

# STORM WATER DRAIN IMPROVEMENTS TO SERVE THE DUGAN CENTRE THIRD ADDITION

Private Project Number

560 PPS (607861)

## INDEX:

|    |                             |
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| 9  | Drop Inlet Detail           |
| 10 | Type 2 Inlet Detail         |
| 11 | Type 1A Single Inlet Detail |

## General Notes

1. Contractor will be required to provide notice to utility companies a minimum of twenty-four (24) hours prior to any excavation, as follows:

Kansas One-Call 687-2470

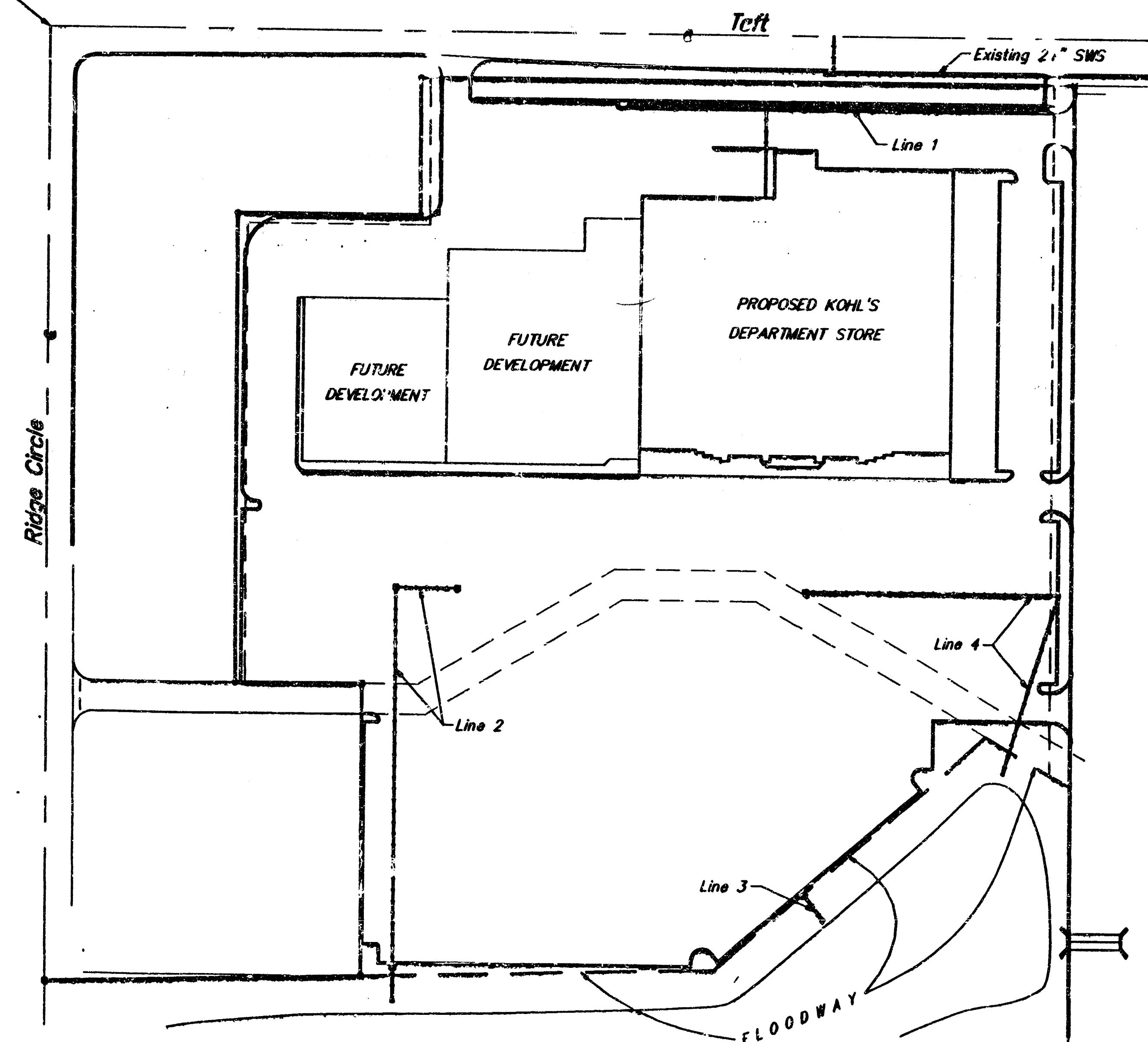
The Contractor must notify the following in case of an emergency:

