

SHEET NO.	TOTAL SHEETS
1	8

PLANS FOR STORM WATER SEWER IMPROVEMENTS

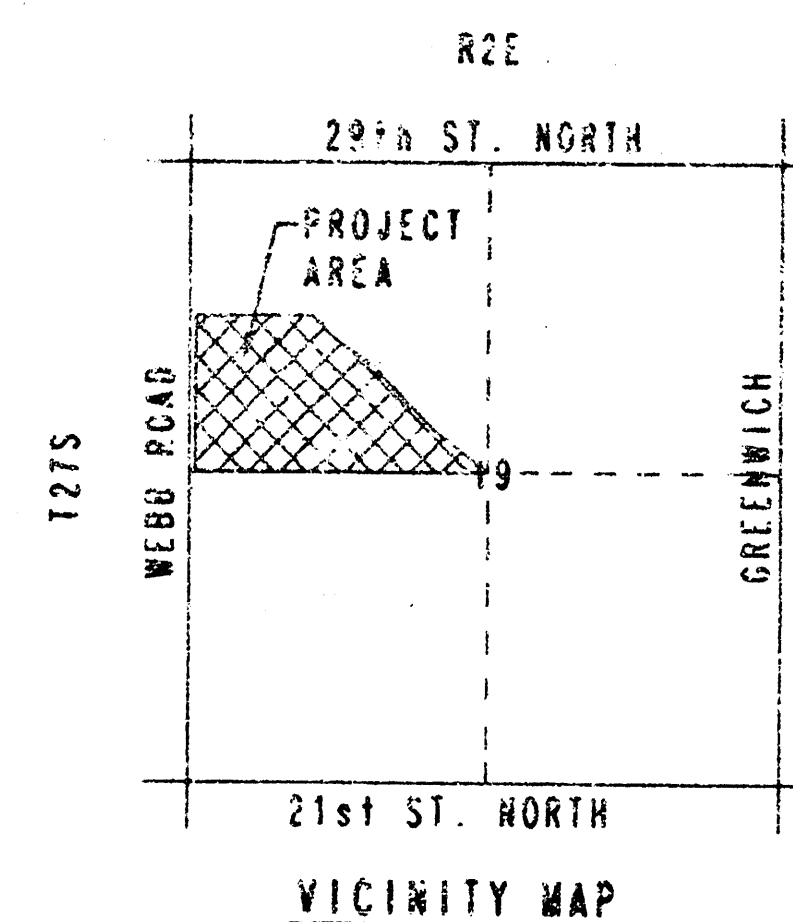
FOR
LOT 1 & 2, BLOCK 1
KANSAS SURGERY AND RECOVERY CENTER ADDITION
CITY OF WICHITA PRIVATE PROJECT NO. 525 PPS (607861)

INDEX OF SHEETS

1. TITLE SHEET
2. PLAT
3. PLAN
4. GRADING AND EROSION CONTROL DETAILS
5. DETAIL STANDARD TYPE 12 CURB INLET
6. REINFORCED CONCRETE MANHOLE
7. MANHOLE FRAME AND COVER DETAIL
8. PROFILE

NOTES

ALL STORM WATER SEWER TO BE CONSTRUCTED IN ACCORDANCE WITH CITY OF WICHITA STANDARD SPECIFICATIONS AS MODIFIED BY THE SPECIAL PROVISIONS. SPECIFICATIONS ARE ON FILE AT THE OFFICE OF THE CITY ENGINEER, 7TH FLOOR CITY HALL



APPROVED AS NOTED
BY CITY ENGINEER OF WICHITA

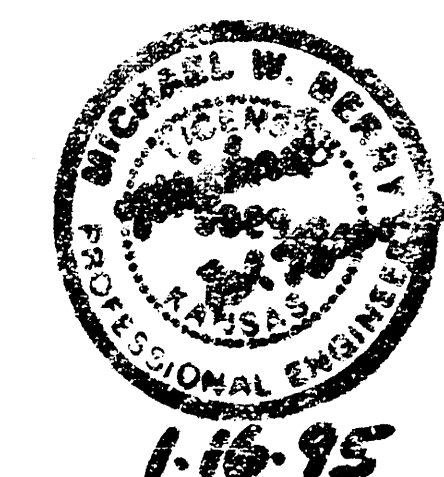
SANITARY SEWERS _____
STORM SEWERS VRH 1/17/95
DRIVEWAY APPROACHES _____
WATER MAINS _____
PAVING _____

NOTE TO CONTRACTOR

INSPECTION AND TESTING FOR THIS PROJECT IS TO BE PROVIDED BY A LICENSED CONSULTING ENGINEERING FIRM UNDER CONTRACT WITH THE OWNER/DEVELOPER. SAID INSPECTION TO BE IN ACCORDANCE WITH THE CITY OF WICHITA STANDARD CONSTRUCTION ENGINEERING PRACTICES AND CERTIFIED BY A LICENSED PROFESSIONAL ENGINEER. NO WORK SHALL BE PERFORMED IN DEDICATED EASEMENTS OR PUBLIC RIGHT-OF-WAY BY THE CONTRACTOR WITHOUT SUCH INSPECTION NOR SHALL ANY WORK BE COMMENCED IN DEDICATED EASEMENTS OR PUBLIC RIGHT-OF-WAY WITHOUT WRITTEN AUTHORIZATION BY THE CITY ENGINEER.

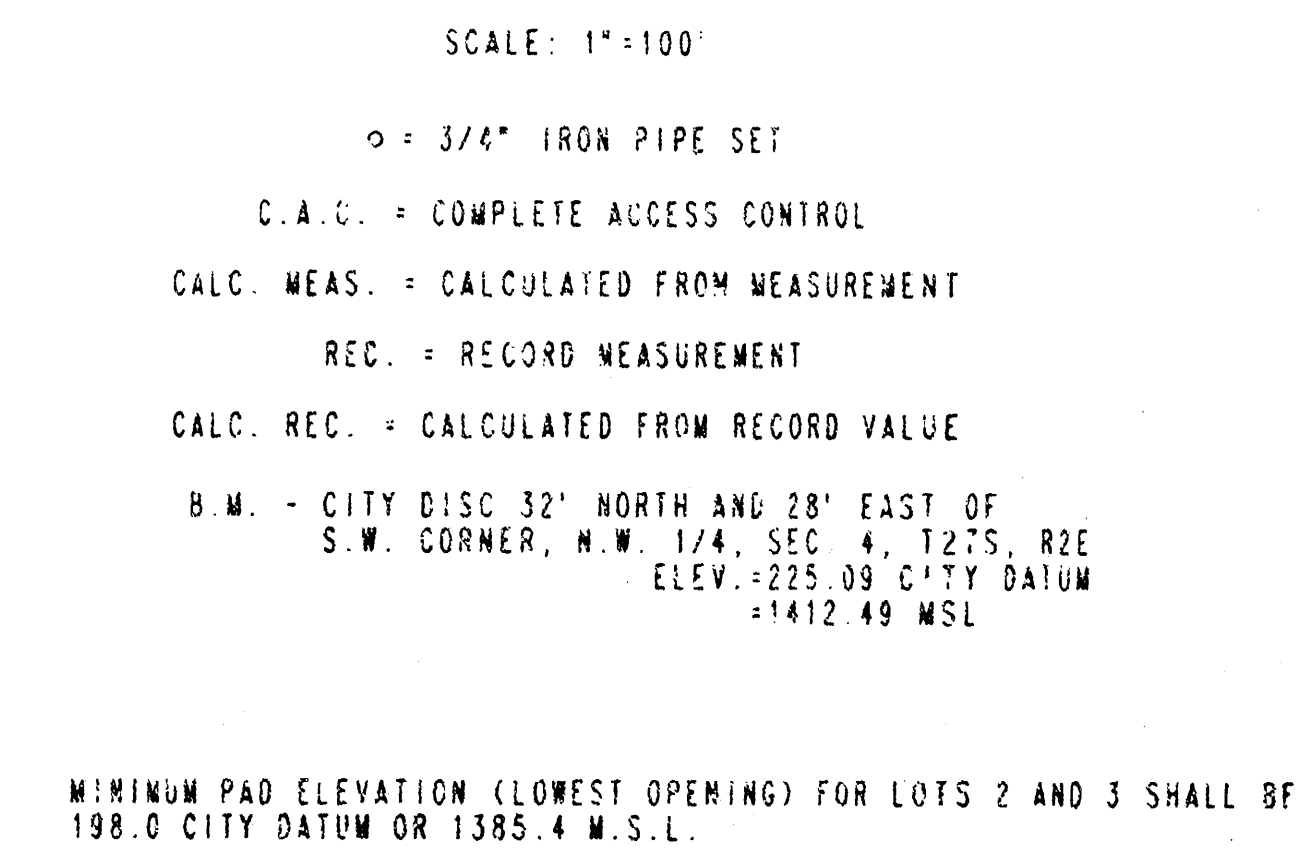
DECEMBER 1994

PLANS PREPARED BY
PROFESSIONAL ENGINEERING CONSULTANTS, P.A.
ENGINEERS
WICHITA, KANSAS



DESIGNED BY: J. M. H. 36-54772-1 SHEET
CHECKED BY: J. M. H.
DATE LAST REVISED ON: DEC. 28, 1994
BY: J. M. H.

