

RESOURCE LIST

GAS CO.
KANSAS GAS & ELECTRIC
JIM STULTZ, P.E.
1021 EAST 26TH STREET NORTH
WICHITA, KANSAS 67202
PH: (316) 832-3122

ELECTRIC
KG&E (WESTAR ENERGY)
SHANE PRICE
1900 E. CENTRAL
WICHITA, KANSAS 67201
PH: (316) 261-6865

SANITARY SEWER
CITY OF WICHITA ENGINEERING
VICKY HUANG, P.E.
455 N. MAIN (7TH FLOOR)
WICHITA, KANSAS 67202
PH: (316) 268-4235

WATER
CITY OF WICHITA WATER & SEWER DEPT
BILL PERKINS
455 N. MAIN (8TH FLOOR)
WICHITA, KANSAS 67202
PH: (316) 268-4555

CITY OF WICHITA ENGINEERING
JULIANNE KALLMAN, P.E.
455 N. MAIN (7TH FLOOR)
WICHITA, KANSAS 67202
PH: (316) 268-4632

TELEPHONE
SWBT
GREG SHARPE
154 NORTH BROADWAY, ROOM 460
WICHITA, KANSAS 67202
PH: (316) 268-2245

SHEET INDEX

ST-1	TITLE SHEET
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STORM SEWER TO SERVE

WAL*MART

SUPERCENTER #1099-01

PRIVATE PROJECT NUMBER 1361PPS (607861)

CITY OF WICHITA, KANSAS

NEIL D. CABLE, P.E. CITY ENGINEER

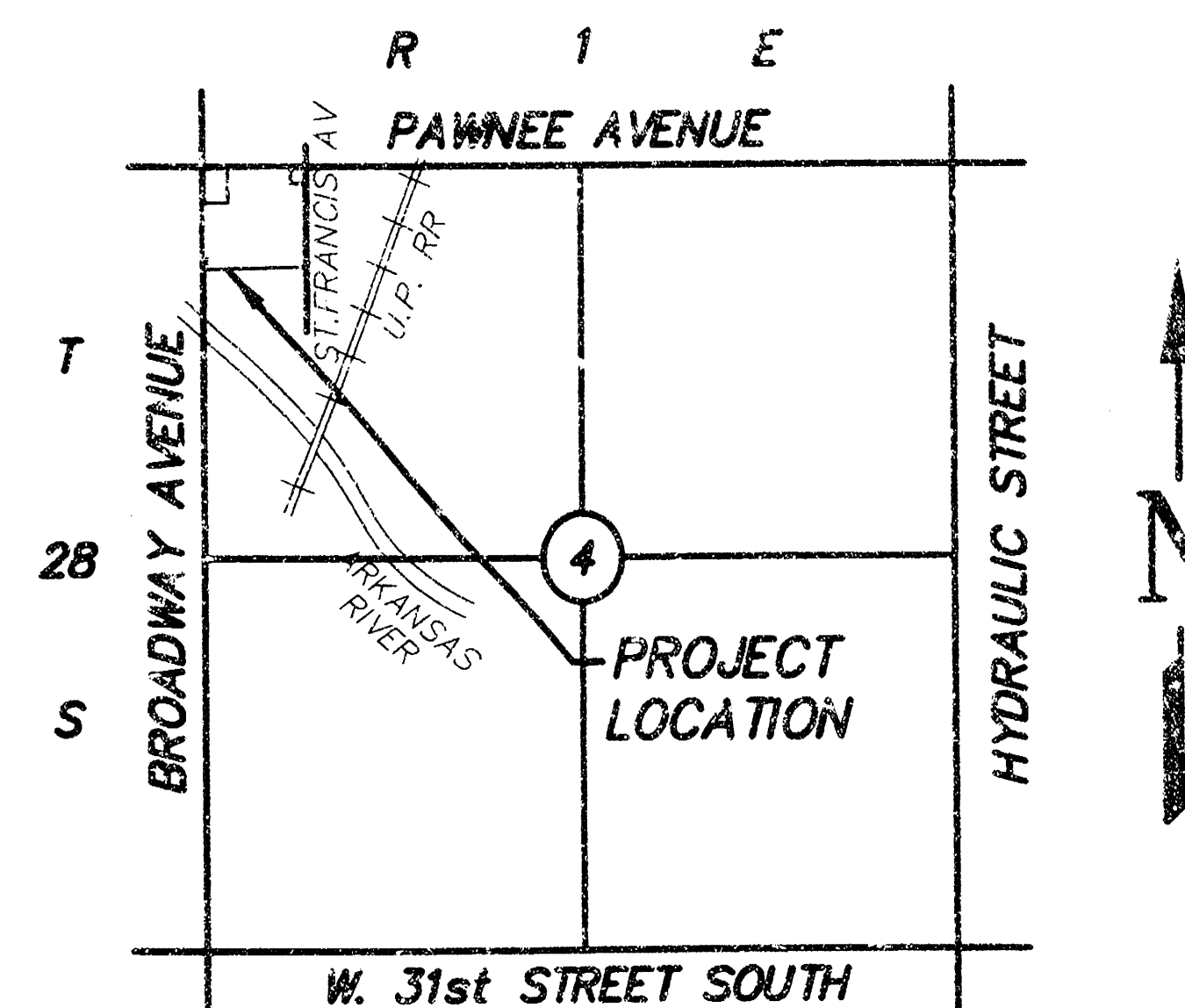
MONTH 2003

Legal Description

A tract of land lying in the Northwest Quarter (NW/4) of Section Four (4), Township Twenty-eight (28) South, Range One (1) East of the 6th P.M., also being a part of the recorded plat of KINKAID PARK, an addition to Wichita, Sedgwick County, Kansas, being more particularly described as follows:
Lot Two (2), Block A, KINKAID PARK, an addition to Wichita, Sedgwick County, Kansas.
Said tract contains a mathematical error of closure of 1:94,592,190.
Said tract contains 1,180,290 square feet or 27.0957 acres more or less.

General Notes

- Contractor will be required to provide a minimum notice of 48 hours to utility companies prior to starting any excavation or construction.
- The Contractor must notify the following in case of an emergency:
Kansas One-Call 687-2470
Gas Communications 262-0661
Kansas Gas Service Company 383-8900
Kansas Gas & Electric Company 383-8600
Propane Gas Company 1-800-303-0357
Southwestern Bell Telephone Company 1-800-670-6390
City of Wichita Water Department 268-4908
City of Wichita Sewer Department 268-4071
- The Contractor shall give all property owners and/or tenants of developed property directly abutting the construction of this project a minimum of ten (10) days advanced notice prior to start of construction.
- The Contractor shall be responsible for preserving property lines. The Contractor will be required to re-establish any property lines which are damaged or destroyed by his construction operations. Such lines shall be re-established by a licensed land surveyor in accordance with state laws.
- The Contractor shall seed and fertilize all disturbed turf areas upon completion of construction.
- Traffic will not be affected by construction of this project.
- Polystyrene Chloride Pipe (PVC) installed on this project shall conform to the City of Wichita Standard Specifications for Sewer Line Construction. The PVC pipe shall be rated for 200-25. All PVC pipe shall be installed in accordance with the manufacturer's recommendations. Manhole gaskets around the pipe shall be installed in all manhole walls.
- Reinforced Concrete Pipe (RCP) installed on this project shall conform to the City of Wichita Standard Specifications for Sewer Line Construction. RCP pipe for storm sewer shall be Class III pipe. Joints shall be tongue and groove. Joints sealed with either flexible plastic gaskets or cement mortar.
- Storm sewer Contractor shall conform with roof drain contractor the size, location and pipe material of roof drain pipes into manholes prior to manhole construction. Storm sewer Contractor shall plug drain connections into manhole since roof drains shall be installed by drain contractor.



LOCATION MAP
NOT TO SCALE

AS-BUILT - SEPT. 2004

TITLE SHEET
PRIVATE PROJECT NO. 1361PPS (607861)
PAWNEE AVENUE & BROADWAY AVENUE
SUPERCENTER #1099-01

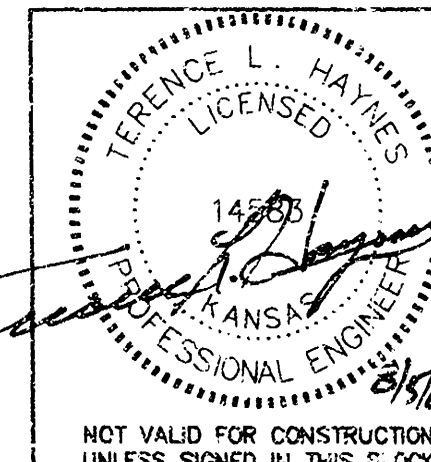
CITY OF WICHITA
SEDGWICK COUNTY, KANSAS

SPEAR & McCALLEN CO., P.C.
815 West Main - Oklahoma City, OK 73106
PH: 405-232-7715 Fax: 405-232-7859

KANSAS CERTIFICATE OF AUTHORIZATION NO. E-335 EXP. DEC. 2004

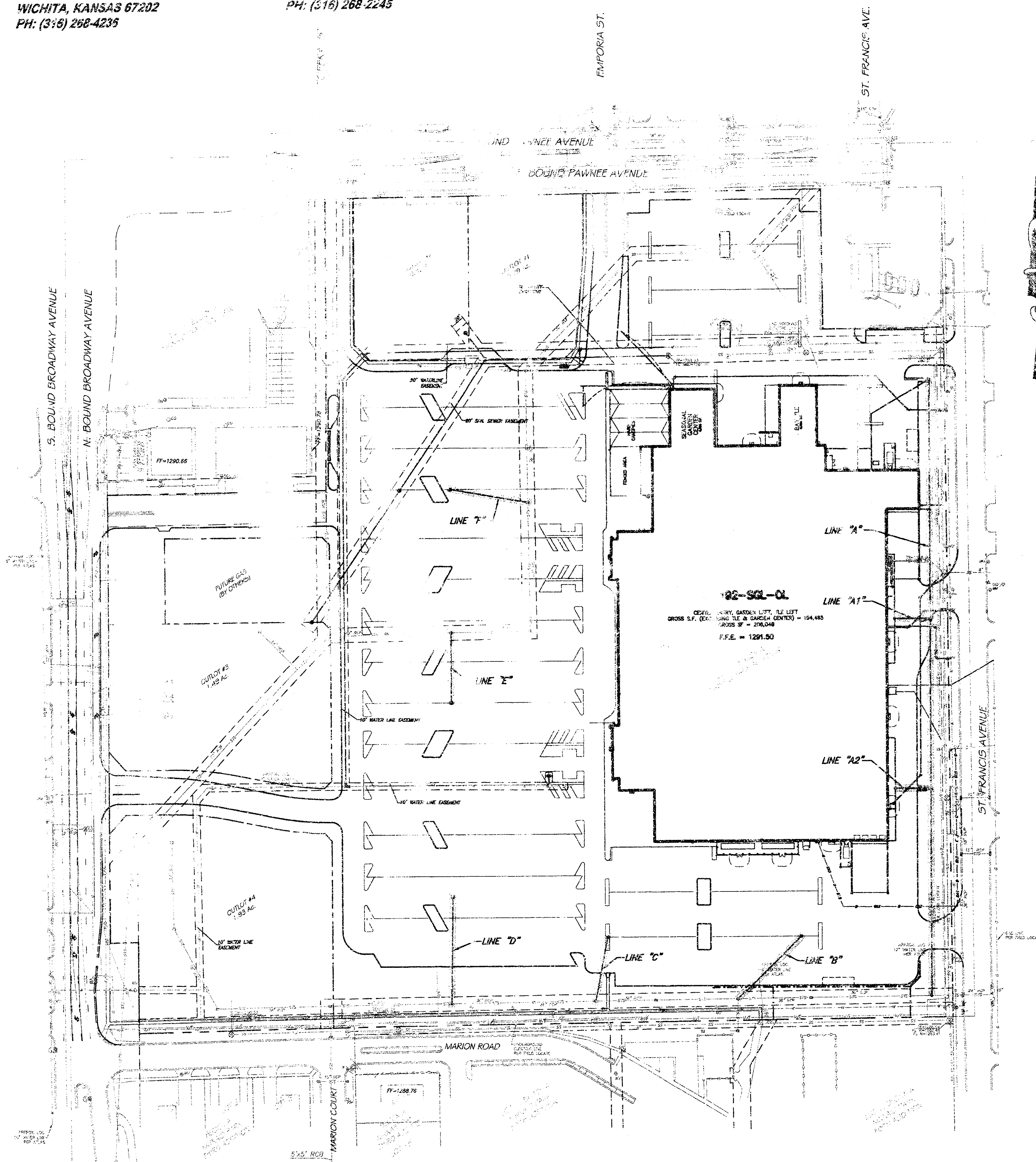
DATE: 07/15/03
DRAWN BY: KST
PROJECT NO.: 3800
ENGINEER: TERENCE L. HAYNES, P.E. #14583

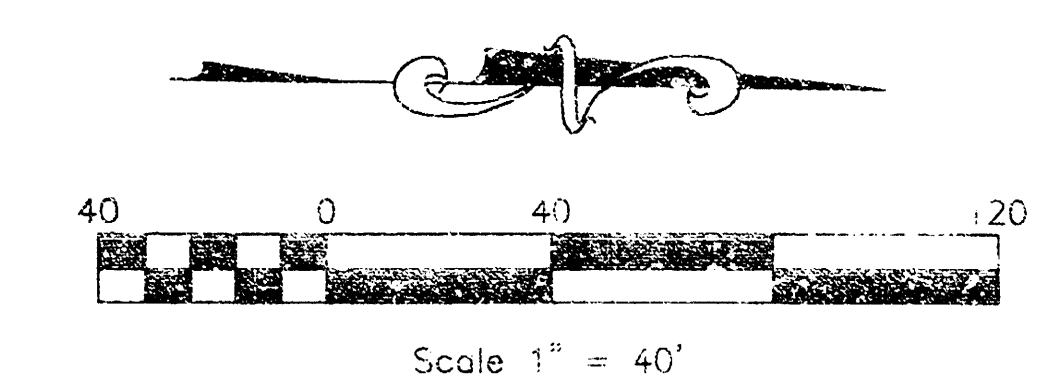
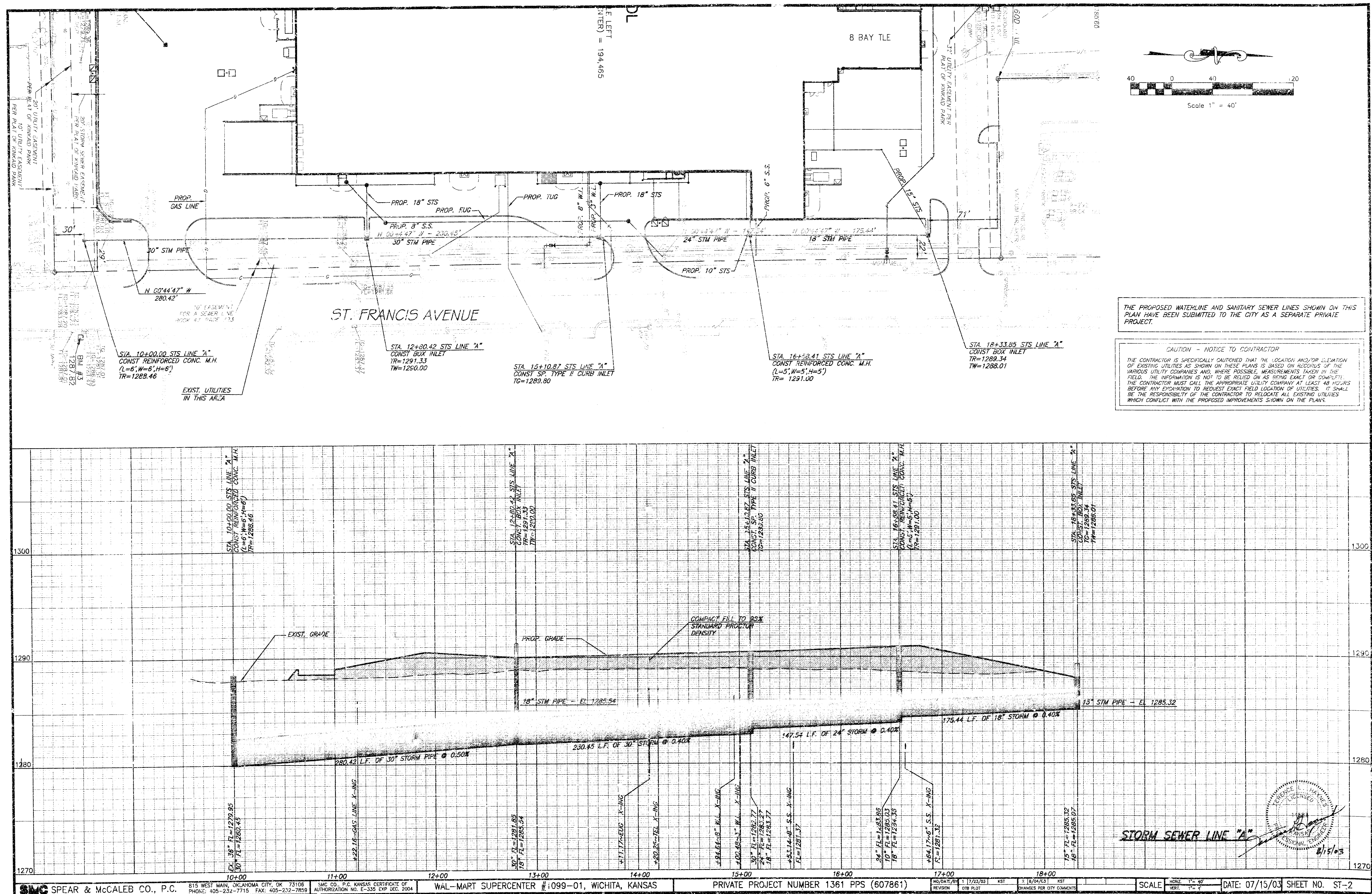
SCALE: N.T.S.
SHEET NO. ST-1



BENCHMARKS

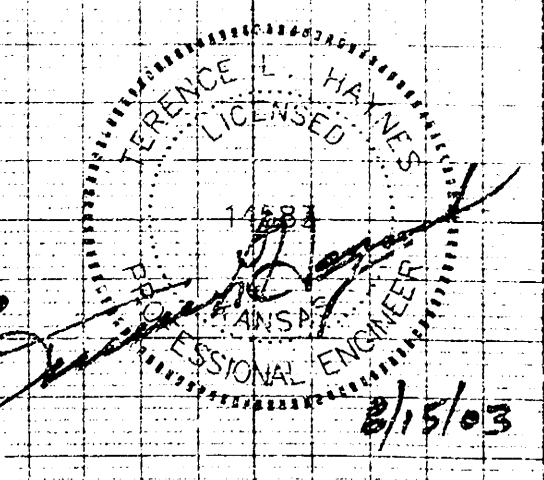
BM #1 CUT "X" ON NOSE OF MEDIAN AT PAWNEE & TOPEKA ELEV=1290.14	BM #3 R.R. SPIKE IN POWER POLE APX. 25' N. OF S.E. PROP. COR. ON E. SIDE ST. FRANCIS ELEV=1287.82
BM #2 CUT "X" ON W. END MEDIAN OL. PAWNEE N. OF N.E. PROPERTY CORNER ELEV=1288.16	BM #4 CUT "X" ON TOP OF CURB @ S.E. BROADWAY & S. INT. TO WAL-MART ELEV=1290.08

