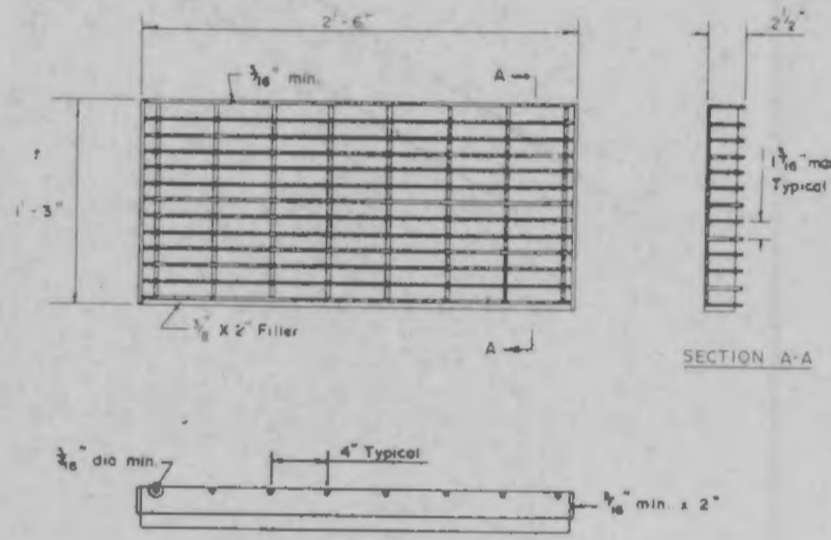
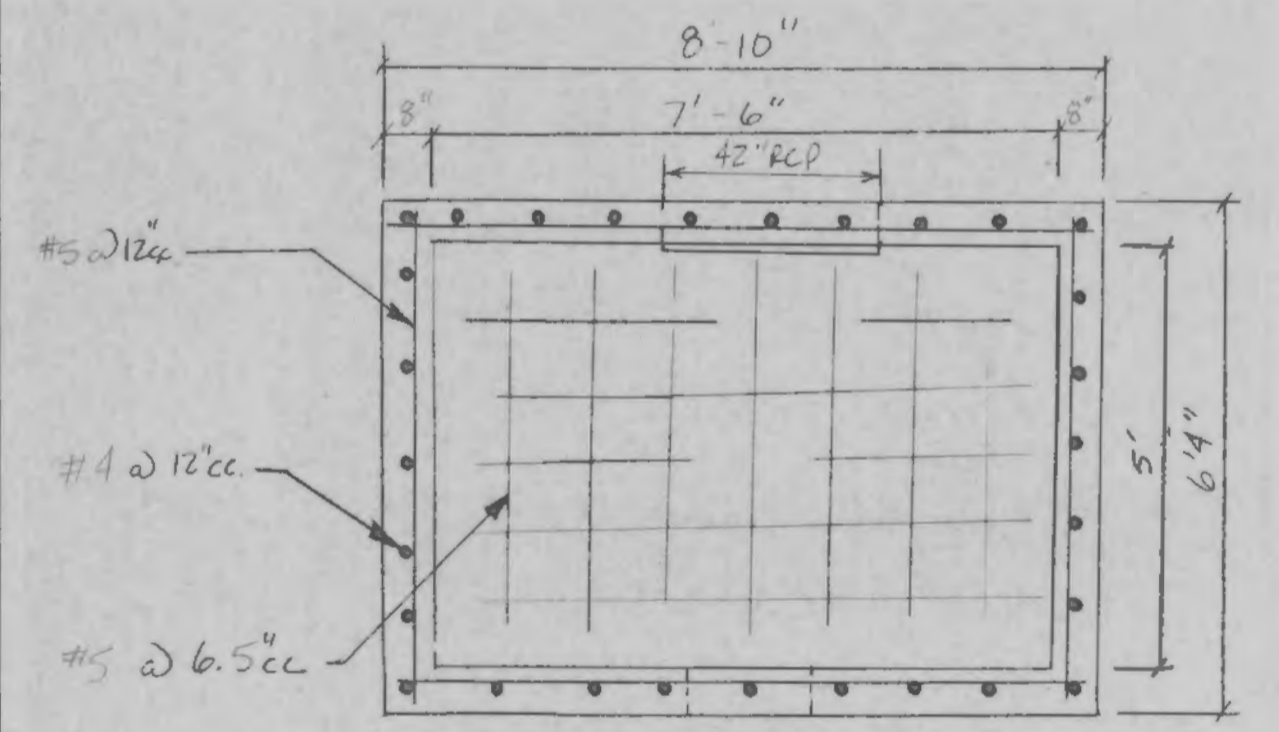