PROJECT NO.	SHEET NO.	TOTAL SHEETS
525 PPS (607861)	2	8

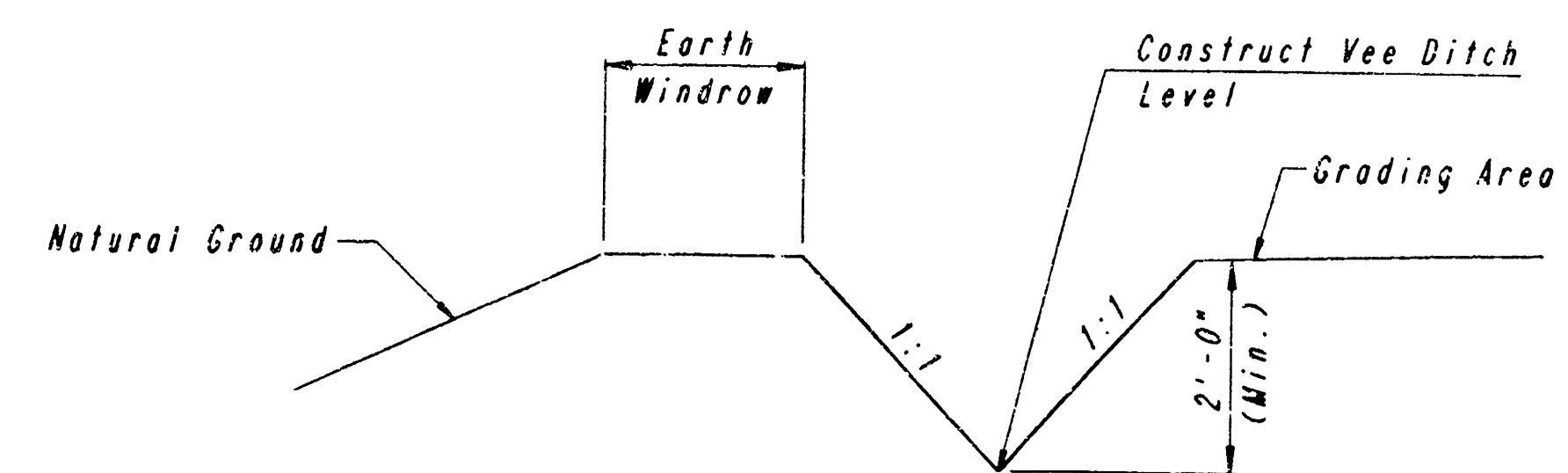
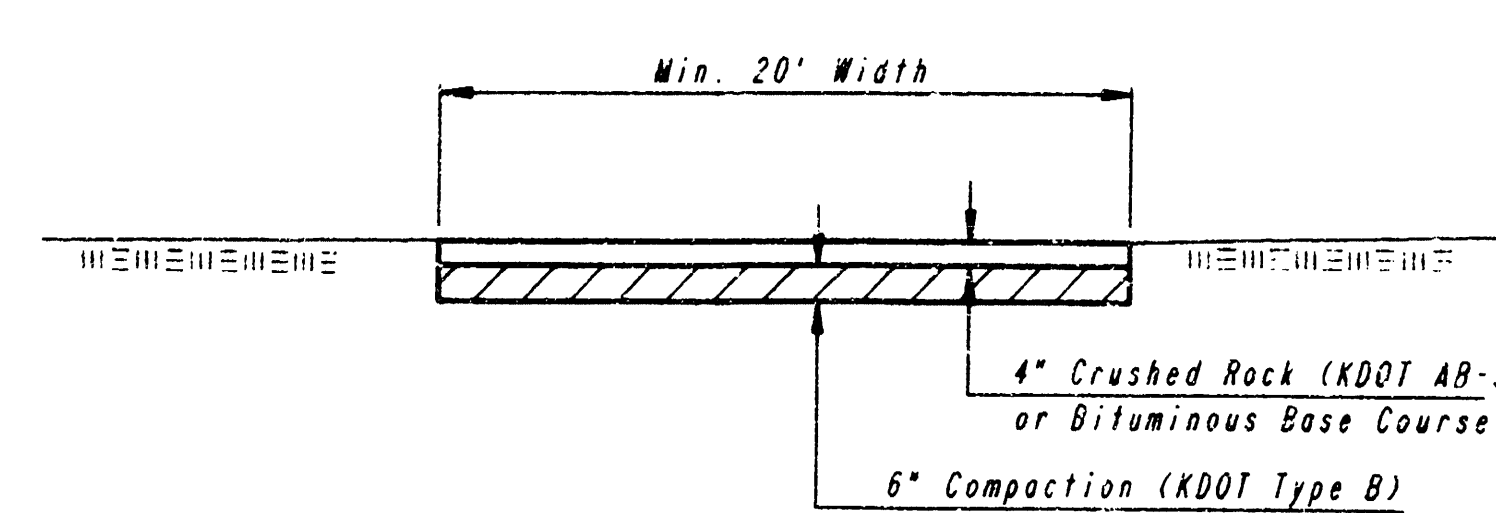
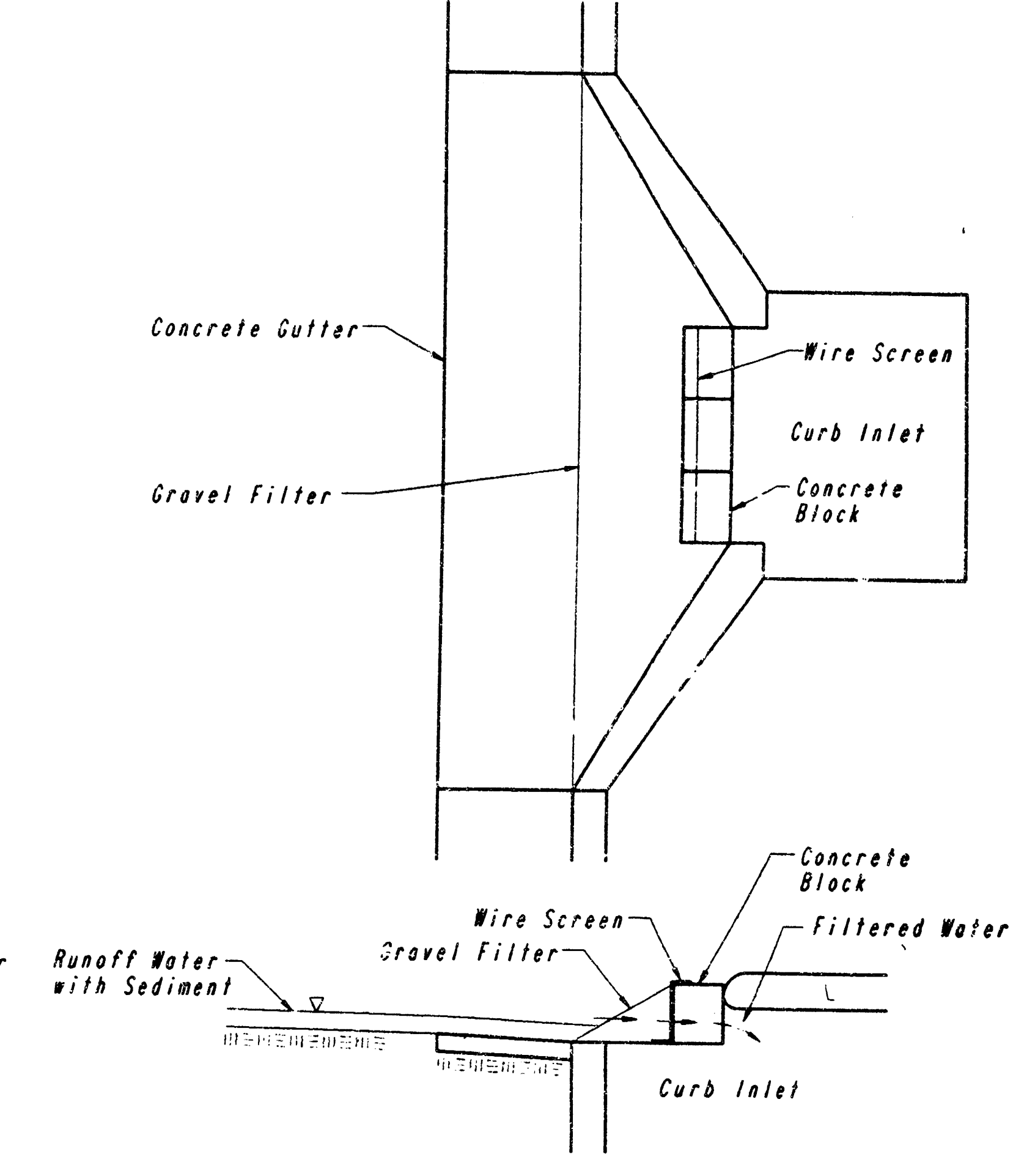
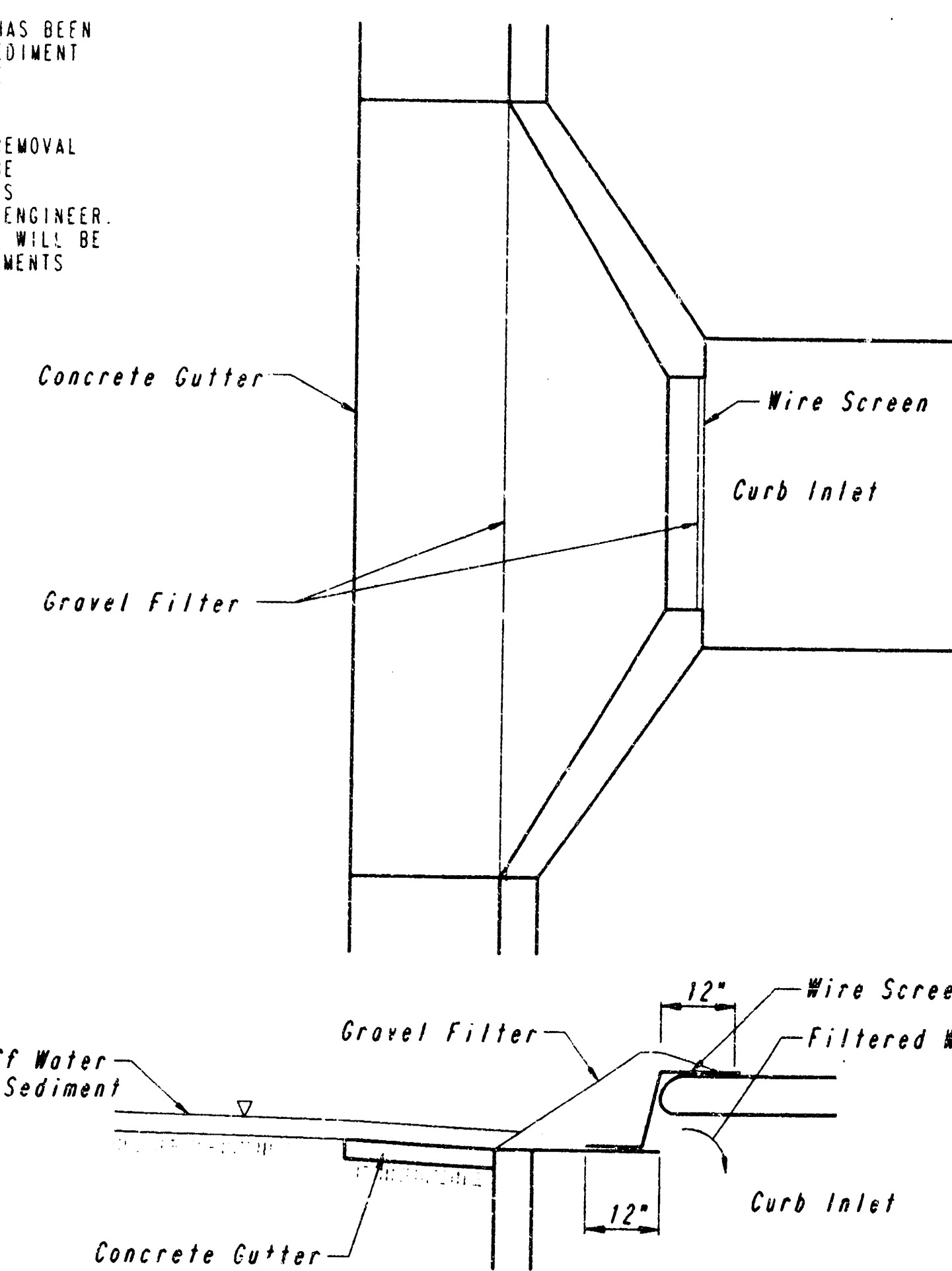
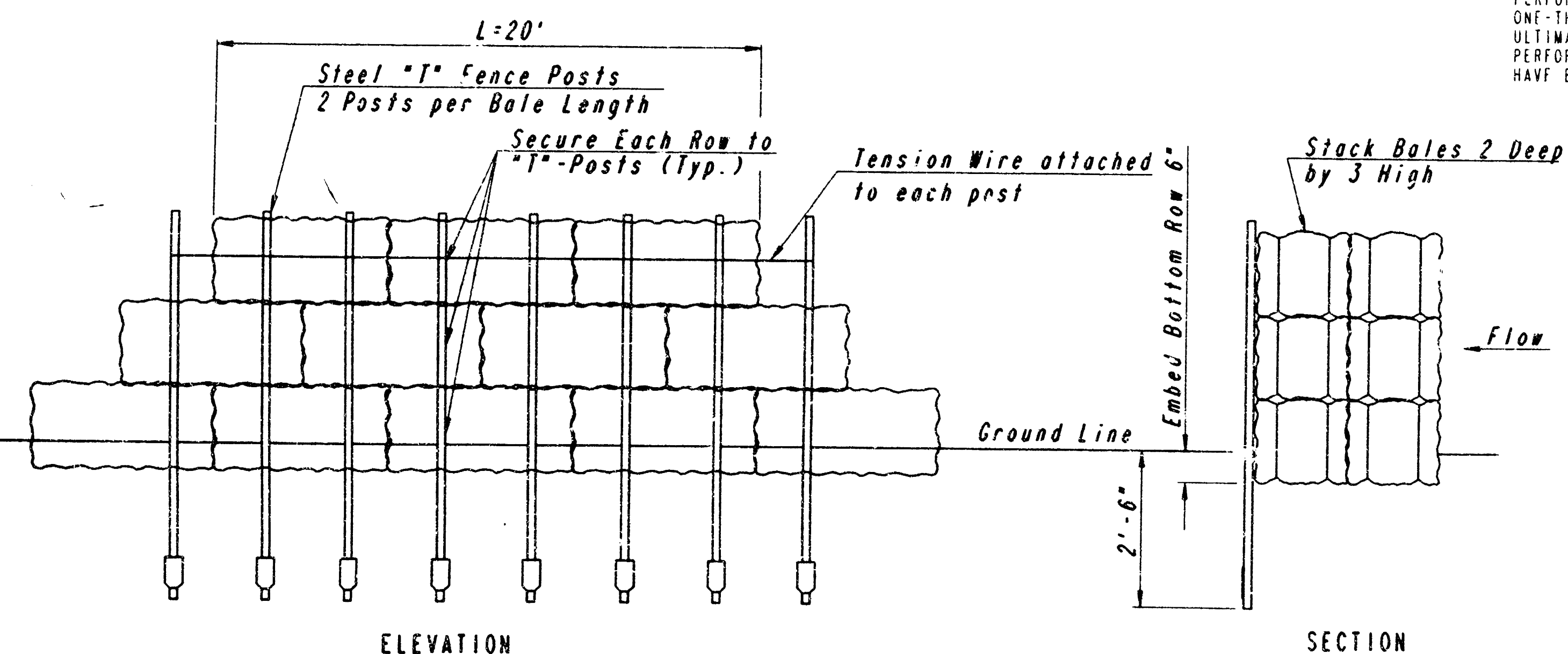
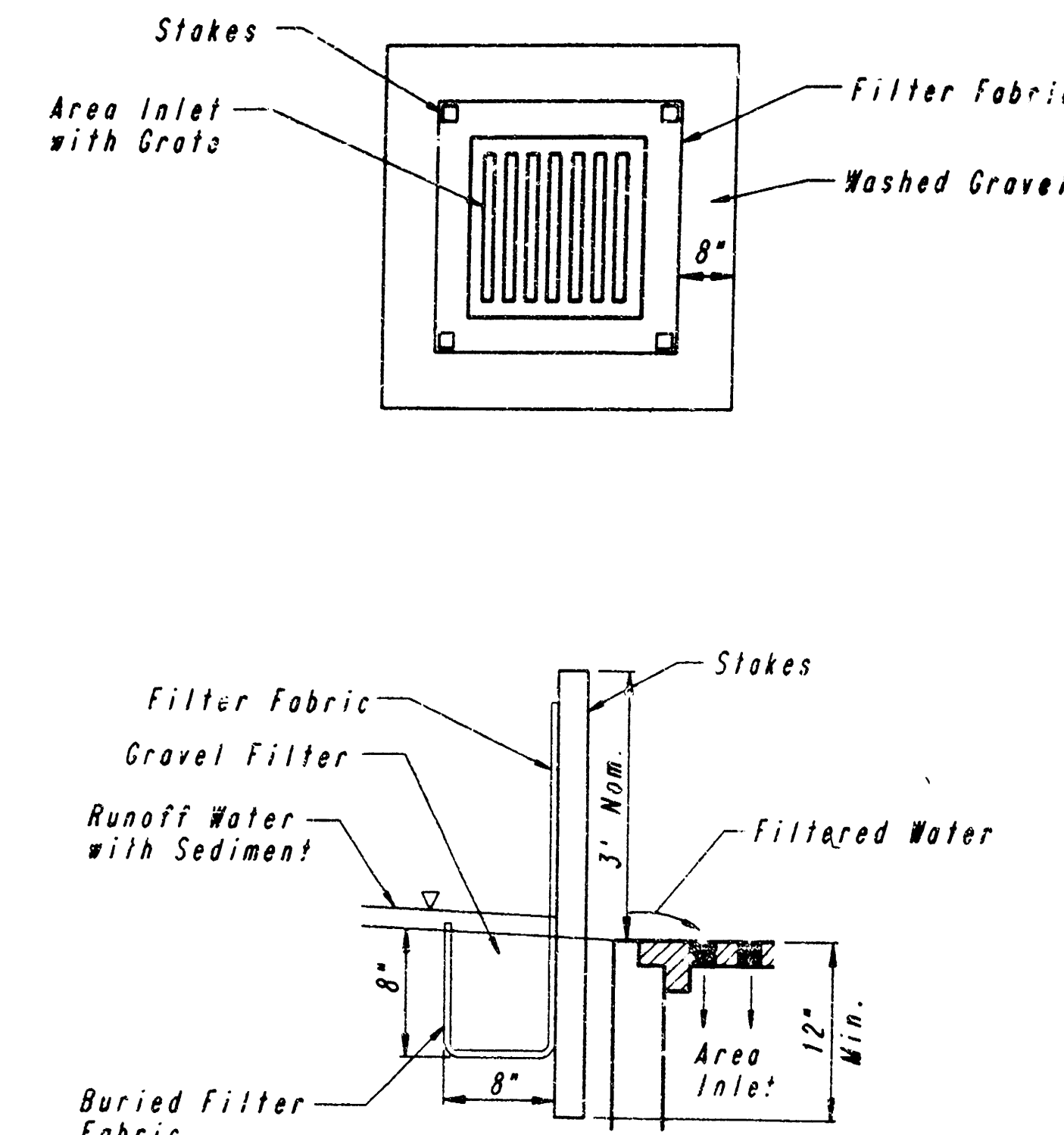
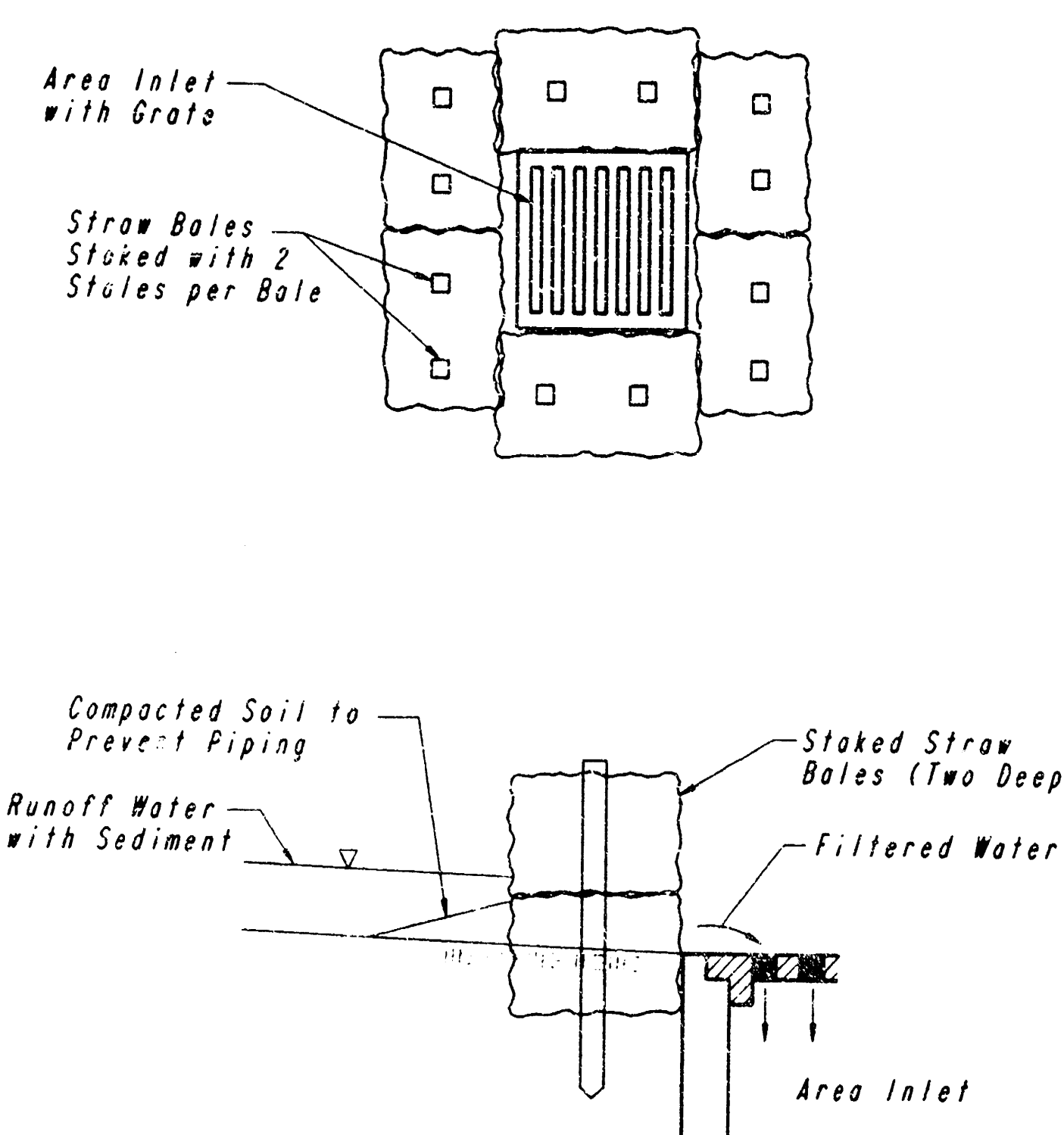
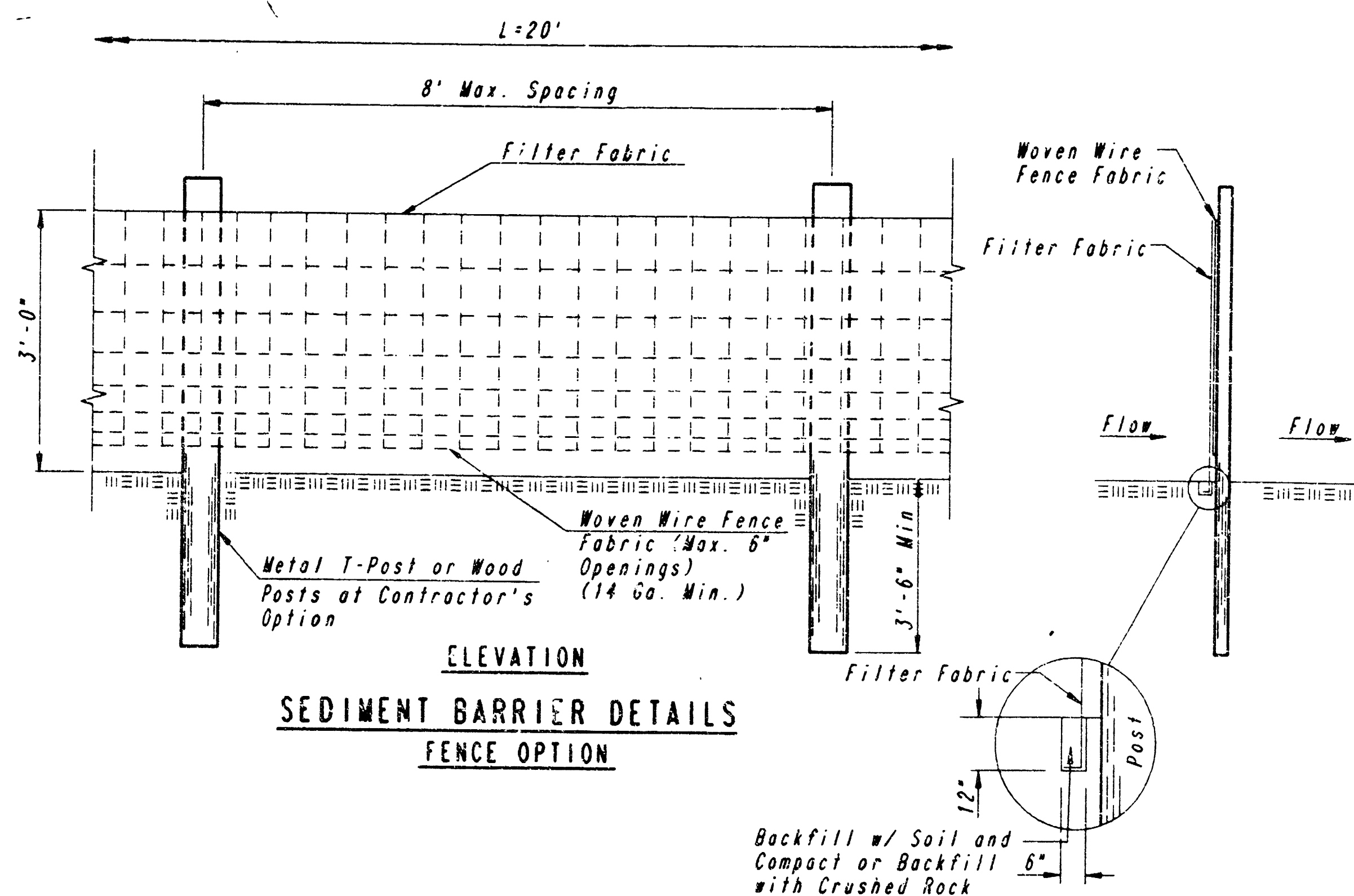


DRAWING NAME: 35-9472-1 PLAT
LOCATION: 04 AUGST
CENTER COORDINATES:
ROTATION ANGLE:
DATE LAST MODIFIED ON: DEC. 28, 1994
DWAINE DUNN