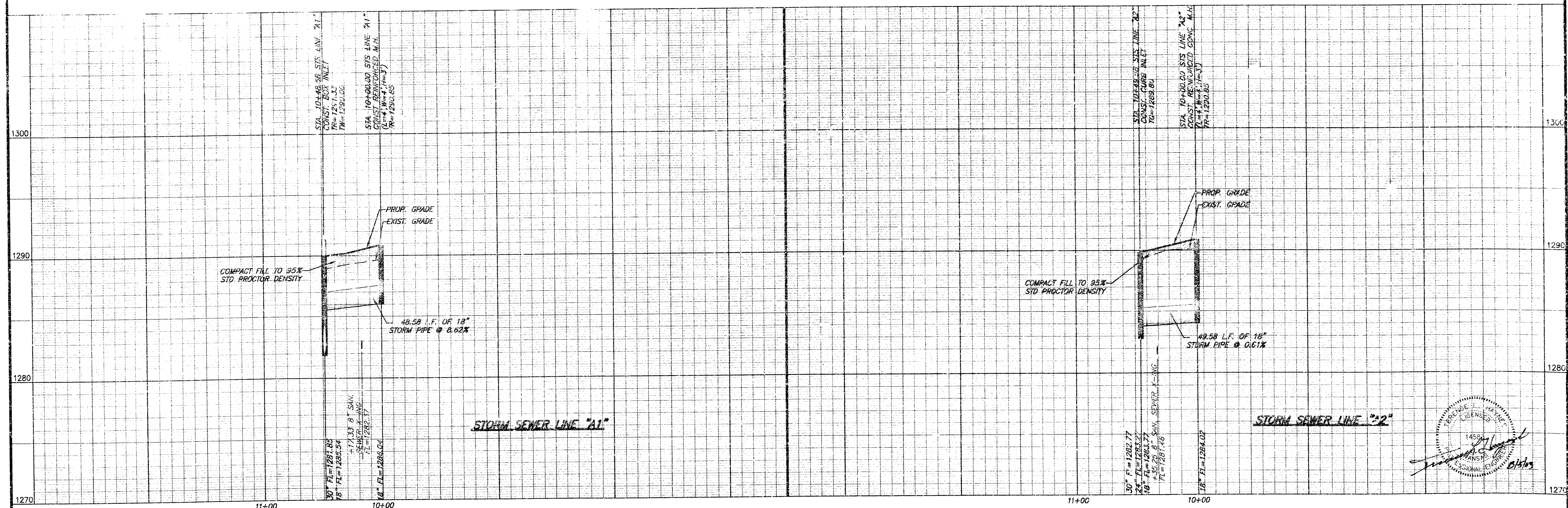
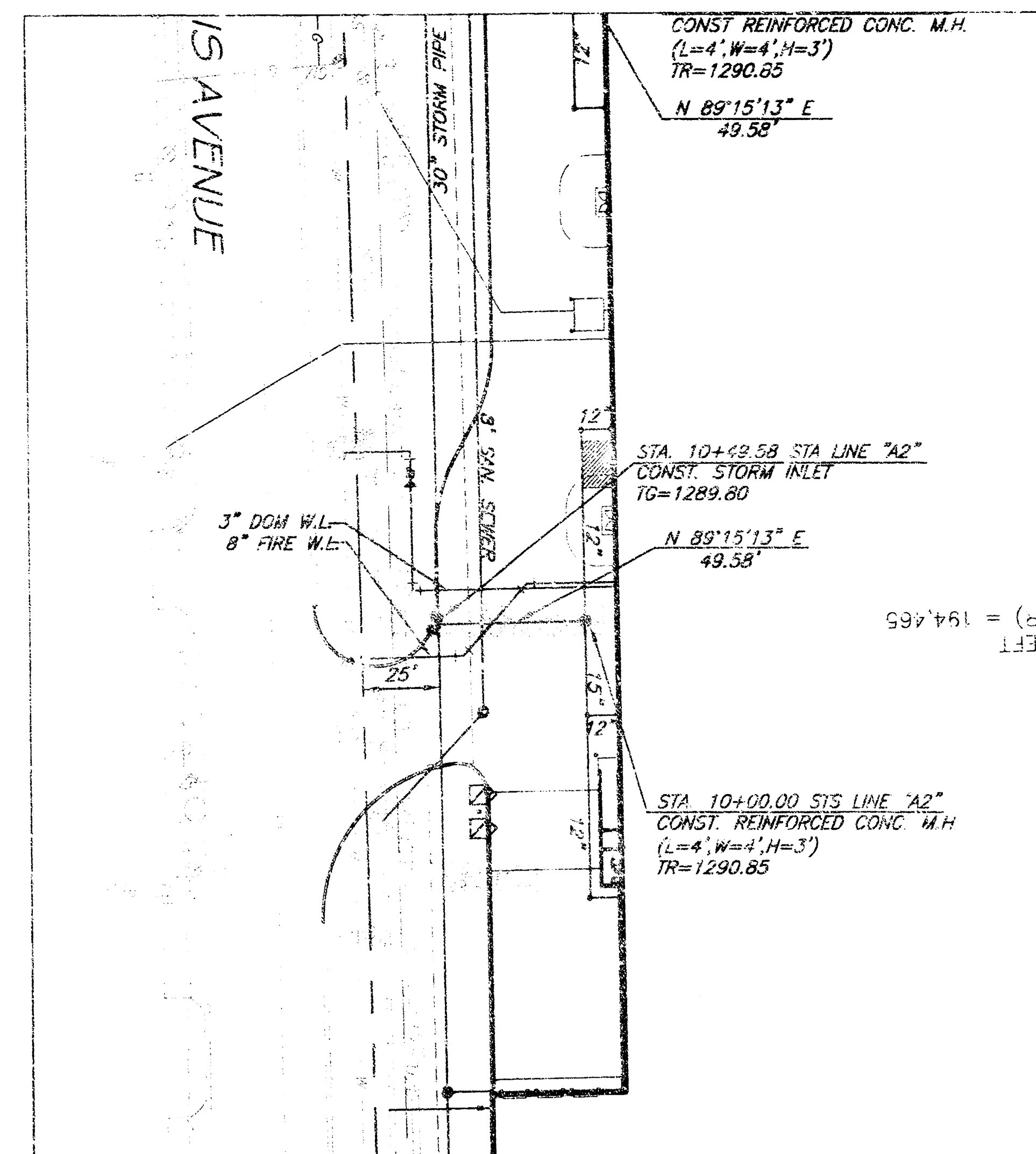
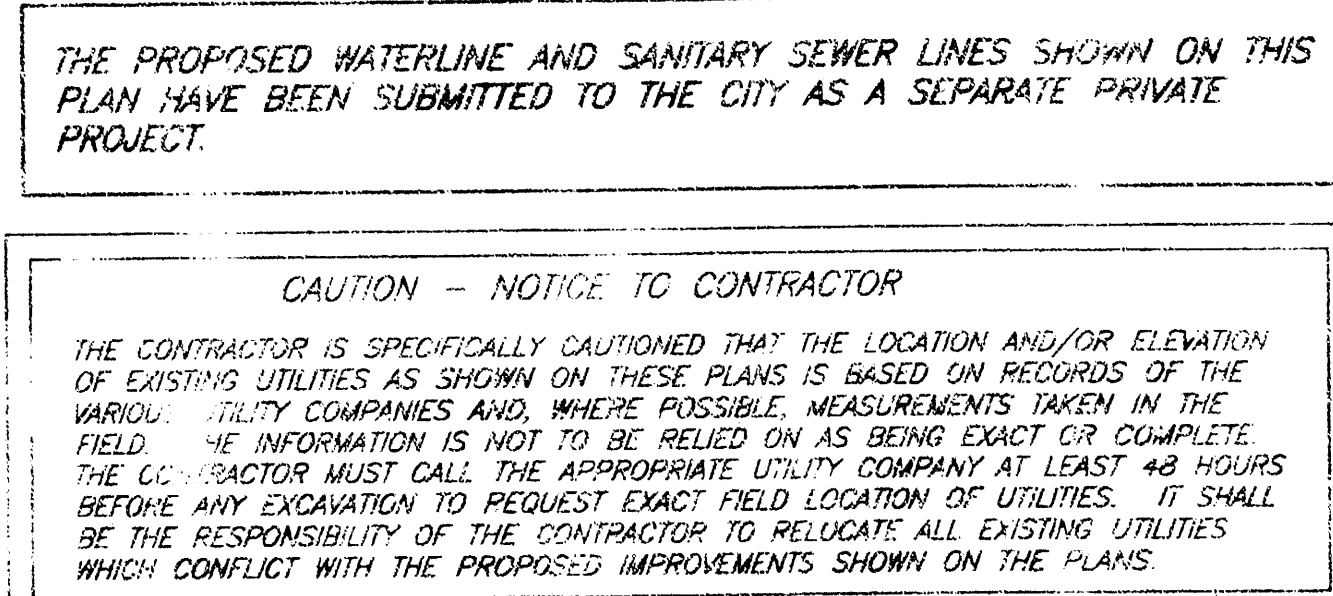


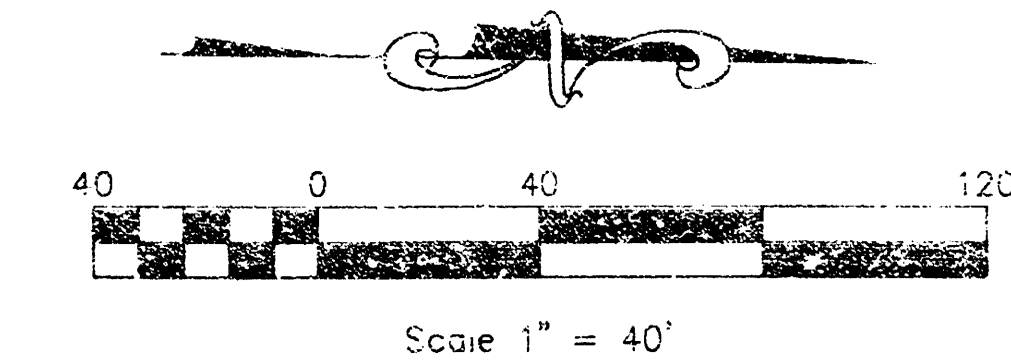
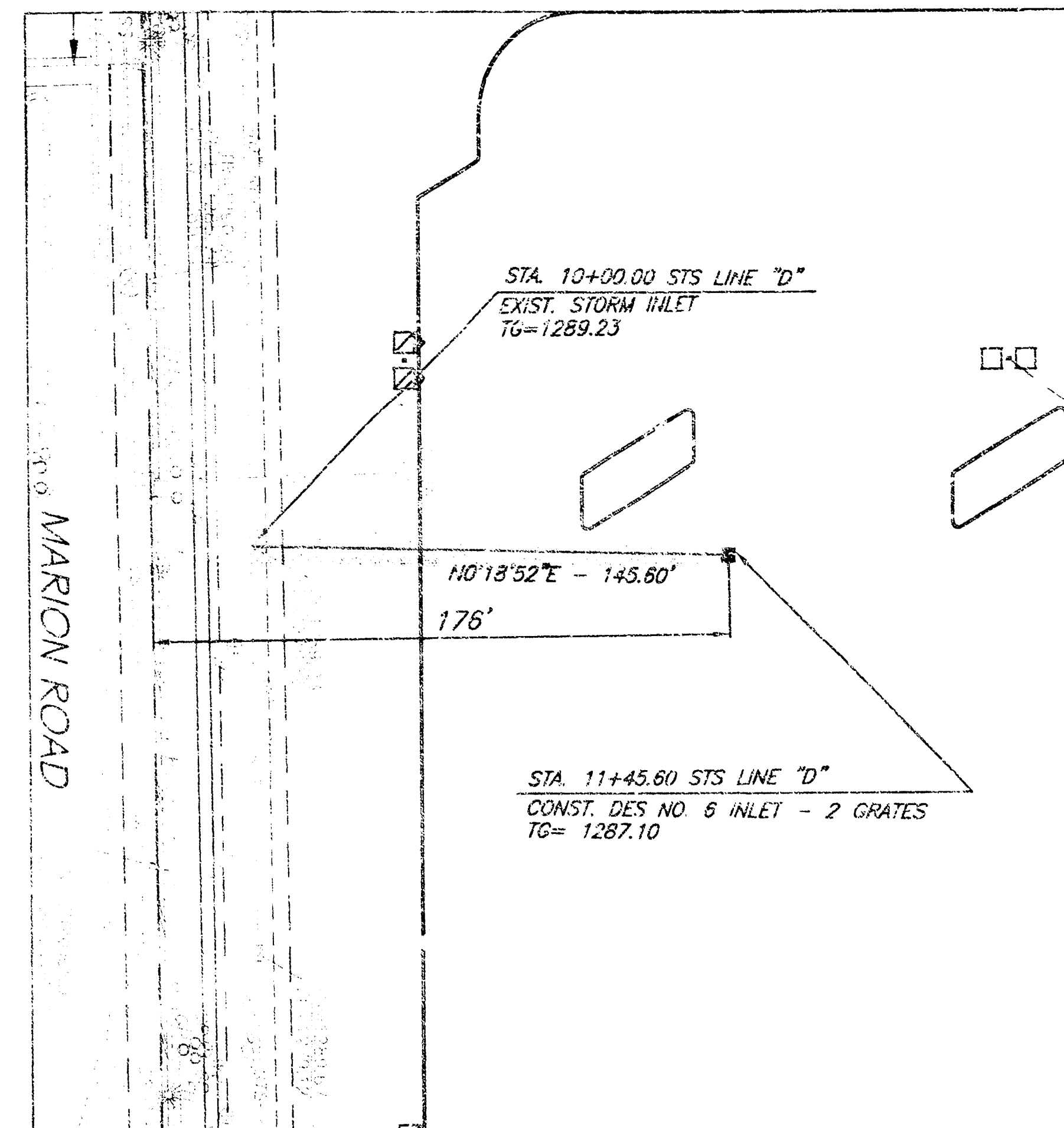
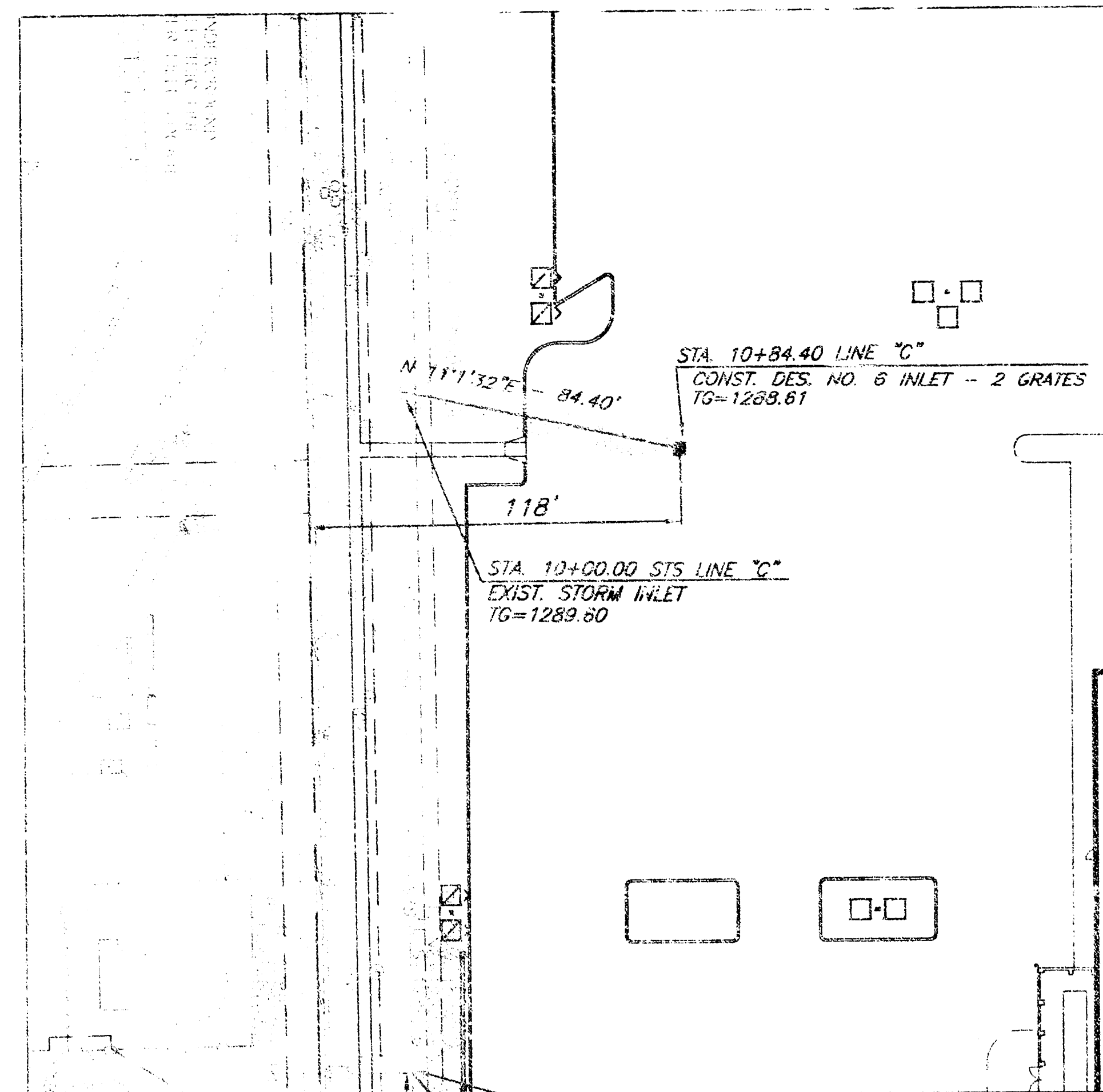
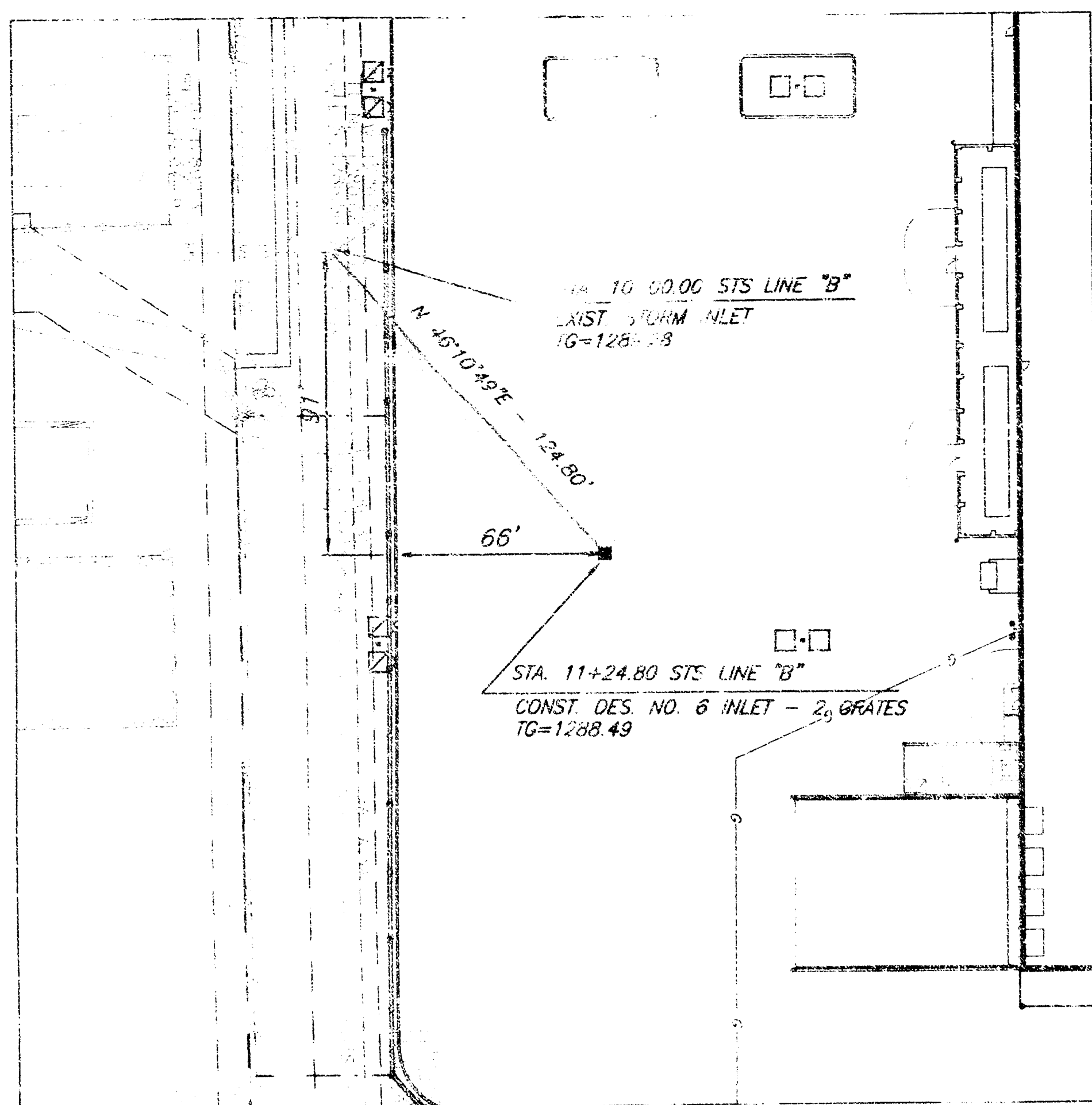


