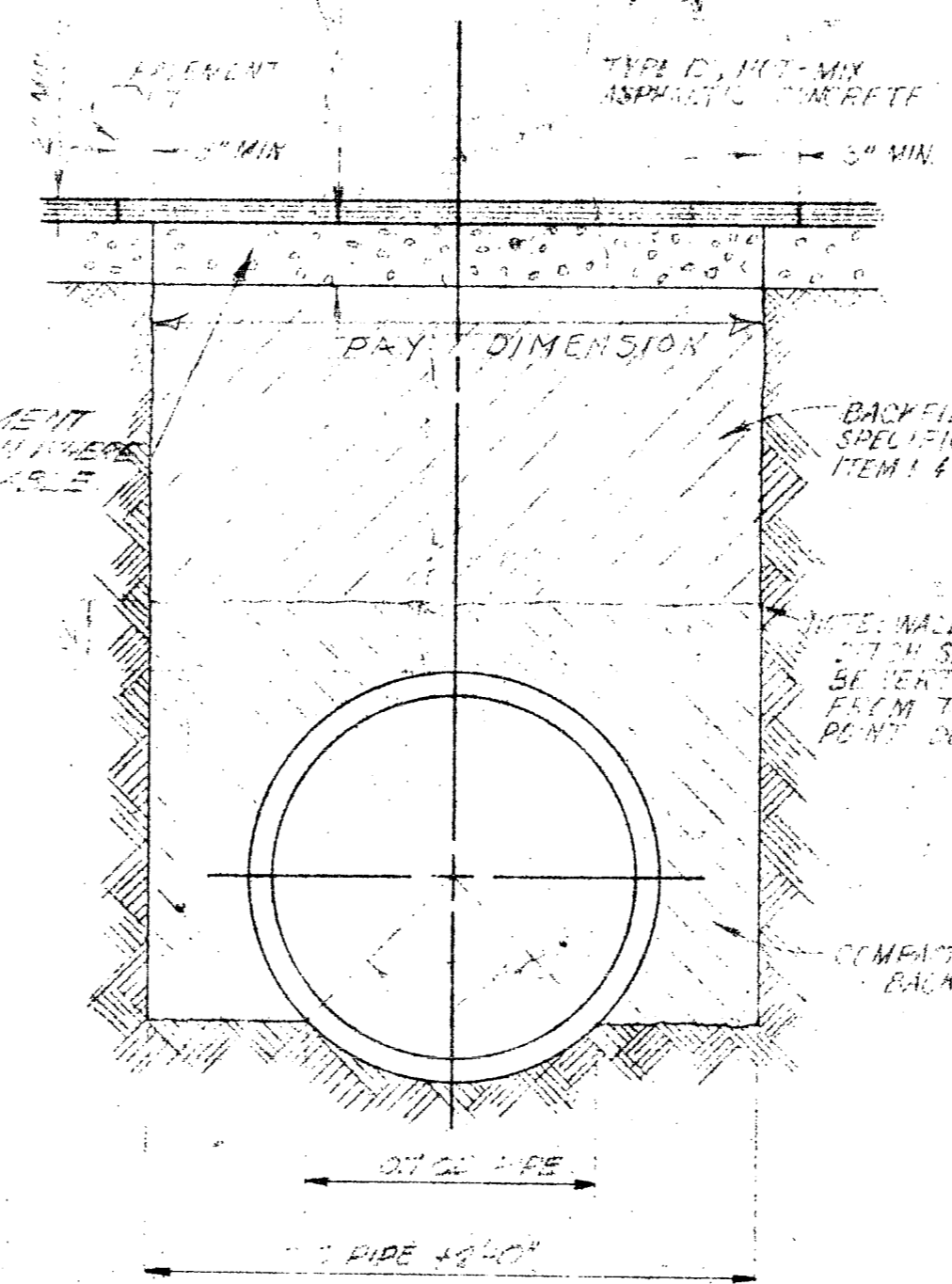
DATE: 11-22-72
JOB NO.: [Blank]
SHEET: 12
72