**AERIAL CREEK CROSSING DETAIL**  
(NO SCALE)

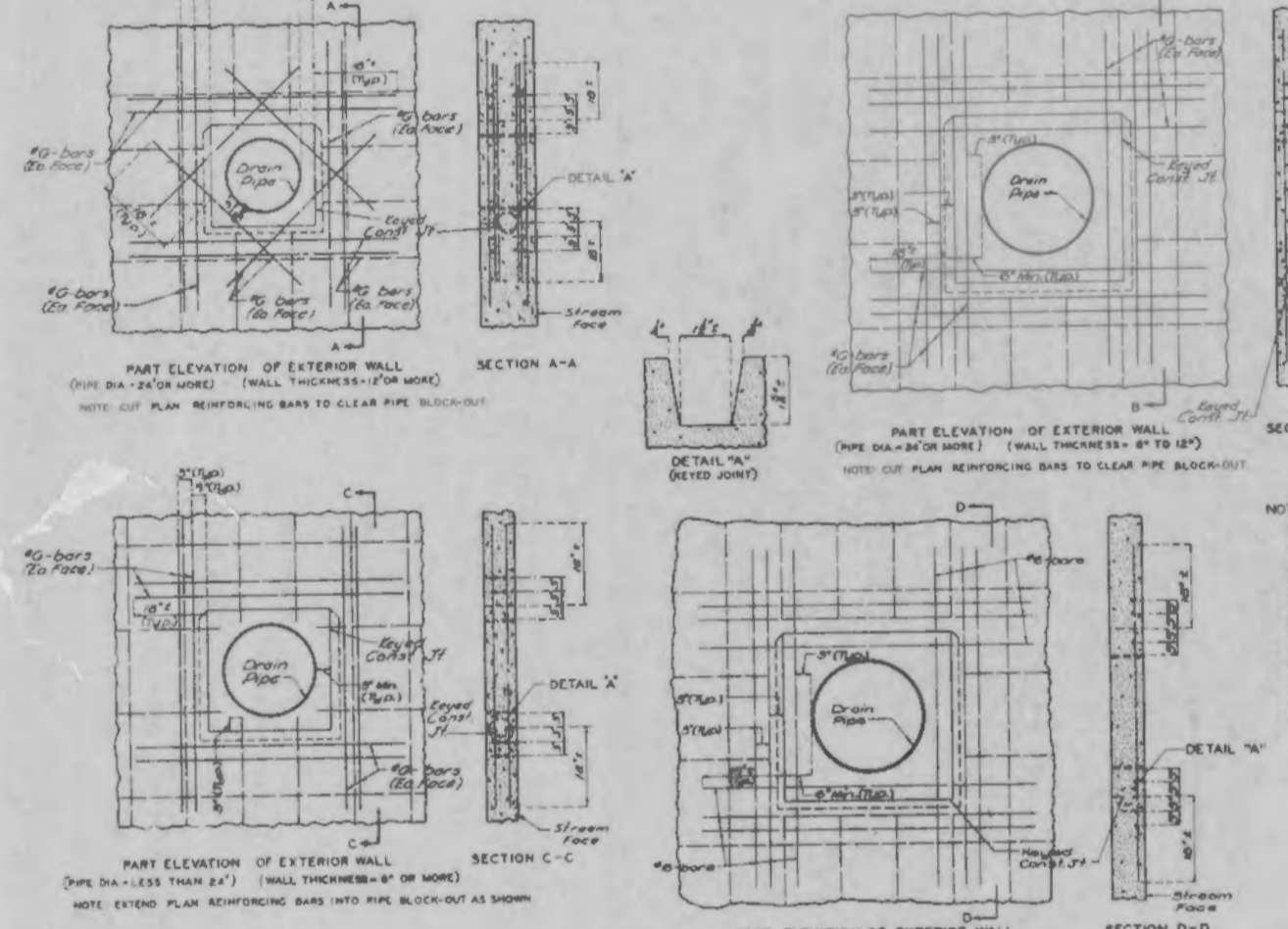
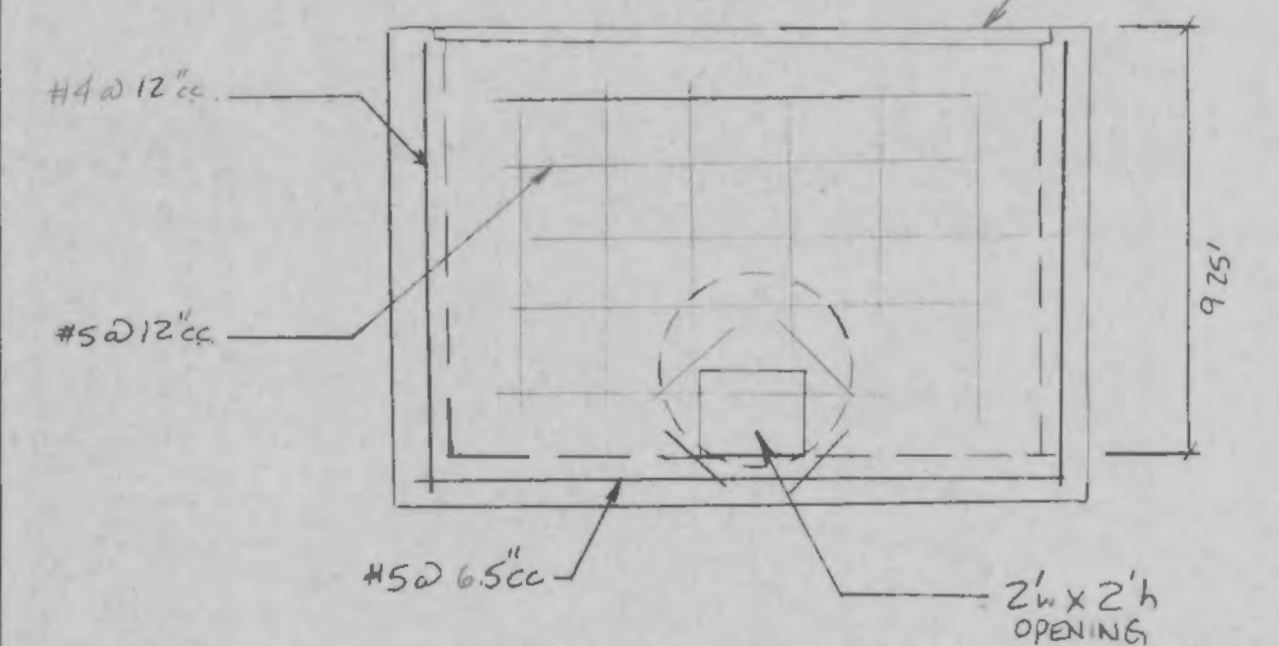
- Finish - Asphaltic 10 mil coating
- Material - Mild carbon steel - ASTM A569
- Capacity - 1400 lbs. loading
- Weight - 85 lb. min.
- Tolerances - All dimensions  $\pm 1/8"$
- Installation - The manufacturer must place the frame or make up each unit for the purpose of identification