THE PROPOSED WATERLINE AND SANITARY SEWER LINES SHOWN ON THIS PLAN HAVE BEEN SUBMITTED TO THE CITY AS A SEPARATE PRIVATE PROJECT.

CAUTION - NOTICE TO CONTRACTOR
 THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AT LEAST 48 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.

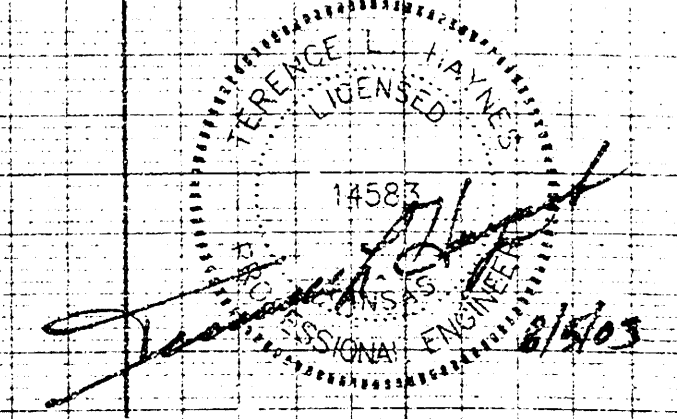
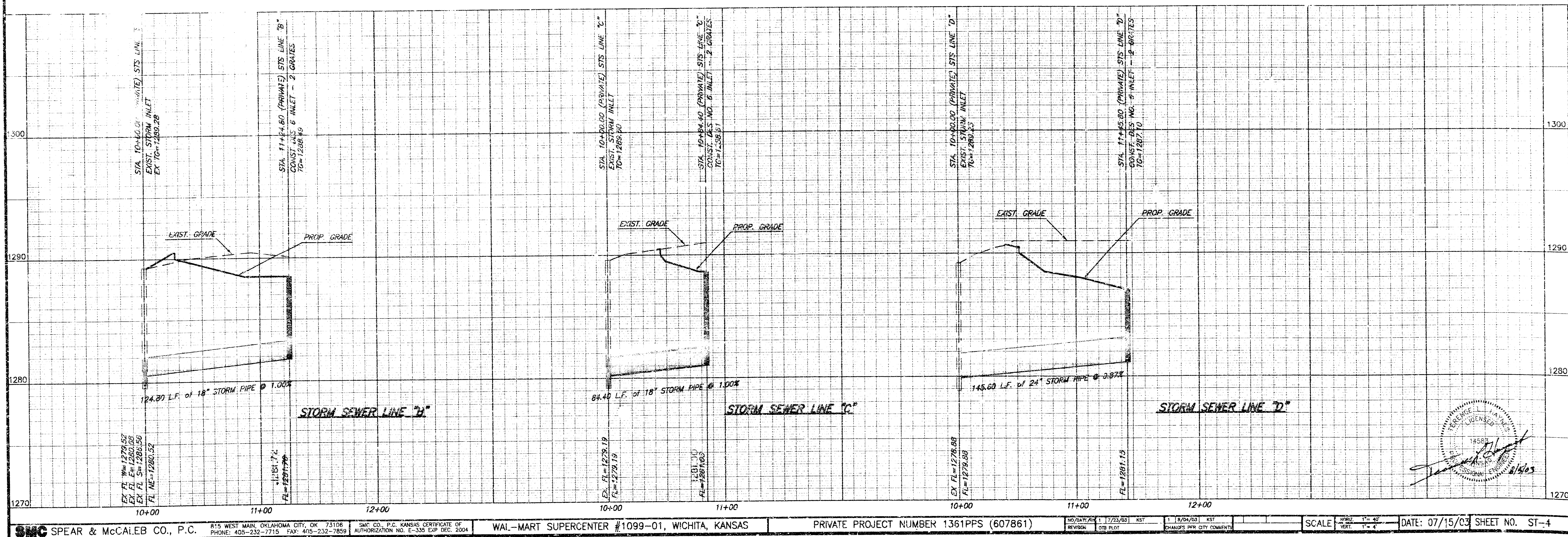


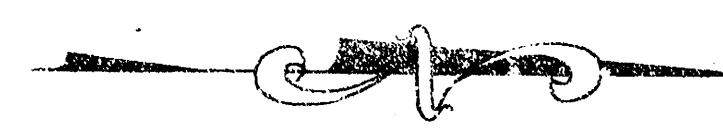
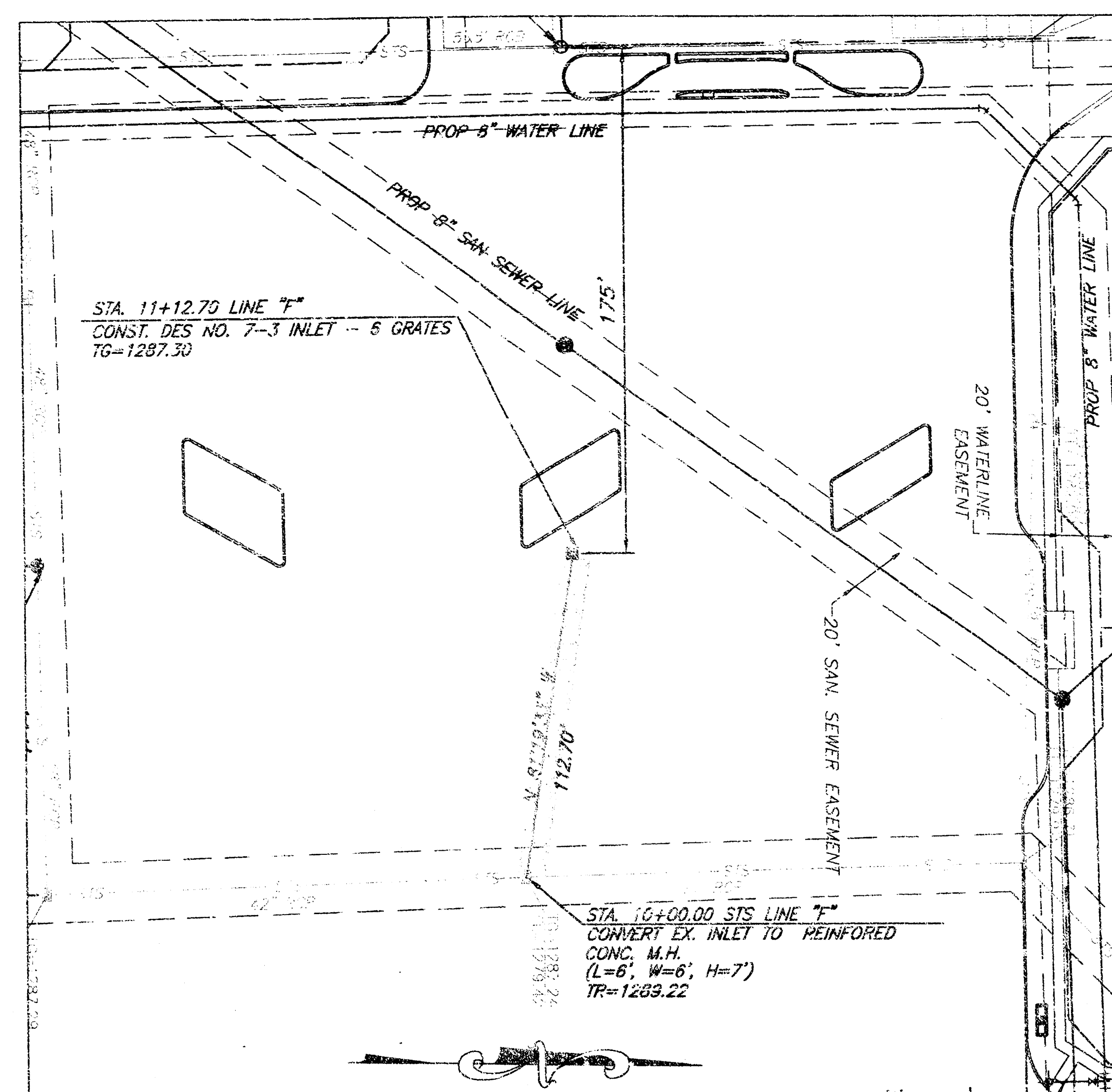
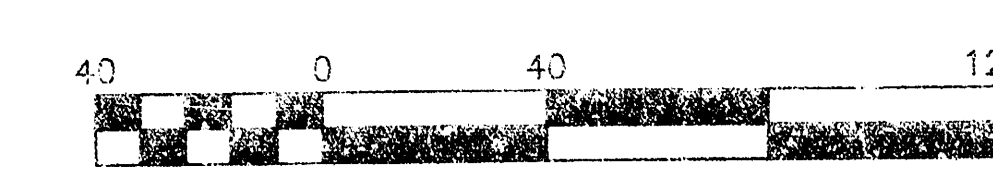
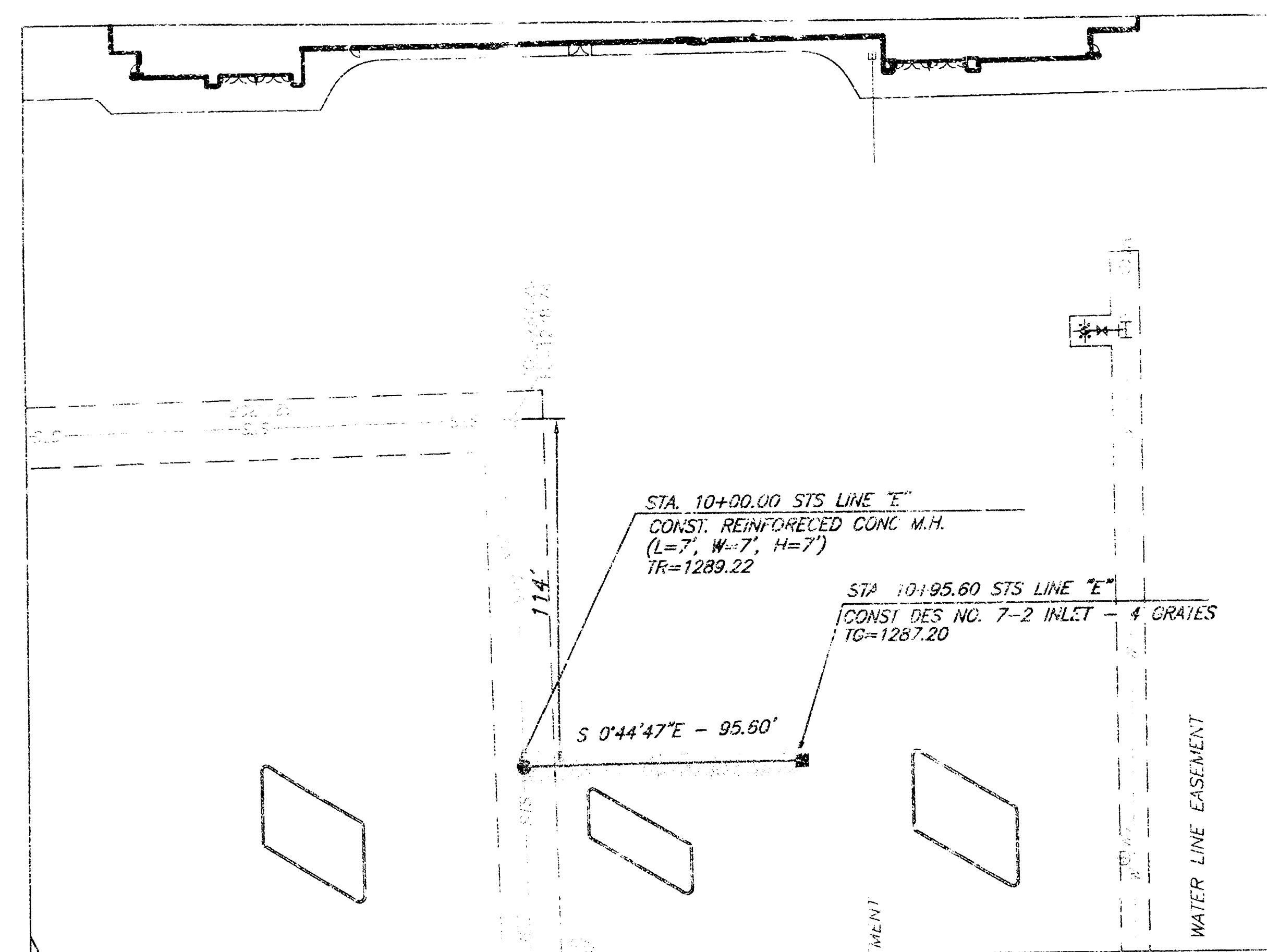