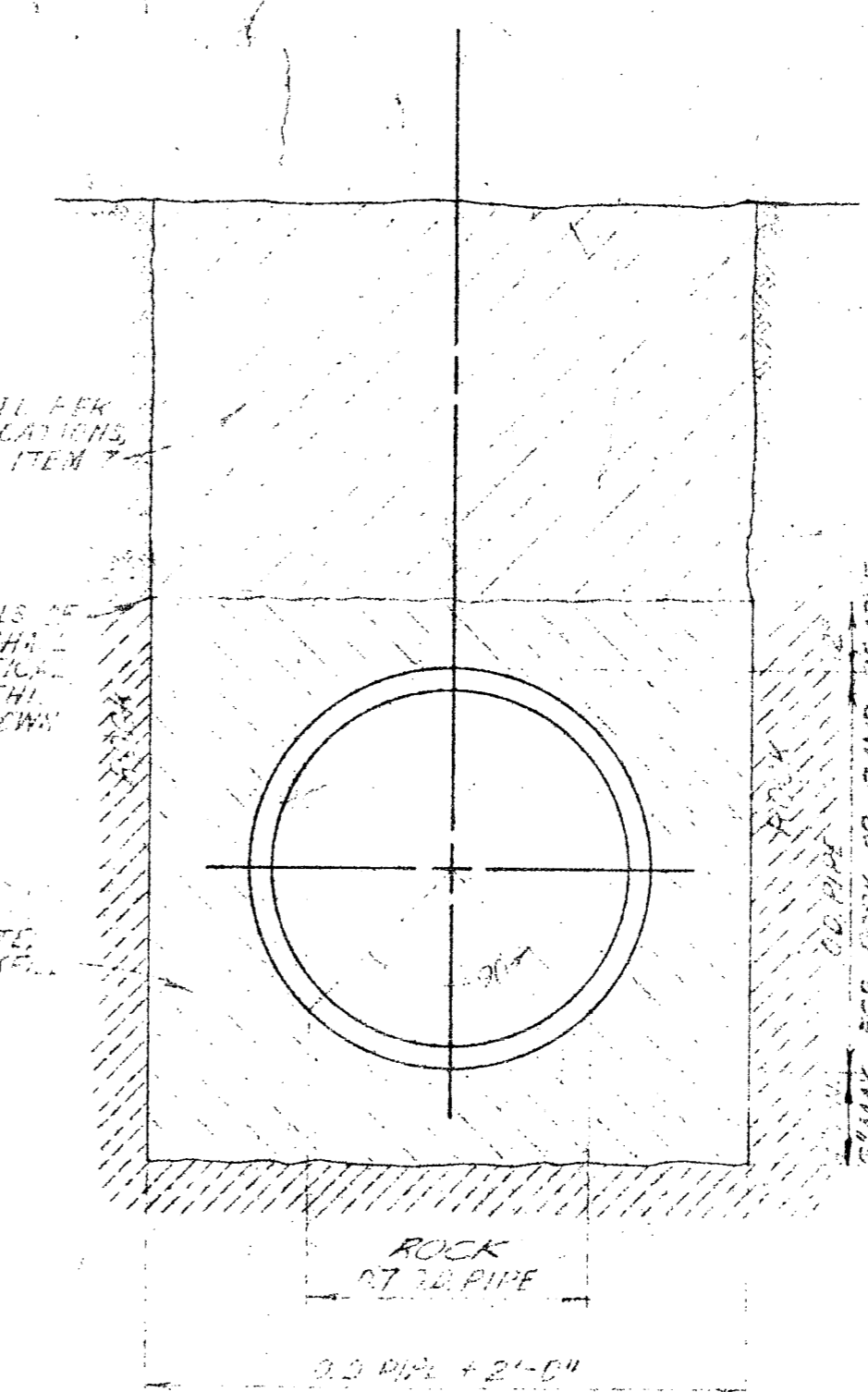
PLAN-TOP



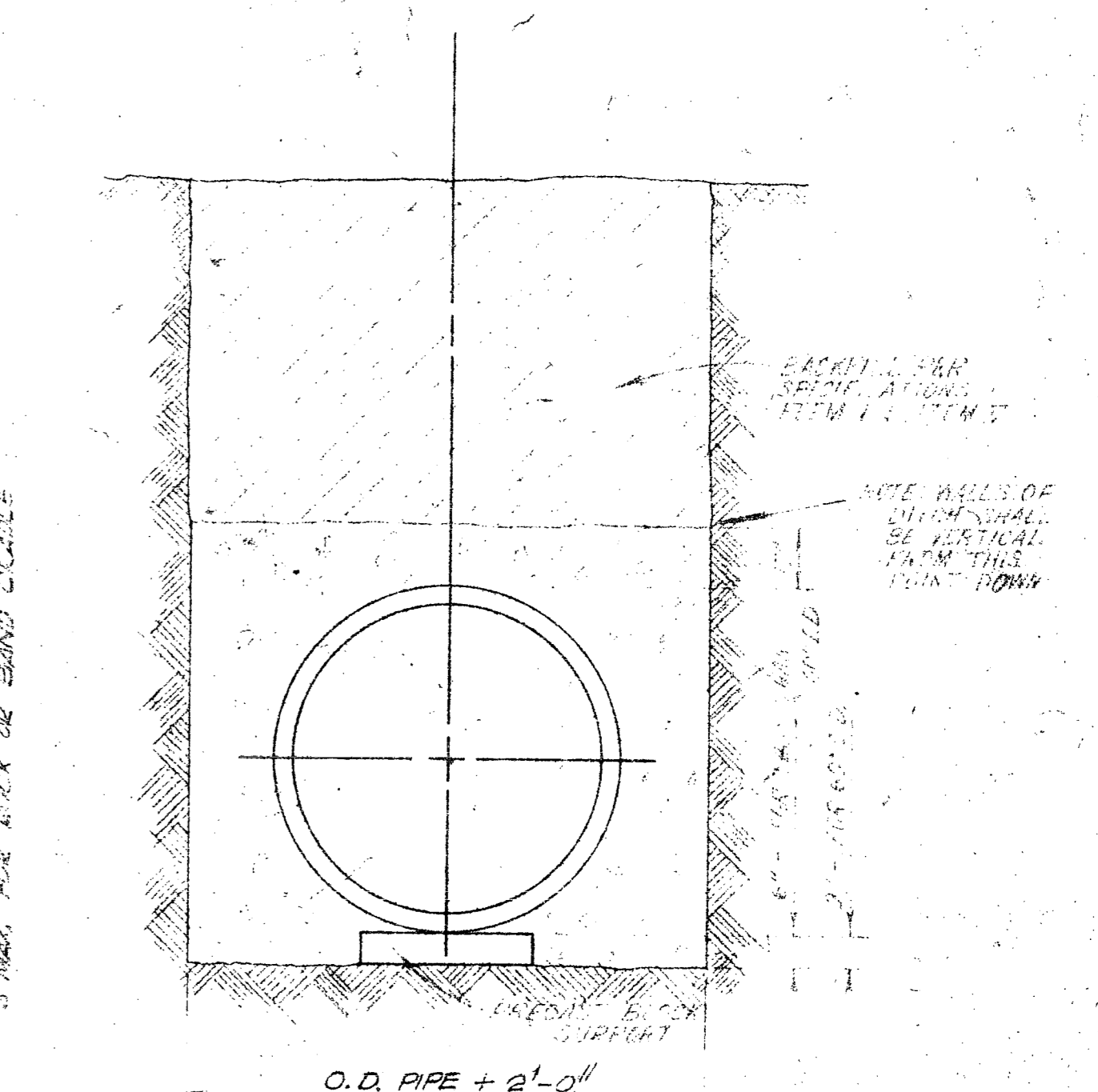
TRANSVERSE SECTION TYPE "B" MANHOLE



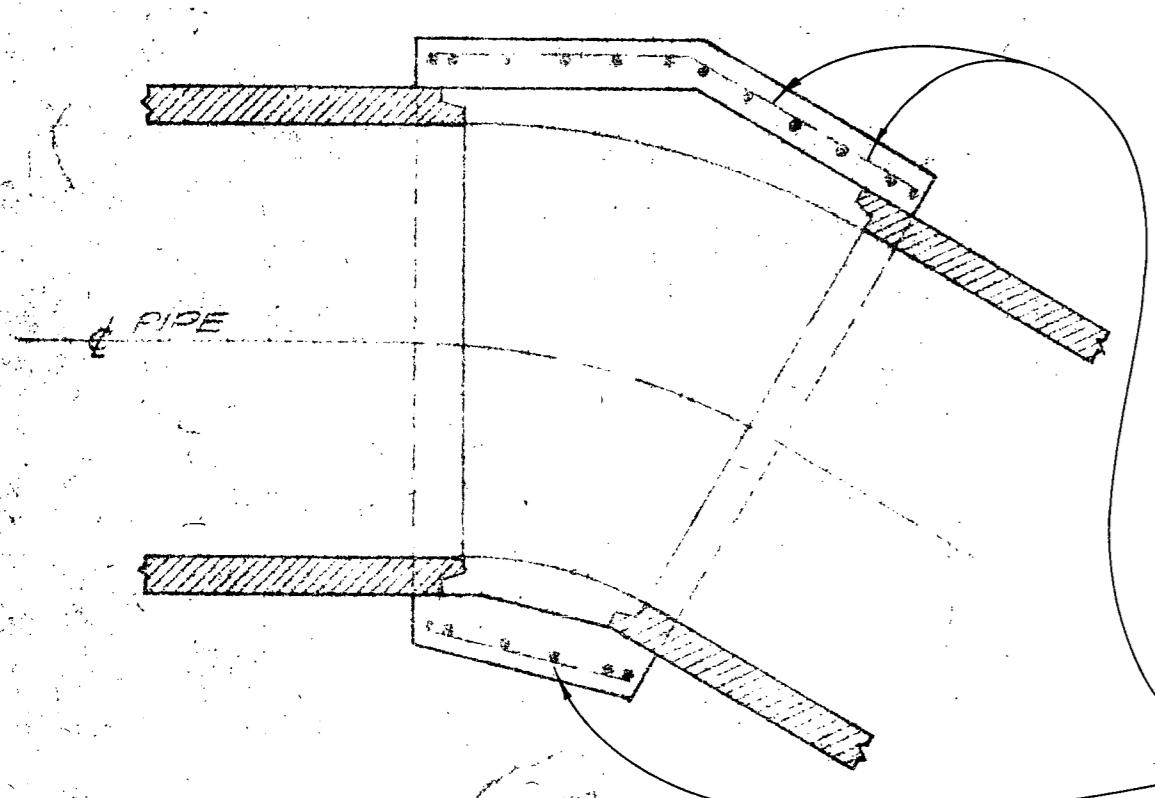
COMMON EXCAVATION



ROCK EXCAVATION



CONCRETE ENDOWMENT

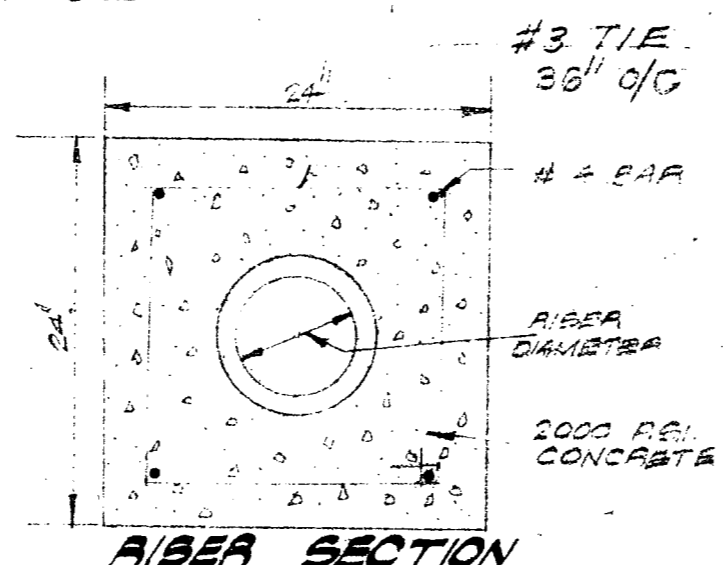


LONGITUDINAL HORIZONTAL SECTION

TYPE "6" MANHOLE

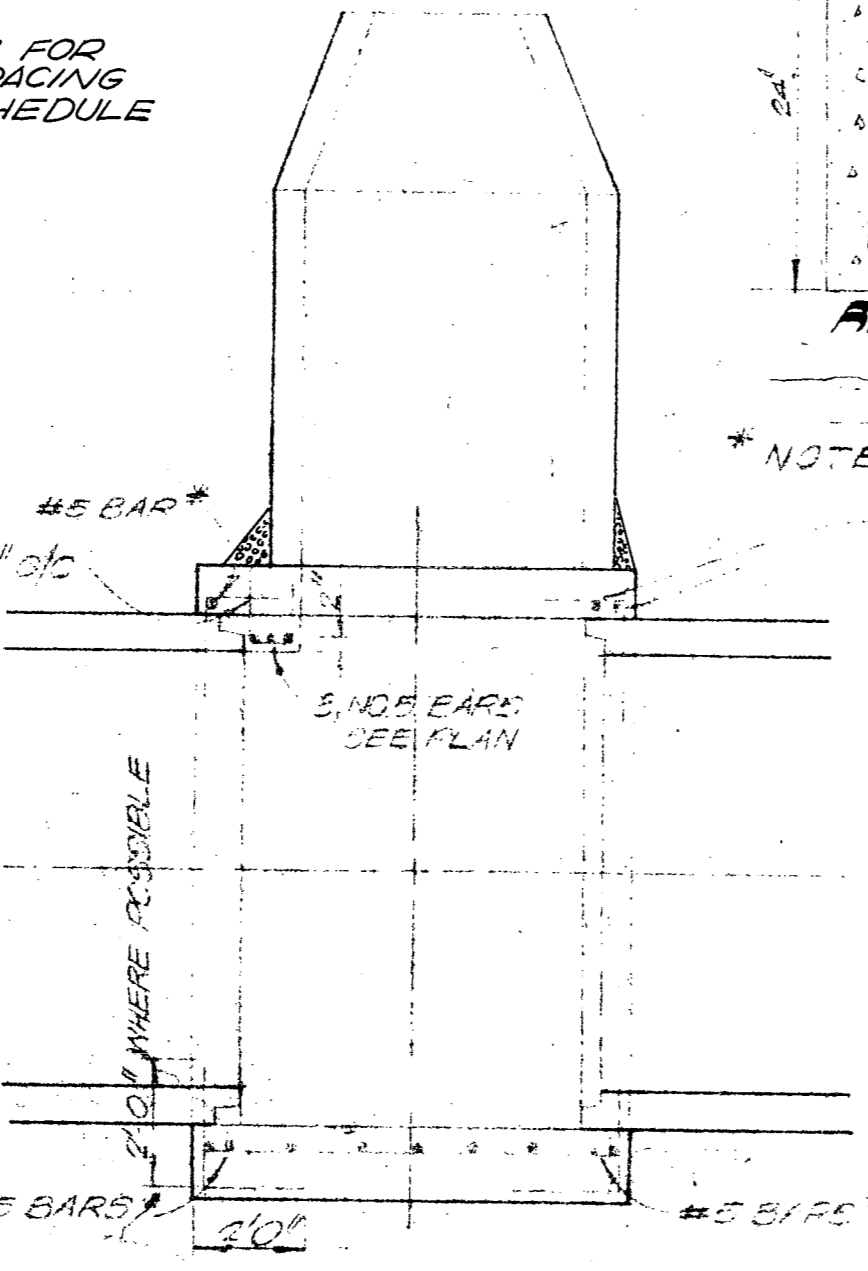
FOR COLLECTION (O.D. 36" TO 48" & LESS)