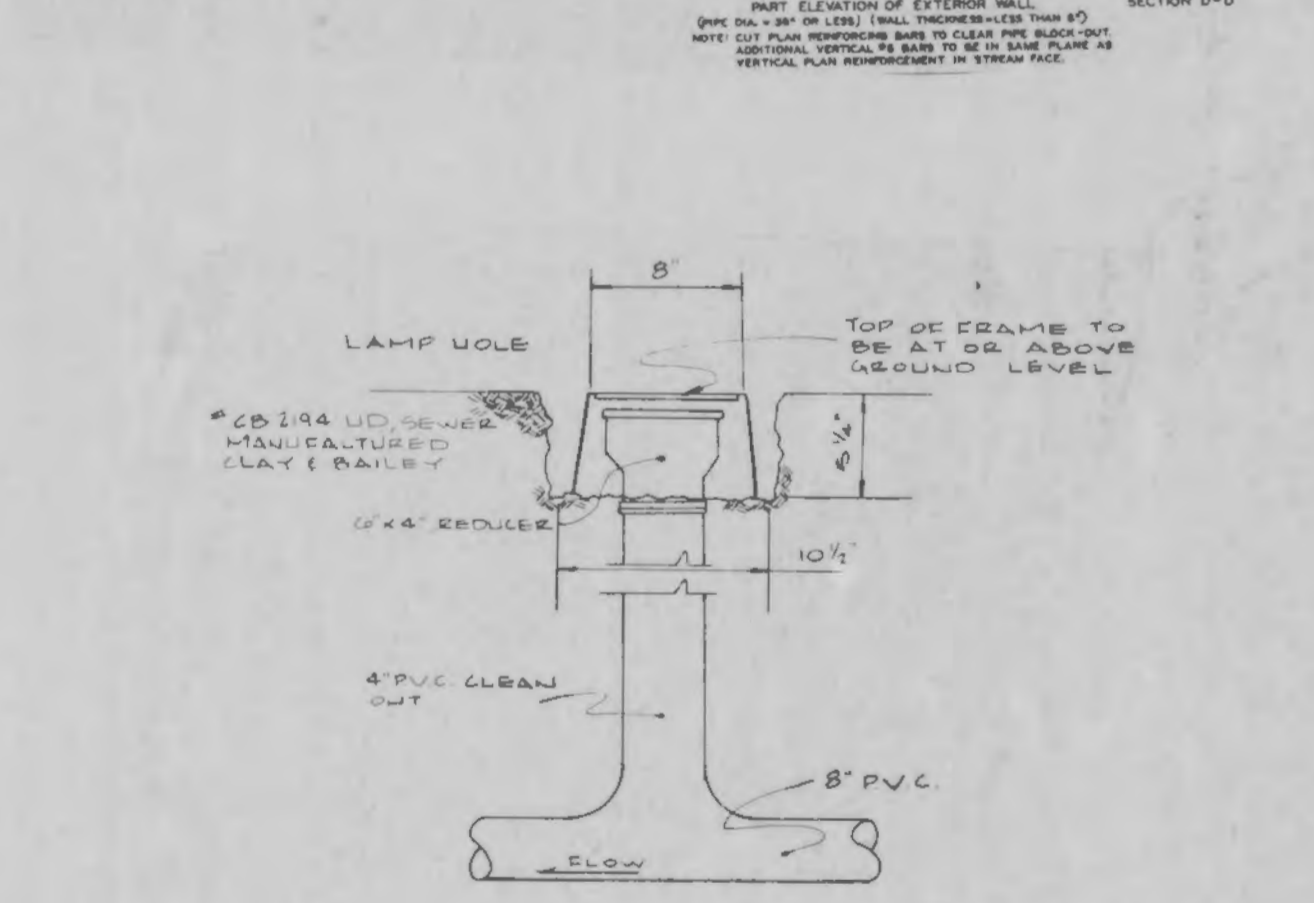
**DETAIL OF STEEL GRATE**