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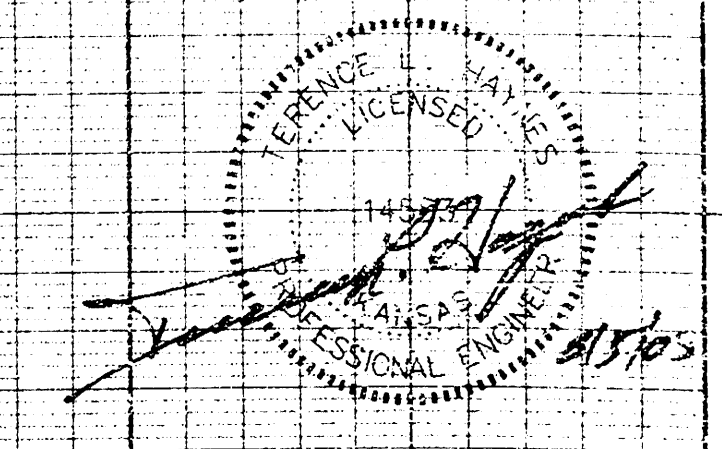
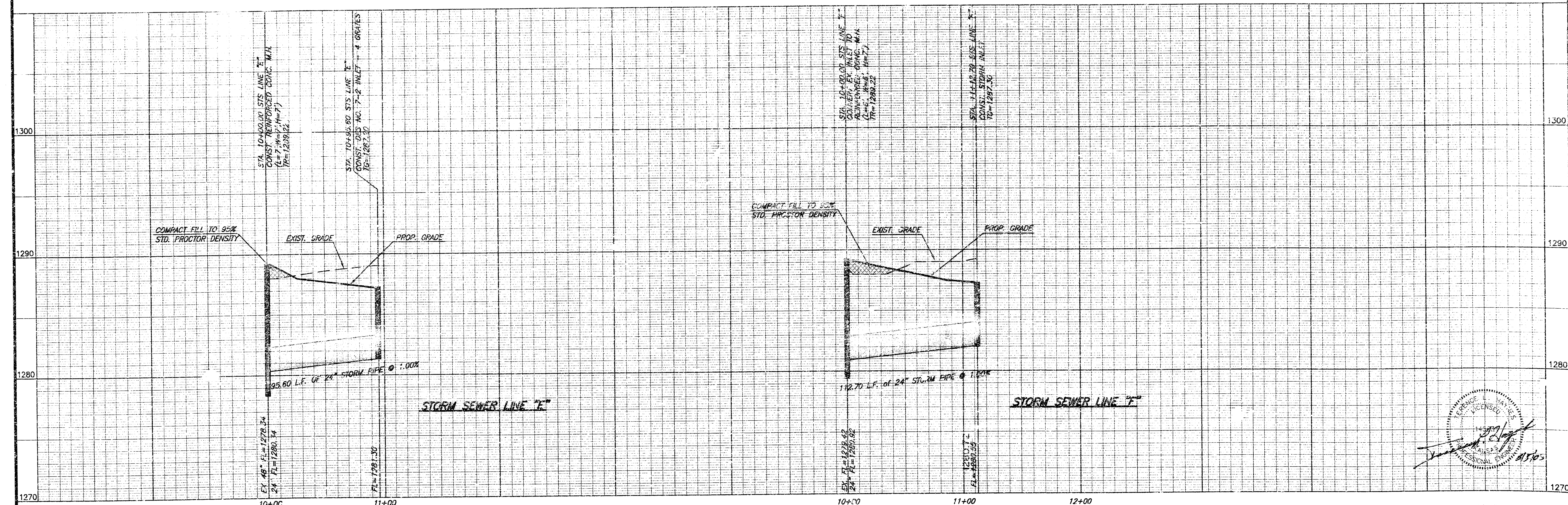
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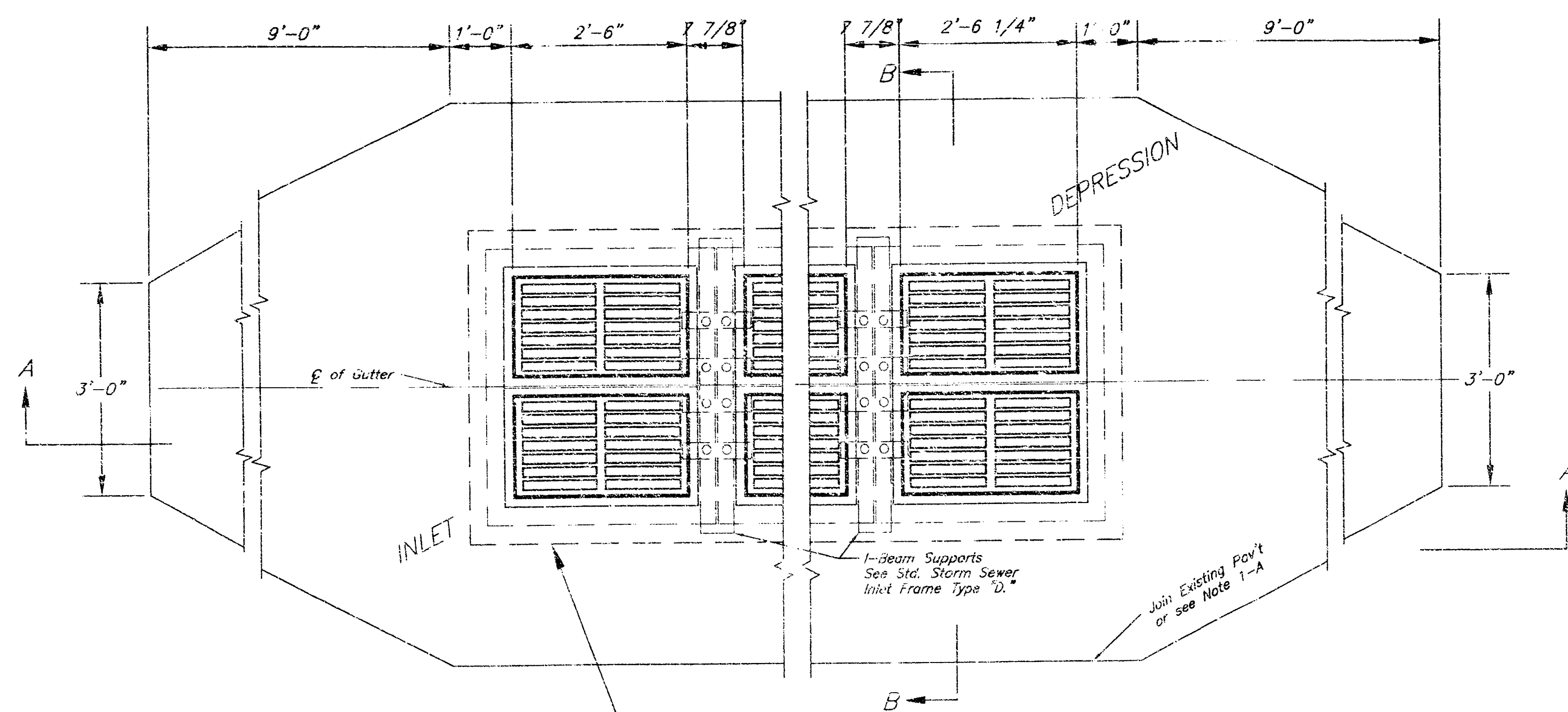


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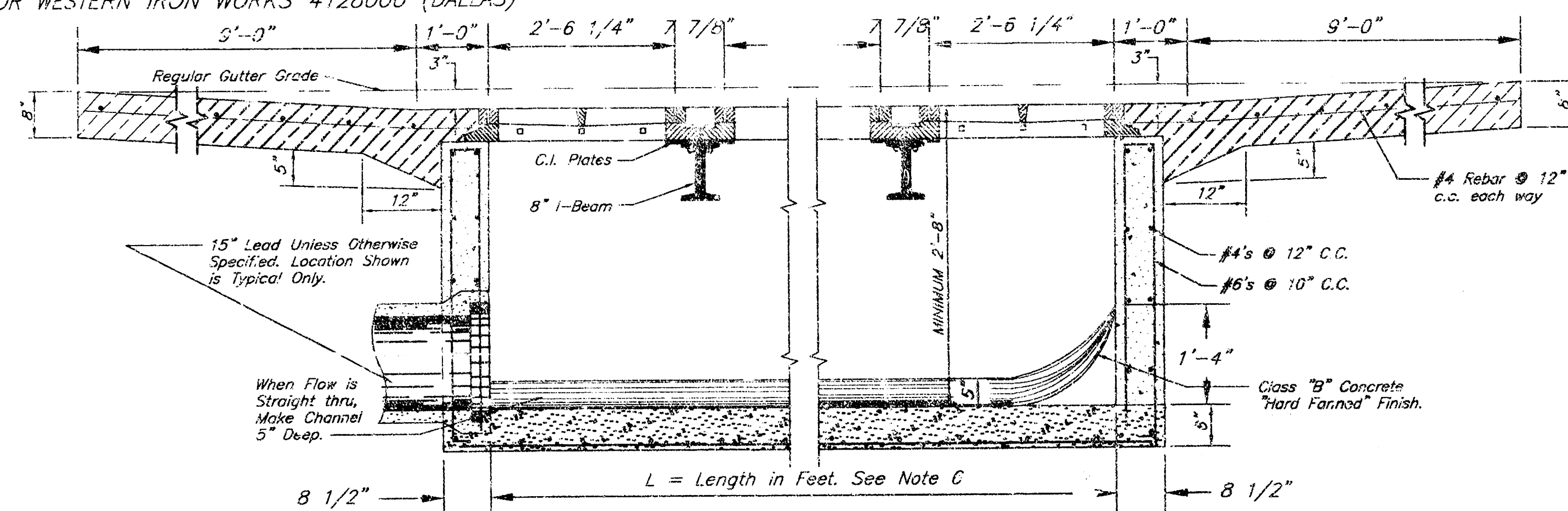
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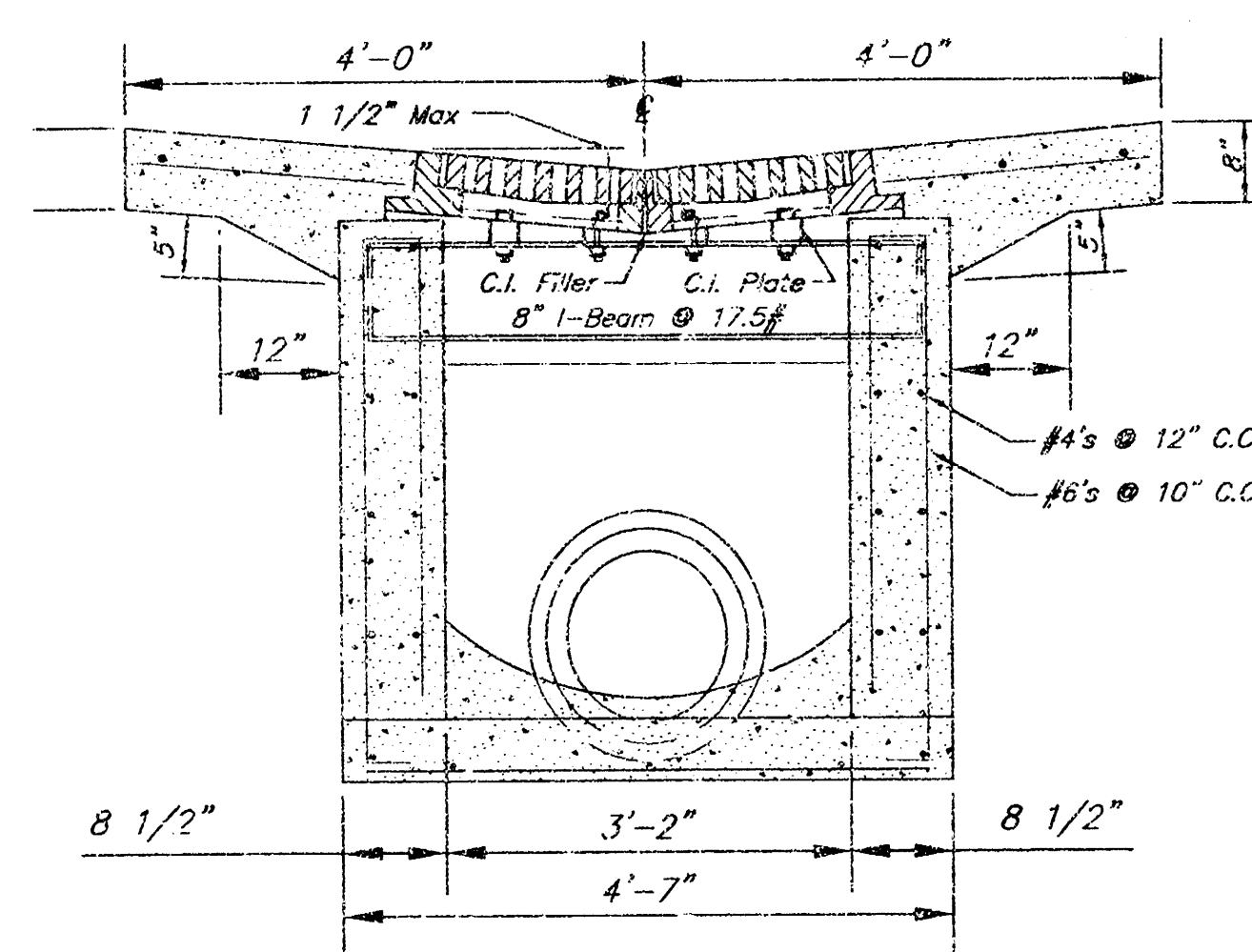
AS-BUILT SEPT. 2004



ALL GRATES SHALL BE THE "BICYCLE" GRATE
NEENAH# R-3079 OR WESTERN IRON WORKS 4128000 (DALLAS)



SEC. A-A

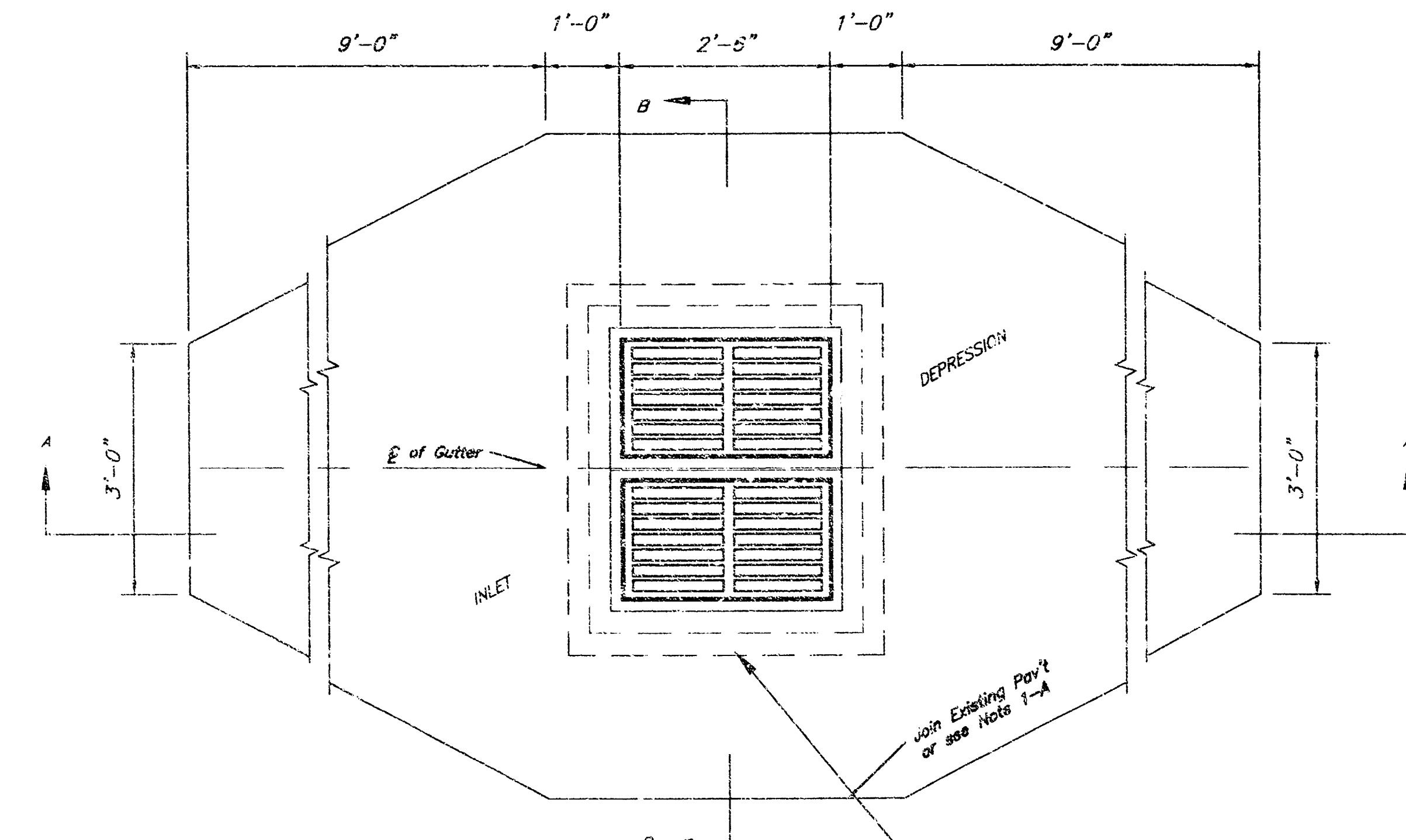


SEC. B-B

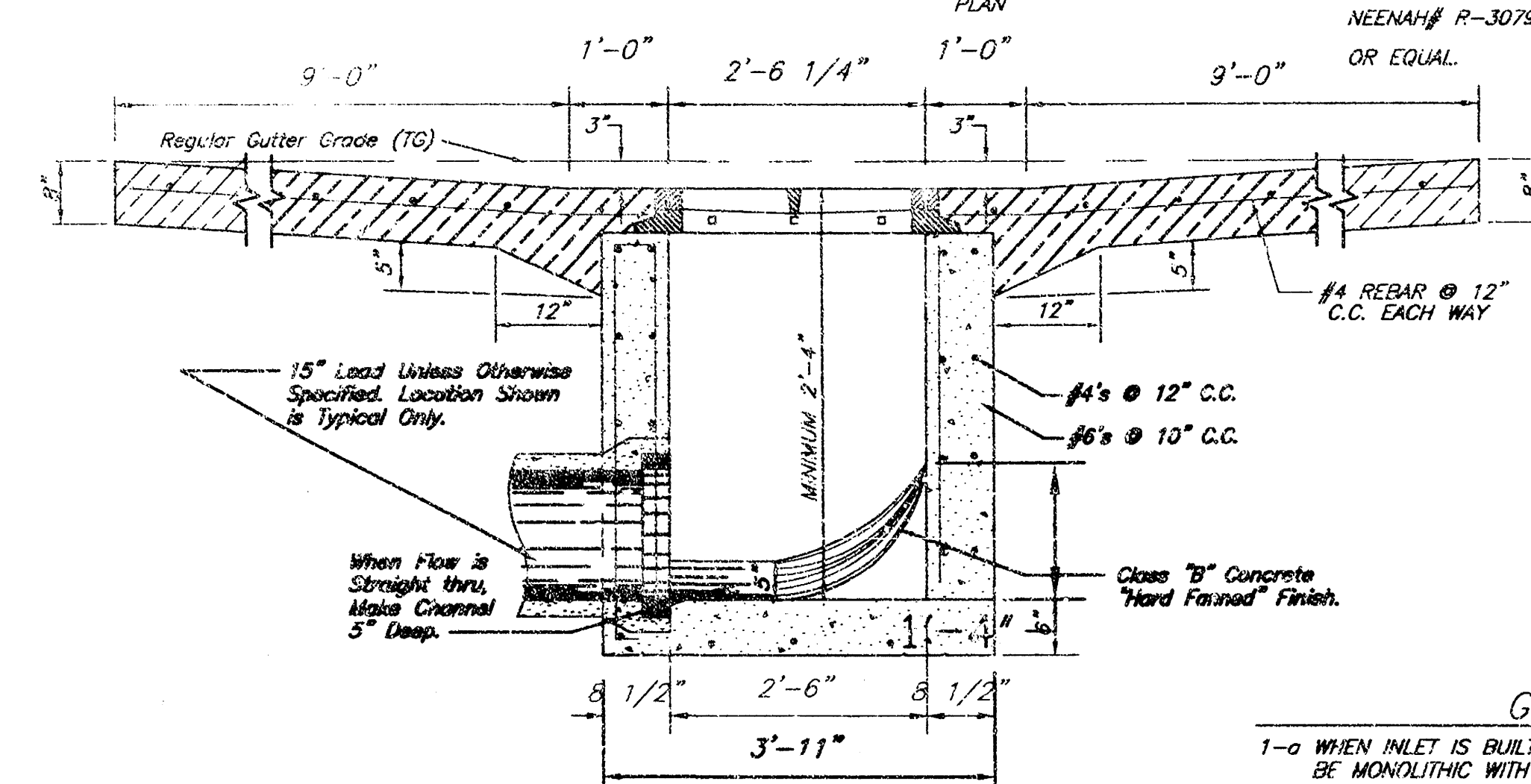
GENERAL NOTES

- 1-a WHEN INLET IS BUILT IN NEW PAVEMENT THE INLET PAVEMENT SHALL BE MONOLITHIC WITH NEW PAVEMENT AND CONFORM TO PLANS AND SPECIFICATIONS THEREOF
- 1-b WHEN INLET IS BUILT IN EXISTING PAVEMENT THE TYPE OF INLET PAVEMENT SHALL CONFORM TO THAT OF THE ADJACENT SLAB UNLESS OTHERWISE PROVIDED IN SPECIAL PROVISIONS
2. CAST IRON STEPS SHALL BE PLACED IN ALL INLETS 3' OR MORE IN DEPTH IN CONFORMITY WITH STANDARD SPECIFICATIONS THEREOF
3. GRATINGS TO BE USED IN THIS STRUCTURE WILL BE SHOWN ON THE PLANS OR DESIGNATED IN SPECIAL PROVISIONS
4. THIS STRUCTURE WILL BE DESIGNATED ON PLANS AS "DESIGN NO. 7" (INDICATE NUMBER OF DOUBLE GRATINGS)
5. BASIS OF PAYMENT FOR INLETS SHALL BE LUMP SUM INCLUDING REMOVAL AND REPLACEMENT OF EXISTING PAVEMENT
6. $L = (3.18 \text{ IN}) - 0.66 \text{ IN}$ IN WHICH $N =$ THE NUMBER OF DOUBLE GRATINGS