Designed by		Checked by	
Drawn by	DEP	Date DEC. 1994	Job No. 94772-1

GENERAL NOTES

- TEMPORARY FIRE LANE TO BE PROVIDED IN ACCORDANCE WITH FIRE DEPARTMENT REQUIREMENTS AT ALL TIMES. SURFACE TO BE MINIMUM 4" CRUSHED ROCK (KDOT AB-3) OR APPROVED EQUAL. MAINTAIN FIRE LANE SURFACE THROUGHOUT PROJECT CONSTRUCTION TIME.
- TOPSOIL STRIPPED ON SITE TO BE UTILIZED IN LANDSCAPING. EXCESS TOPSOIL, IF ANY, TO BE STOCKPILED ON A SITE TO BE APPROVED BY THE OWNER ON LOT 2, BLOCK 1, KANSAS SURGERY AND RECOVERY CENTER ADDITION.
- EXCESS EXCAVATED MATERIAL TO BE STOCKPILED ON A SITE TO BE APPROVED BY THE OWNER ON LOT 2, BLOCK 1, KANSAS SURGERY AND RECOVERY CENTER ADDITION.
- SEDIMENT BARRIERS SHALL BE INSTALLED AT LOCATIONS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
- SEDIMENT BARRIERS SHALL BE ERECTED PRIOR TO THE COMMENCEMENT OF EARTHWORK OPERATIONS IN A GIVEN BASIN. REMOVAL AND DISPOSAL OF ACCUMULATED SILT AND DEBRIS AND/OR REMOVAL AND RECONSTRUCTION OF SEDIMENT BARRIERS WILL BE PERFORMED THROUGHOUT THE PROJECT LIFE WHEN DEBRIS REACHES ONE-THIRD THE FENCE HEIGHT OR AS DEEMED NECESSARY BY THE ENGINEER. SEDIMENT BARRIERS AND ACCUMULATED DEBRIS SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR AFTER TURF COVER HAS BEEN ESTABLISHED, UNLESS OTHER ARRANGEMENTS HAVE BEEN AGREED TO.
- FILTER FABRIC FOR FENCE OPTION SEDIMENT BARRIERS SHALL BE RESISTANT TO ULTRAVIOLET LIGHT. MATERIALS MAY BE SUPPLIED BY THE FOLLOWING MANUFACTURERS:
 MIRAFIL, INC. : 100X
 HOECHST FIBERS INDUSTRIES : TREVIRA 1115
 EXXON : TYPAR 3301 W
 MATERIALS SUPPLIED BY THE ABOVE NAMED MANUFACTURERS SHALL BE ACCEPTED UPON VISUAL INSPECTION BY THE ENGINEER. OTHER COMPARABLE MATERIALS MAY BE USED IF APPROVED BY THE ENGINEER.
 FILTER FABRIC SHALL BE ATTACHED TO FENCE FABRIC BY MEANS OF THE WIRES OR ROD RINGS PRIOR TO ATTACHMENT OF FENCE/FABRIC COMBINATION ONTO THE POSTS.
 RAIFS USED MAY BE EITHER HAY OR STRAW, PROVIDED THEY ARE SOUND AND INTACT.
- INLET PROTECTION METHOD MAY BE ANY OF THE APPLICABLE TYPES SHOWN, AT THE CONTRACTOR'S OPTION.
- GRAVEL FILTER SHALL BE A DURABLE, WELL-GRADED SAND-GRAVEL OR CRUSHED STONE, MAXIMUM 1-1/2 IN. SIZE. AS AN ALTERNATE GRAVEL FILLED BAGS OF BURLAP OR OTHER FABRIC MAY BE USED. WHERE BAGS ARE USED, THE WIRE SCREEN, WHERE SHOWN, MAY BE OMITTED.
- INLET PROTECTION SHALL BE ERECTED AS SOON AS THE STRUCTURE HAS BEEN BACKFILLED. MEASURES SHALL BE TAKEN TO PRECLUDE ENTRY OF SEDIMENT INTO THE STORM WATER SEWER SYSTEM DURING CONSTRUCTION OF THE STRUCTURE.
- REMOVAL AND DISPOSAL OF ACCUMULATED SILT AND DEBRIS AND/OR REMOVAL AND RECONSTRUCTION OF INLET PROTECTION INSTALLATIONS SHALL BE PERFORMED THROUGHOUT THE PROJECT LIFE WHENEVER DEBRIS REACHES ONE-THIRD THE BARRIER HEIGHT, OR AS DEEMED NECESSARY BY THE ENGINEER. ULTIMATE REMOVAL AND DISPOSAL OF INLET PROTECTION AND DEBRIS WILL BE PERFORMED AFTER SEEDING IS ESTABLISHED, UNLESS OTHER ARRANGEMENTS HAVE BEEN MADE.



WHERE TEMPORARY EROSION CONTROL INTERCEPT DITCHES ARE USED, ALL AREAS WHERE FLOW IS CONCENTRATED SHALL BE PROTECTED BY SEDIMENT BARRIERS PRIOR TO DISCHARGING INTO ANY DITCH, STORM SEWER, OR WATERCOURSE.

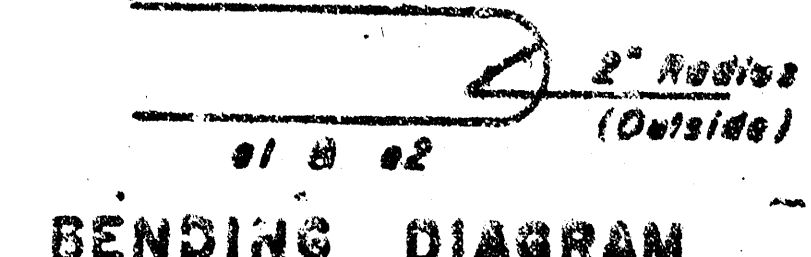
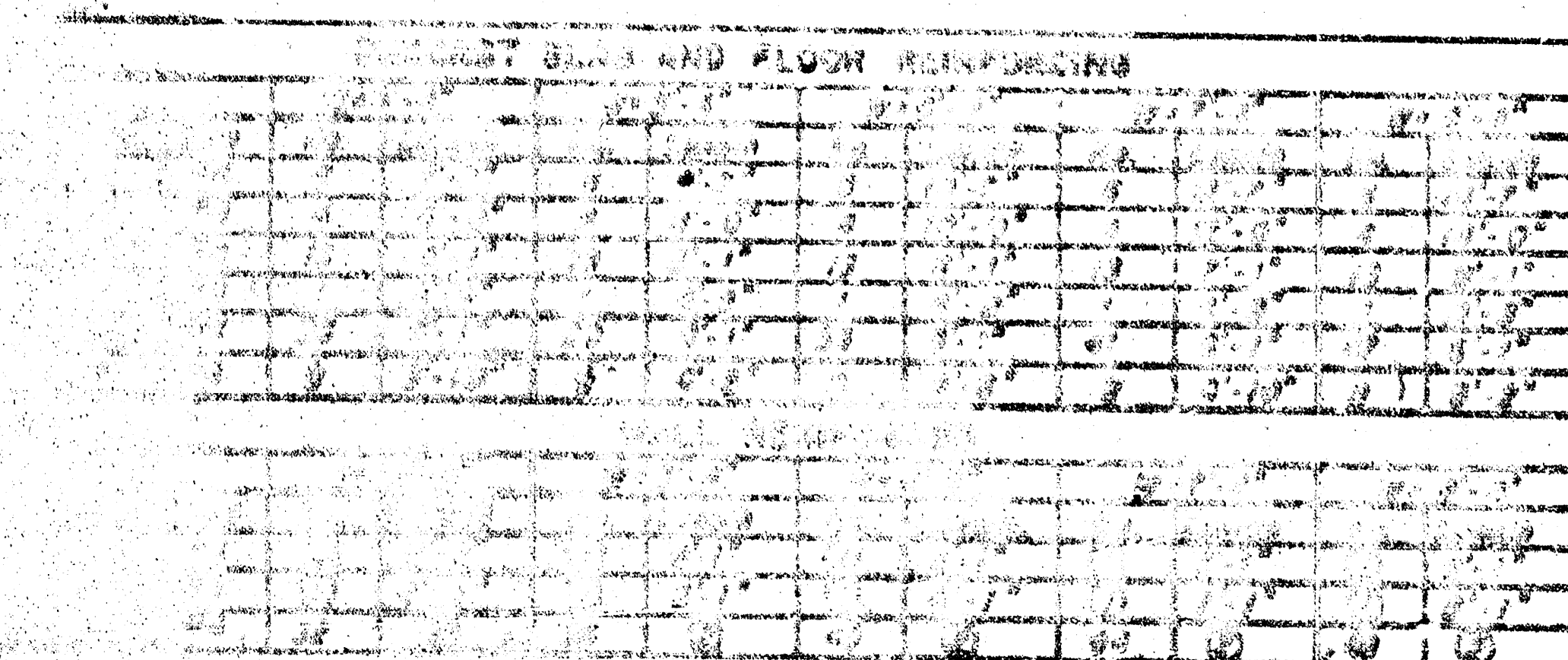
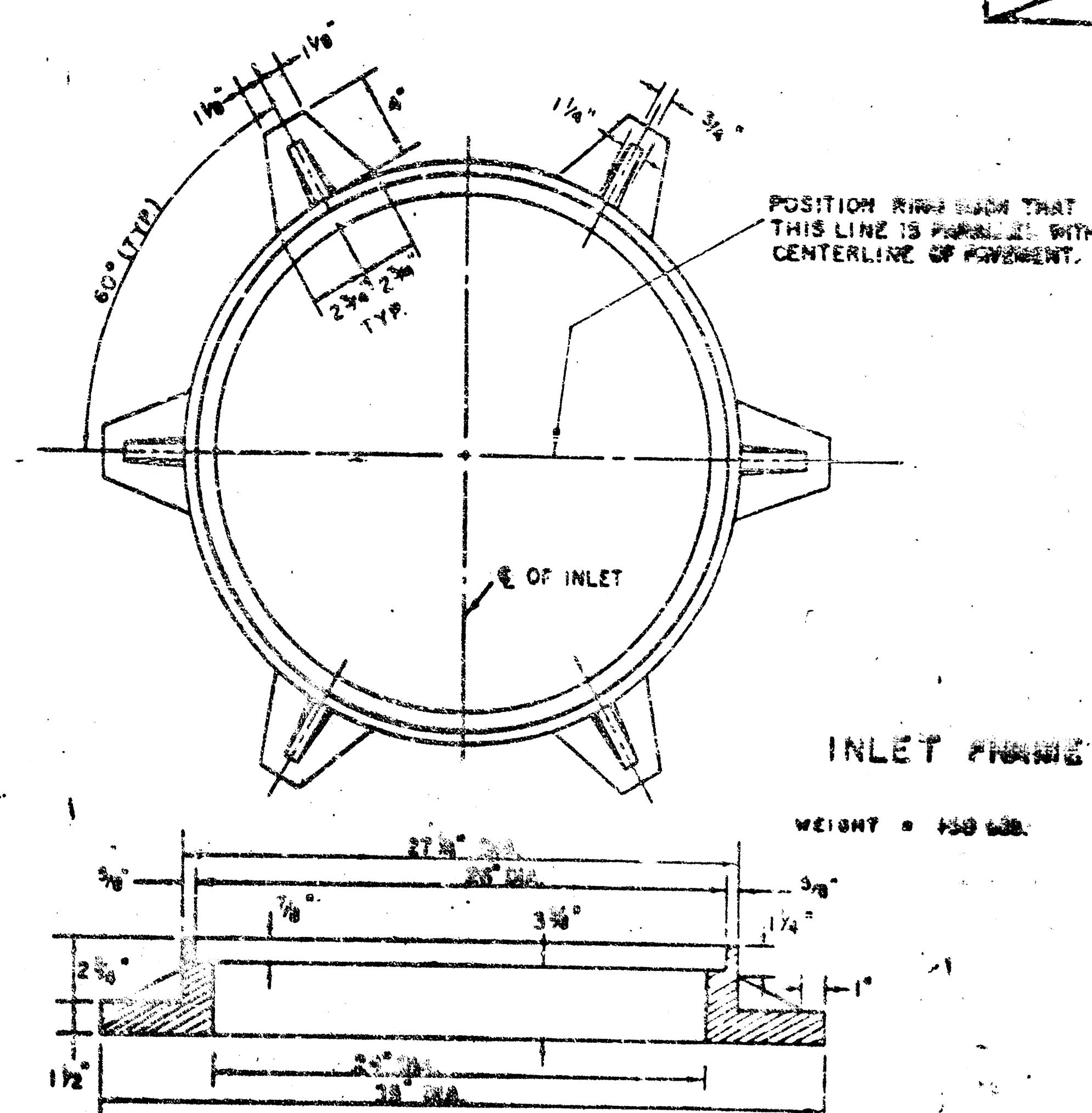
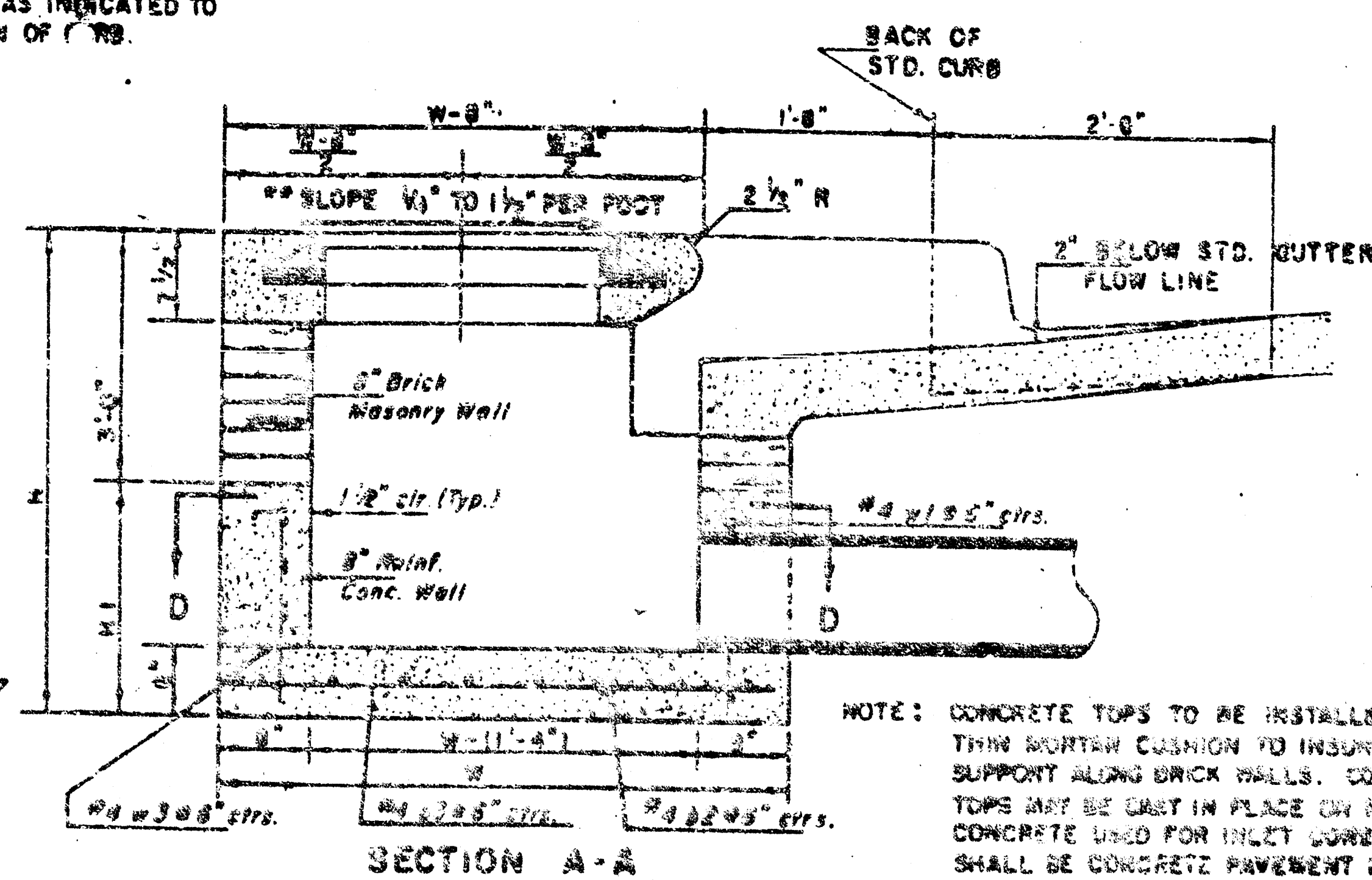
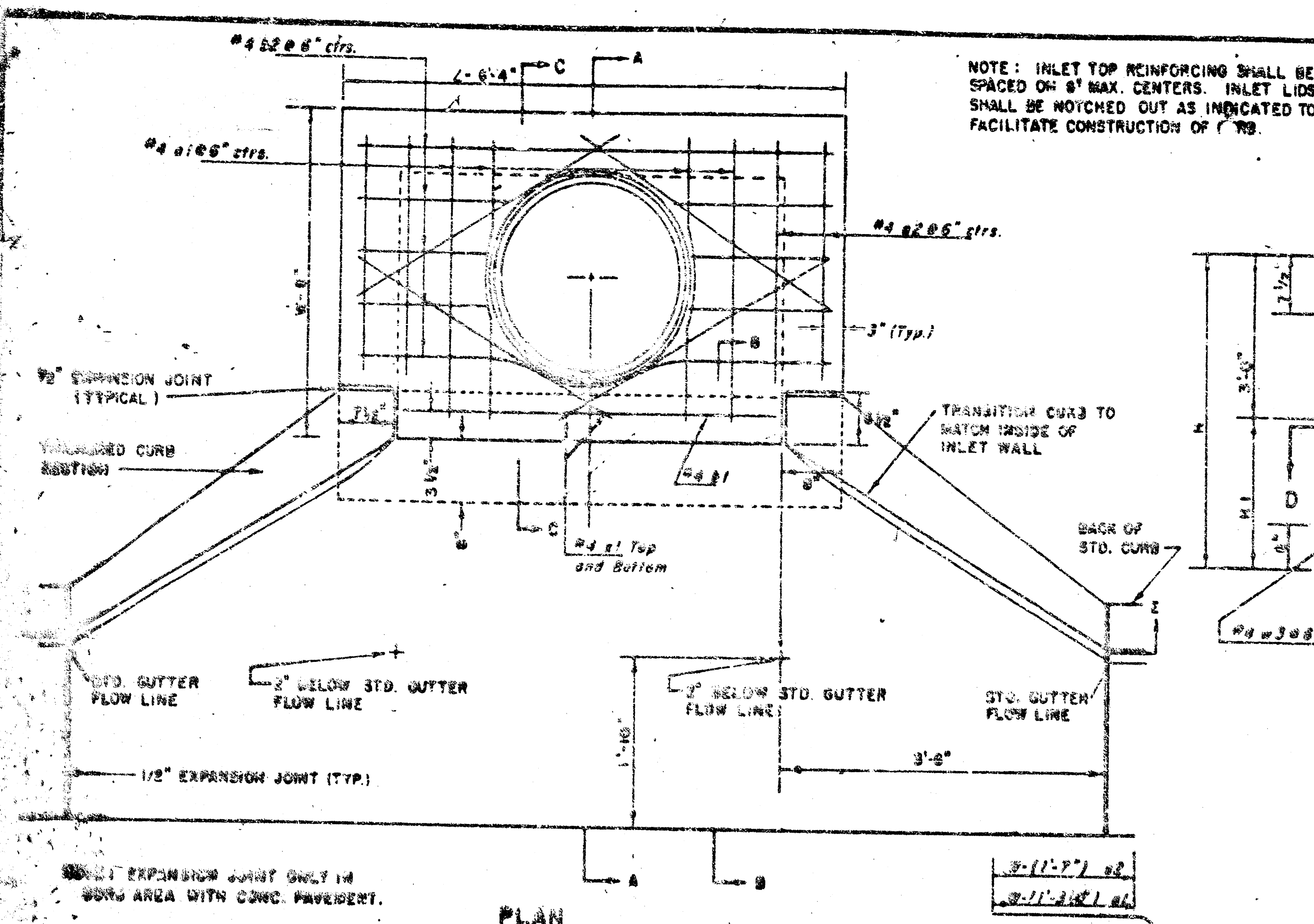
EROSION CONTROL DETAILS ADAPTED FROM:
VIRGINIA SOIL AND WATER CONSERVATION COMMISSION,
1985 AND DRAINAGE CRITERIA MANUAL, DENVER URBAN
DRAINAGE AND FLOOD CONTROL DISTRICT 9-1-92.