NOTE: FOR GREATER DEPLECTIONS USE TYPE "5" MANHOLE



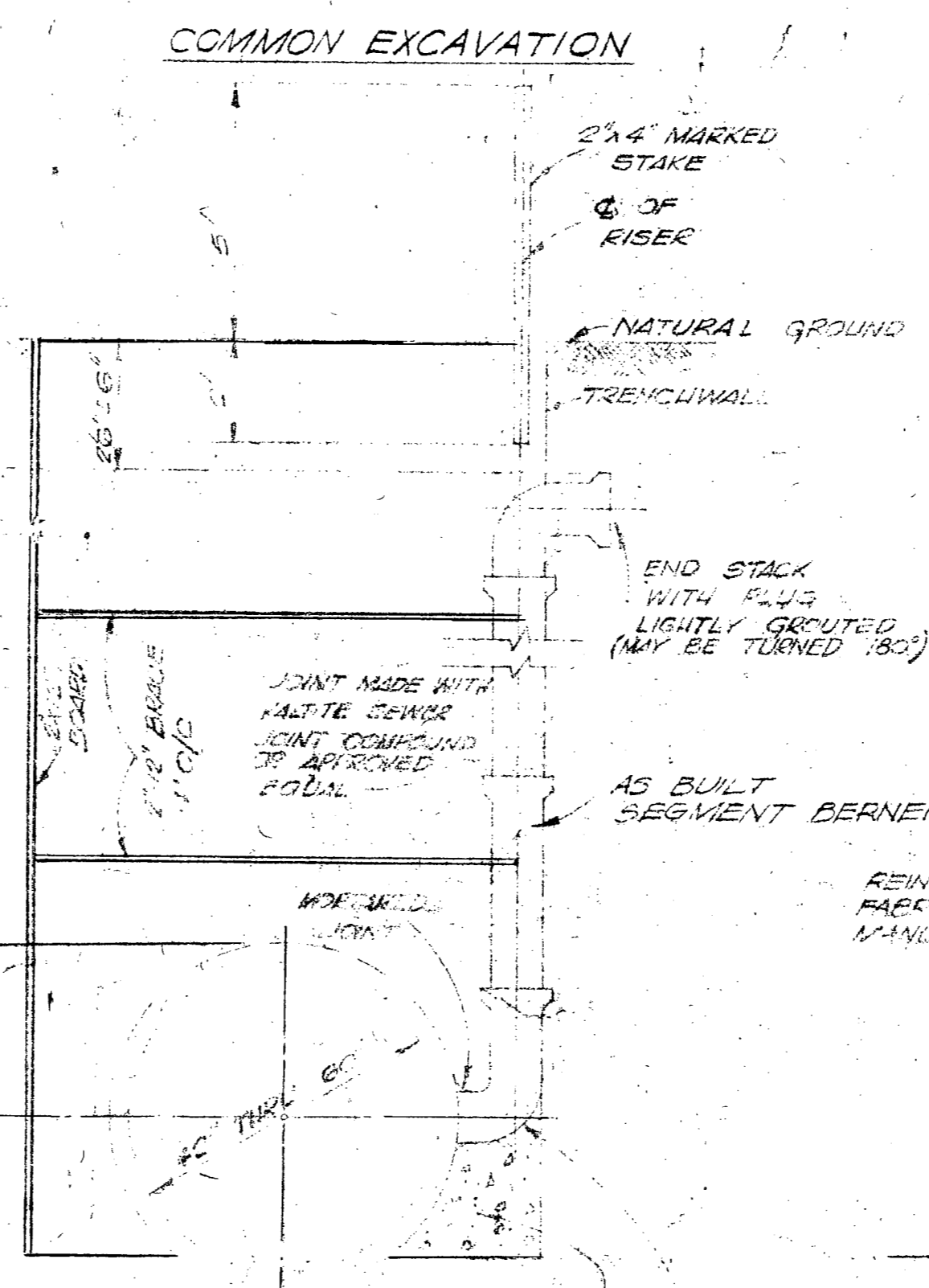
A/B SECTION

NOTE: FOR BAR SCHEDULING SEE SCHEDULE



LONGITUDINAL VERTICAL SECTION

PLAN-FLOOR



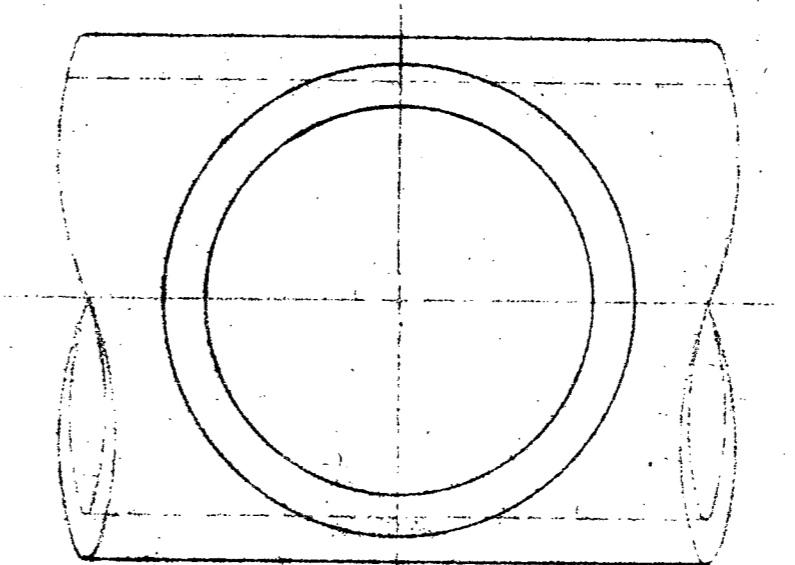
TYPICAL STACK DETAIL

ROCK EXCAVATION

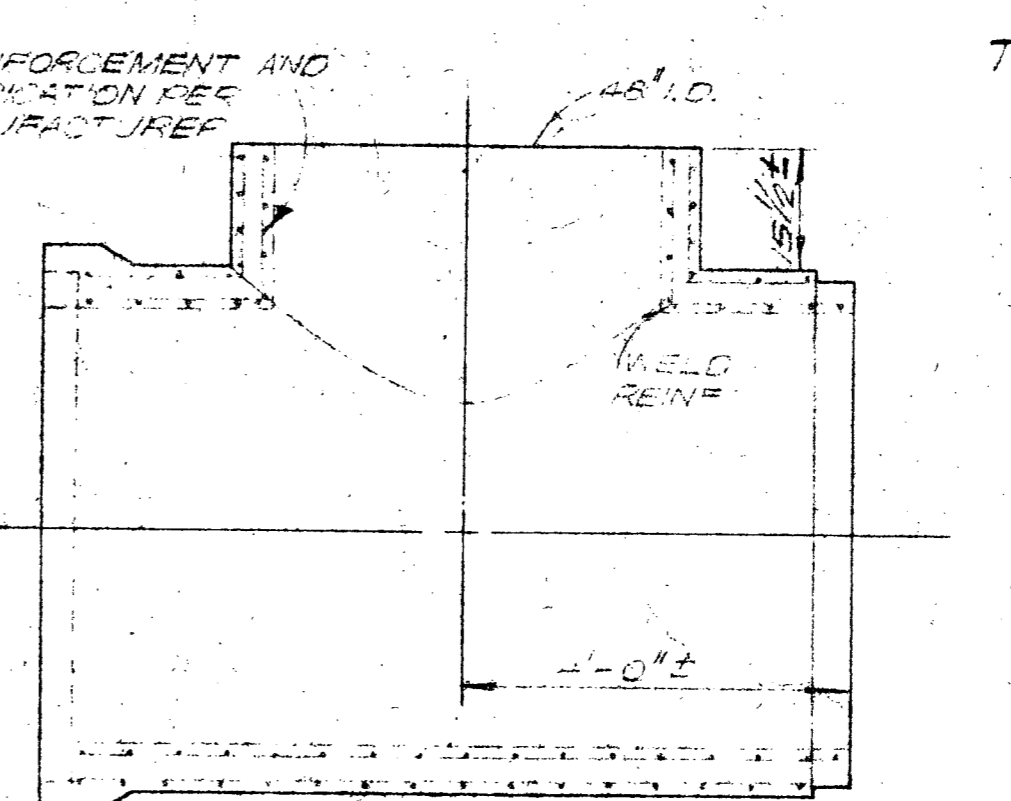
100% FAYATITE TBM

TYPICAL TRENCH SECTIONS

NOTE: SEE ITEM 10 FOR CONCRETE CRADLE

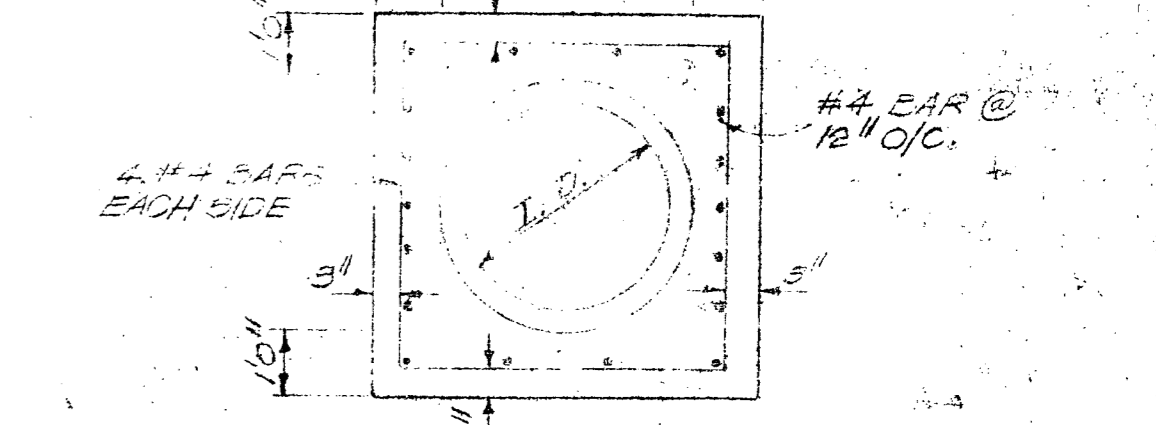


PLAN

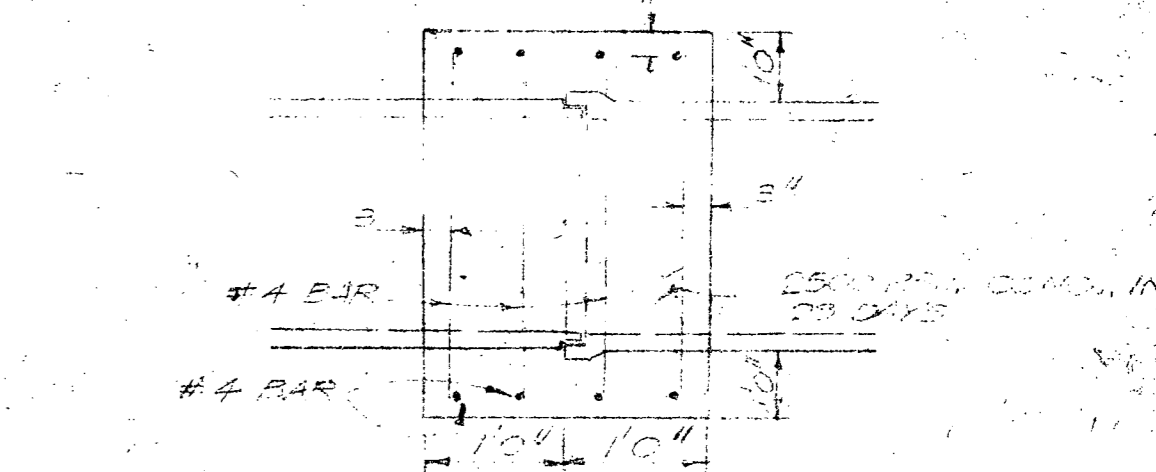


ELEVATION

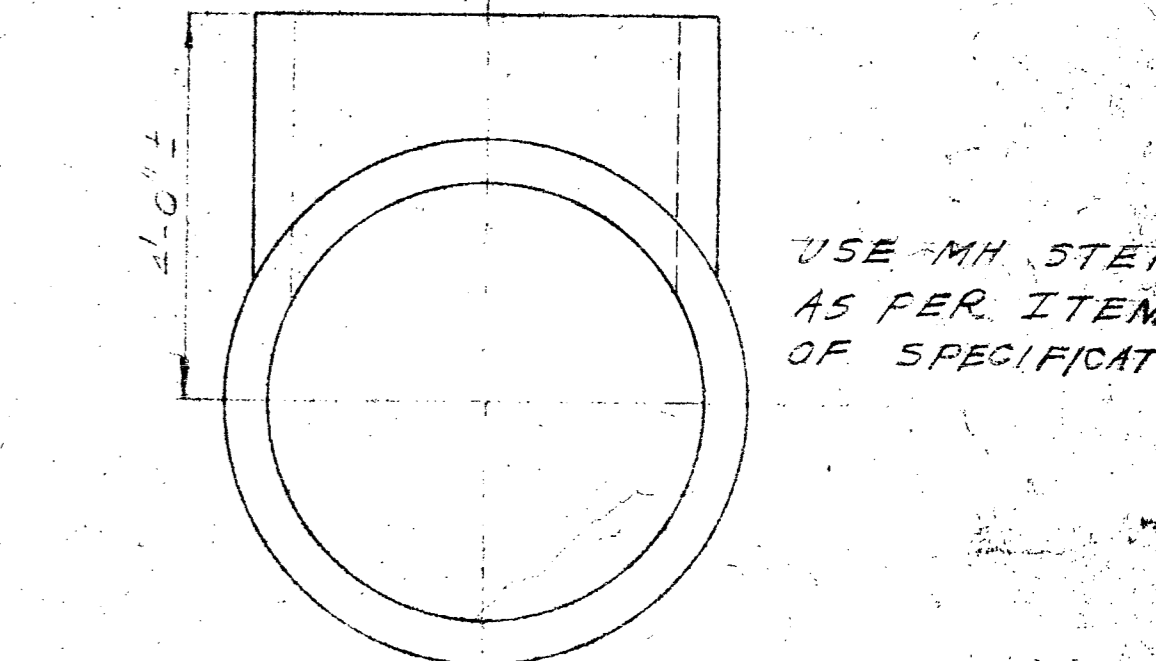
MANHOLE RISER TEE



TRANSVERSE SECTION



TYPICAL CONCRETE COLLAR LONGITUDINAL SECTION



SECTION

MANHOLE DETAILS, TYPICAL SECTIONS

REINFORCEMENT SCHEDULE

TYPE	COVER	LONGITUDINAL	TRANSVERSE	VERTICAL	HORIZONTAL
TYPE "A" 5' MANHOLE	0'-10" COVER	#4 @ 9"	#4 @ 9"	#5 @ 9"	#5 @ 9"
	10'-20" COVER	#5 @ 9"	#5 @ 9"	#5 @ 9"	#5 @ 9"
TYPE "B" 6' MANHOLE	0'-10" COVER	#4 @ 9"	#4 @ 9"	#5 @ 9"	#5 @ 9"
	10'-20" COVER	#5 @ 9"	#5 @ 9"	#5 @ 9"	#5 @ 9"