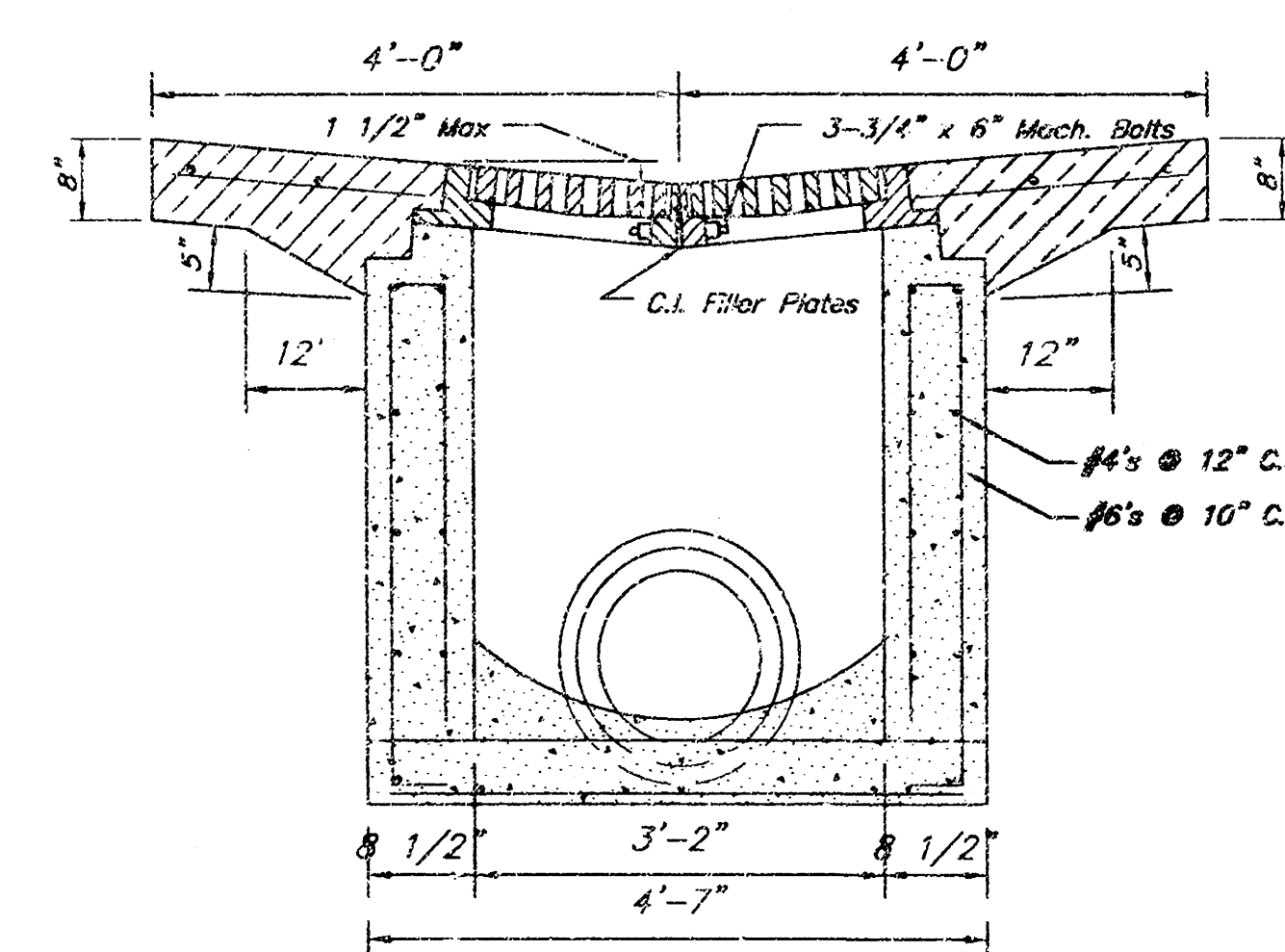
STORM SEWER INLET
DESIGN NO. 7 (MULTIPLE DOUBLE GRATINGS)



ALL GRATES SHALL BE THE "BICYCLE" GRATE
NEENAH# R-3079 OR WESTERN IRON WORKS 4128000 (DALLAS)
OR EQUAL



SEC. A-A

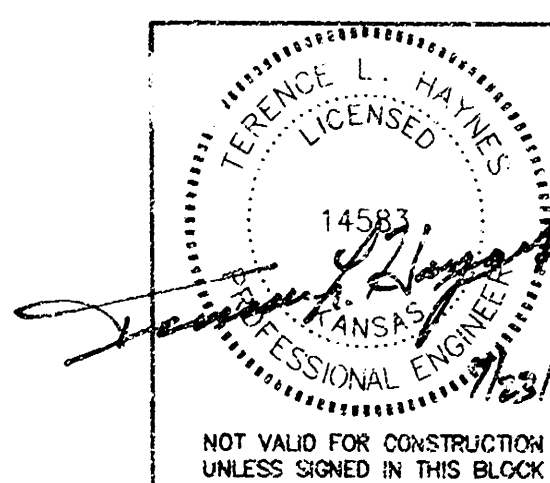


SEC. B-B

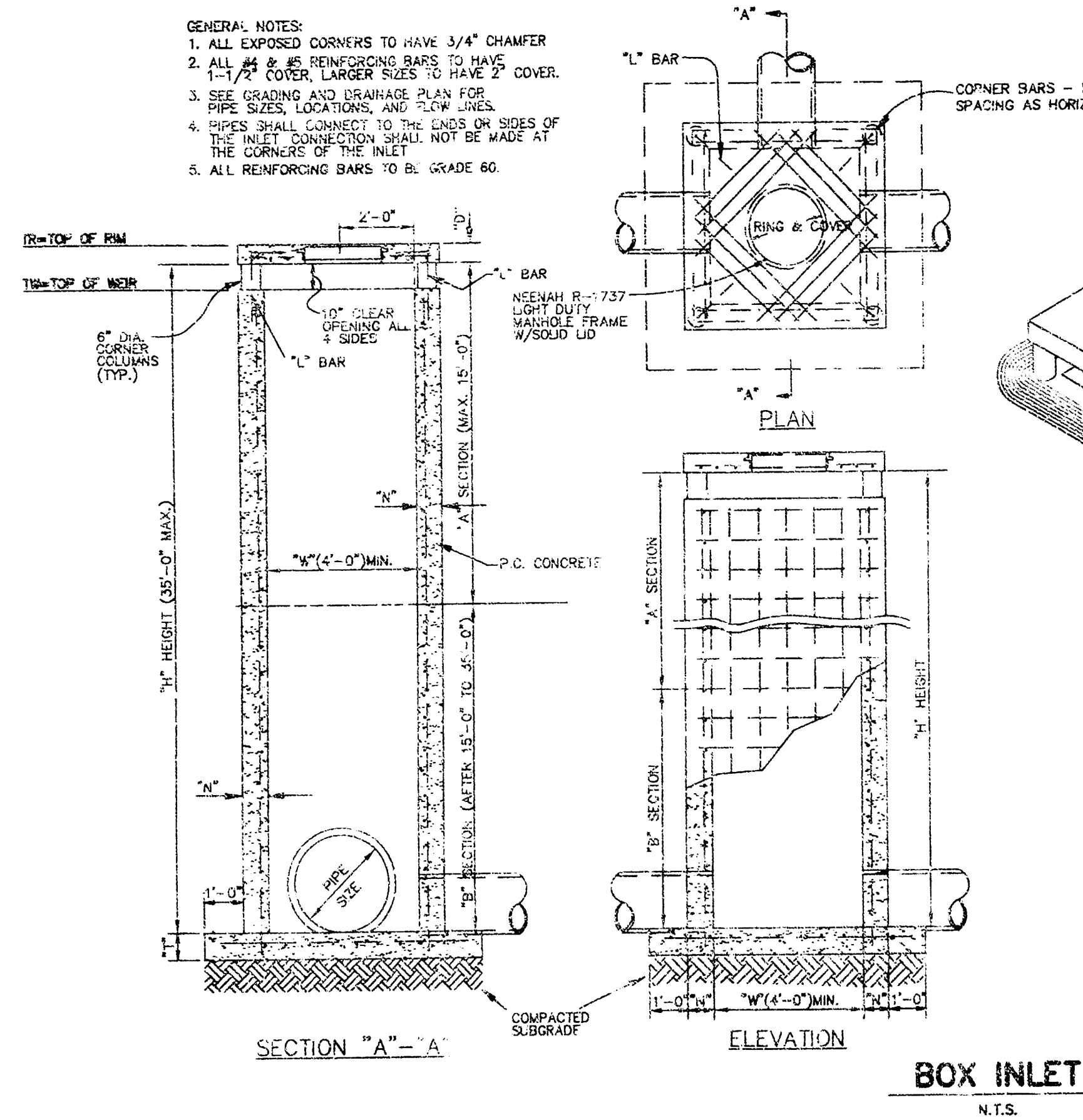
GENERAL NOTES

- 1-a WHEN INLET IS BUILT IN NEW PAVEMENT THE INLET PAVEMENT SHALL BE MONOLITHIC WITH NEW PAVEMENT AND CONFORM TO PLANS AND SPECIFICATIONS THEREOF
- 1-b WHEN INLET IS BUILT IN EXISTING PAVEMENT THE TYPE OF INLET PAVEMENT SHALL CONFORM TO THAT OF THE ADJACENT SLAB UNLESS OTHERWISE PROVIDED IN SPECIAL PROVISIONS
2. CAST IRON STEPS SHALL BE PLACED IN ALL INLETS 3' OR MORE IN DEPTH IN CONFORMITY WITH STANDARD SPECIFICATIONS THEREOF
3. GRATINGS TO BE USED IN THIS STRUCTURE WILL BE SHOWN ON THE PLANS OR DESIGNATED IN SPECIAL PROVISIONS
4. THIS STRUCTURE WILL BE DESIGNATED ON PLANS AS "INLET NO. 6"
5. BASIS OF PAYMENT FOR INLETS SHALL BE LUMP SUM INCLUDING REMOVAL AND REPLACEMENT OF EXISTING PAVEMENT
6. NO BRICK CONSTRUCTION
7. POUR-IN-PLACE OR PRECAST ONLY
8. CONTRACTOR SHALL USE THE TOP OF GRADE SHOWN IN GRADING PLAN AS REGULAR GUTTER GRADE ELEVATION SHOWN IN THIS DETAIL. THE ACTUAL GRADE SHALL BE SET 3" LOWER THAN THE REGULAR GUTTER GRADE.

STORM SEWER INLET
DESIGN NO. 6
STORM SEWER INLET



AS-BUILT SEPT. 2004			
(PRIVATE) STORM SEWER DETAILS DESIGN 6 & 7 INLETS			
WAL-MART SUPERCENTER #1099-01			
PAWNEE AVENUE & BROADWAY AVENUE WICHITA, KANSAS			
SPEAR & McCALEB CO., P.C. 815 West Main - Oklahoma City, OK 73102 PH: 405-232-7715 FAX: 405-232-7559 KANSAS CERTIFICATE OF AUTHORIZATION NO. E-335 EXP. DEC. 2004			
No.	Revision	By	Date
1			
DATE: 07/15/03		SCALE:	SHEET NO.
DRAWN BY: KST		N.T.S.	ST-6
PROJECT NO.: 3800		ENGINEER:	



REINFORCEMENT SCHEDULE, BASE

SECTION	WIDTH (W)	HEIGHT (H)	VERT.
"A"	14'-0"	14'-0"	#4 @ 12"
"B"	14'-0"	14'-0"	#4 @ 12"

TABLE OF "W" DIMENSIONS

PIPE SIZE	SKIN OF CROSS DRAIN	SKIN OF CROSS DRAIN	SKIN OF CROSS DRAIN
12"	12'-0"	12'-0"	12'-0"
18"	18'-0"	18'-0"	18'-0"
24"	24'-0"	24'-0"	24'-0"
30"	30'-0"	30'-0"	30'-0"
36"	36'-0"	36'-0"	36'-0"
42"	42'-0"	42'-0"	42'-0"
48"	48'-0"	48'-0"	48'-0"
54"	54'-0"	54'-0"	54'-0"
60"	60'-0"	60'-0"	60'-0"

REINFORCEMENT SCHEDULE, WALLS

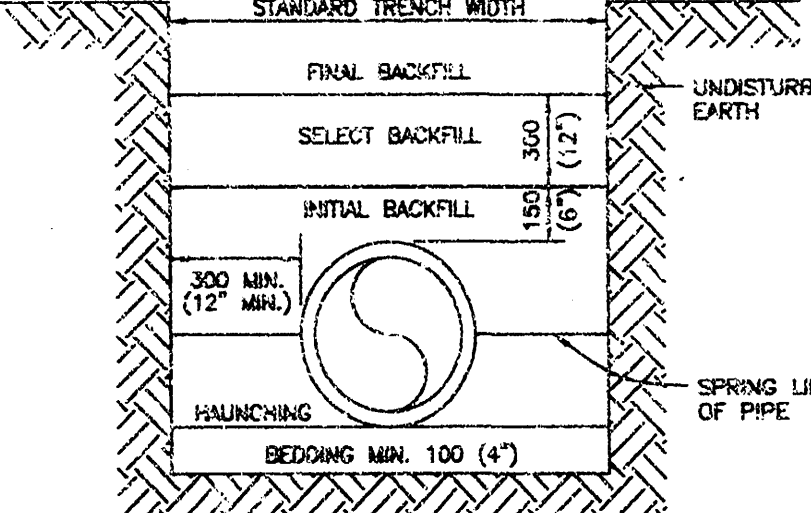
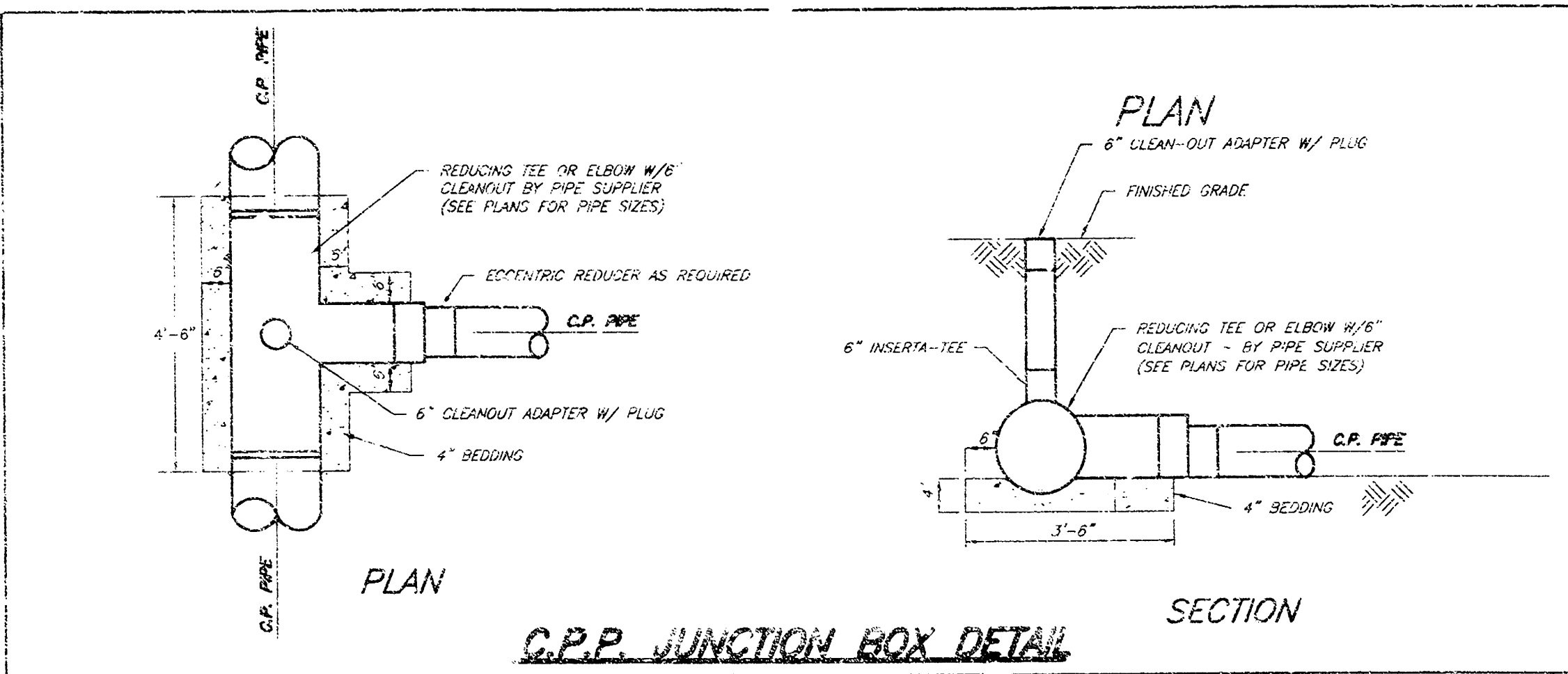
SECTION	WIDTH (W)	HEIGHT (H)	VERT.
"A"	14'-0"	14'-0"	#4 @ 12"
"B"	14'-0"	14'-0"	#4 @ 12"

TABLE OF "H" & "W" DIMENSIONS

SECTION	WIDTH (W)	HEIGHT (H)	VERT.
"A"	14'-0"	14'-0"	#4 @ 12"
"B"	14'-0"	14'-0"	#4 @ 12"

REINFORCEMENT SCHEDULE, TOP

DIMENSIONS	STEEL	SPECIAL TYPING
W1 = 7' OR LESS	#4 @ 12" E.W.	DIAGONAL @ COVER
W2 = 7' OR LESS	#4 @ 12" E.W.	DIAGONAL @ COVER
W3 = 7' OR LESS	#4 @ 12" E.W.	DIAGONAL @ COVER
W4 = 7' OR LESS	#4 @ 12" E.W.	DIAGONAL @ COVER
W5 = 7' OR LESS	#4 @ 12" E.W.	DIAGONAL @ COVER
W6 = 7' OR LESS	#4 @ 12" E.W.	DIAGONAL @ COVER
W7 = 7' OR LESS	#4 @ 12" E.W.	DIAGONAL @ COVER
W8 = 7' OR LESS	#4 @ 12" E.W.	DIAGONAL @ COVER
W9 = 7' OR LESS	#4 @ 12" E.W.	DIAGONAL @ COVER
W10 = 7' OR LESS	#4 @ 12" E.W.	DIAGONAL @ COVER



BEDDING MATERIALS

BACKFILL DESCRIPTION	NON-PAVED AREAS				PAVED AREAS (See Note #)			
	CONCRETE	HOPE	CONCRETE	HOPE	CONCRETE	HOPE	CONCRETE	HOPE
FINAL BACKFILL	EXCAVATED MATERIAL	EXCAVATED MATERIAL	EXCAVATED MATERIAL	EXCAVATED MATERIAL	SBM	SBM	SBM	SBM
SELECT BACKFILL	EXCAVATED MATERIAL	EXCAVATED MATERIAL	EXCAVATED MATERIAL	EXCAVATED MATERIAL	SBM	SBM	SBM	SBM
INITIAL BACKFILL	SAND	SAND	SELECT FILL	SAND	SBM	SBM	SBM	SBM
HAUNCHING	SBM	SBM	SELECT FILL	SBM	SBM	SBM	SBM	SBM
BEDDING	SEE NOTE 5	SEE NOTE 5	SEE NOTE 5	SEE NOTE 5	SEE NOTE 5	SEE NOTE 5	SEE NOTE 5	SEE NOTE 5

NOTES:

- INSTALLATION AND BACK FILLING SHALL MEET MANUFACTURER'S RECOMMENDATIONS.
- SELECT FILL CONSISTS OF EXCAVATED MATERIALS CONTAINING NO MATERIAL LARGER THAN 3/4" DIA. (75% PASSING 30 MESH).
- STANDARD BEDDING MATERIAL (SBM) SHALL CONFORM TO ASTM D-1557 - AGGREGATE BASE OR FILLABLE FILL OR APPROVED EQUIV.
- COMPACTION REQUIREMENTS:
- NON-PAVED AREAS: 90% STANDARD PROCTOR DENSITY FOR COHESIVE SOILS AND 95% FOR COHESIVE SOILS.
- PAVED AREAS: 95% STANDARD PROCTOR DENSITY FOR COHESIVE SOILS.
- TRENCH 6" DEEP BEDDING SHALL BE 100 MM (4") SAND OR 100 MM (4") AGGREGATE BASE, AND IF MET SHALL BE NO. 57 OR NO. 57 ROCK PER SECTION 701.66(C).
- NO WATER SETTING ALLOWED.
- IN SANDY NON-PAVED AREAS, SAND CAN BE USED FOR ALL BACKFILL.
- FOR CONCRETE PIPE IN NON-PAVED AREAS, SAND CAN BE USED FOR ALL BACKFILL IF THE CONCRETE PIPE USES RUBBER GASKETS.
- THE BACKFILL MATERIAL SHALL EXTEND A MINIMUM OF 2'-FEET BEHIND THE BACK OF CURB, OR THE EDGE OF PAVEMENT WHERE NO CURB EXISTS.
- METRIC UNITS ARE IN MM WITH ENGLISH UNITS IN PARENTHESIS, UNLESS INDICATED OTHERWISE.