GRADING AND EROSION CONTROL DETAILS

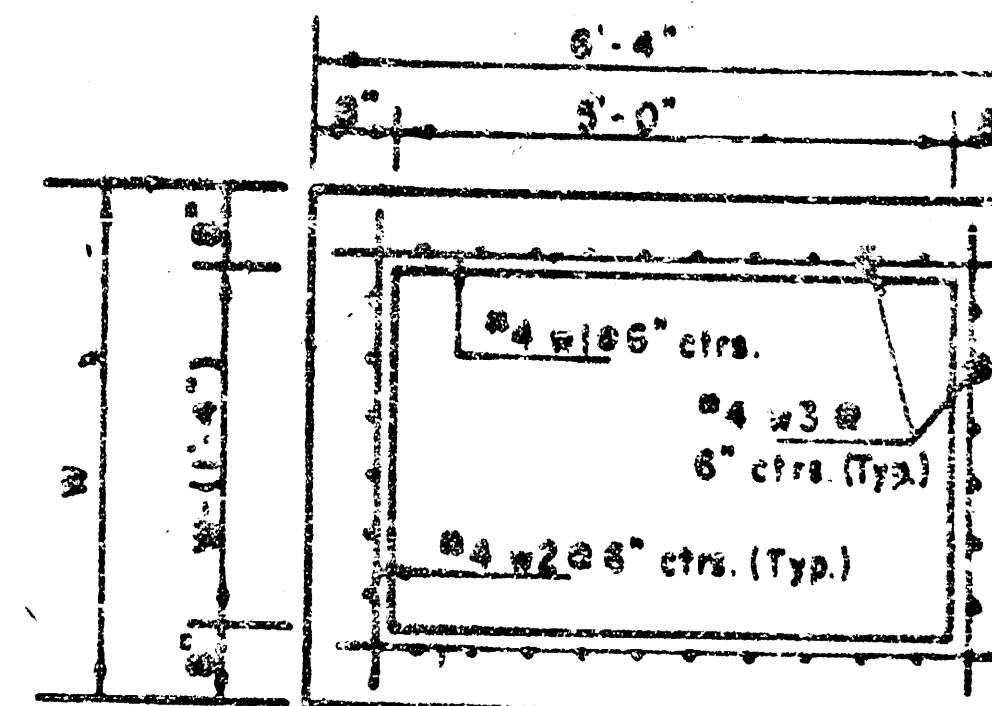
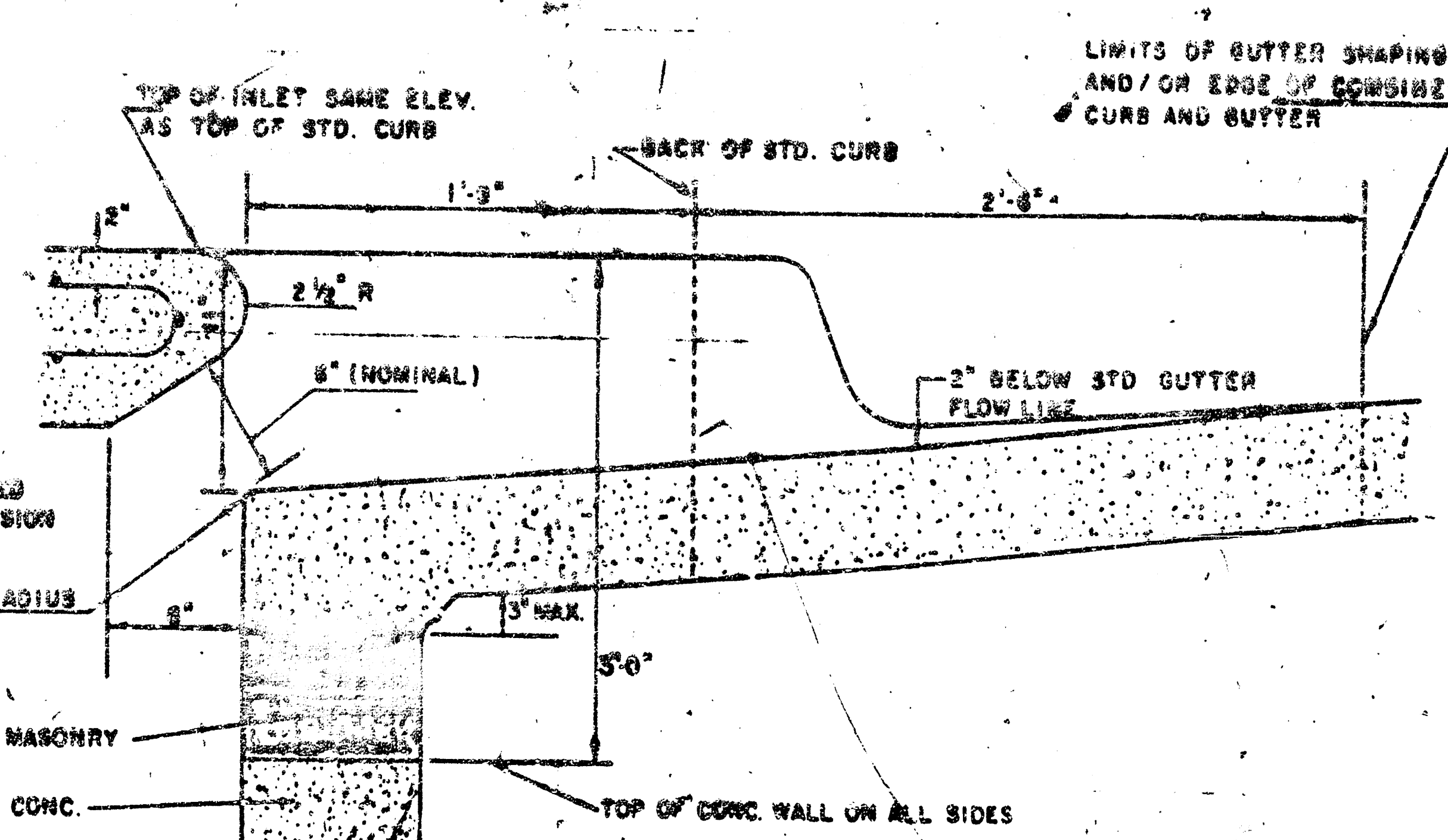
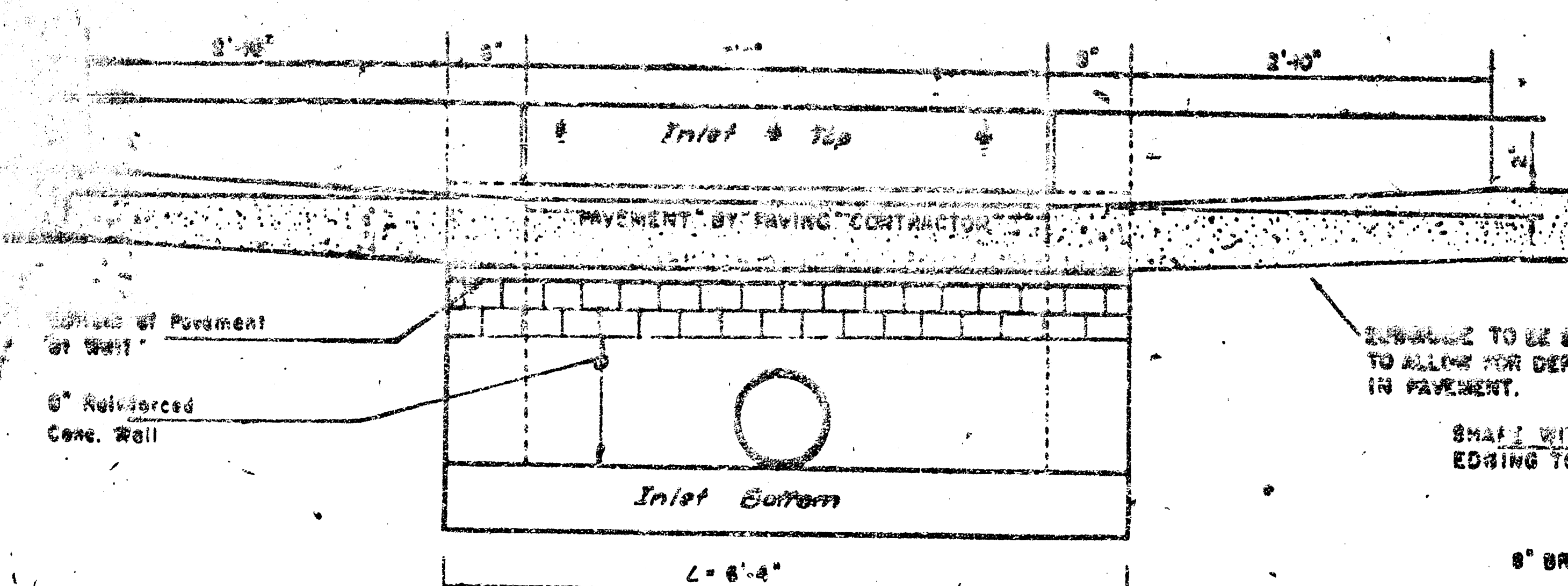
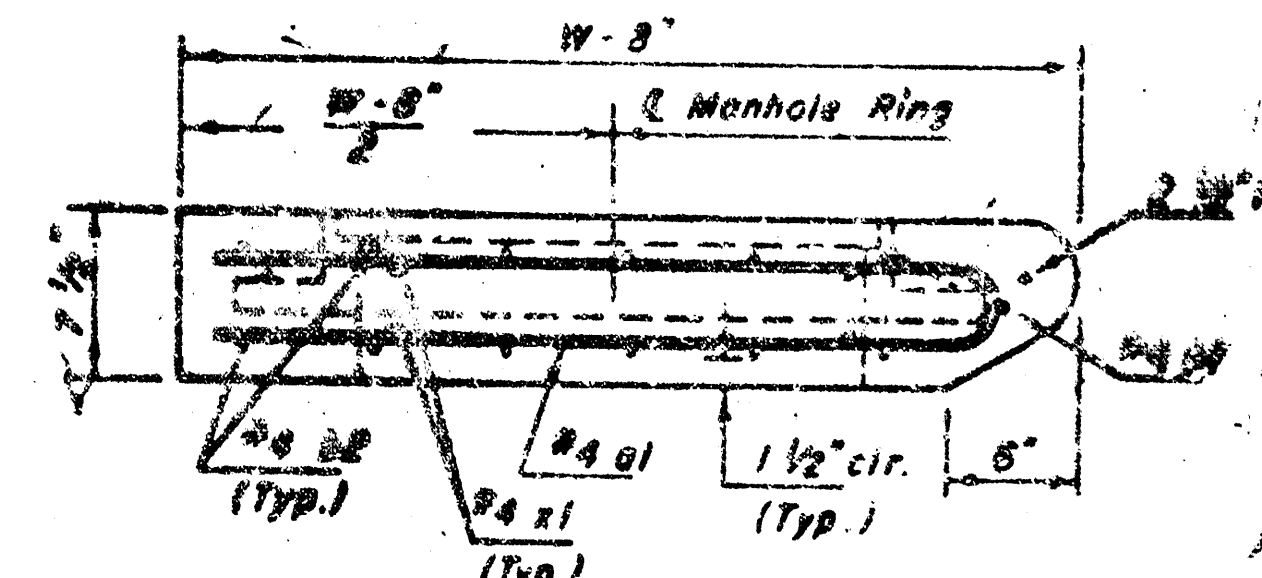
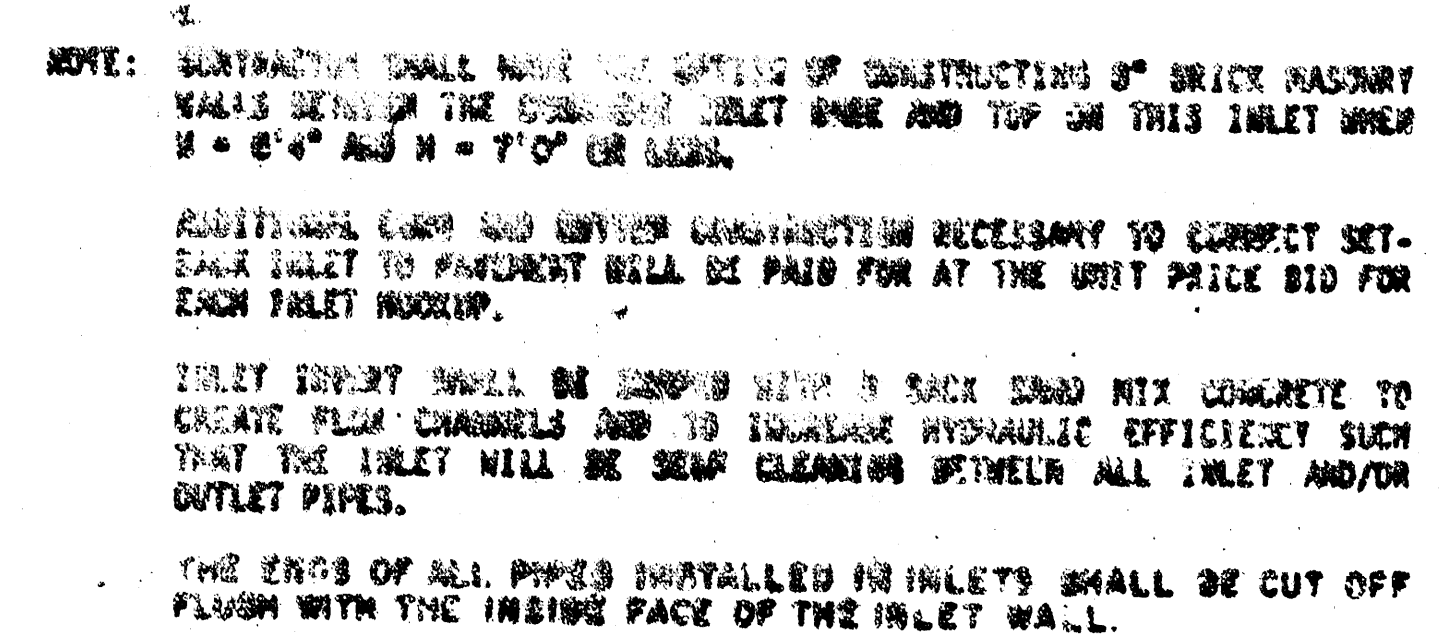
29TH AND WEBB ROAD
WICHITA, KANSAS
PROFESSIONAL ENGINEERING CONSULTANTS, P.A.
ENGINEERS
WICHITA, KANSAS

Designed by: NWB
Drawn by: DEP
Checked by: DEP
Date: Dec. 1994 Job No: 94772-1

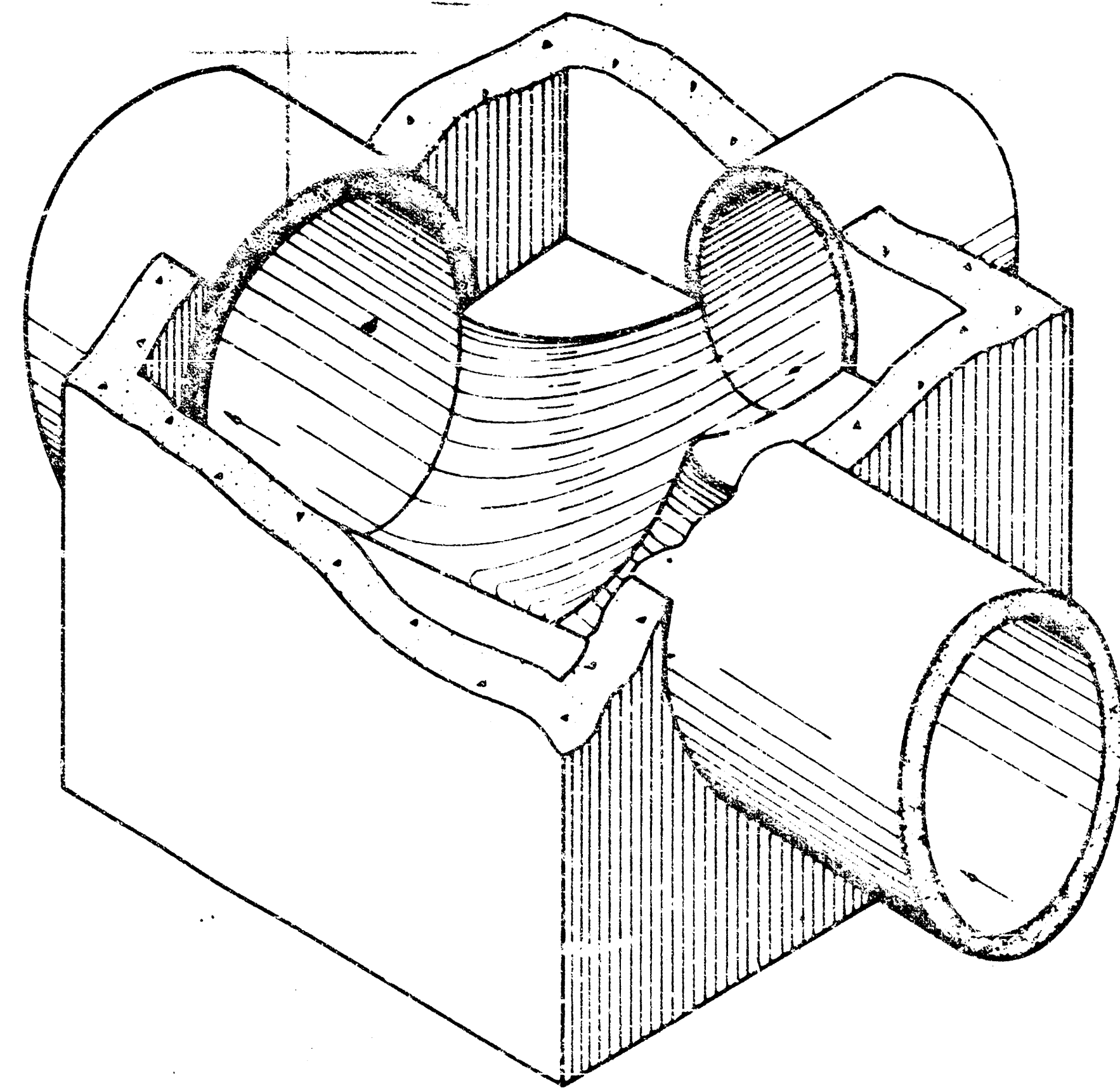
DRAWING NAME: 35-01027-2 SE: BAR 24-35
LOCATION: D4 4124
CENTER COORDINATES:
DATE LAST WORKED ON:
DICK BERRY