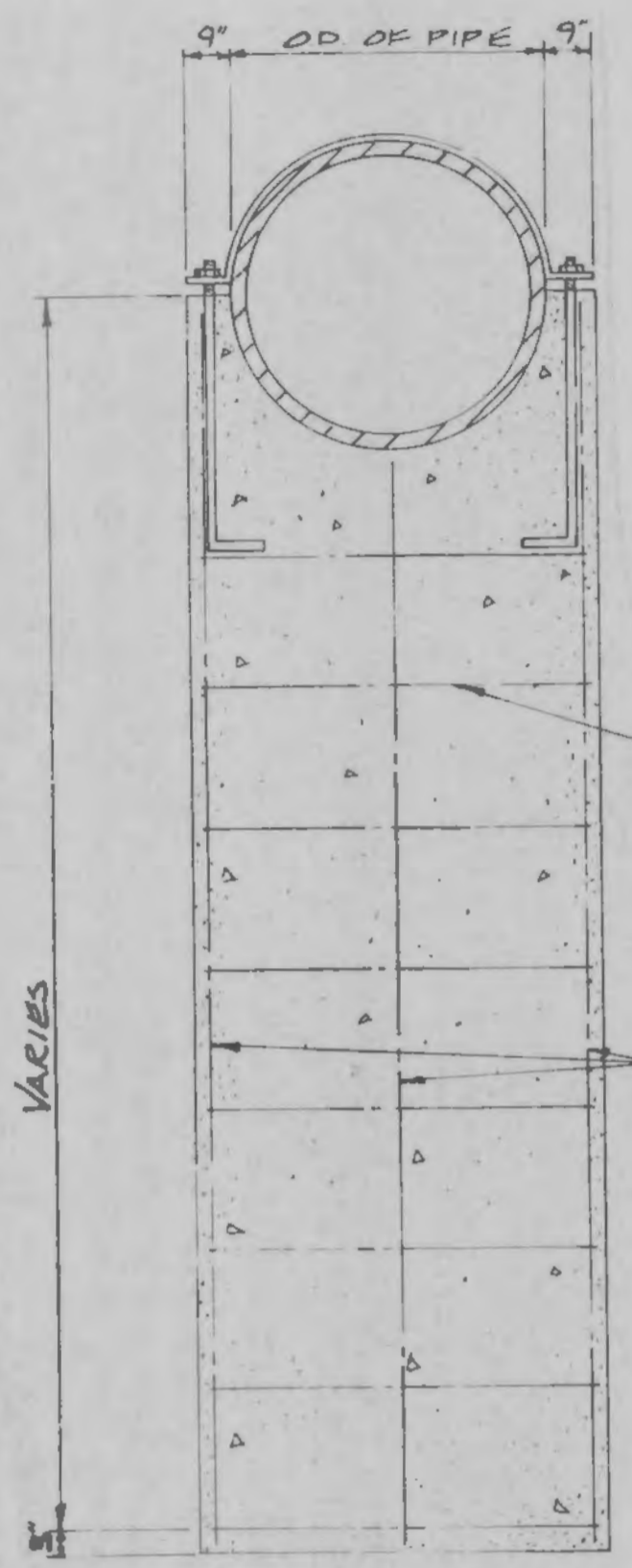
**OVERFLOW STRUCTURE (TOP VIEW)**