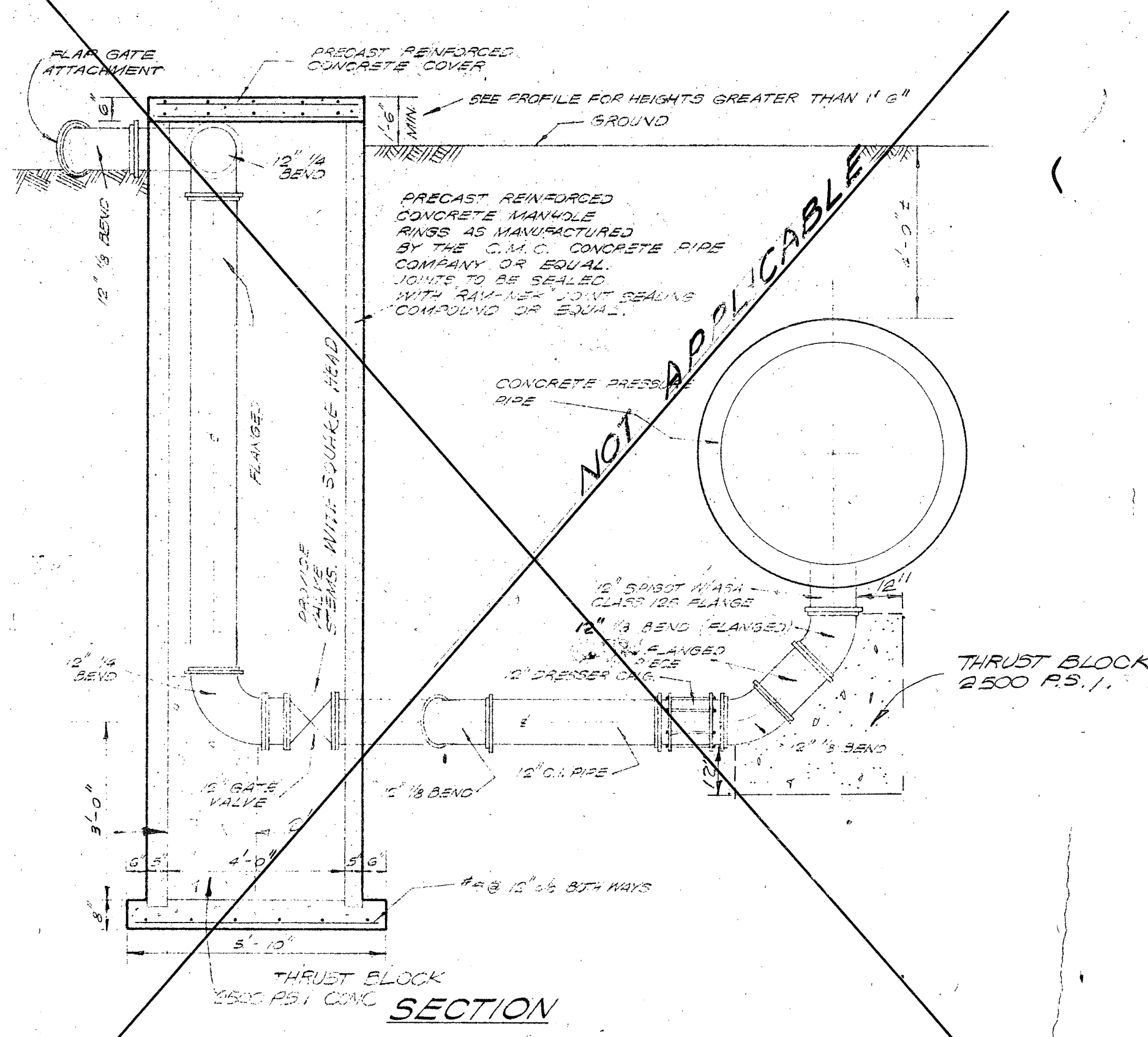
NOTE: CONTRACTOR HAS OPTION OF USING 12" DIAMETER PIPE FOR "RISER" TO WITHIN 6' OF SURFACE THEN TAPER TO 6" OR 8"

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SALADO OUTFALL SANITARY SEWER

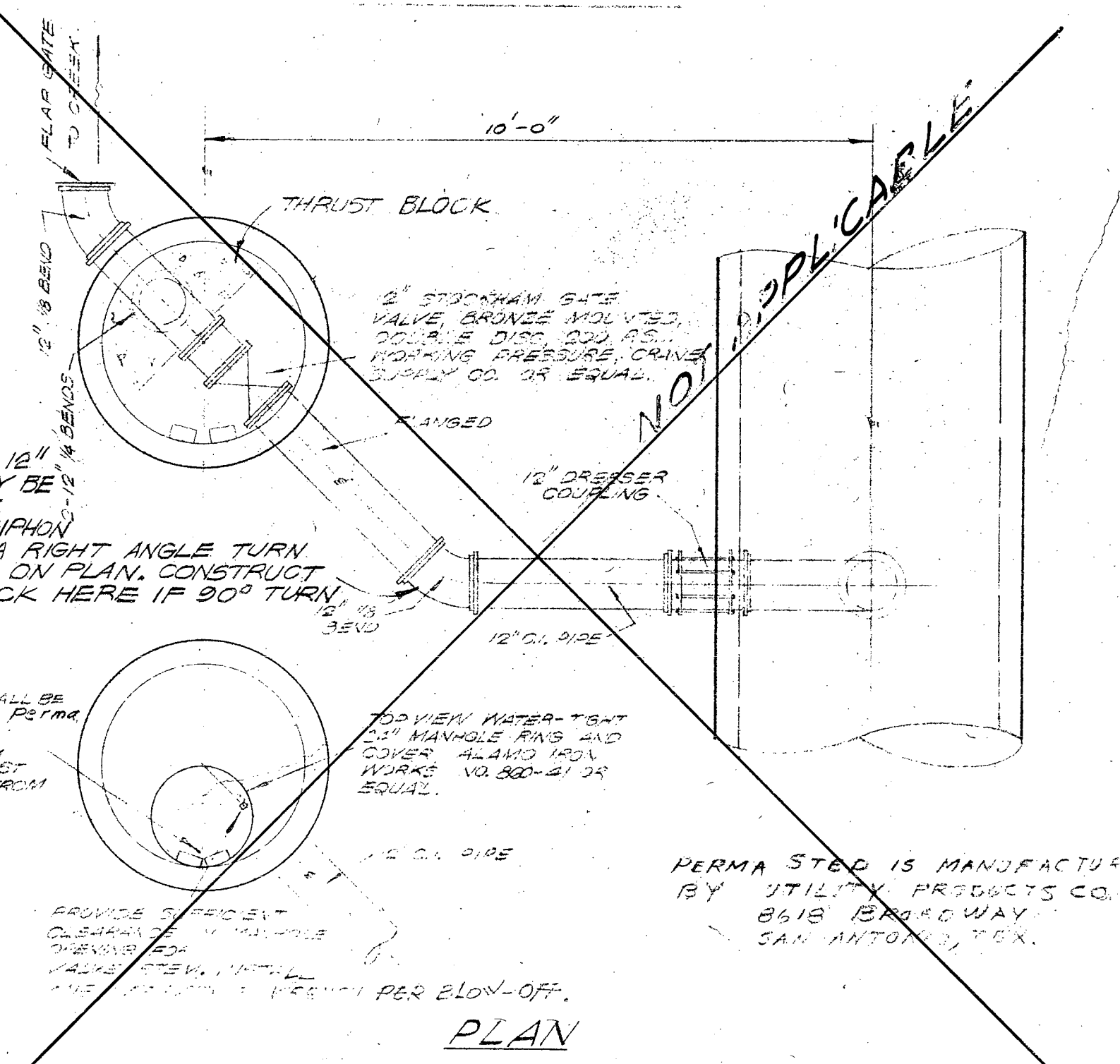
W. F. CASTELLA & ASSOCIATES
CONSULTING ENGINEERS
1829 W. HILDEBRAND
SAN ANTONIO, TEXAS

3569 SP 27

Siphon 45761

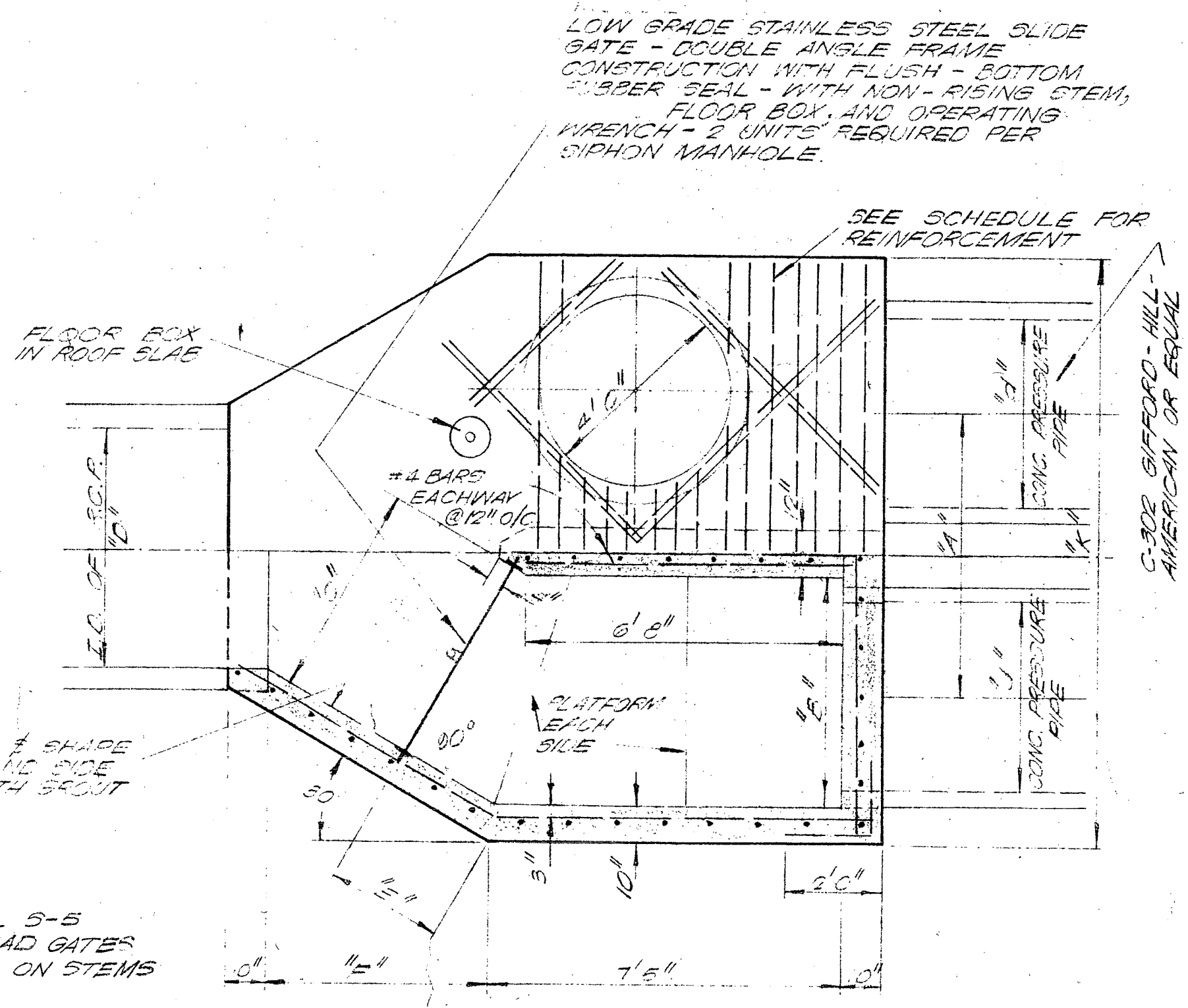


NOTE: ALL PIPE AND FITTINGS TO HAVE FLANGED JOINTS.