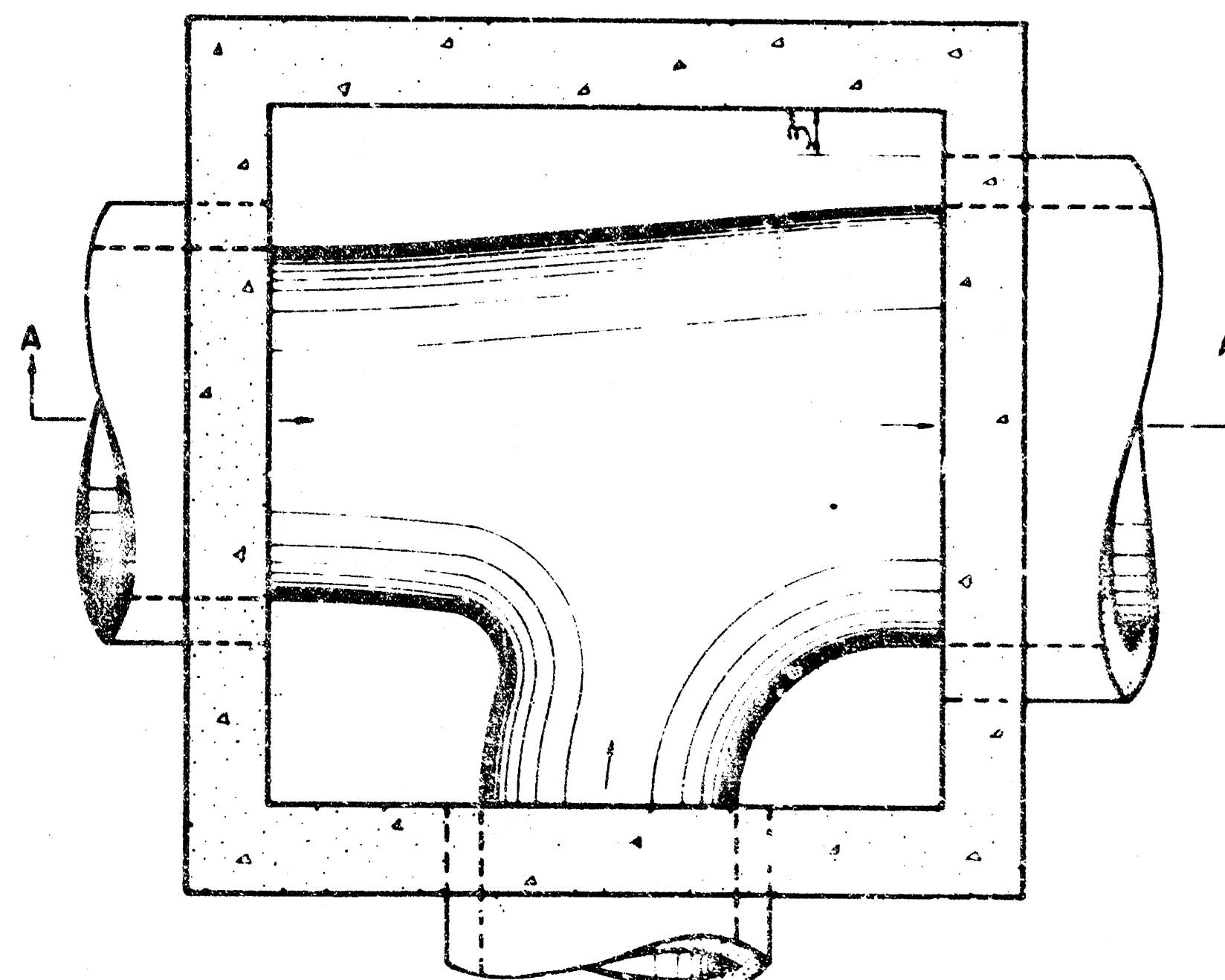
STATIONED TO THE WEST SIDE OF THE			
NO.	SECTION	DATE	BY
1	1	1901	W. H. H.
2	2	1901	W. H. H.
3	3	1901	W. H. H.
4	4	1901	W. H. H.
5	5	1901	W. H. H.
6	6	1901	W. H. H.
7	7	1901	W. H. H.
8	8	1901	W. H. H.



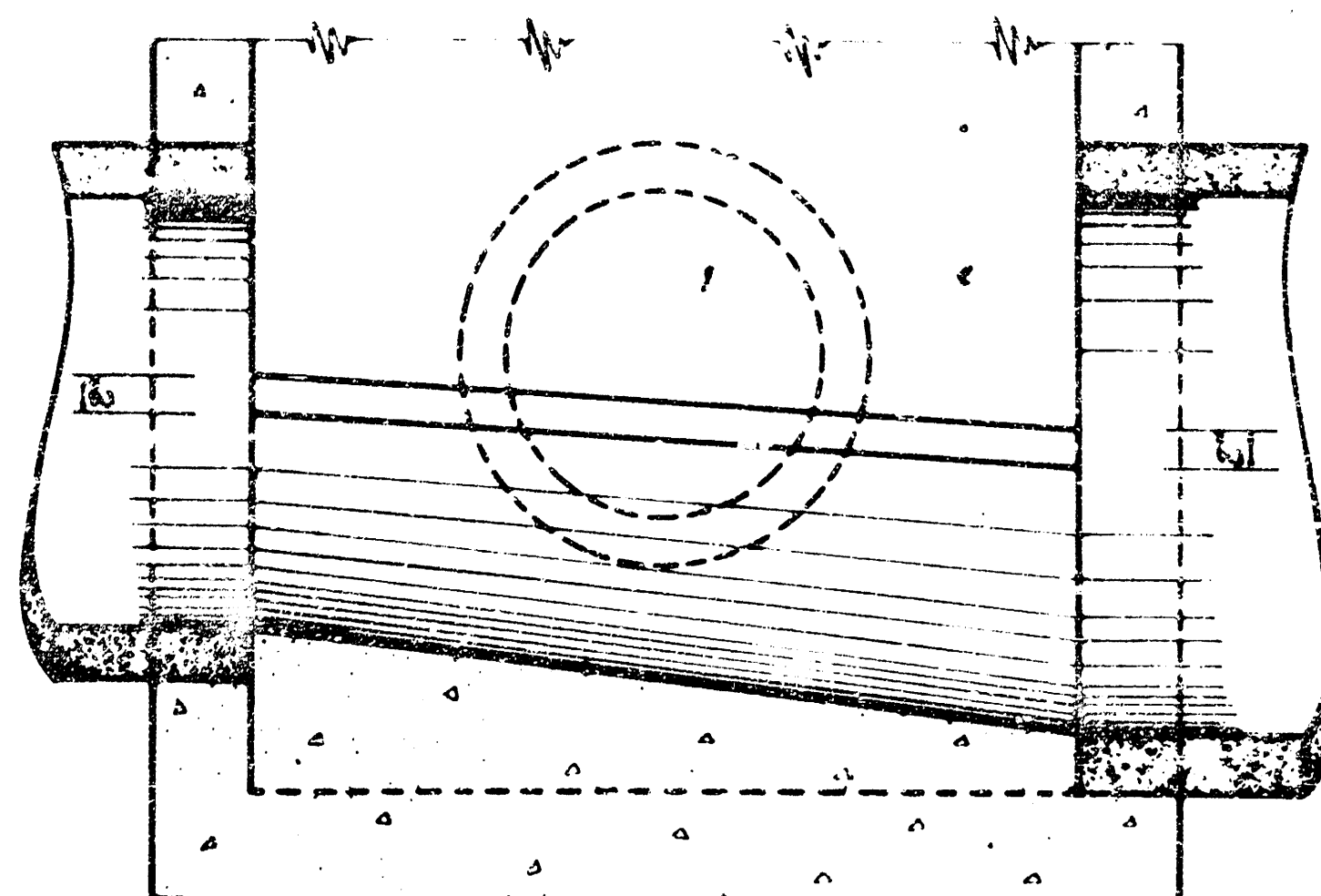
DETAIL STANDARD TYPE 1A CURB INLET
CITY OF WICHITA, KANSAS
INLET OPENING - 6" x 8" 0"
2.5' x 2.5'
JUNE 1984



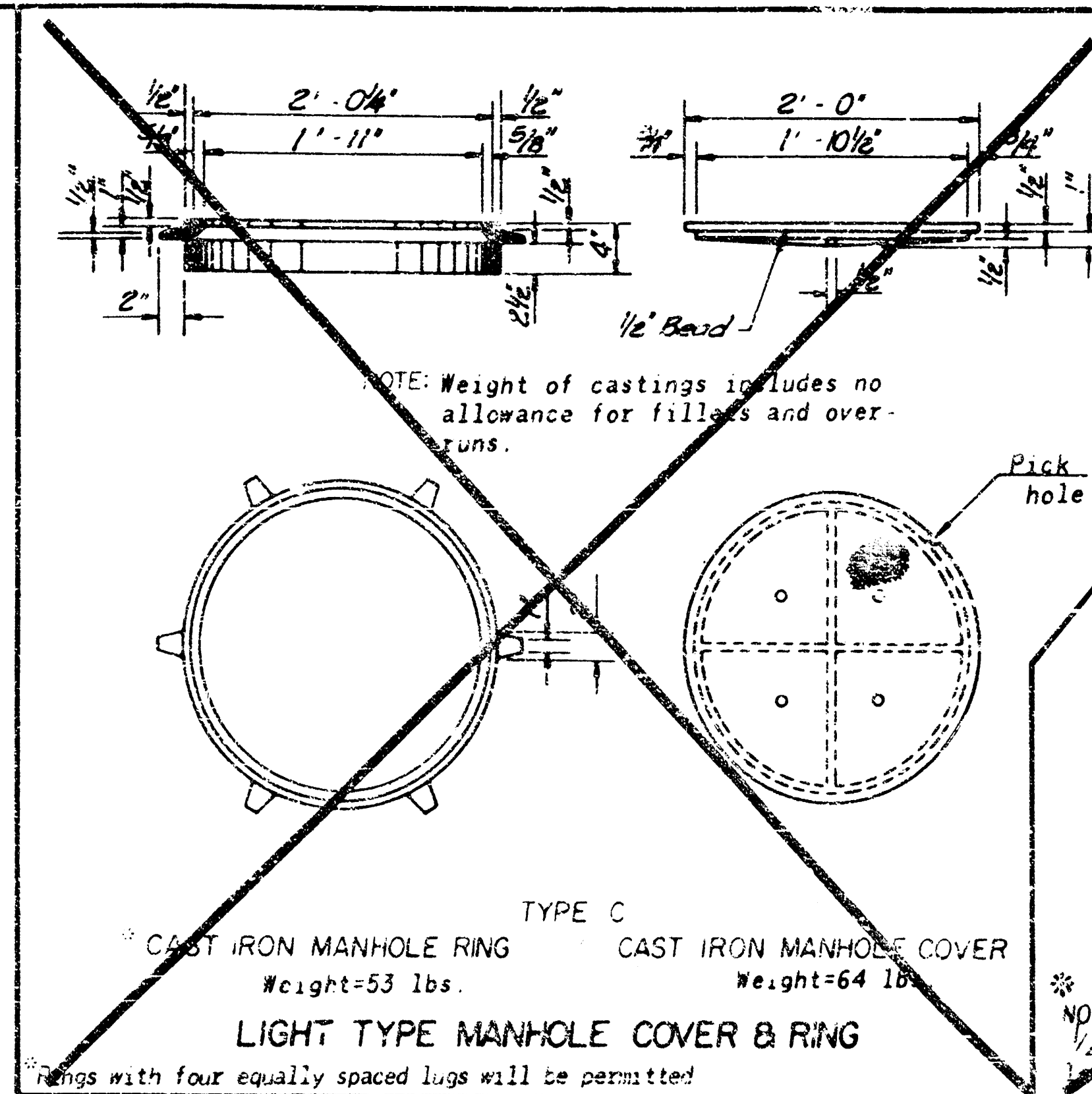
SECTIONAL VIEW (EXAMPLE IV)
Showing Floor Shaping



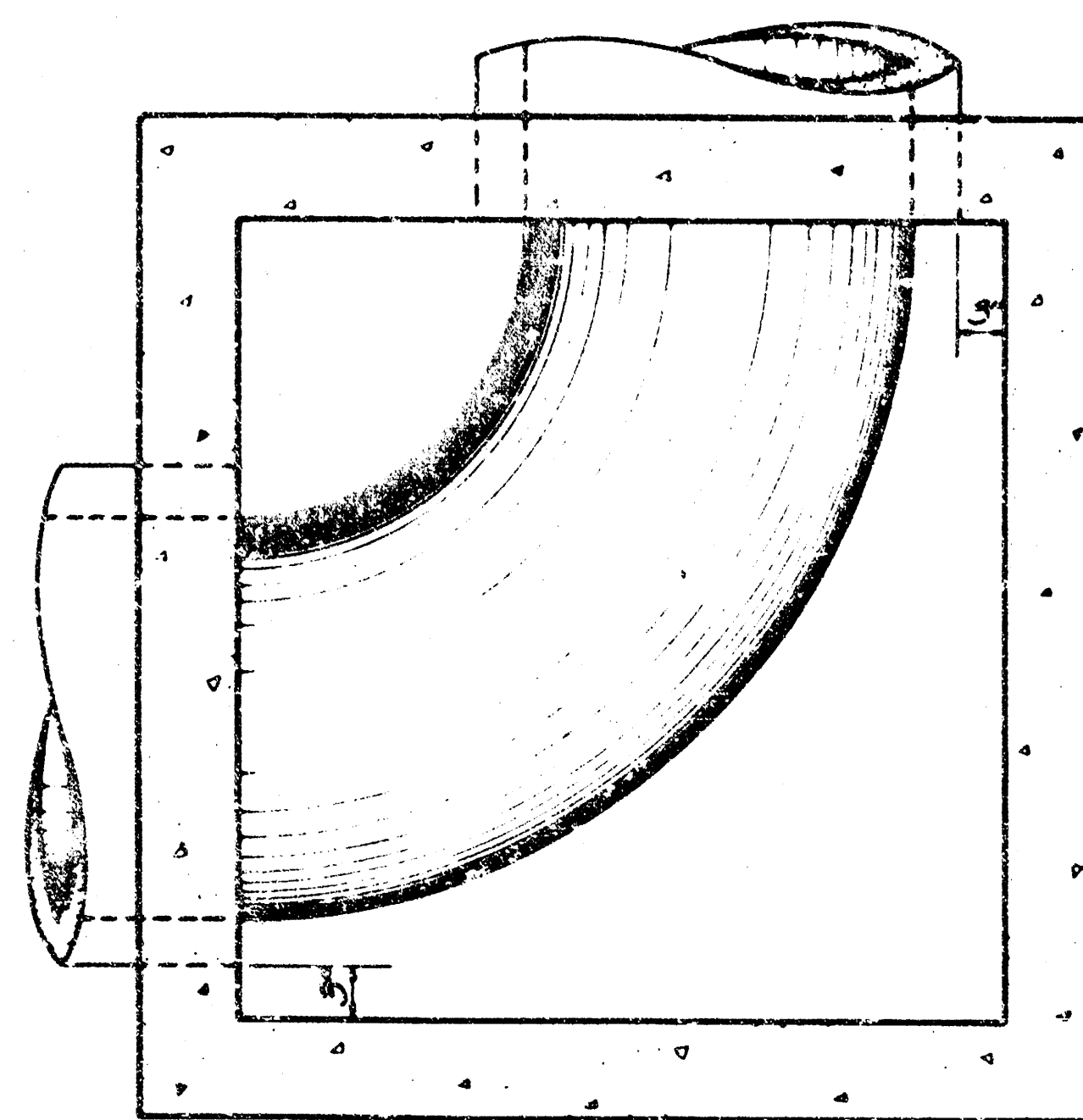
FLOOR PLAN (EXAMPLE IV)