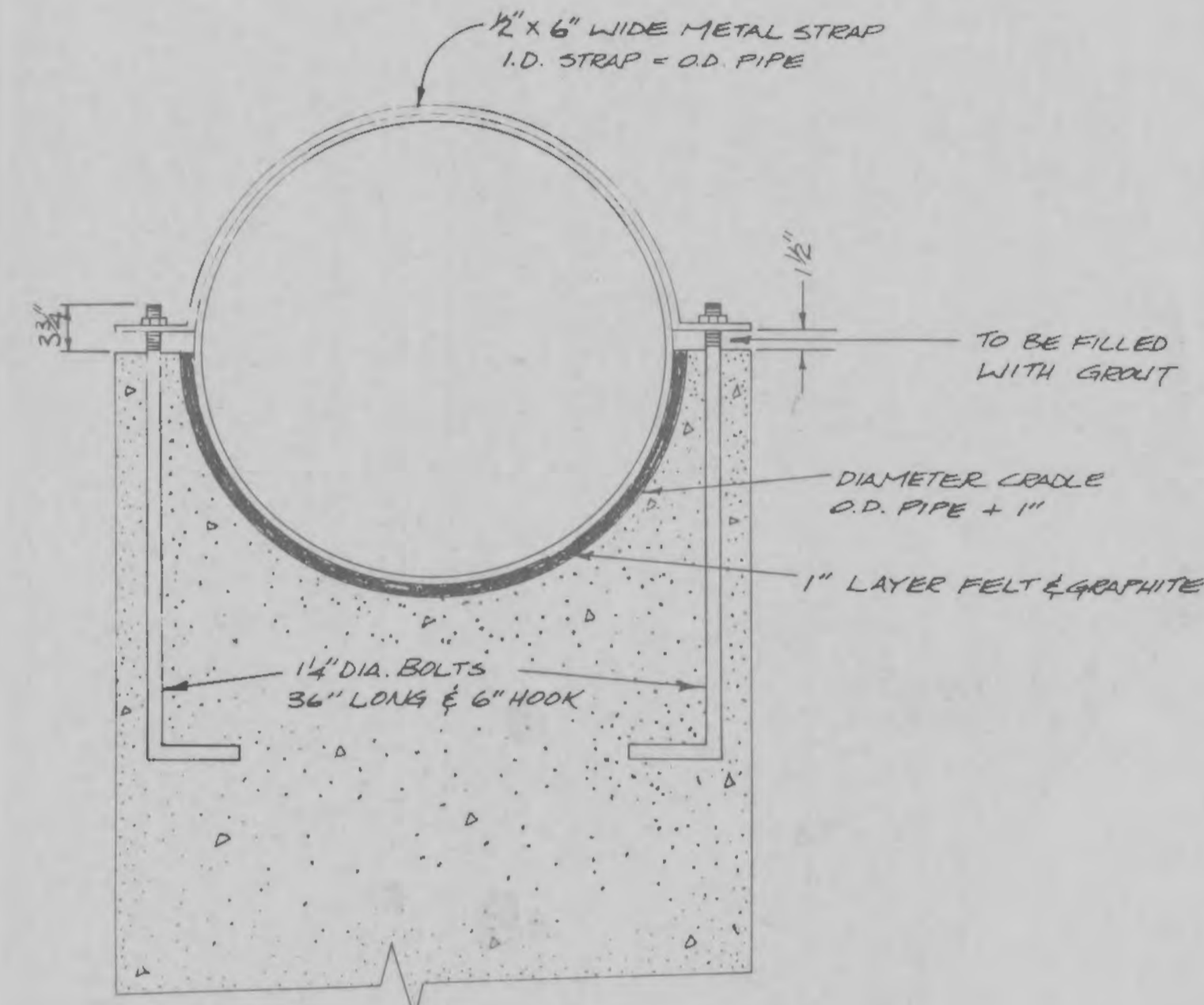
**SECTION A-A CONCRETE PIER DETAIL**  
(NO SCALE)