Cablevision 262-4270  
or  
K.P.L. Gas Service Company 263-2061  
Kansas Gas & Electric Company 263-7511  
Arkla Gas Company 264-1141  
or  
Southwestern Bell Telephone Company 942-8350  
City of Wichita Water Department 263-8161  
City of Wichita Sewer Maintenance 1-571-2611  
268-4908  
268-4071

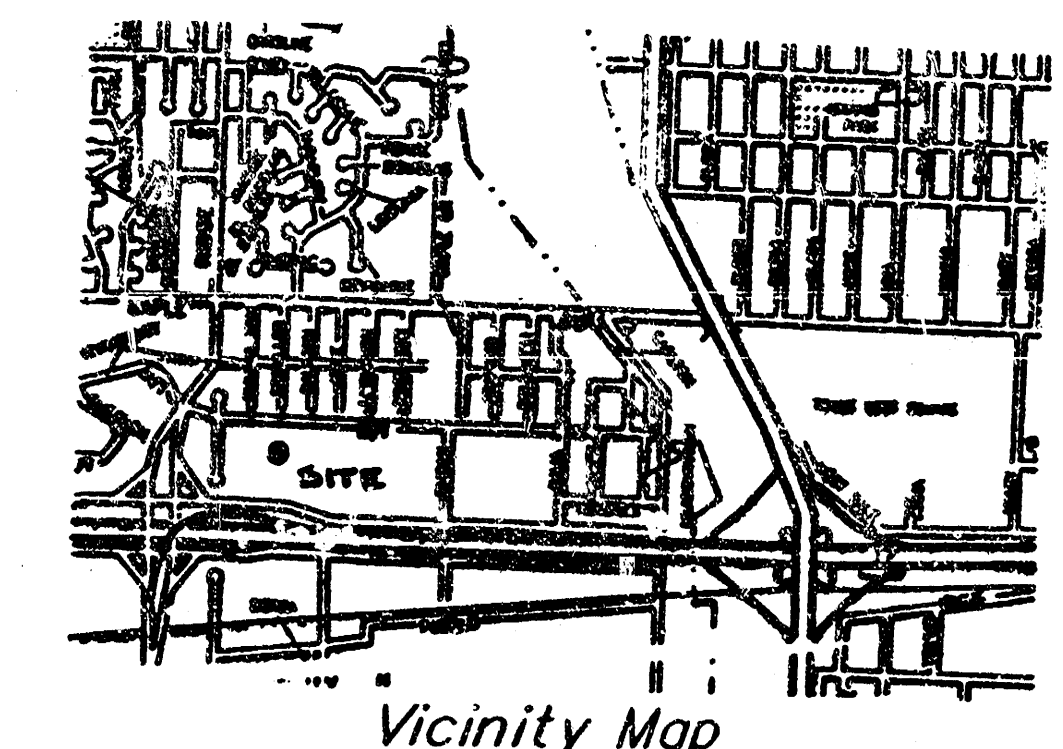
2. Underground utility service lines and overhead utility pole lines are to be adjusted as necessary by others prior to construction unless the plans specifically call for their adjustment by the Contractor or unless the plans specifically identify a utility to be adjusted by its owner during construction. Existing utilities and their location, as shown on the plans, represent the best information obtainable for design. The Contractor will be required to work around existing utilities within the right-of-way which do not conflict with proposed construction.
3. The Contractor shall be responsible for preserving property irons. The Contractor will be required to re-establish any property irons which are damaged or destroyed by his construction operations. Such irons shall be re-established by a licensed land surveyor in accordance with state laws.
4. All areas disturbed by construction operations shall be seeded with rye grass at a rate of 350 lbs. per acre immediately following construction in that area.
5. Contractor shall not start work on the project until the project inspector is assigned to the project and is present on the site. Any work done without inspection will be required to be uncovered for inspection.
6. Traffic affected by construction on this project shall be handled in accordance with the latest addition of the Manual on Uniform Traffic Control Devices subject to approval by the Engineer.
7. All work shall conform to the specifications for stormwater sewer construction for the City of Wichita.
8. The Contractor shall use aluminized steel pipe, Contech Ultra Flow in lieu of reinforced concrete pipe. Use of such pipe shall be in accordance with the manufacturer's specifications.