STORM SEWER PIPE TRENCHING AND BEDDING

AS-BUILT: SEPT. 2004

(PRIVATE) STORM SEWER DETAILS

WAL-MART SUPERCENTER #1099-01

**PAWNEE AVENUE & BROADWAY AVENUE
WICHITA, KANSAS**

SPEAR & McCALEB CO., P.C.
815 West Main - Oklahoma City, OK 73106
PH: 405-232-7715 Fax: 405-232-7859
KANSAS CERTIFICATE OF AUTHORIZATION NO. E-535 EXP. DEC. 2004

SMC

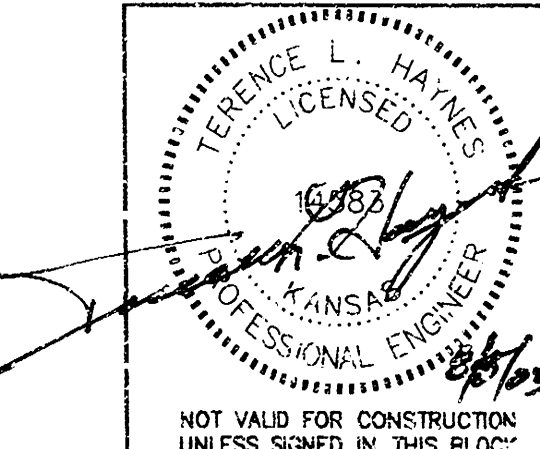
No. Revision
1. CHANGES PER CITY COMMENTS

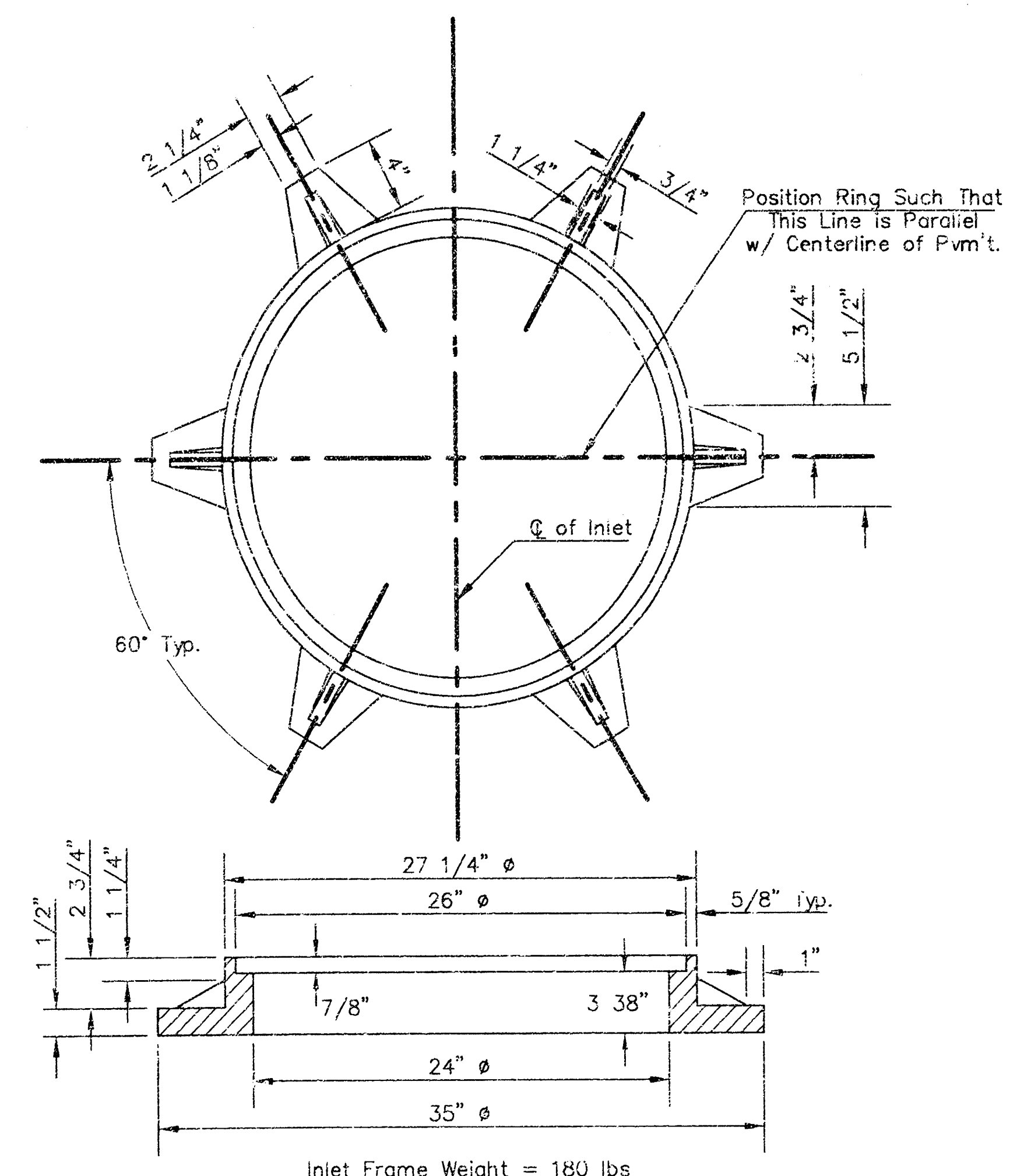
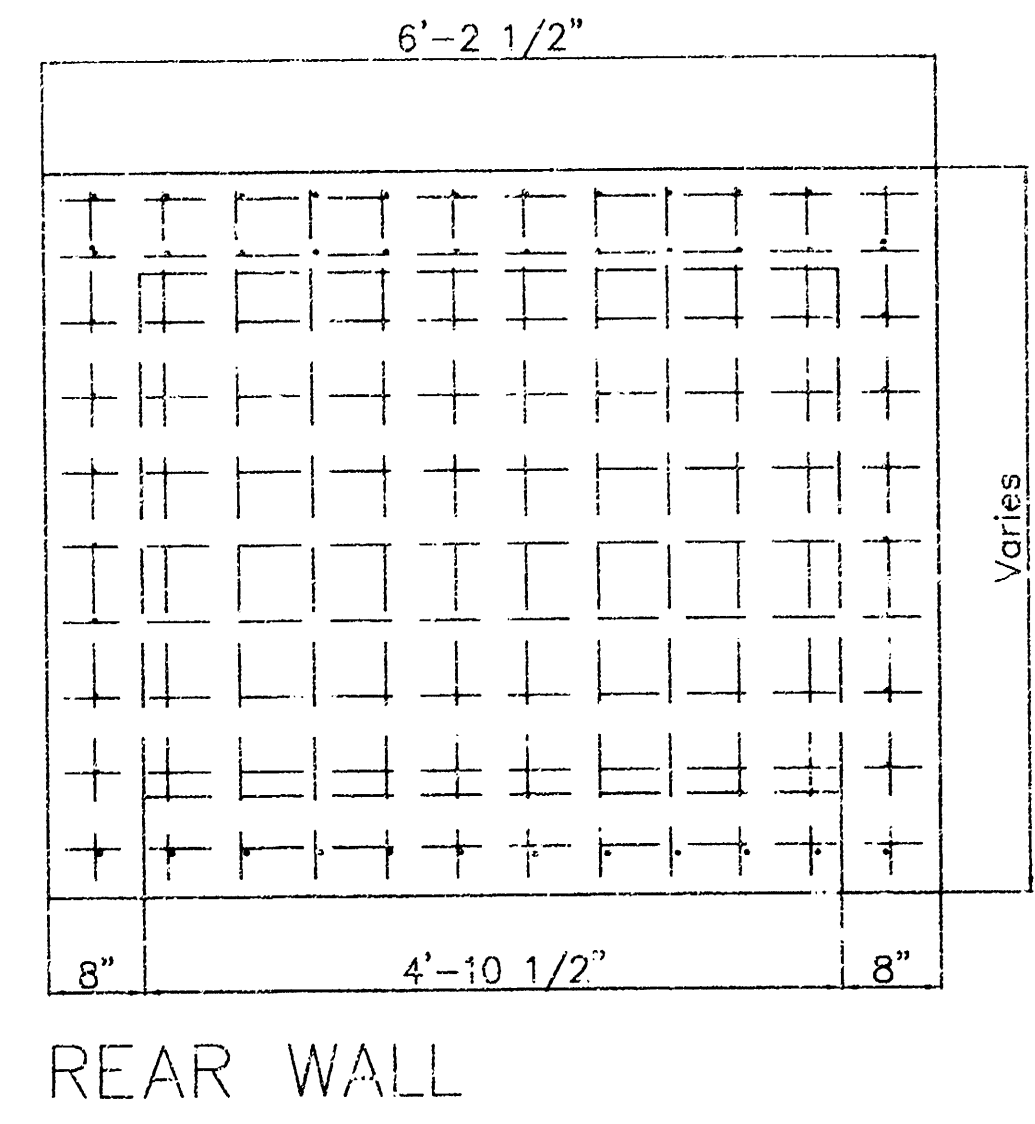
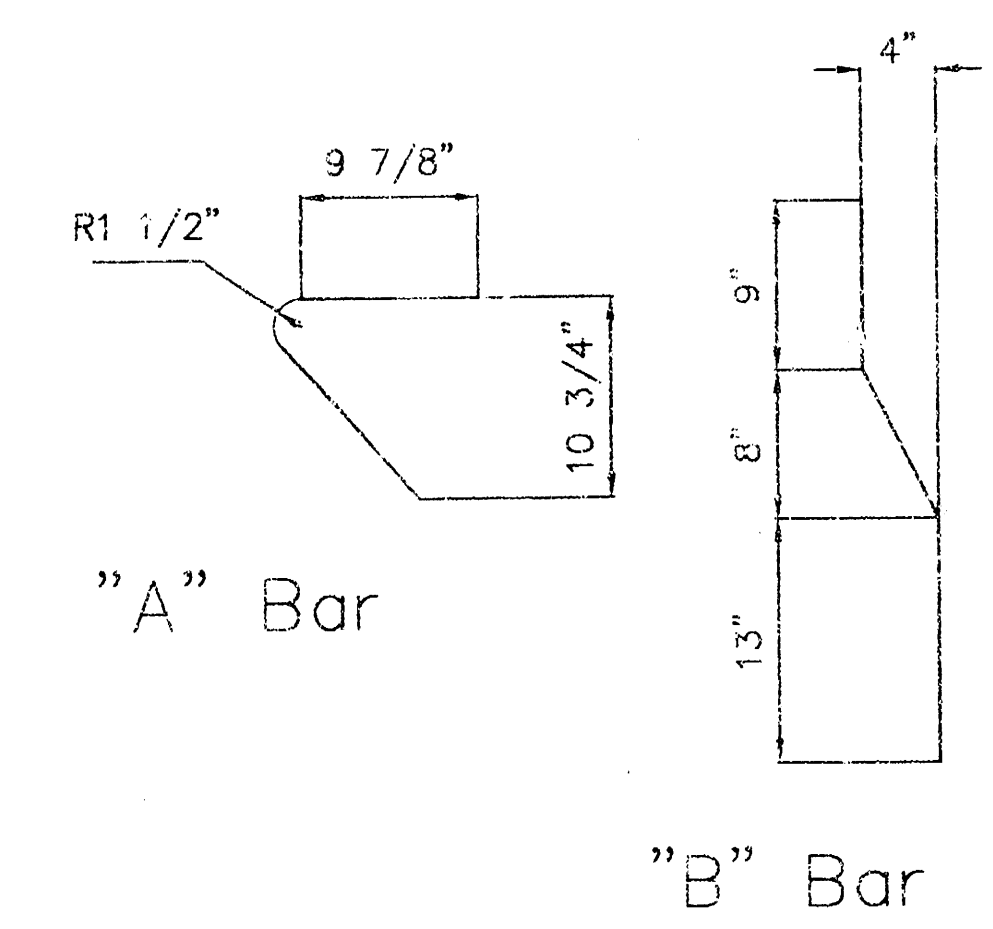
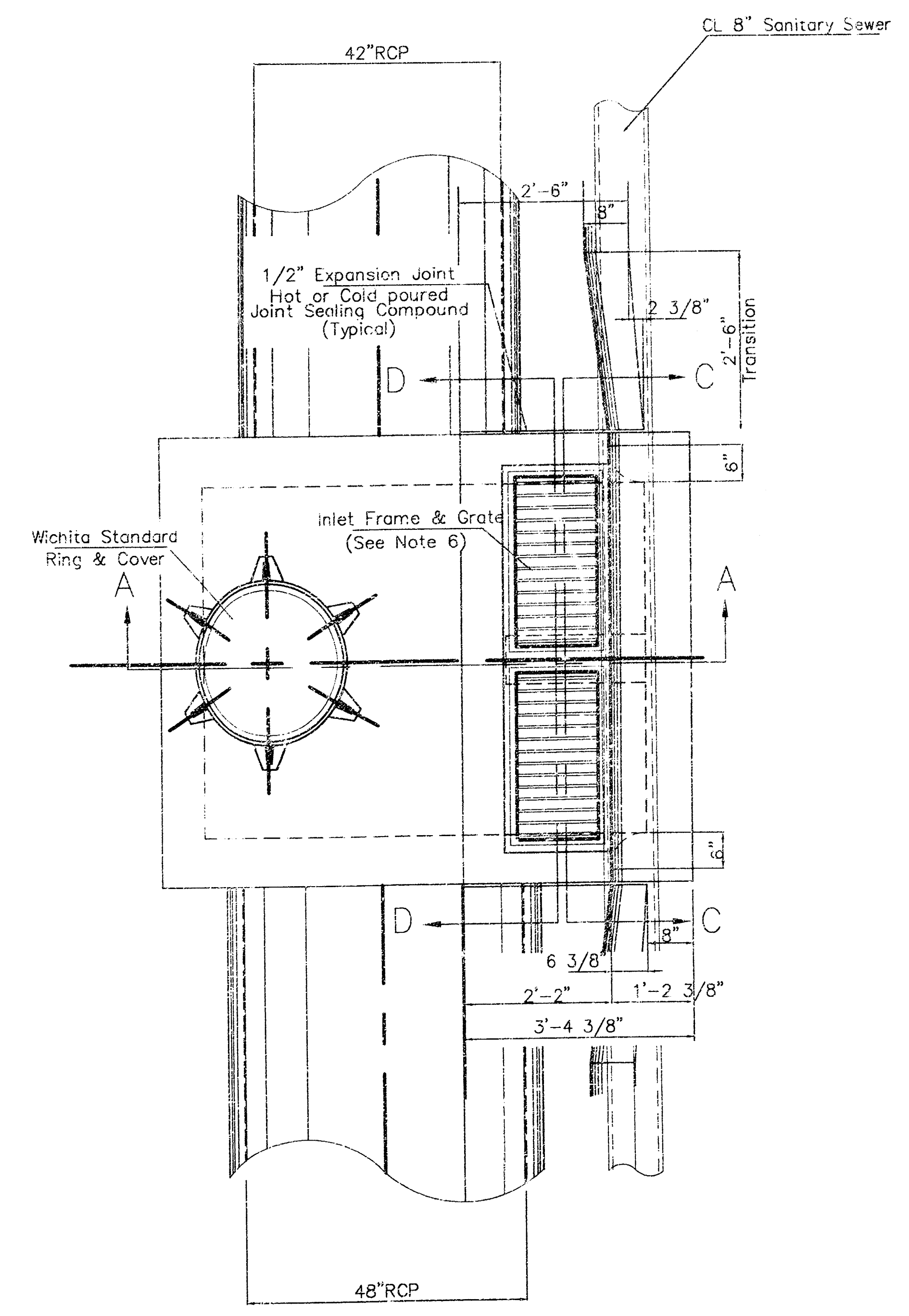
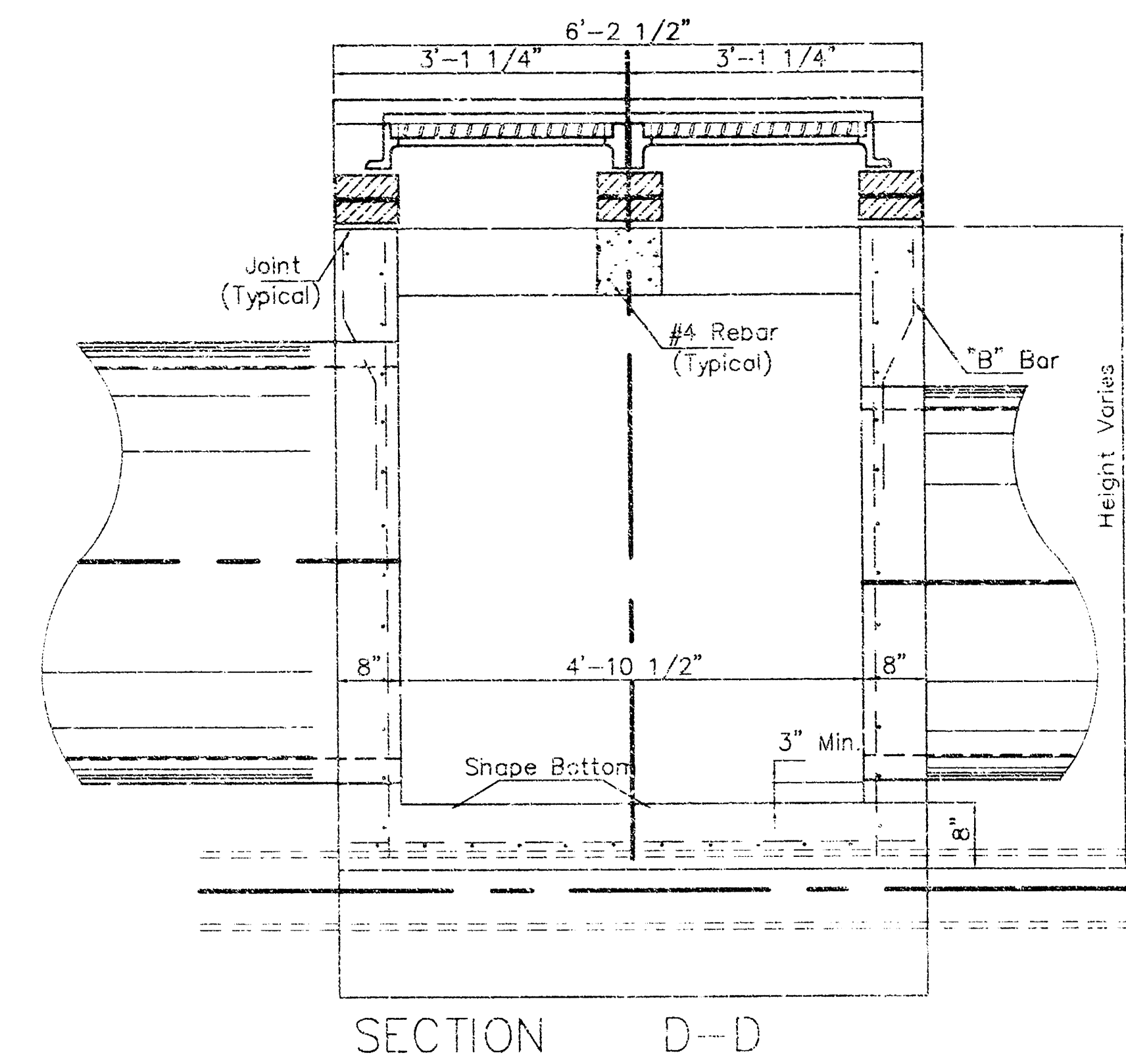
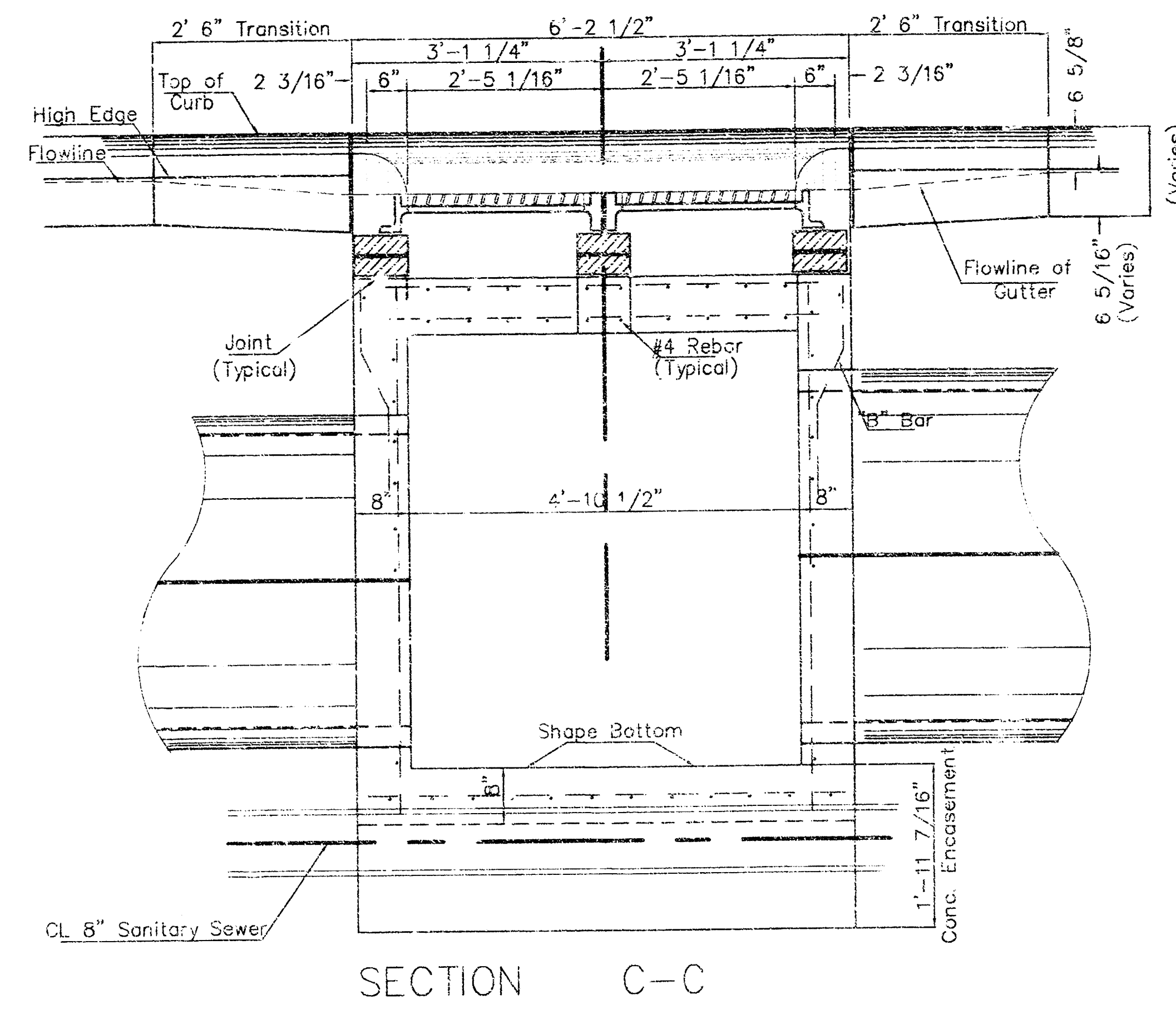
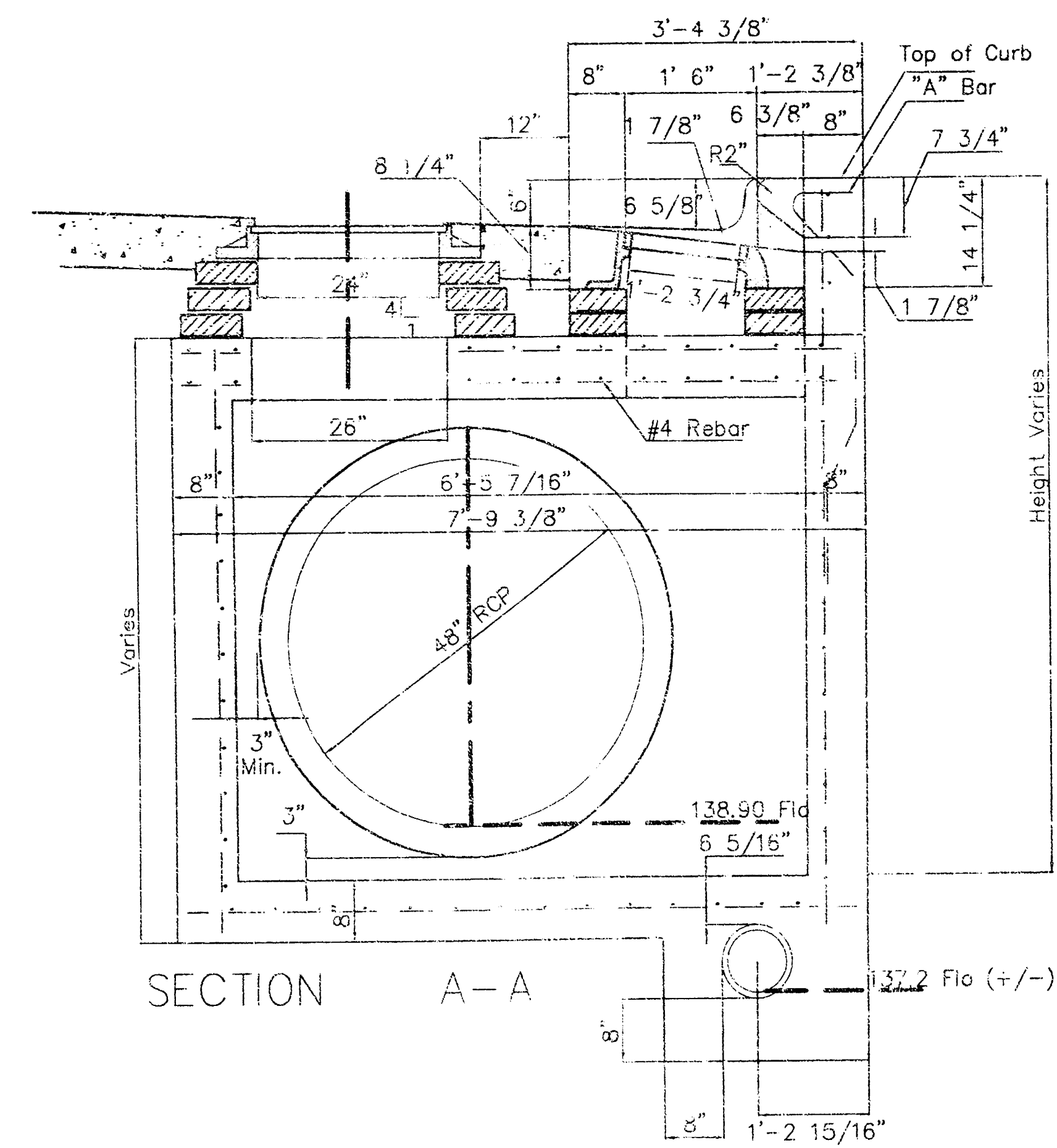
DATE: 07/15/03
DRAWN BY: KST
PROJECT NO.: 3800