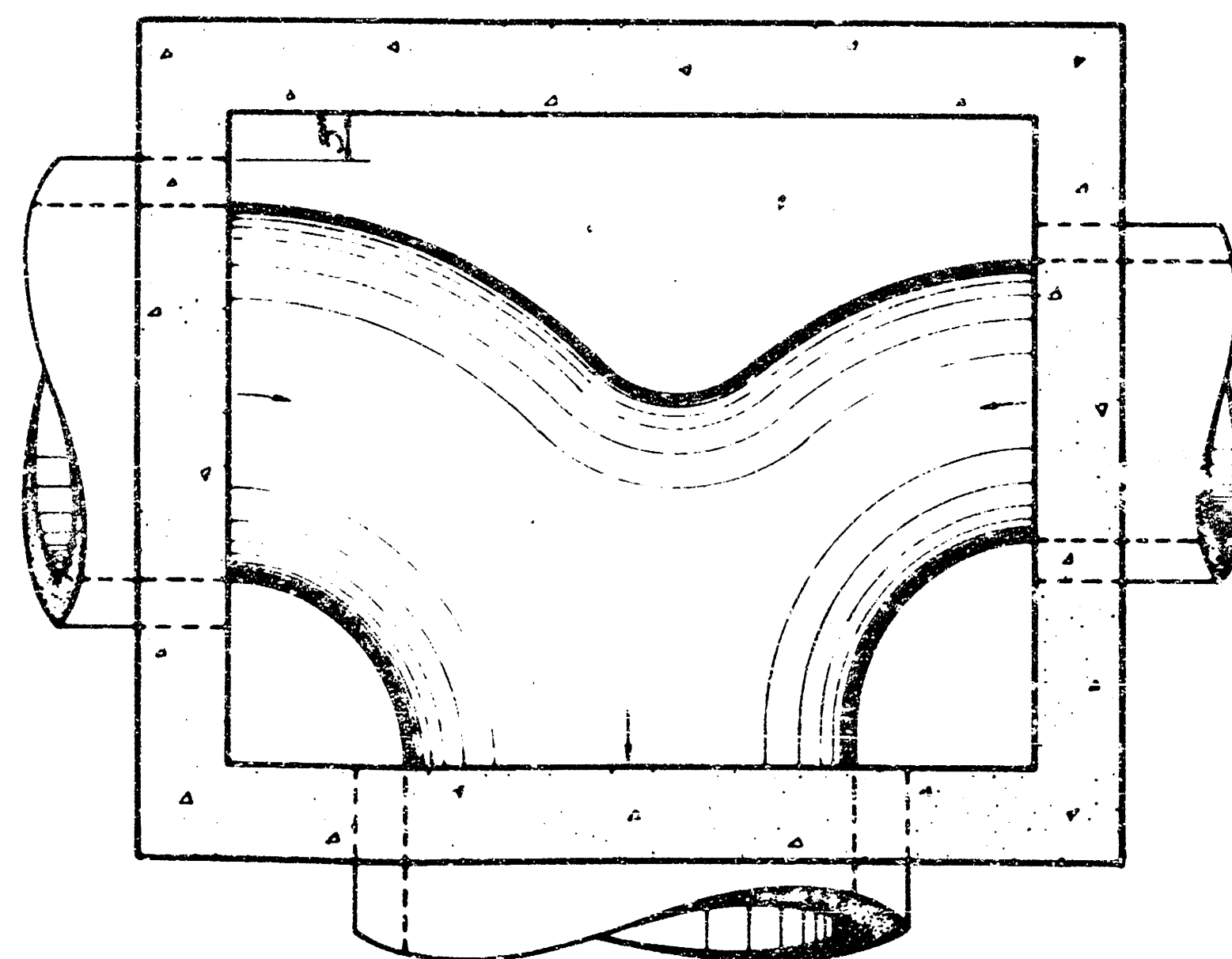
SECTION A-A (EXAMPLE IV)



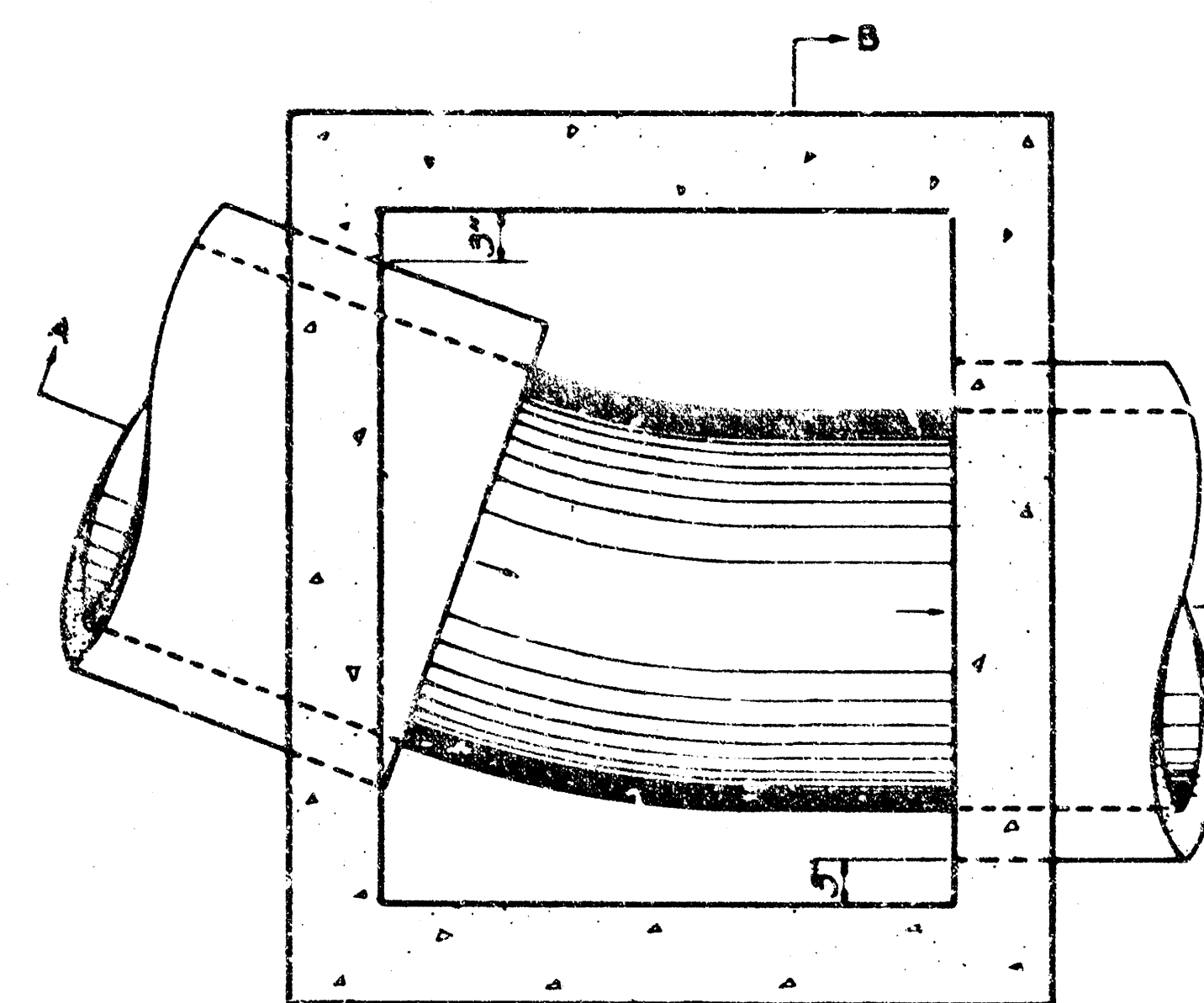
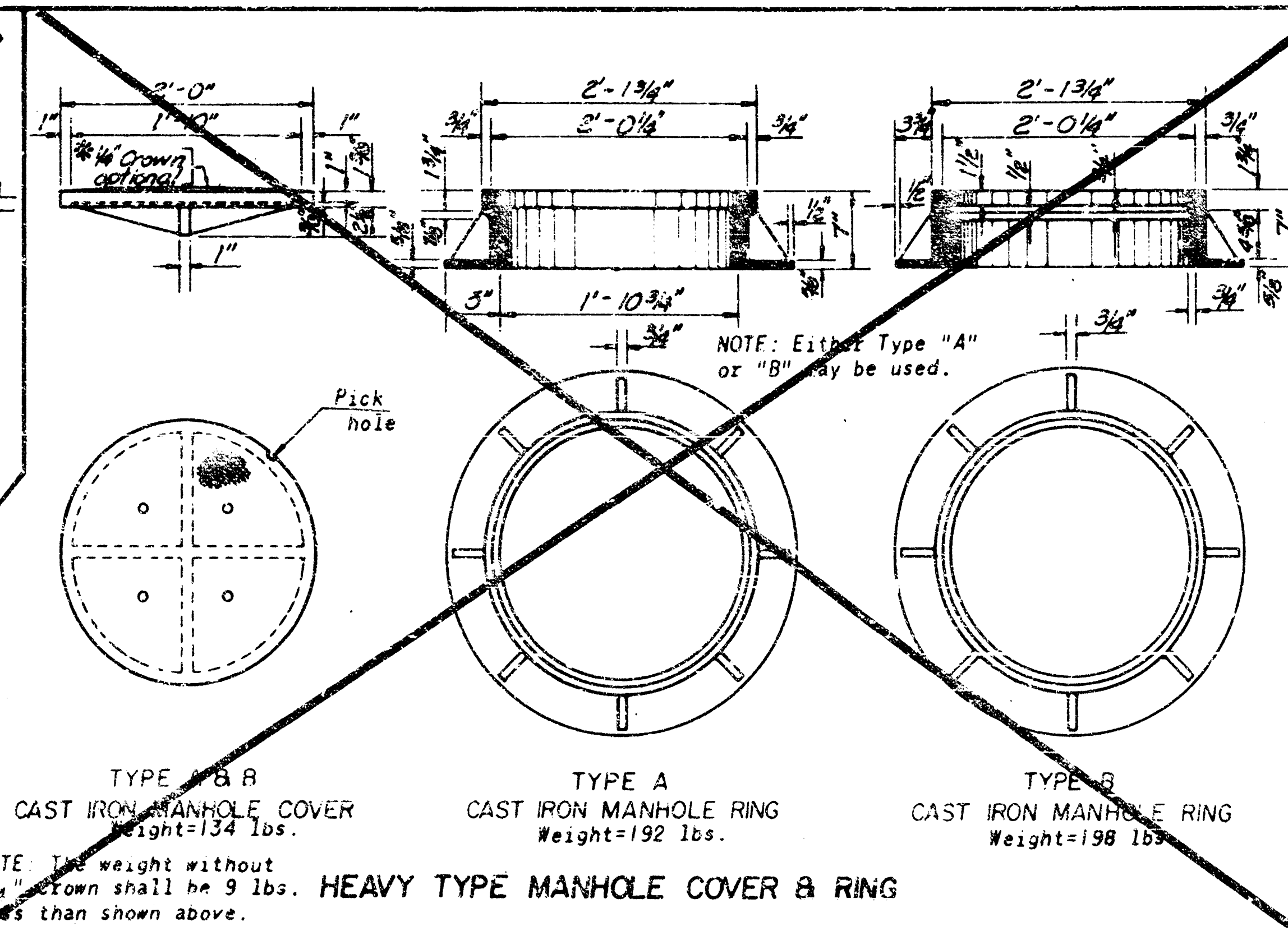
TYPICAL EXAMPLES OF VARIOUS PIPE COMBINATIONS
Showing method of shaping floor of manholes to provide increased hydraulic efficiency.
For reinforcing & other features see "PLAN" and "SECTION"



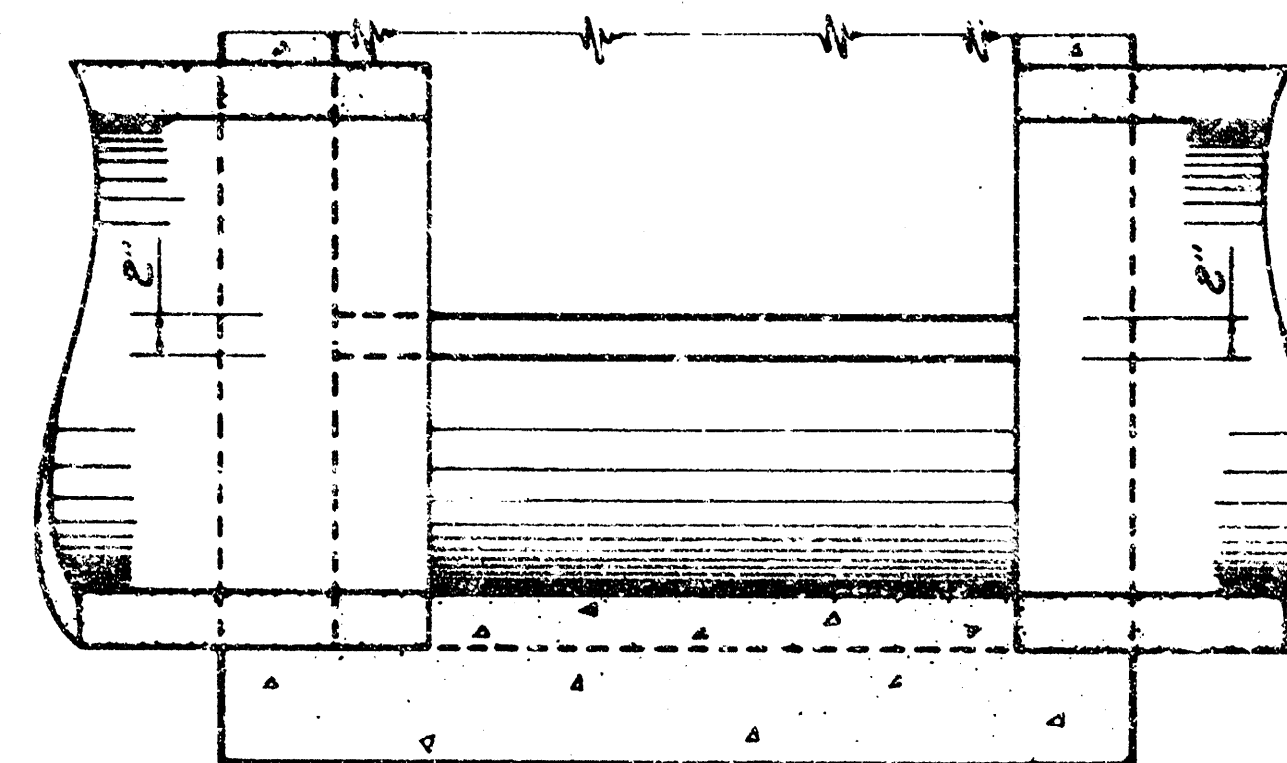
FLOOR PLAN (EXAMPLE II)



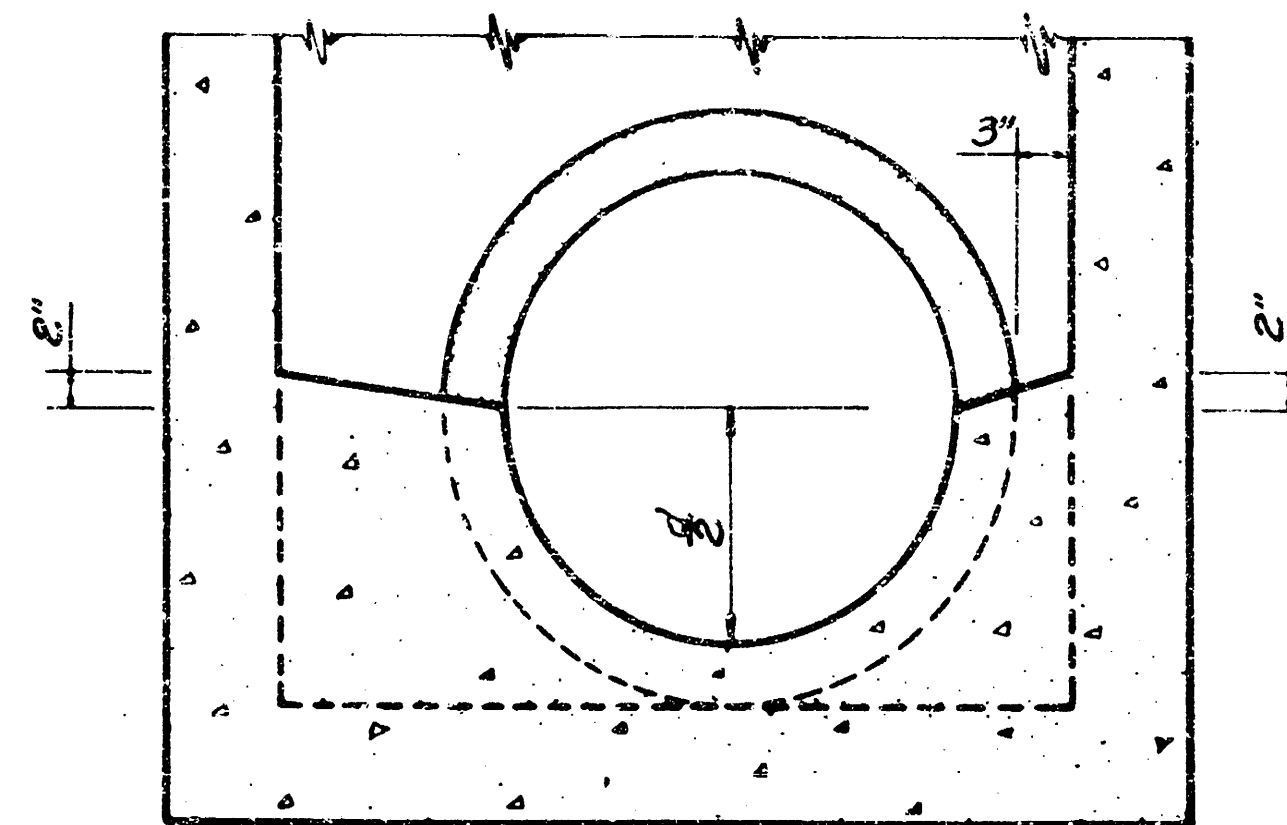
FLOOR PLAN (EXAMPLE III)



FLOOR PLAN (EXAMPLE I)