CITY OF WICHITA, KANSAS  
Michael E. Lindebak, P.E. City Engineer

NW Corner S. 1/2 NW 1/4,  
Sec. 27, T27S, R1W



Scale: 1" = 100'



Vicinity Map

Booked  
8-27-97  
MCG  
D-358

APPROVED AS NOTED  
BY CITY ENGINEER OF WICHITA

Sanitary Sewers \_\_\_\_\_  
Storm Sewers Steve Rath 6-10-95  
Driveway Approaches \_\_\_\_\_  
Water Mains \_\_\_\_\_  
Paving \_\_\_\_\_

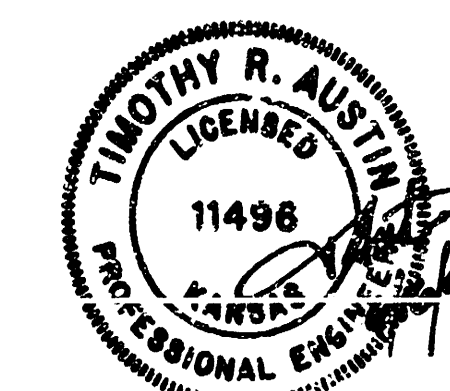
### NOTE TO CONTRACTORS

Inspection and testing for this project is to be provided by a Licensed Consulting Engineering Firm under contract with the Owner/Developer. Said inspection is 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 without written authorization by the City Engineer. All construction and materials shall comply with the City of Wichita Specifications and Standards (as available in the City Engineer's Office).

ASBUILT: 2/28/96 JEFF BRADLEY

INSPECTOR: LYLE POWERS

BAUGHMAN, CO.



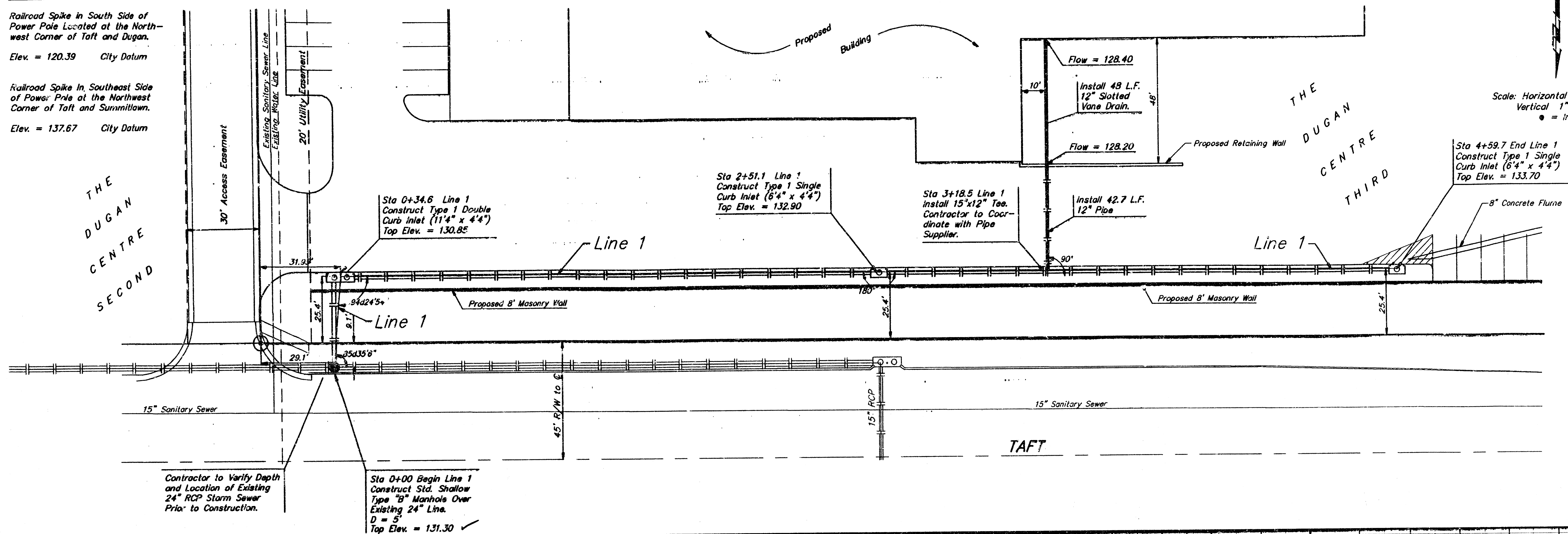
**BAUGHMAN COMPANY P.A.**  
ENGINEERING, SURVEYING, & PLANNING  
316-262-7271 • 213 ELLIS • WICHITA, KANSAS 67211