BEND MAY BE OMITTED OR 2 1/2" BENDS MAY BE USED AT 10 FT FROM 3 OF SIPHON PIPE WHERE A RIGHT ANGLE TURN IS INDICATED ON PLAN. CONSTRUCT THRUST BLOCK HERE IF 90° TURN IS MADE.

PERMA STEP IS MANUFACTURED BY UTILITY PRODUCTS CO. 8618 BROADWAY, SAN ANTONIO, TEX.

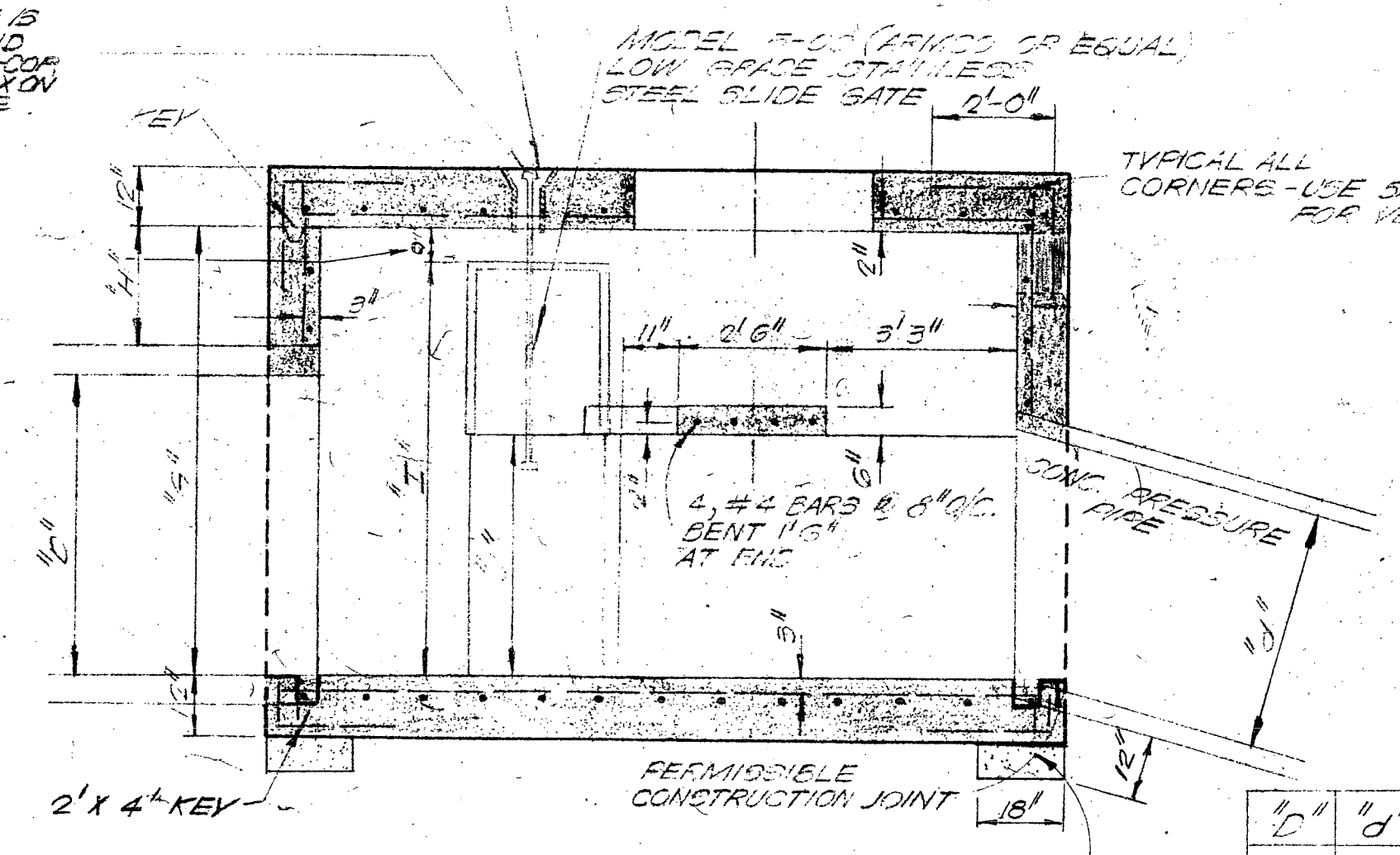


USE HYDRAFLO MODEL S-5 DOUBLE ANGLE HEAD GATES WITH SQUARE HEAD ON STEMS

NOTE:

WHERE GROUND SURFACE IS ABOVE FINISH FLOOR TO BE SET FLUSH WITH ROOF OF SIPHON BOX AND FLOOR BOX TO BE SET IN 1" THICK 2" FJOT SQUARE CONCRETE SLAB FLUSH WITH NATURAL GROUND

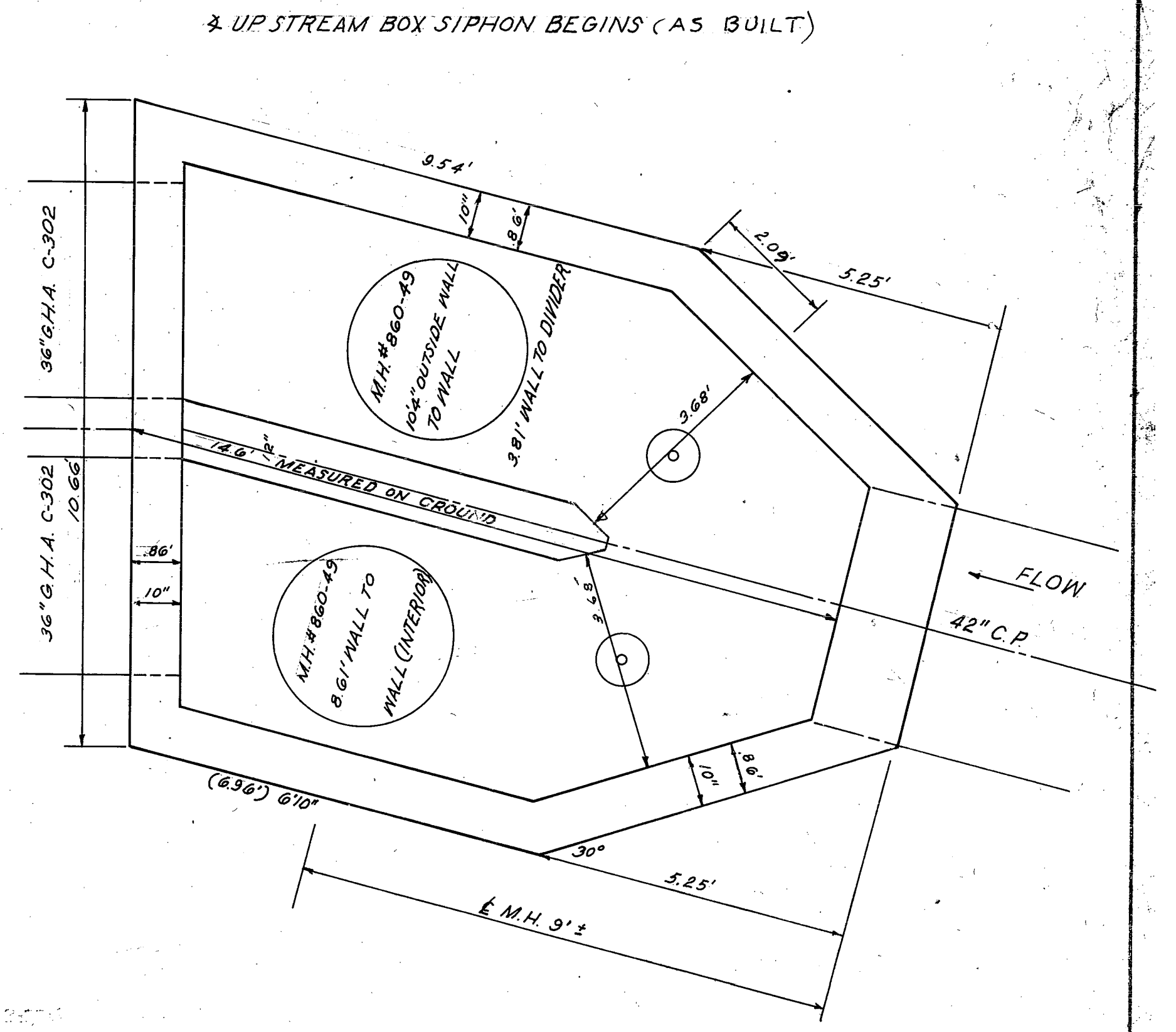
NOTE: WHERE GROUND SURFACE IS ABOVE ROOF SLAB EXTEND GATE STEEL THRU GROUND COVER TO FLOOR BOX ON TOP OF GROUND SURFACE.



SIPHON BOX DETAILS

SCALE: 3/8" = 1'-0"

STANDARD PRECAST CONCRETE MANHOLE TO SURFACE WHERE SHOWN ON THE PROFILE. SUBSTITUTE ALUMINUM IRON WICKS NO. 800-40 IN STRUCTURES WHERE MANHOLE RISER IS NOT USED. MANHOLE RISERS PAYABLE AS EXTRA MANHOLE DEPTH.



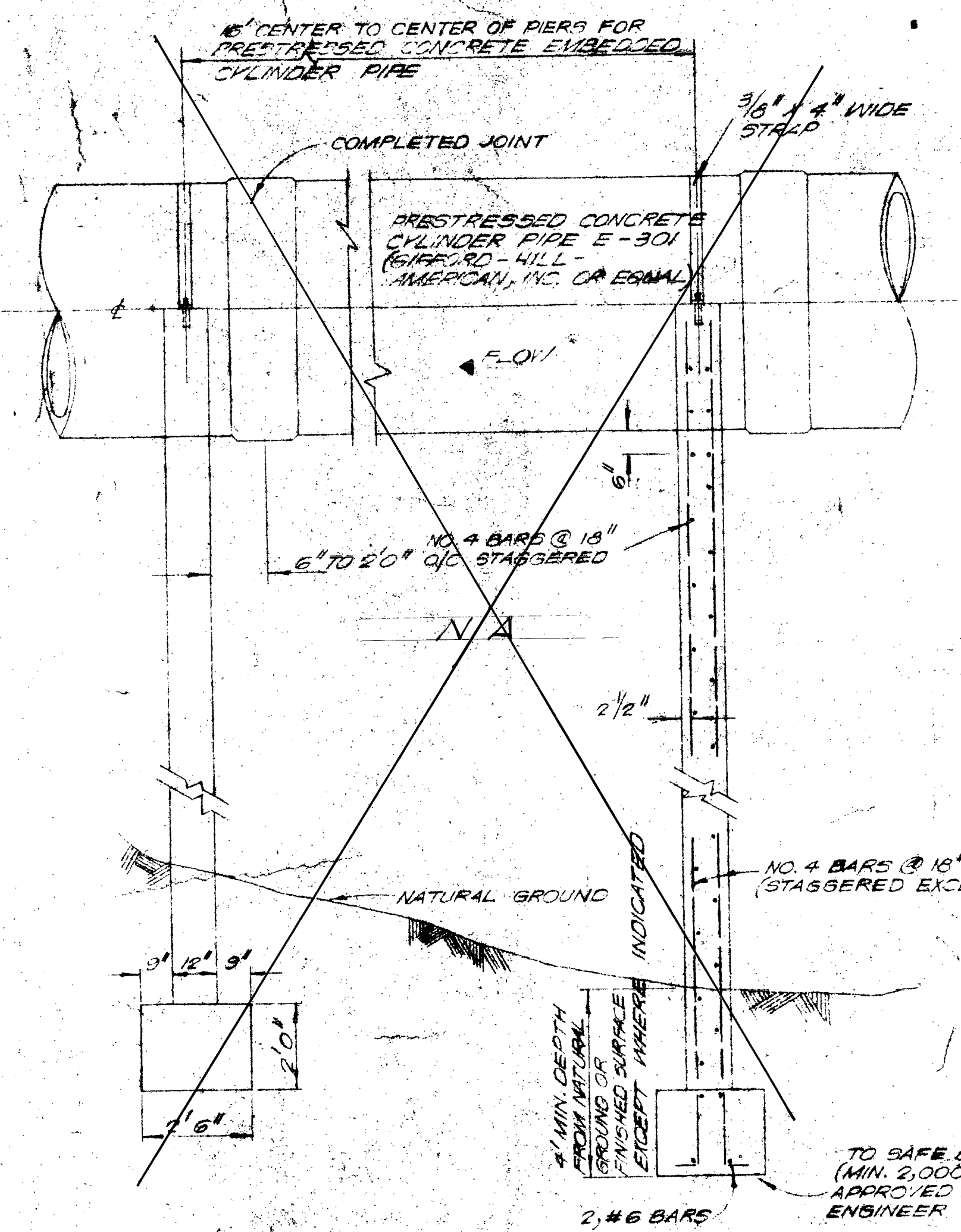
NOTES:
GATE SIZE FOR SIPHON NO. 3 (DISCHARGE M.H.) WILL BE 4'1 1/2" X 3'3"
GATE SIZE DIMENSIONS ARE CLEAR OPENING DIMENSIONS