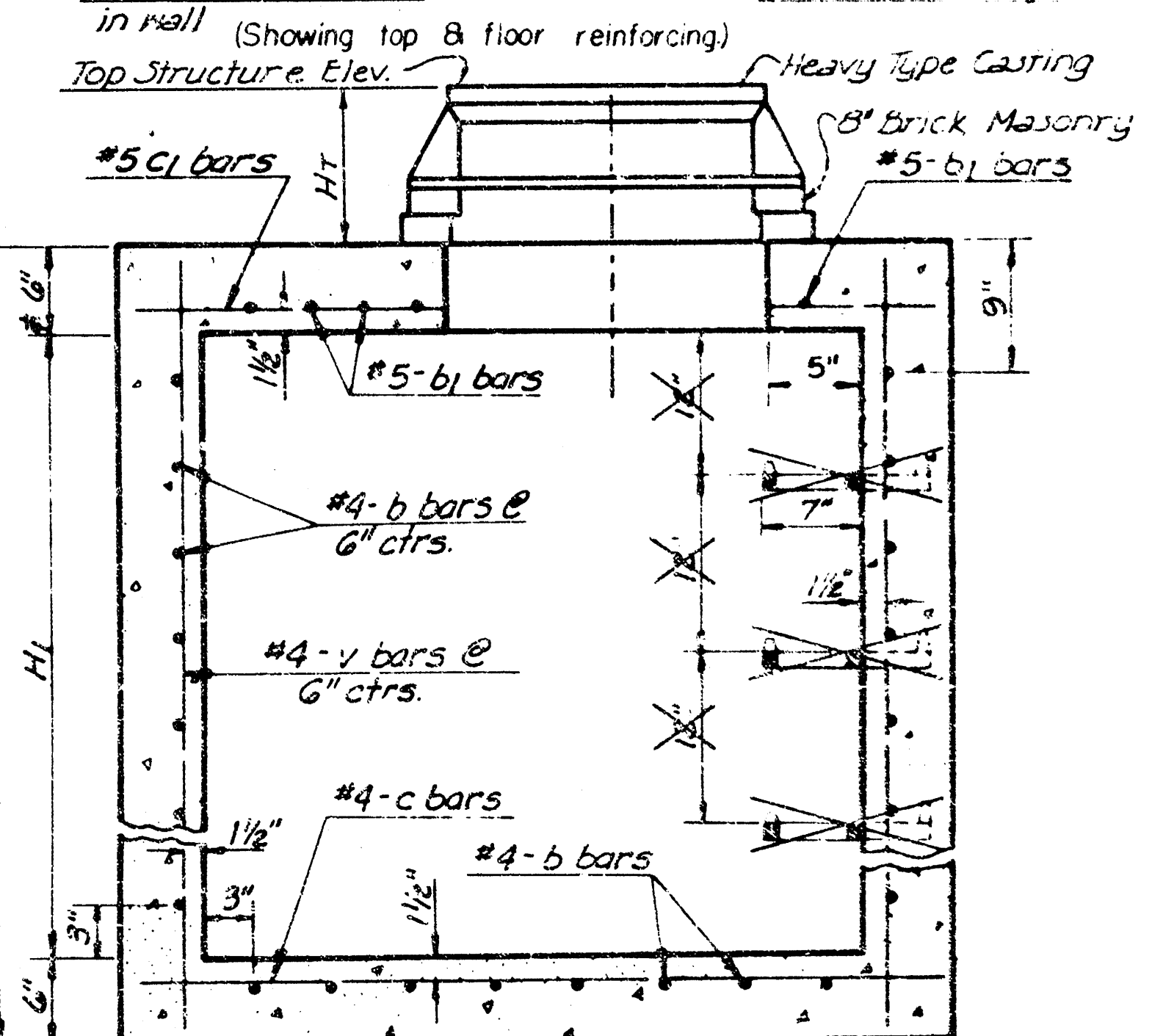
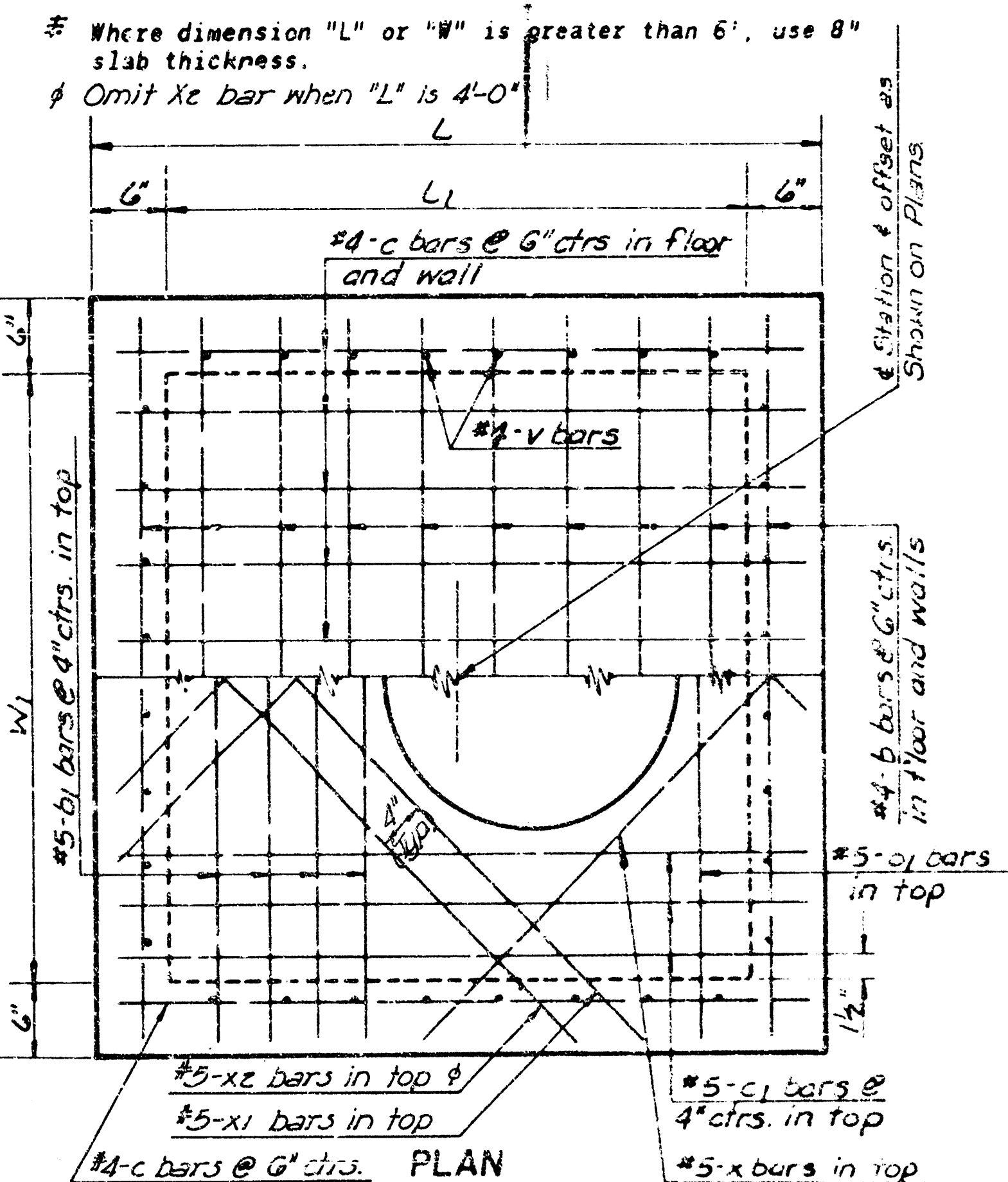
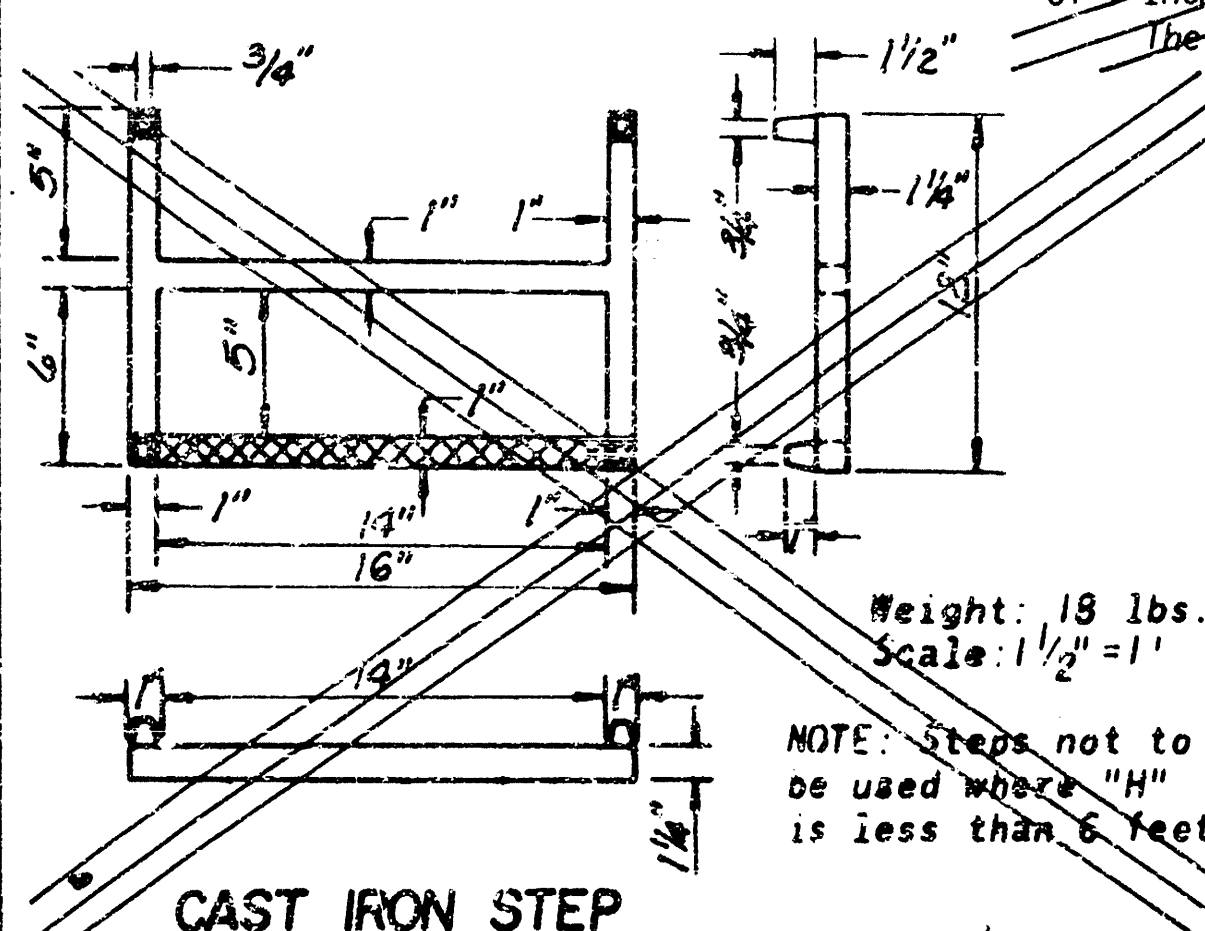


SECTION A-A (EXAMPLE I)



SECTION B-B (EXAMPLE I)

NOTE: All exposed edges shall be finished with an edging tool.
Concrete shall be mix used in Conc. Pvt. may be used throughout.
In general, pipes will enter and leave the manhole at various positions. Where possible bend bars around pipes.
Floor of manhole to be shaped as shown in various "EXAMPLES" with unreinforced concrete.
Manhole opening and steps, where used, shall be placed to afford easy access to top of shaped invert. Top reinforcing bars to be adjusted accordingly.
All castings shall be gray iron and shall comply with the Standard Specifications.
All exposed cast iron surfaces (rings & covers) not subjected to traffic, shall be painted either in the shop or in the field with one coat of a zinc dust paint, followed by two field coats of aluminum paint.
No deductions in concrete quantities shall be made for pipe openings.
No additions in concrete quantities shall be made for shaping floor of manholes.
When so ordered by the Engineer, the top of the manhole shall be sloped slightly to approximately fit the ground line or other conditions.
Dimensions and weights of cast iron as shown on this sheet are minimum. Larger dimensions and/or heavier weights of cast iron may be used.



SECTION (Exclusive of floor shaping)
As an alternate to the cast iron step shown, either an aluminum or a plastic coated steel step complying with the same minimum clear opening dimensions may be used. The minimum length of step shall be 14 inches and the minimum distance of step from wall shall be 6 inches. The solid aluminum or plastic step shall comply with the Standard Specifications (ASTM A 242, A 243, A 244, A 245, A 246, A 247, A 248, A 249, A 250, A 251, A 252, A 253, A 254, A 255, A 256, A 257, A 258, A 259, A 260, A 261, A 262, A 263, A 264, A 265, A 266, A 267, A 268, A 269, A 270, A 271, A 272, A 273, A 274, A 275, A 276, A 277, A 278, A 279, A 280, A 281, A 282, A 283, A 284, A 285, A 286, A 287, A 288, A 289, A 290, A 291, A 292, A 293, A 294, A 295, A 296, A 297, A 298, A 299, A 300, A 301, A 302, A 303, A 304, A 305, A 306, A 307, A 308, A 309, A 310, A 311, A 312, A 313, A 314, A 315, A 316, A 317, A 318, A 319, A 320, A 321, A 322, A 323, A 324, A 325, A 326, A 327, A 328, A 329, A 330, A 331, A 332, A 333, A 334, A 335, A 336, A 337, A 338, A 339, A 340, A 341, A 342, A 343, A 344, A 345, A 346, A 347, A 348, A 349, A 350, A 351, A 352, A 353, A 354, A 355, A 356, A 357, A 358, A 359, A 360, A 361, A 362, A 363, A 364, A 365, A 366, A 367, A 368, A 369, A 370, A 371, A 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26	9-28-82	Rev step from 16" to 14" clear opening	W.L.H. L.R.P.
25	3-14-80	Revised to Standard Specs	W.L.H. L.R.P.
24	4-2-80	Labeled bars same as Steel table	W.L.H. L.R.P.
NO	DATE	REVISIONS	BY
KANSAS DEPARTMENT OF TRANSPORTATION			
REINFORCED CONCRETE MANHOLE			
STD NO. 633			
SHEET NO.	OF	SCALE	1"=1'
DESIGNED	BY	QUANTITIES	BY
DESIGN OK	BY	TRACE OK	BY