**Benchmarks:**

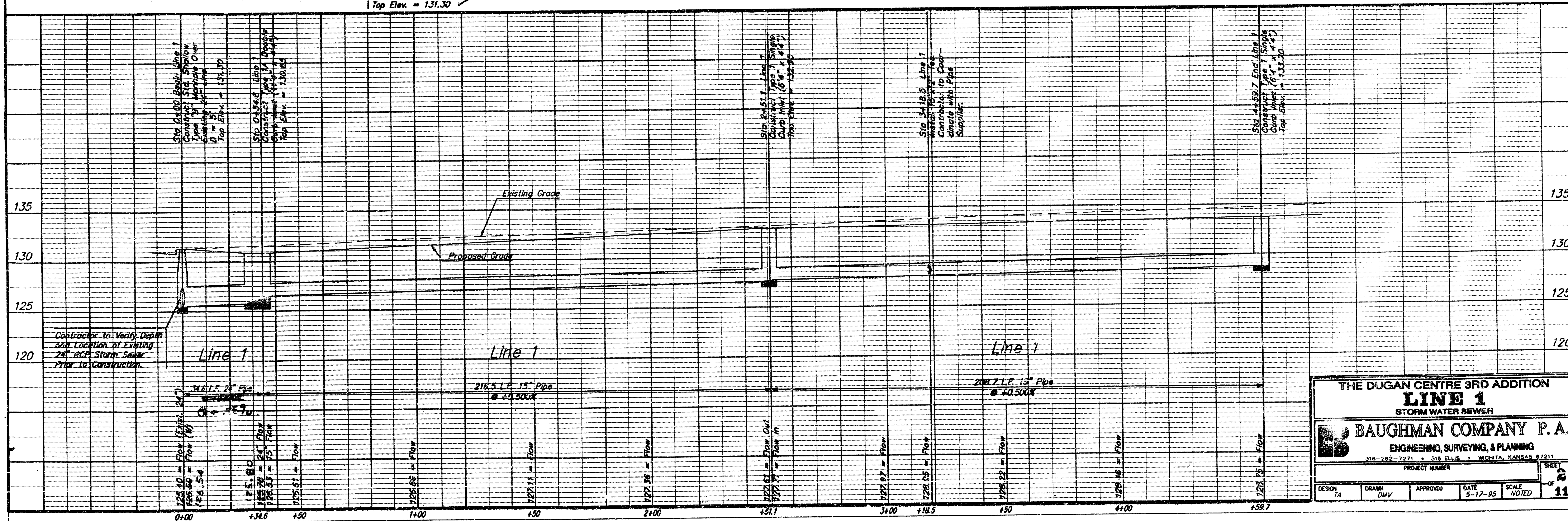
Railroad Spike in South Side of Power Pole Located at the Northwest Corner of Taft and Dugan.  
Elev. = 120.39 City Datum

Railroad Spike in Southeast Side of Power Pole at the Northwest Corner of Taft and Summittown.  
Elev. = 137.67 City Datum