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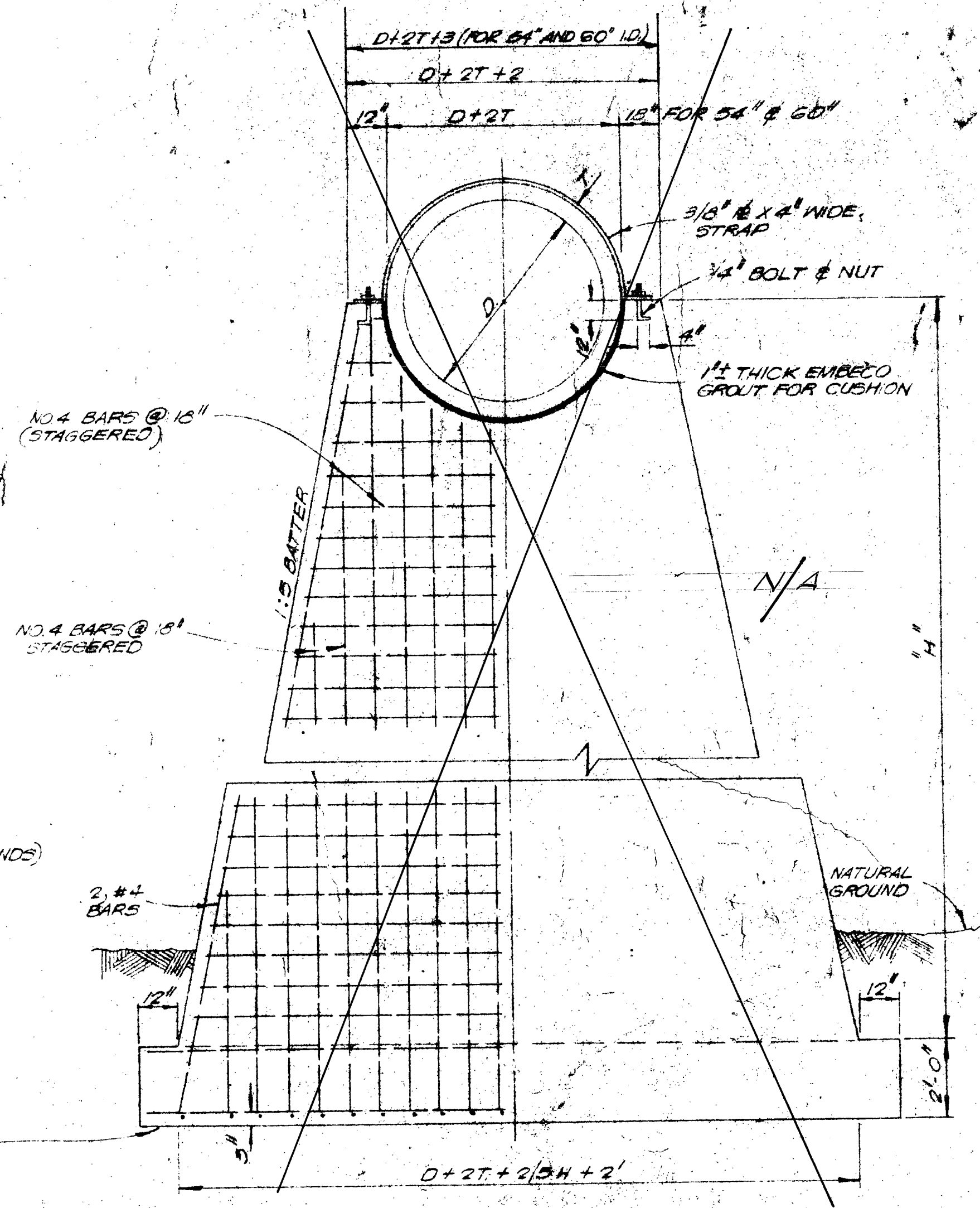
W. F. CASTELLA & ASSOCIATES
CONSULTING ENGINEERS
1039 W. HILDEBRAND
SAN ANTONIO, TEXAS

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or 19

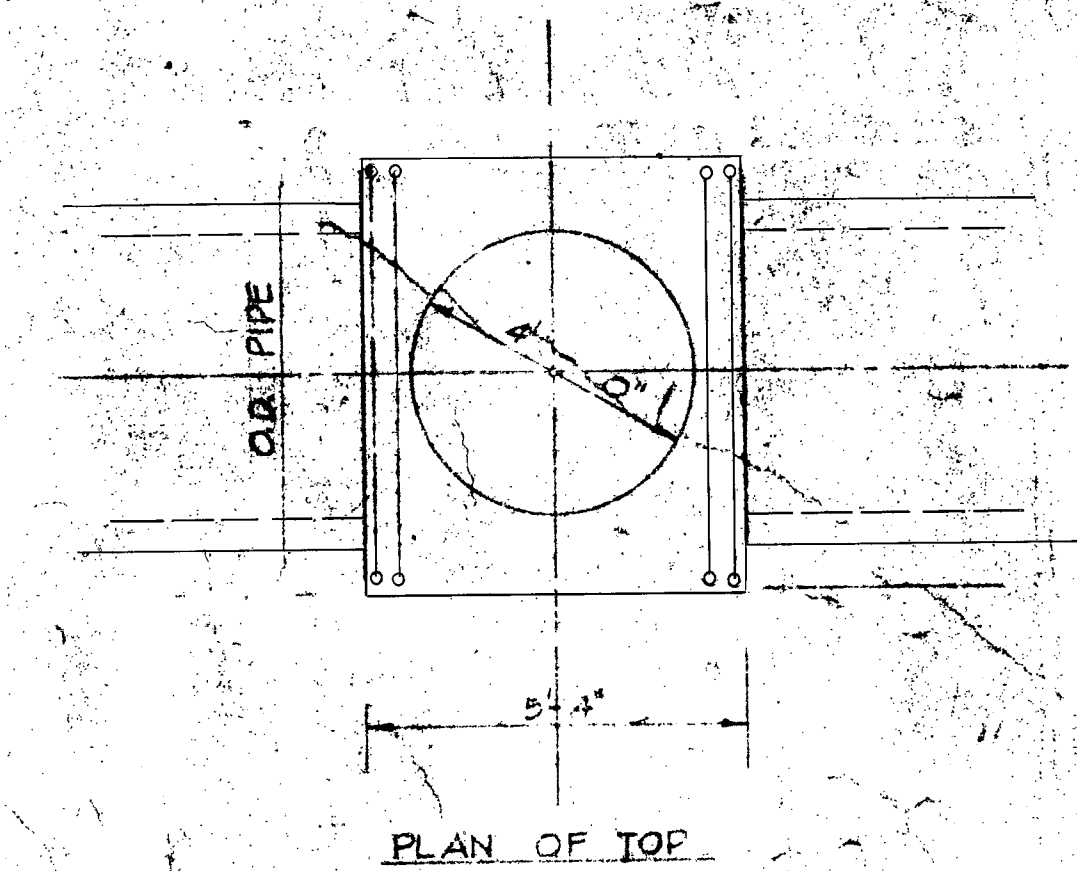
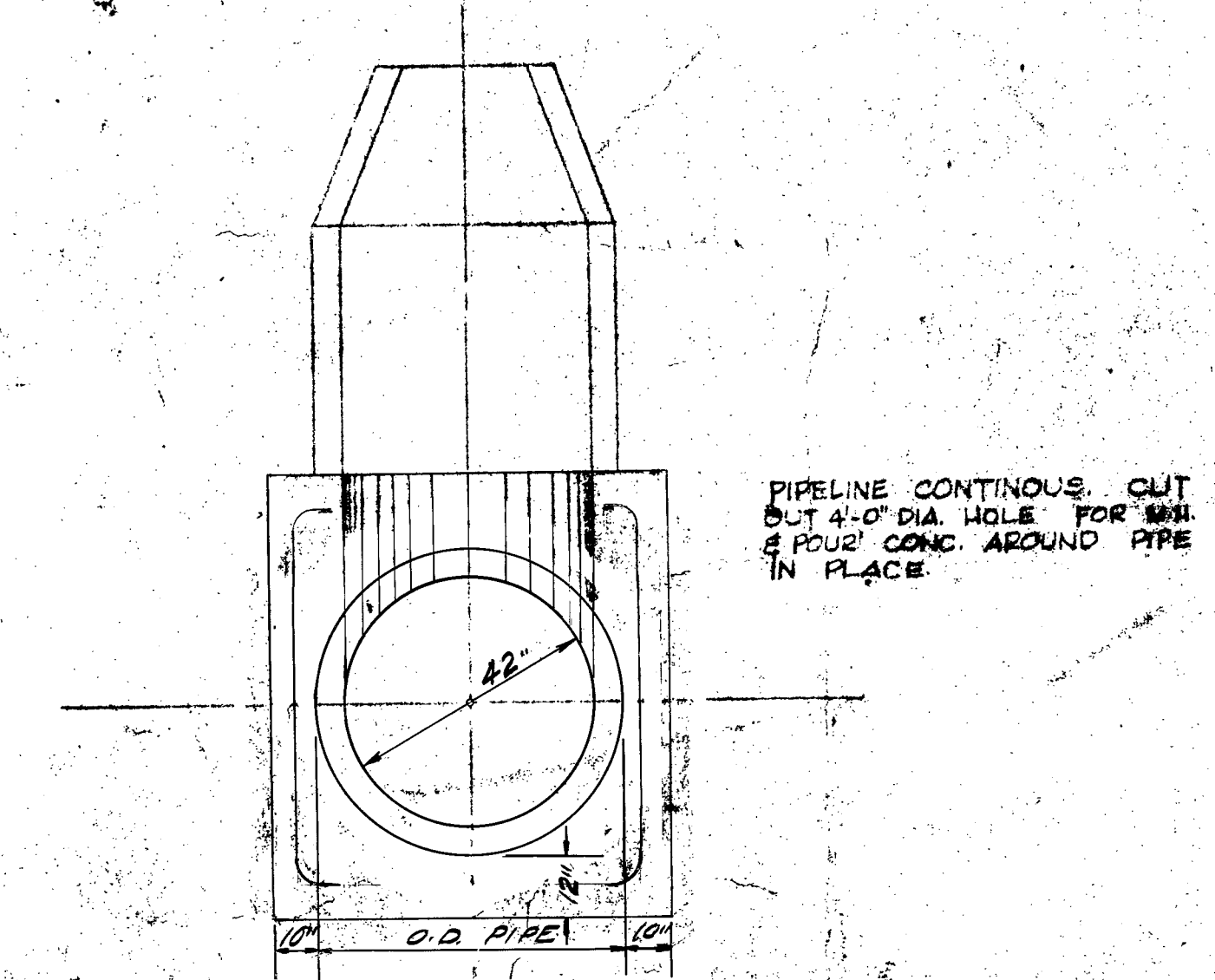
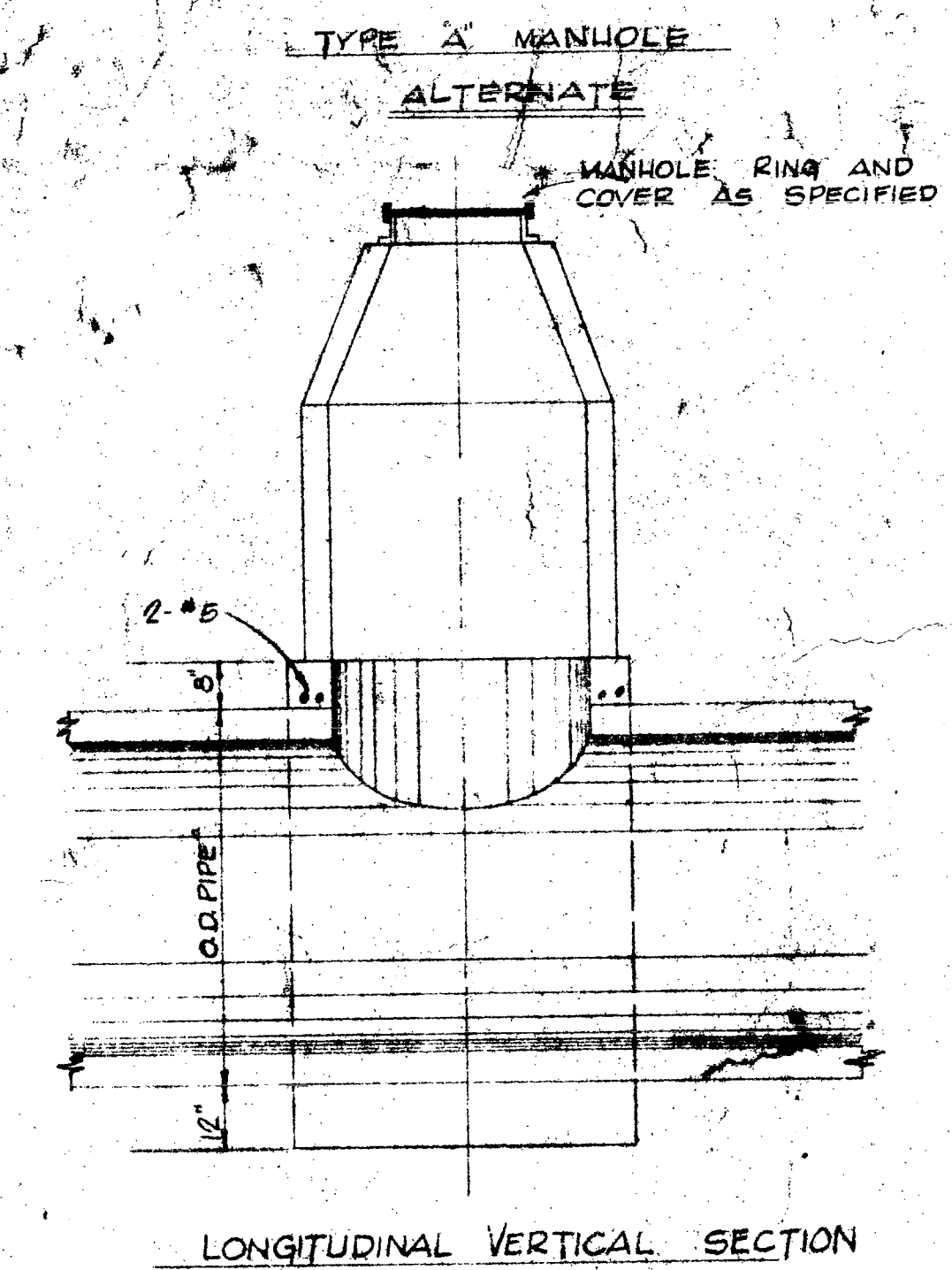
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ELEVATION