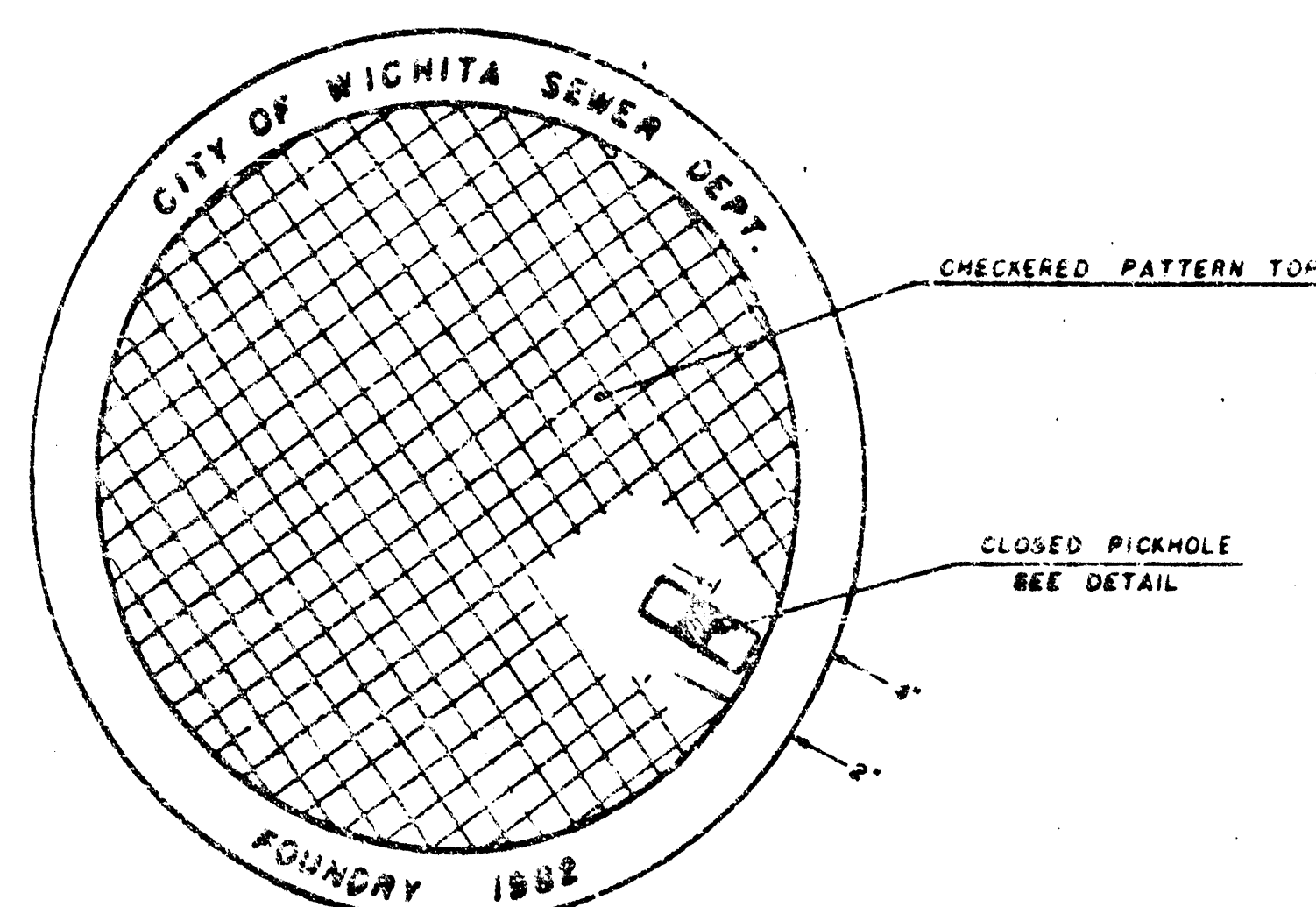
MANHOLE FRAME AND COVER DETAIL

ADOPTED AS STANDARD DESIGN
BY

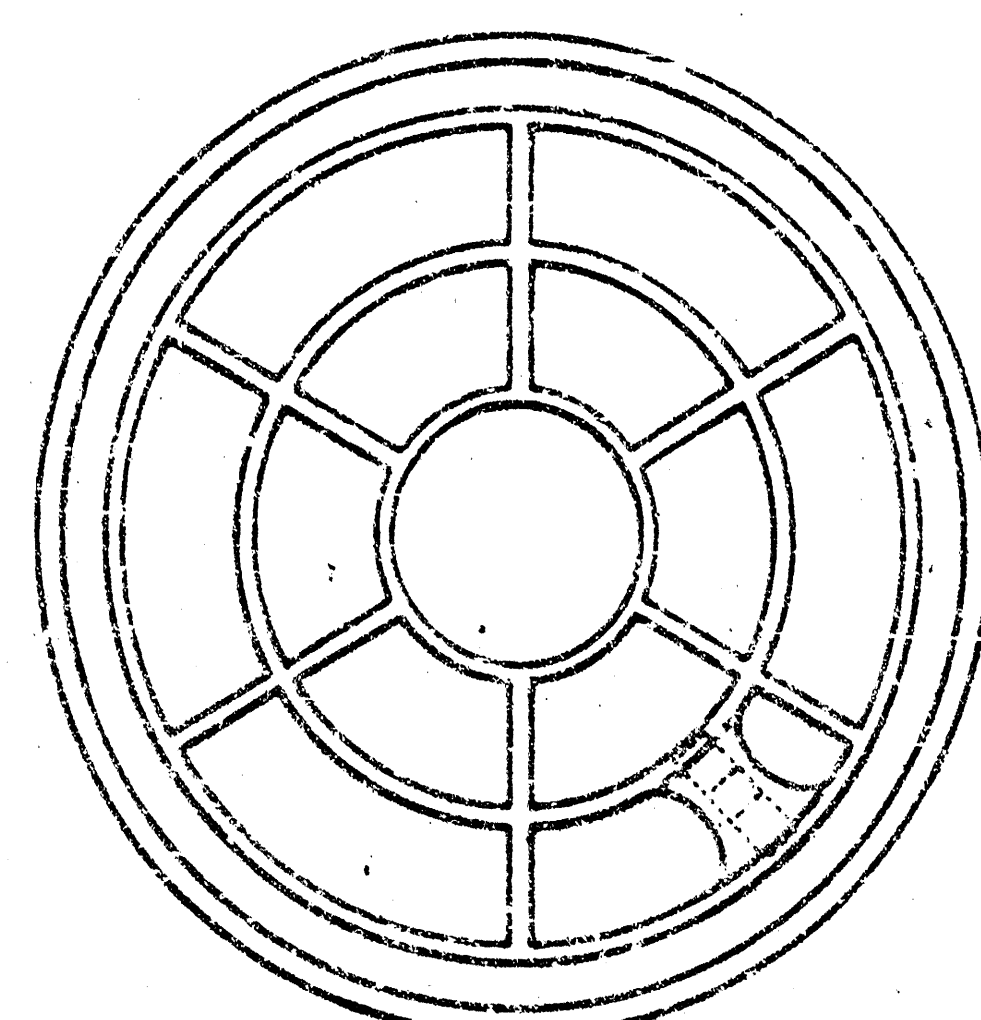
City of Wichita, Kansas

MANHOLE COVER

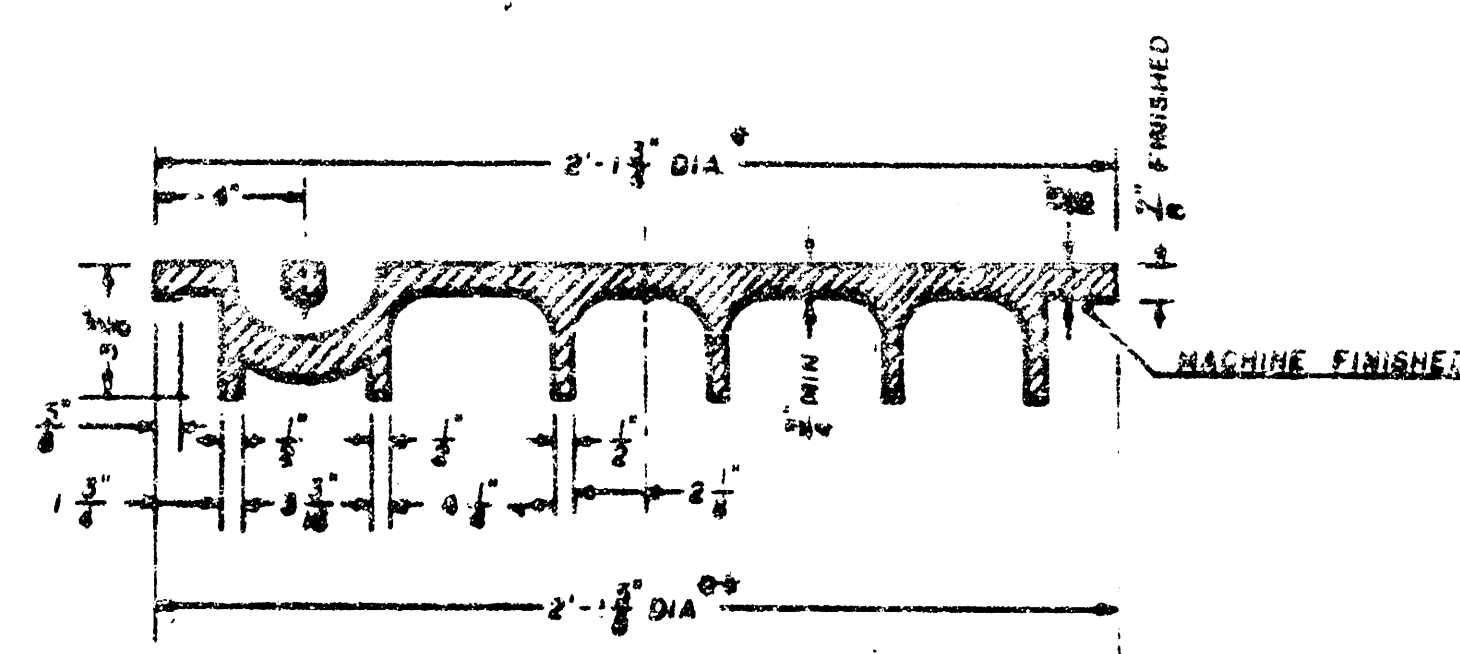
Weight: 180 Lbs.



TOP VIEW



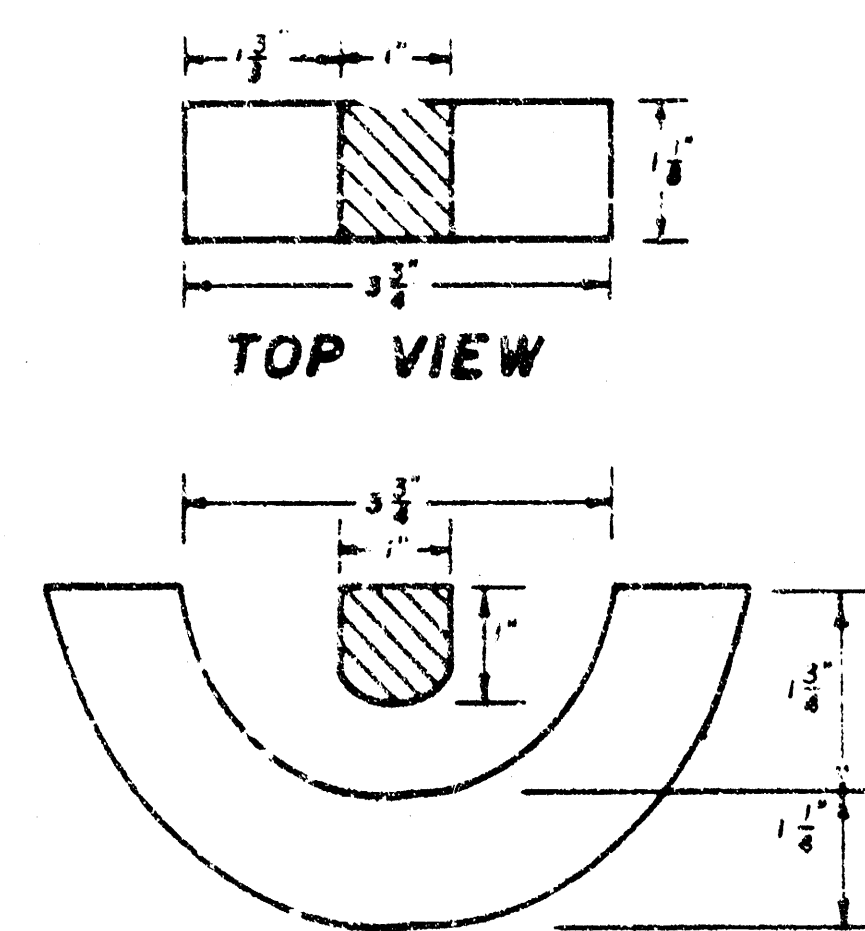
BOTTOM VIEW



SECTION VIEW

* OUTSIDE DIA. TOP OF COVER
** OUTSIDE DIA. BOTTOM OF COVER

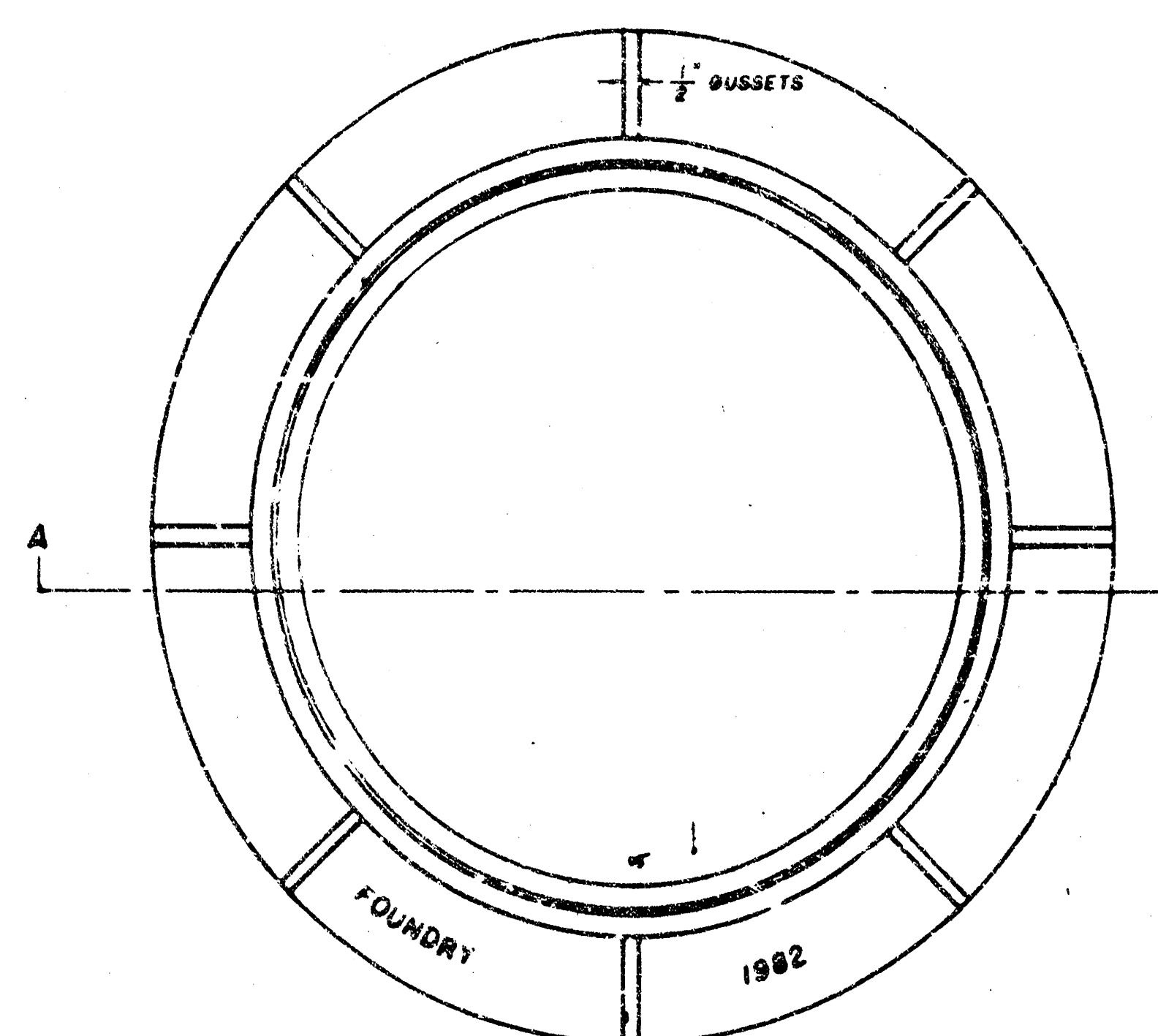
PICKHOLE DETAIL



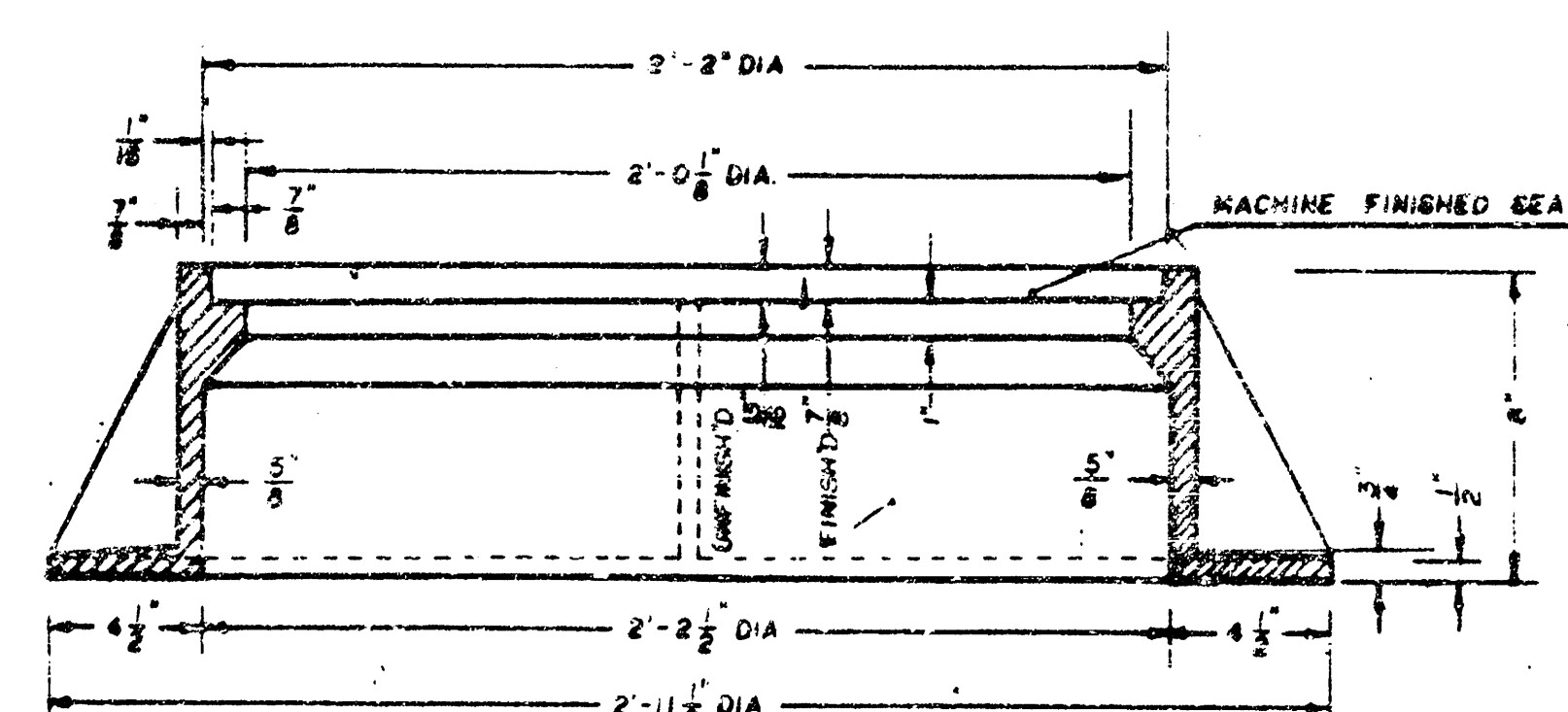
SECTION VIEW

MANHOLE FRAME

Weight: 240 Lbs.



TOP VIEW



SECTION A-A

GENERAL NOTES

1. MANHOLE CASTINGS SHALL BE MANUFACTURED USING GOOD QUALITY GRAY IRON CONFORMING TO CLASS 30 OF A.S.T.M. DESIGNATION A-48. DIMENSIONS AND WEIGHTS SHOWN ON THE DETAILED DRAWINGS SHALL BE CONSIDERED AS MINIMUM REQUIREMENTS AND ANY DEVIATIONS FROM THE DIMENSIONS SHOWN MUST BE SPECIFICALLY APPROVED. THE FINISHED CASTINGS SHALL BE OF UNIFORM QUALITY, FREE FROM BLOWHOLES, POROSITY, HARD SPOTS, SHRINKAGE DISTORTIONS OR OTHER DEFECTS.
2. MANHOLE CASTINGS SHALL BE MANUFACTURED SUCH THAT A COVER MANUFACTURED BY ANY ONE FOUNDRY WILL FIT INTERCHANGEABLY INTO A FRAME MANUFACTURED BY ANOTHER FOUNDRY AND STILL MEET ALLOWABLE CLEARANCES AND NON-ROCKING REQUIREMENTS. THIS WILL REQUIRE MANUFACTURING OF THE MATCHING FACES ON THE COVER AND THE FRAME TO CLOSE TOLERANCES.
3. THE OUTSIDE CIRCUMFERENCE OF THE VERTICAL FACE OF THE COVER AND THE INSIDE CIRCUMFERENCE OF THE VERTICAL FACE IN THE FRAME RECESS SHALL BE MANUFACTURED TO TOLERANCES SUCH THAT THE CLEARANCE BETWEEN THE COVER AND FRAME WILL NOT EXCEED 1/8" AT ANY POINT AROUND THE CIRCUMFERENCE OF THE COVER. THE SEATING SURFACES BETWEEN THE COVER AND FRAME SHALL BE MACHINED SUCH THAT THESE SURFACES SHALL MAKE FULL CONTACT FOR THEIR FULL CIRCUMFERENCE TO PRECLUDE THE COVER FROM ROCKING IN THE FRAME.
4. THE MANHOLE FRAME AND COVER SHALL BE MARKED WITH LETTERING INDICATING THE NAME OF THE MANUFACTURER AND THE YEAR WHEN THE COVER OR FRAME WAS CAST. THE COVER SHALL BE FURTHER IDENTIFIED WITH REGARDS TO OWNERSHIP USING LETTERS AT LEAST 1" IN HEIGHT. THIS IDENTIFICATION SHALL BE "CITY OF WICHITA SEWER DEPARTMENT". THE WORD DEPARTMENT MAY BE ABBREVIATED. THE TEXTURE OF THE TOP SURFACE OF THE COVER SHALL BE MANUFACTURED IN A CHECKERED PATTERN DESIGN AS INDICATED ON THE DRAWINGS. SMOOTH BLOCKOUTS SHALL BE UTILIZED TO HIGHLIGHT THE LETTERING ON THE COVER SURFACE. THE TOTAL AREA OF SMOOTH SURFACE BLOCKOUT SHALL NOT EXCEED THE AREA AS INDICATED ON THE DRAWING. POSITIONING OF SMOOTH BLOCKOUTS AND LETTERING MAY VARY FROM THAT SHOWN ON THE DETAILED DRAWING.