Scale: Horizontal 1" = 20'  
Vertical 1" = 5'  
● = Iron

rev. 6/17/95



THE DUGAN CENTRE 3RD ADDITION  
**LINE 1**  
STORM WATER SEWER

**BAUGHMAN COMPANY P.A.**  
ENGINEERING, SURVEYING, & PLANNING  
316-262-7271 • 316 ELLIS • WICHITA, KANSAS 67211

PROJECT NUMBER

|        |       |          |         |       |
|--------|-------|----------|---------|-------|
| DESIGN | DRAWN | APPROVED | DATE    | SCALE |
| JA     | DMV   |          | 5-17-95 | NOTED |

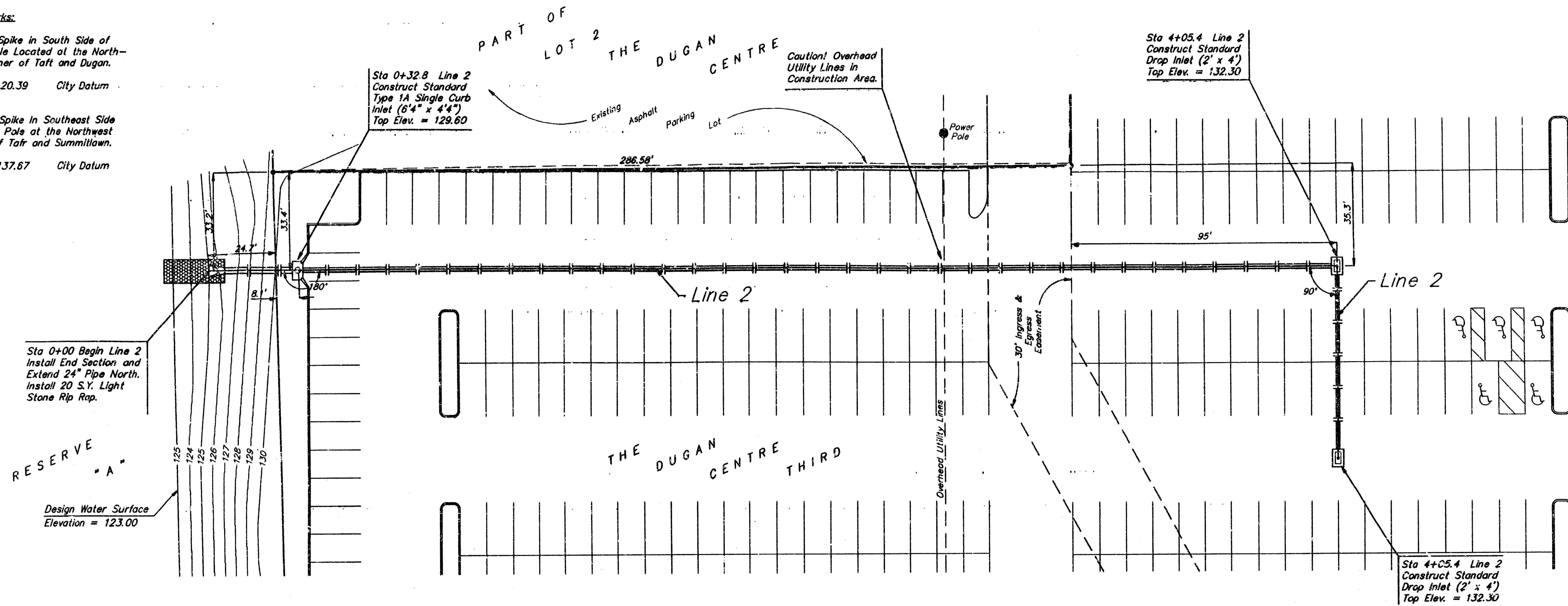
SHEET 11



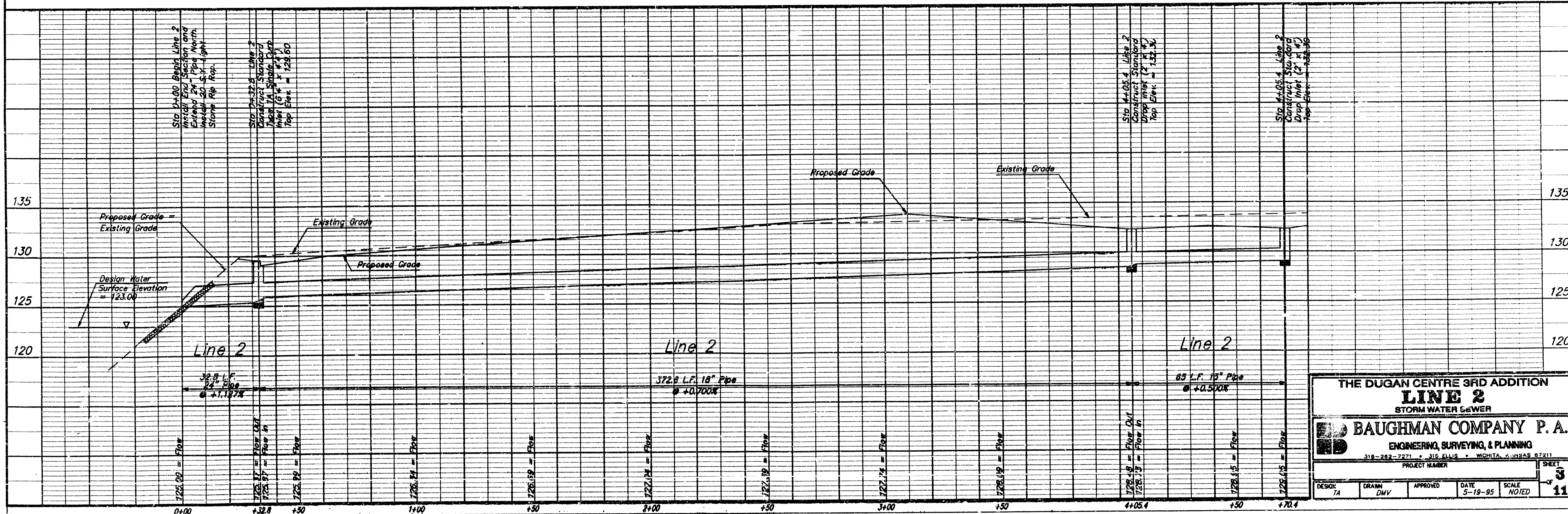
**Benchmarks:**

Railroad Spike in South Side of Power Pole Located at the Northwest Corner of Taft and Dugan.  
Elev. = 120.39 City Datum

Railroad Spike in Southeast Side of Power Pole at the Northwest Corner of Taft and Summitlawn.  
Elev. = 137.67 City Datum