END ELEVATION



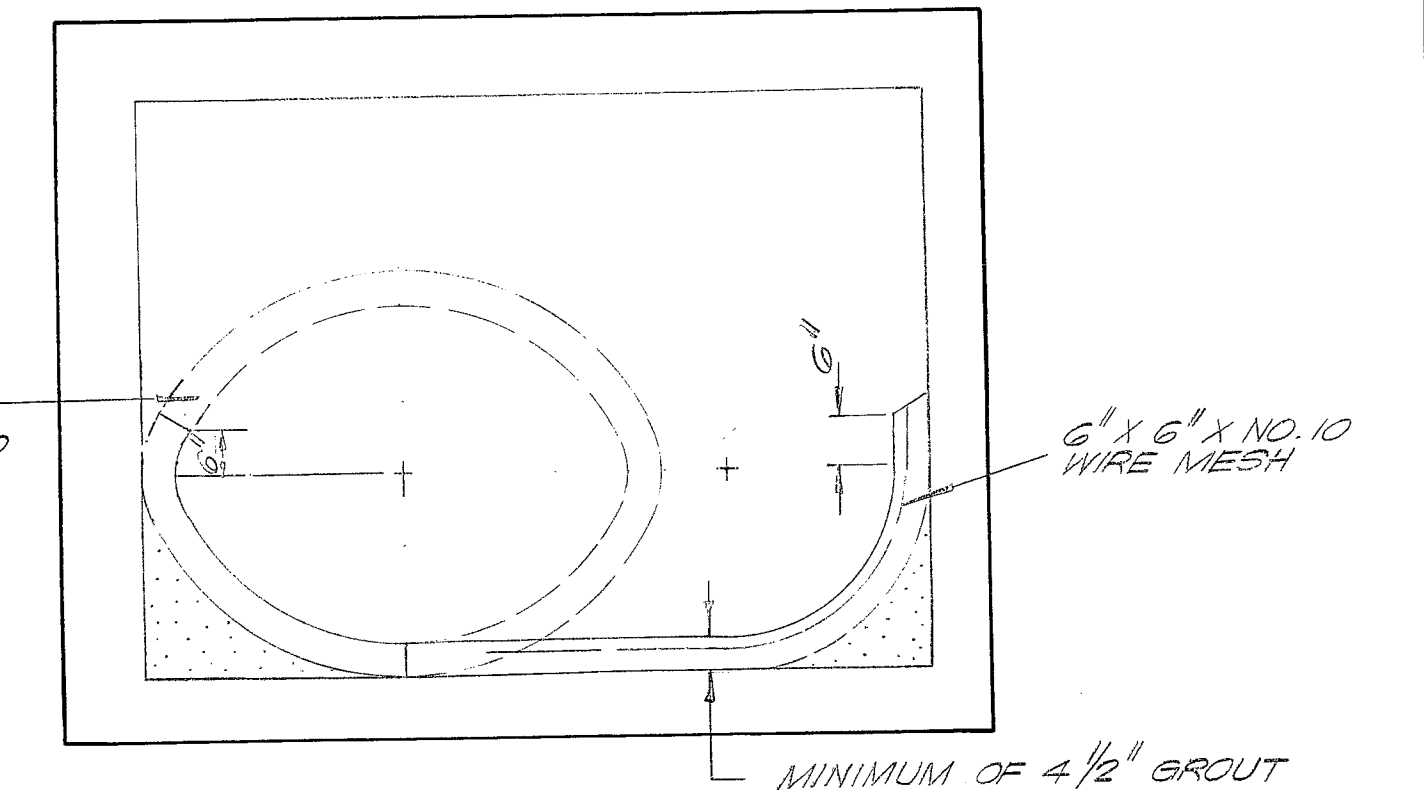
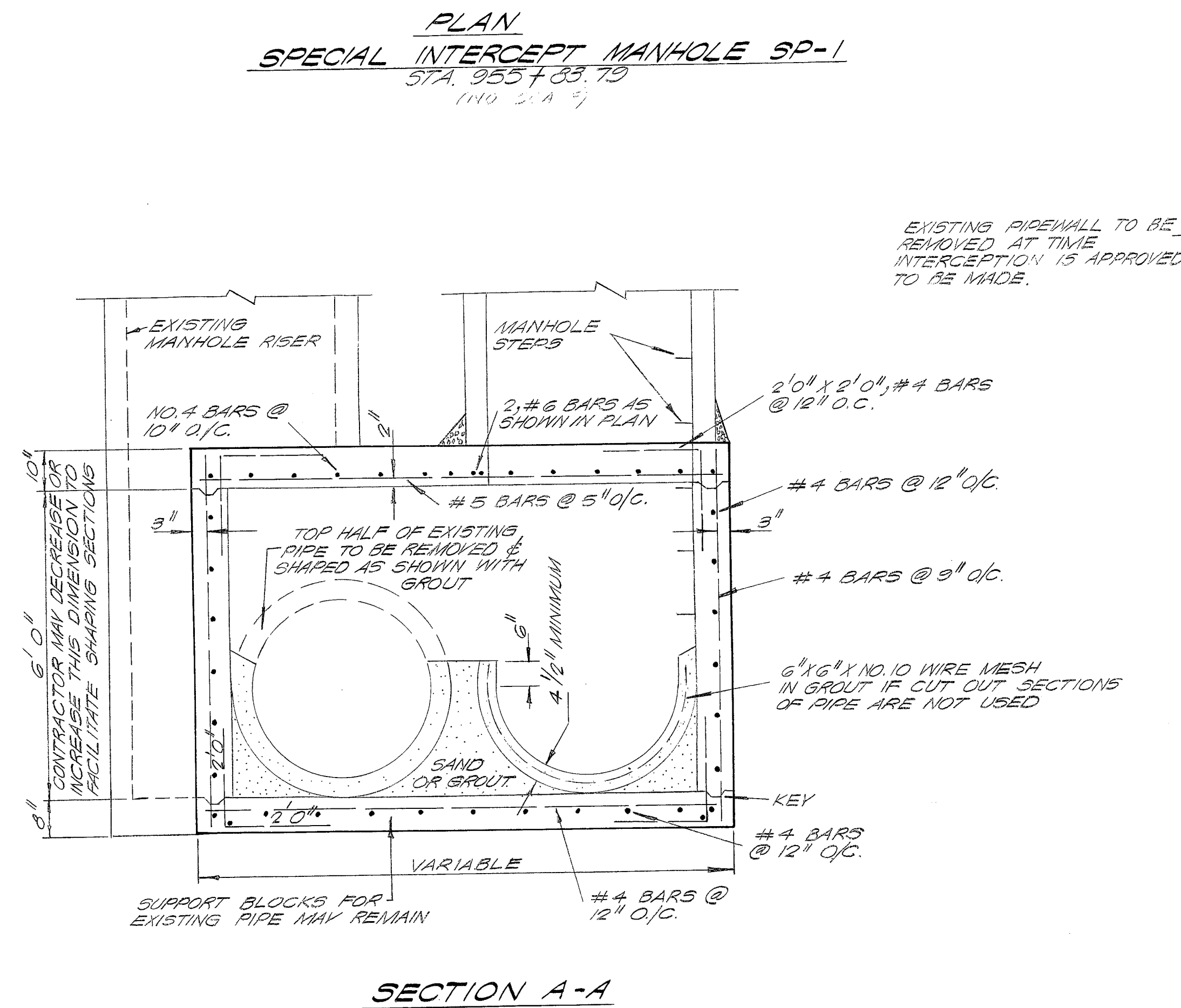
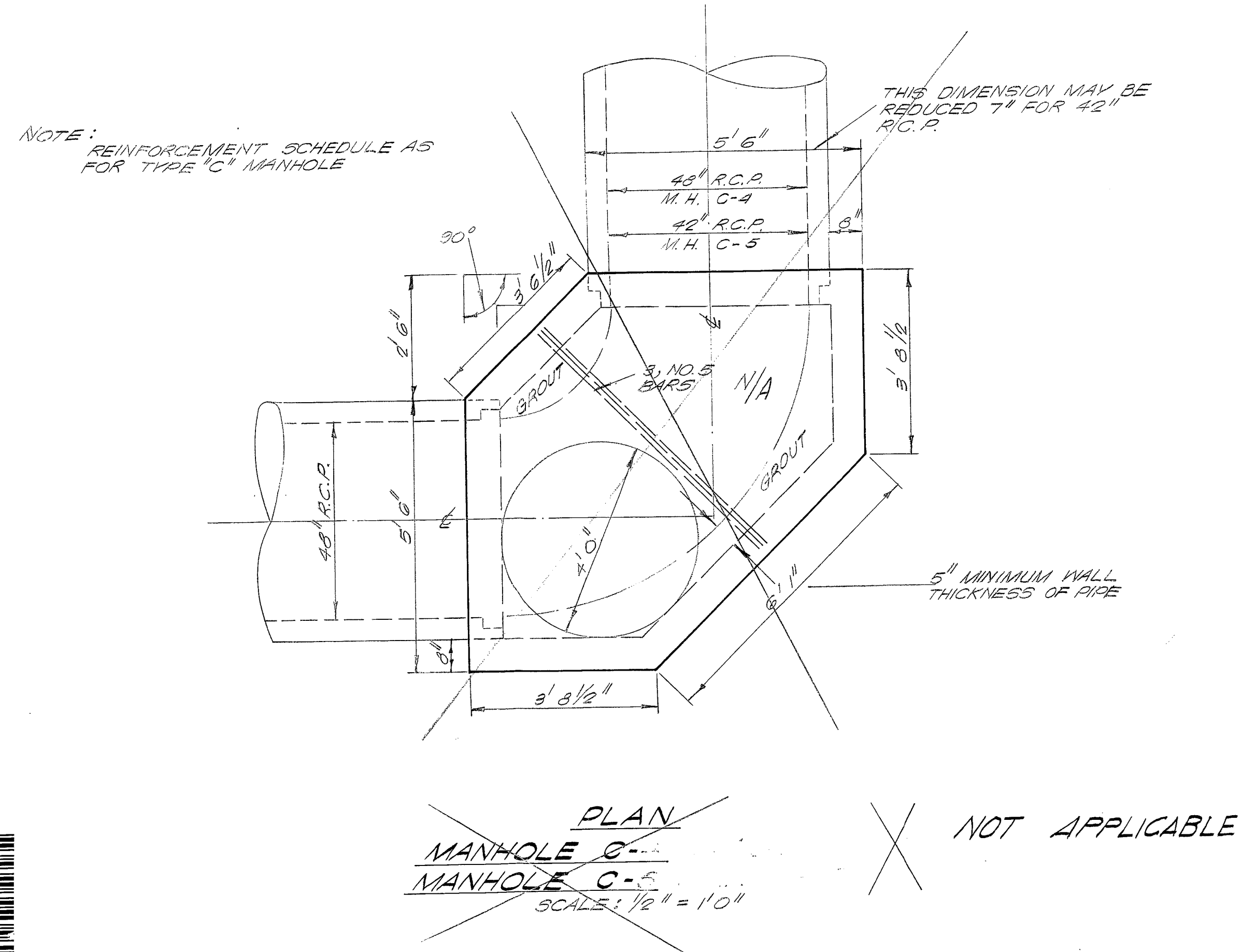
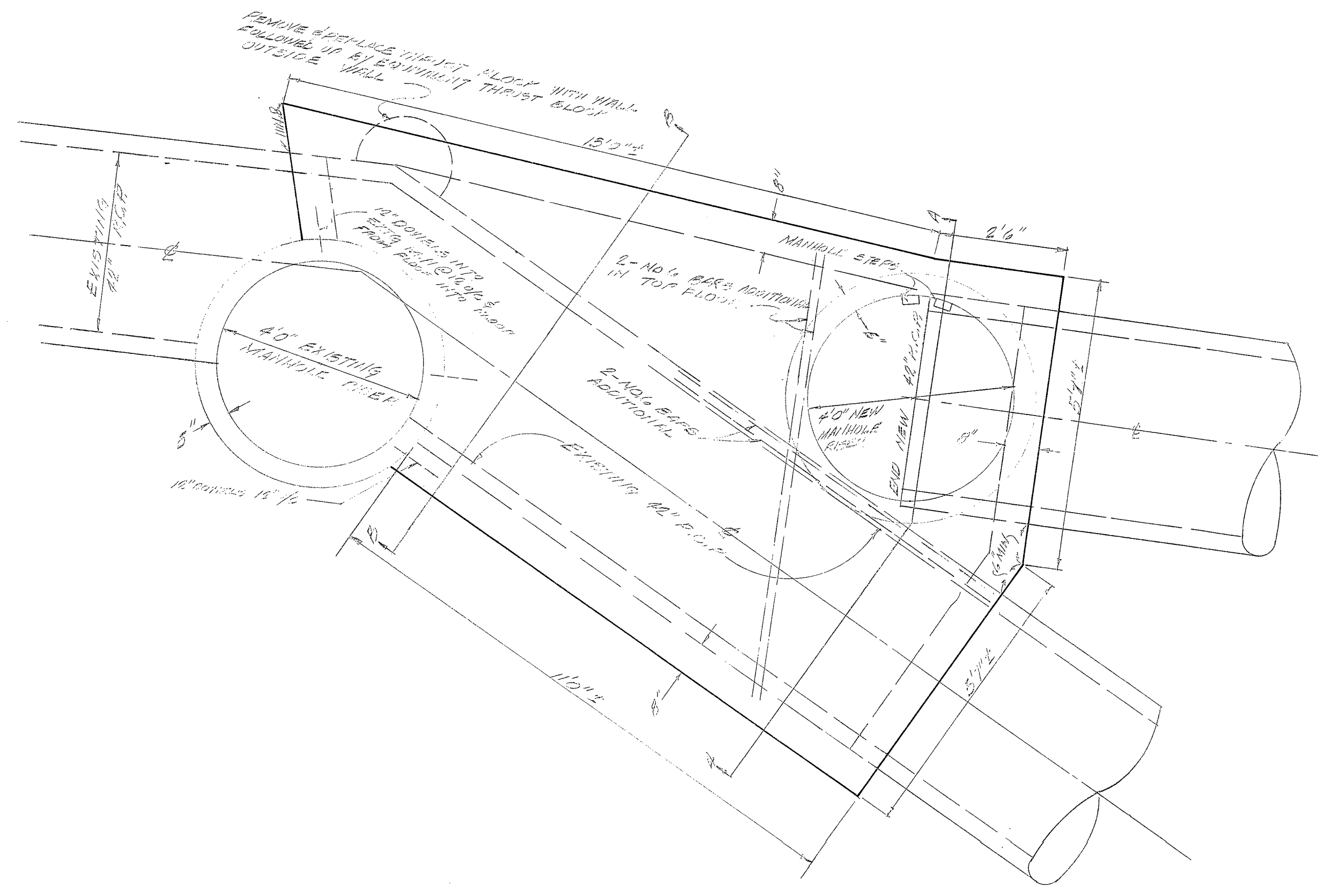
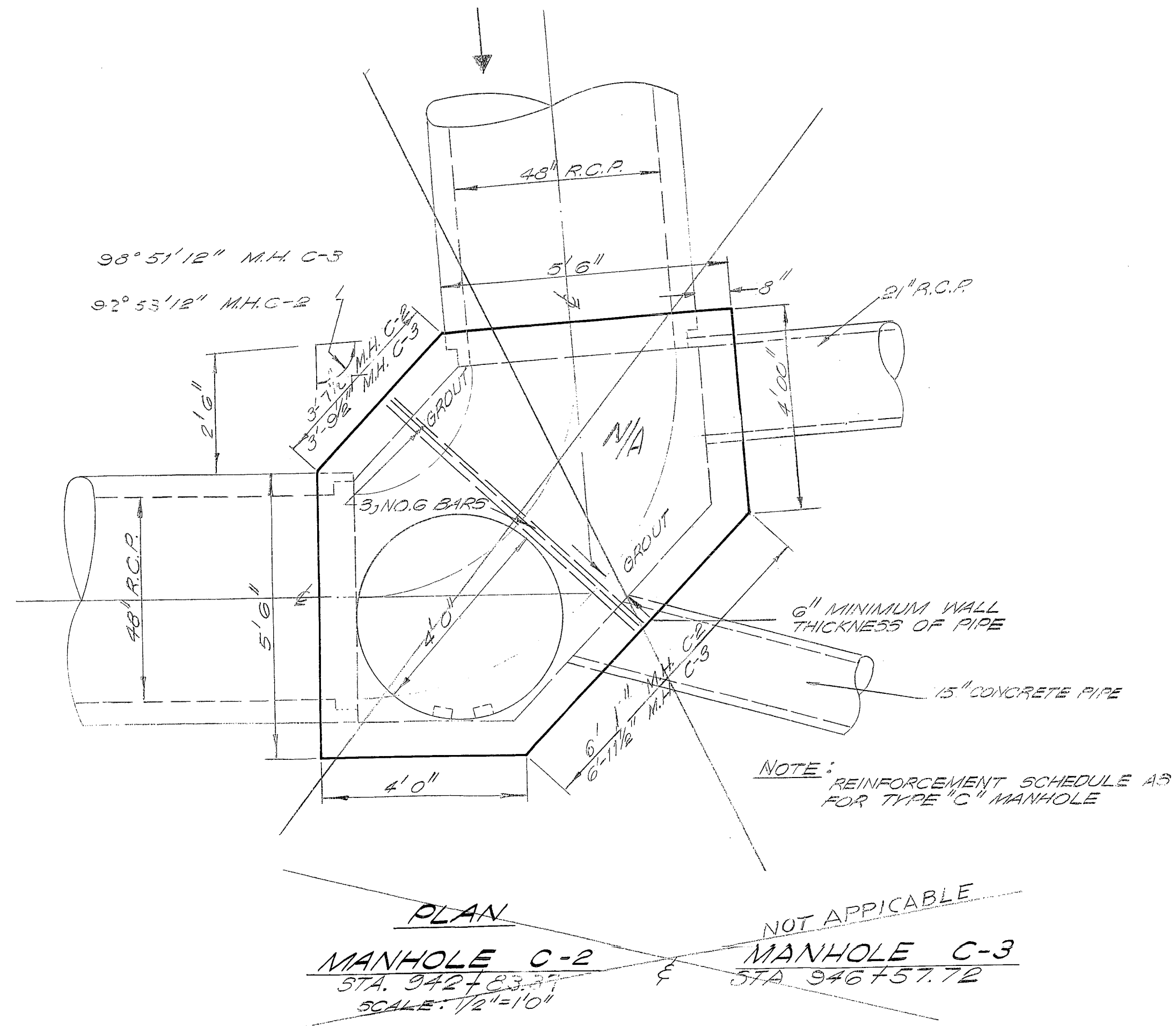
ALTERNATE LINE MANHOLE
42" I.D. PIPE
SCALE: 3/8" = 1'-0"

Siphon 45761

Special 6

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DRAWN			
CHECKED			

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REVISED DIMENSIONS & ANGLE OF ENTRY 11/10/73

CITY OF SAN ANTONIO
DEPARTMENT OF PUBLIC WORKS
SALADO OUTFALL SANITARY SEWER

W. F. CASTELLA & ASSOCIATES
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