**CLEANOUT DETAIL**

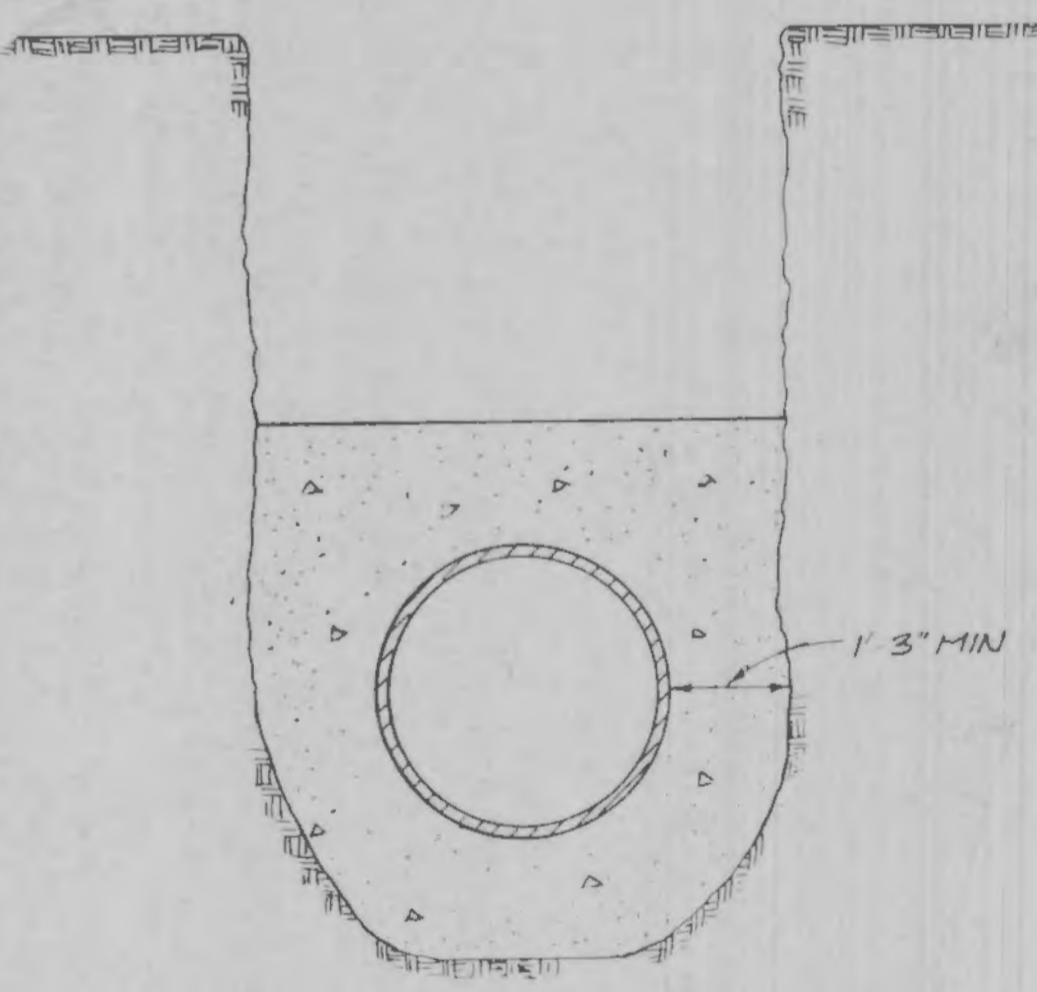


- GENERAL NOTES:**
- Reinforcing steel stress = 20,000 lbs. per sq. in.
  - Concrete stress = 1,200 lbs. per sq. in.
  - Earth = 120 lbs.
  - Equivalent fluid pressure = 30 lbs.
  - All concrete shall be Class "B".
  - Minimum clearance to reinforcing steel shall be 1 1/2" unless otherwise shown.
  - Lap all longitudinal bars 12" at splices.
  - Ø = varies, not more than 12".



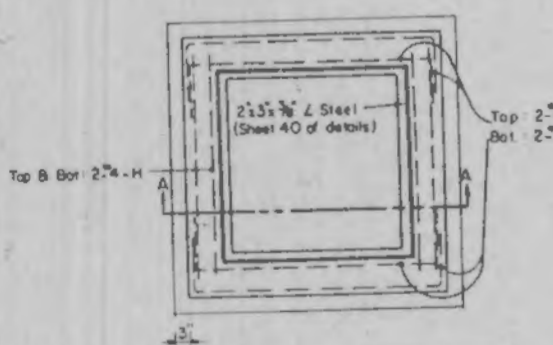
**ANCHOR DETAIL**  
(NO SCALE)

- GENERAL NOTES:**
- IF ROCK IS ENCOUNTERED, SET CONC. PIER 24" INTO ROCK.
  - ALL SPLICES IN REINFORCING STEEL SHALL BE 30 BAR DIAMETERS.
  - MINIMUM COVER OVER PRIMARY REINFORCING STEEL TO BE 2"
  - ULTIMATE COMPRESSIVE STRESS IN CONC. (28 days) = 3000 PSI
  - ULTIMATE TENSILE STRESS IN REINFORCING STEEL = 18,000 PSI