Rev. 6/17/95





**Benchmarks:**

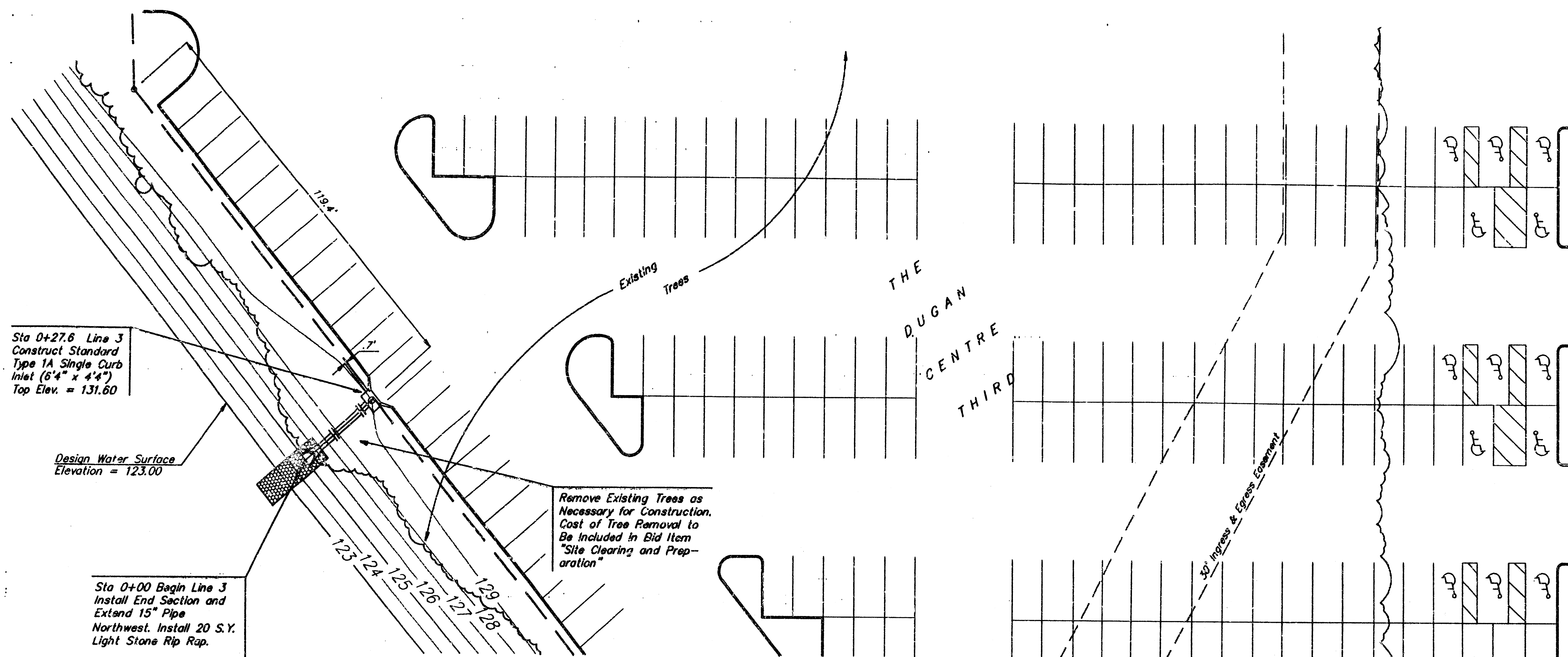
Railroad Spike in South Side of  
Power Pole Located at the North-  
west Corner of Taft and Dugan.

Elev. = 120.39 City Datum

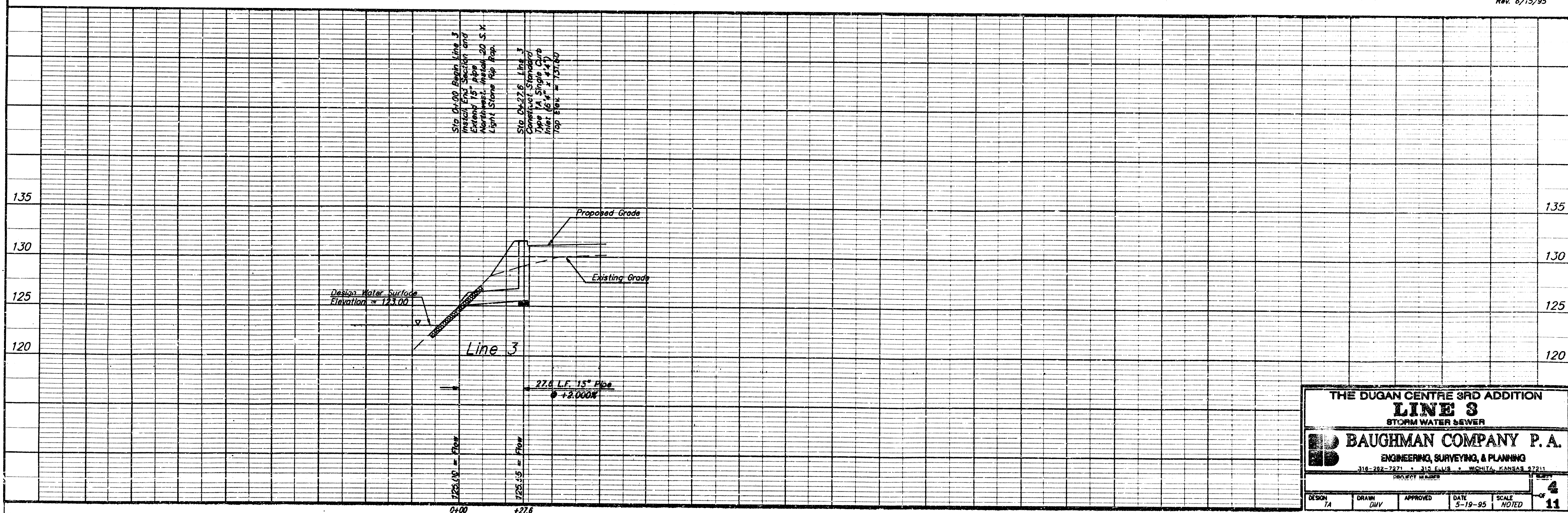
Railroad Spike in Southeast Side  
of Power Pole at the Northwest  
Corner of Taft and Summitlawn.