SCALE: N.T.S.

SHEET NO.
ST-7

ENGINEER:

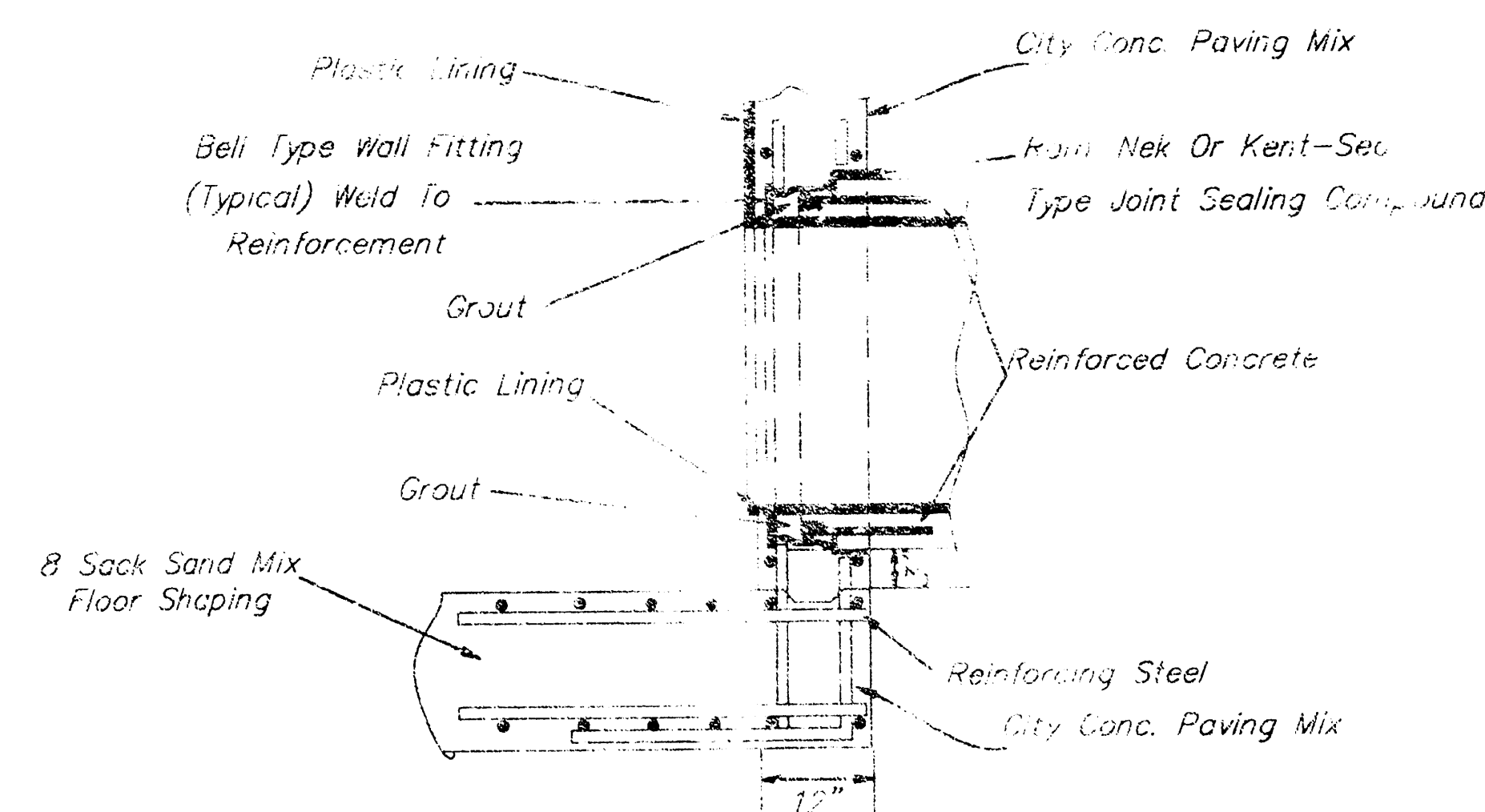




General Notes

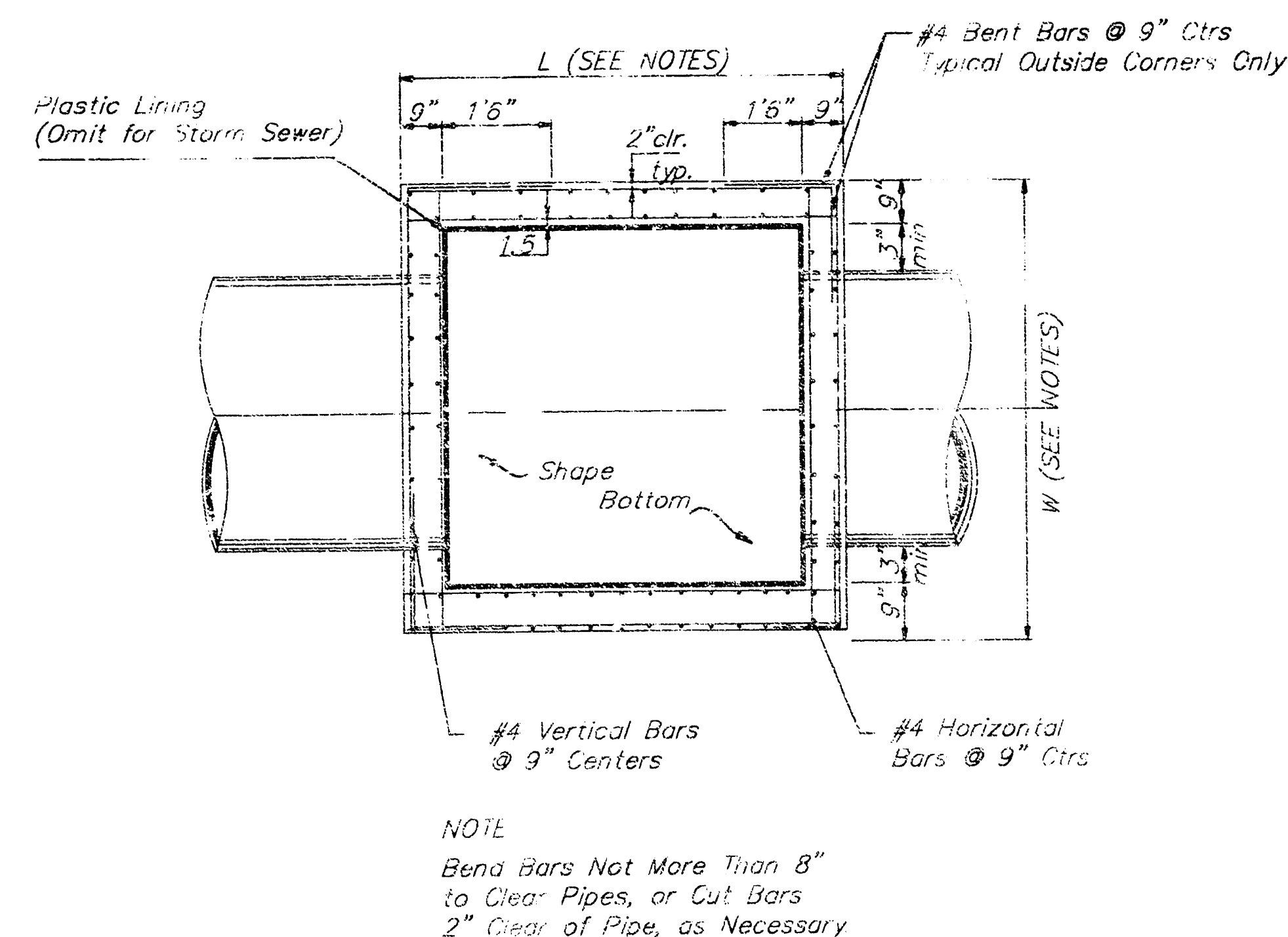
1. Use the concrete mix specified for the City of Wichita concrete pavement throughout. All exposed edges shall be finished with an edging tool. Reinforcing bars shall be bent around pipe.
2. Inlet invert shall be shaped with 8 sack mix concrete to create flow channels and to increase hydraulic efficiency such that the inlet will be self cleaning between all inlet and/or outlet pipes.
3. All bars are #4 with 6" spacing and shall have a minimum clearance of 1 1/2" inches unless otherwise noted on the plans.
4. No deductions will be made in pay length of curb, gutter, or curb and gutter through the inlet area.
5. Use Neenah R-3288 HV Inlet Frame w/ two piece Grate or approved equal. Inlet frame to be proof load tested to 40,000 lbs. on unsupported side.
6. Reinforcing bars shall be cut or bent around pipes. No deduction in concrete quantities shall be made for pipe openings.
7. The vanes of the grate shall be oriented with respect to the flow arrows shown on the plans.
8. Around manhole opening in top slab use #5 bar @ 45° angle to other bars. Length = MH opening + 2'0"