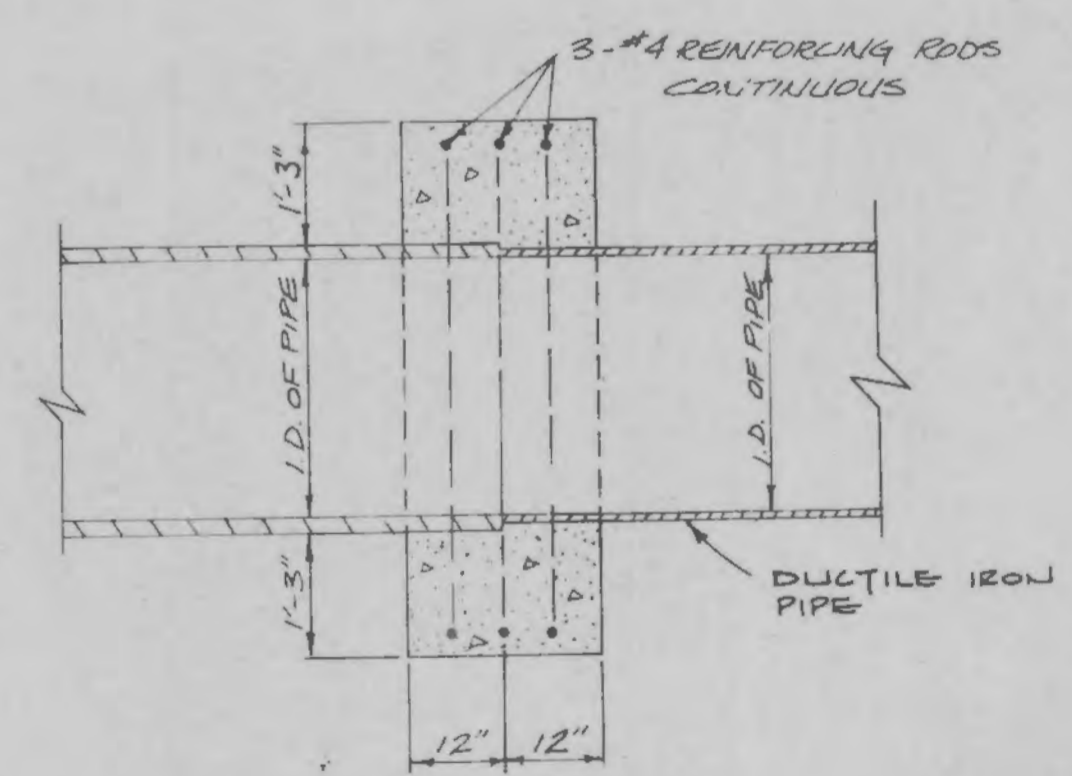


**SECTION C-C DETAIL OF CONC. COLLAR**  
SCALE 1/2" = 1'-0"

| CALL | USE              | Ø      | Straight Bars |
|------|------------------|--------|---------------|
| G-1  | 2,3 or 4 Girders | 3'-4"  |               |
| G-2  | 6 B B Girders    | 5'-10" |               |
| H-2  | 2 Grate          | 3'-6"  |               |
| H-3  | 3 B B Grate      | 4'-9"  |               |
| H-4  | 4 B B Grate      | 6'-0"  |               |



**STEEL REQUIREMENTS FOR GRATE INLET SEAT**



**SECTION B-B DETAIL OF CONC. COLLAR**  
SCALE 1/2" = 1'-0"



REVISIONS  
10/21/92

**FEISE FOREST ESTATES**  
A TRACT OF LAND  
BEING PART OF FRACTIONAL SECTION 34,  
T-474 P.4E. O'FALLON, MO.

TITLE  
DESIGNED J.Y.  
DRAWN G.G.  
CHECKED K.E.I.  
DATE 8-30-92  
SCALE  
KENNETH E. INGRAM  
REGISTERED PROFESSIONAL ENGINEER  
STATE OF MISSOURI  
No. 10234  
P. E.

JOB SHEET OF  
5346 21 23