THE CITY OF WICHITA CITY ENGINEER'S OFFICE CITY HALL - SEVENTH FLOOR 455 NORTH MAIN STREET WICHITA, KANSAS 67202 (316) 268-4501 (316) 268-4114 FAX	SPECIAL TYPE II INLET/MANHOLE INLET OPENING 6" x 4'-10 1/8"	
	M. E. LINDEBAK P.E. - CITY ENGINEER	
	PROJECT NUMBER XXX-XXXXX	INDEX CODE XXXXXX
	DATE MAR 96	SHEET NO. ST-8



R.C.P. CONNECTION DETAIL

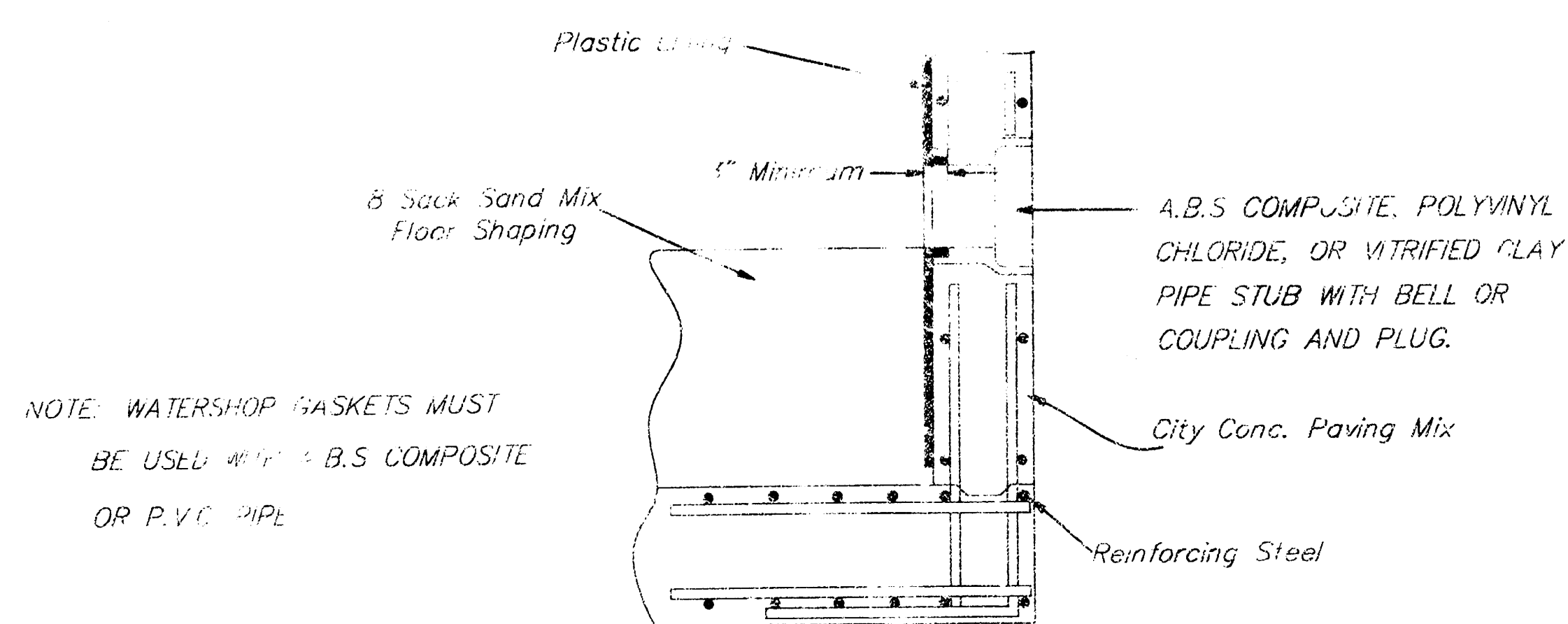
SANITARY SEWER ONLY



TOP VIEW

GENERAL NOTES:

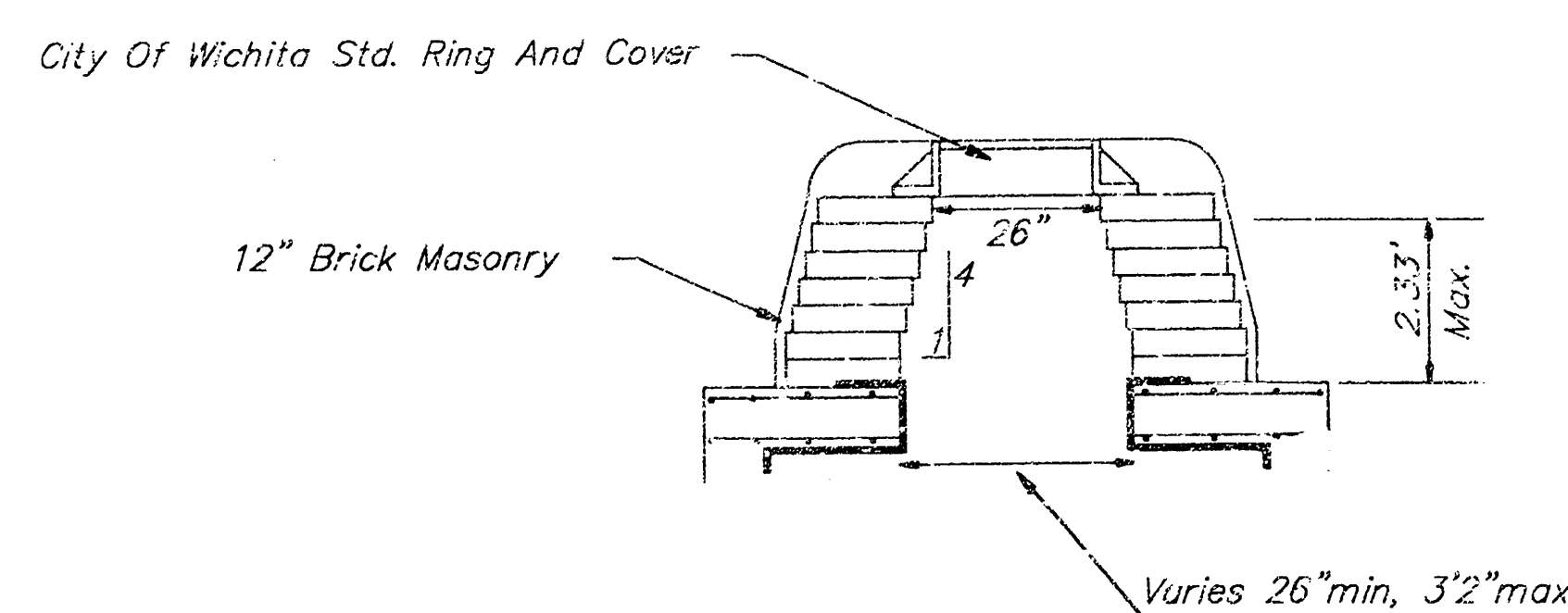
1. MORTAR USED IN MASONRY CONSTRUCTION SHALL CONTAIN 8 SACKS OF CEMENT PER CUBIC YARD. CONCRETE USED IN MANHOLE WALLS AND BASES SHALL CONFORM TO THE REQUIREMENTS FOR CONCRETE PAVEMENT CONSTRUCTION AS SPECIFIED IN THE CITY STANDARD PAVING SPECIFICATIONS, USING CITY CONCRETE PAVEMENT MIX WITHOUT AIR ENTRAINING ADMIXTURE. MORTAR SHALL BE PLACED AROUND THE MANHOLE RING AS SHOWN ON THE DRAWINGS WHEN MANHOLES ARE CONSTRUCTED IN UNPAVED AREAS. COMPLETED MANHOLE SHALL BE WITHOUT LEAKS AND WATER TIGHT.
2. THE FLOORS OF ALL MANHOLES SHALL BE SHAPED WITH FLOW CHANNELS SUCH THAT THE MANHOLES WILL BE SELF CLEANING. USING 8-SACK SAND MIX CONCRETE. FLOW CHANNELS SHALL BE FORMED TO MATCH THE BOTTOM HALVES OF THE INFLOWING PIPES AND THE OUTFLOWING PIPE. MANHOLE FLOORS SHALL HAVE SLOPES OF 3 INCHES PER FOOT IN THE AREAS OUTSIDE OF THE FLOW CHANNELS SLOPED TOWARD THE FLOW CHANNELS.
3. MANHOLE COVER CASTINGS AND MANHOLE FRAME CASTINGS SHALL CONFORM TO THE REQUIREMENTS AS INDICATED IN THE STANDARD SPECIFICATIONS AND AS SHOWN IN THE STANDARD DETAIL DRAWING.
4. THE ENDS OF ALL PIPES IN MANHOLES SHALL BE CUT OFF FLUSH WITH THE INSIDE FACE OF MANHOLE WALL.



NOTE: WATERSHOP GASKETS MUST BE USED WITH A.B.S. COMPOSITE OR P.V.C. PIPE

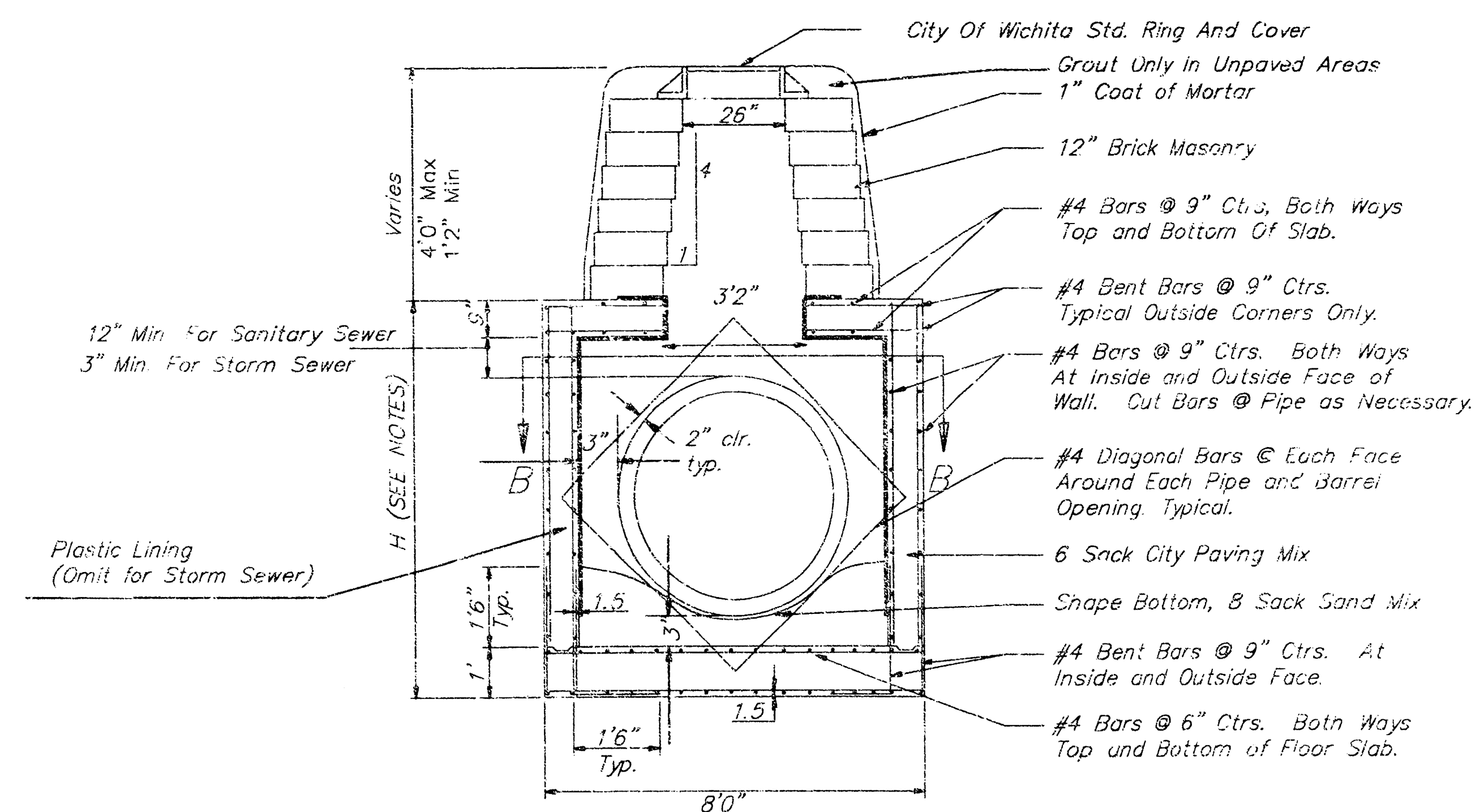
PIPE STUB DETAIL

SANITARY SEWER ONLY



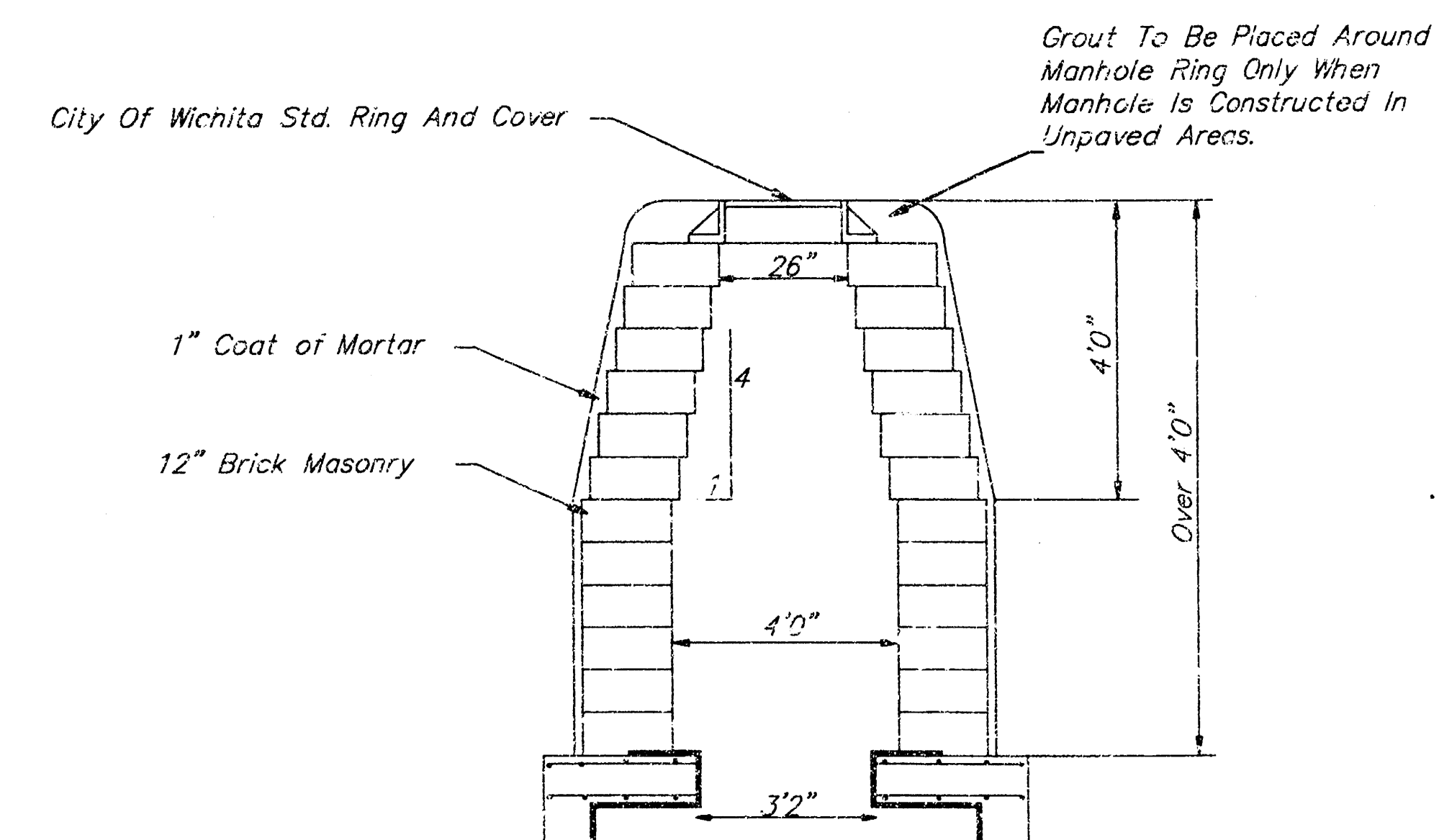
REINFORCED CONCRETE MANHOLE

MANHOLE STACK LESS THAN 2.33'



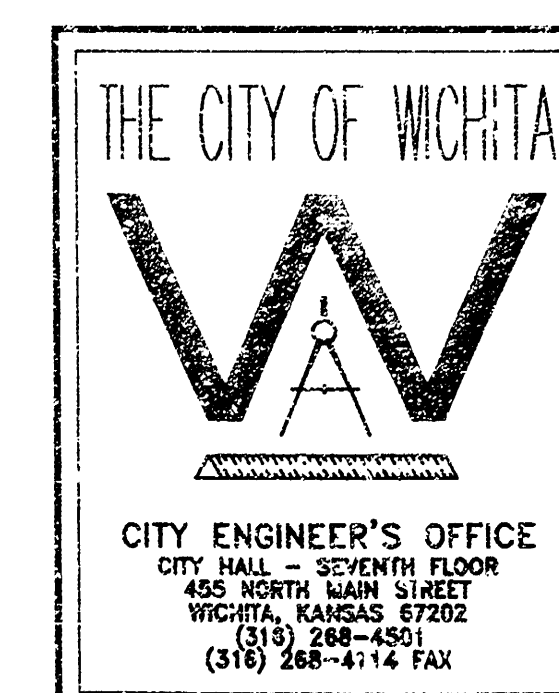
REINFORCED CONCRETE MANHOLE

MANHOLE STACK 2.33' TO 4'0"



REINFORCED CONCRETE MANHOLE

MANHOLE STACK OVER 4'0"



AS-BUILT - SEPT. 2004

REINFORCED
CONCRETE
MANHOLE

M. E. LINDEBAK P.E. - CITY ENGINEER

PROJECT NUMBER XXX-XXXXX INDEX CODE XXXXXX

DATE APRIL 99 SHEET NO. ST-9

SSDTAIL.DWG

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