Elev. = 137.67 City Datum

Scale: Horizontal 1" = 20'  
Vertical 1" = 5'  
● = Iron



Rev. 6/15/95



|                                                    |       |          |         |       |
|----------------------------------------------------|-------|----------|---------|-------|
| THE DUGAN CENTRE 3RD ADDITION                      |       |          |         |       |
| <b>LINE 3</b>                                      |       |          |         |       |
| STORM WATER SEWER                                  |       |          |         |       |
| <b>BAUGHMAN COMPANY P. A.</b>                      |       |          |         |       |
| ENGINEERING, SURVEYING, & PLANNING                 |       |          |         |       |
| 316-282-7271 • 312 S. MAIN • WICHITA, KANSAS 67211 |       |          |         |       |
| PROJECT NUMBER                                     |       |          |         |       |
| DESIGN                                             | DRAWN | APPROVED | DATE    | SCALE |
| TA                                                 | DMV   |          | 5-19-95 | NOTED |
|                                                    |       |          |         | 4     |
|                                                    |       |          |         | 11    |



**Benchmarks:**

Railroad Spike in South Side of  
Power Pole Located at the North-  
west Corner of Taft and Dugan.

Elev. = 120.39 City Datum

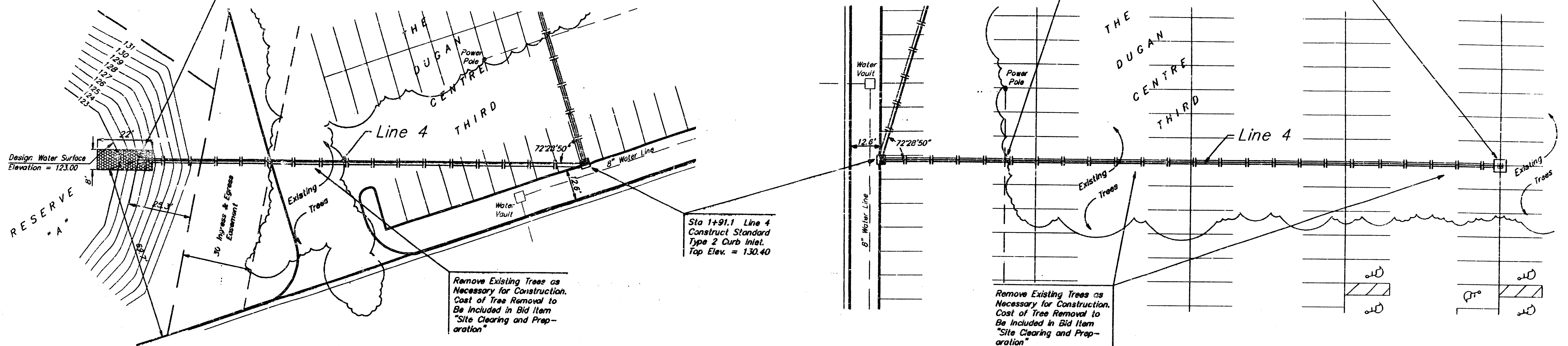
Railroad Spike in Southeast Side  
of Power Pole at the Northwest  
Corner of Taft and Summittown.

Elev. = 137.67 City Datum

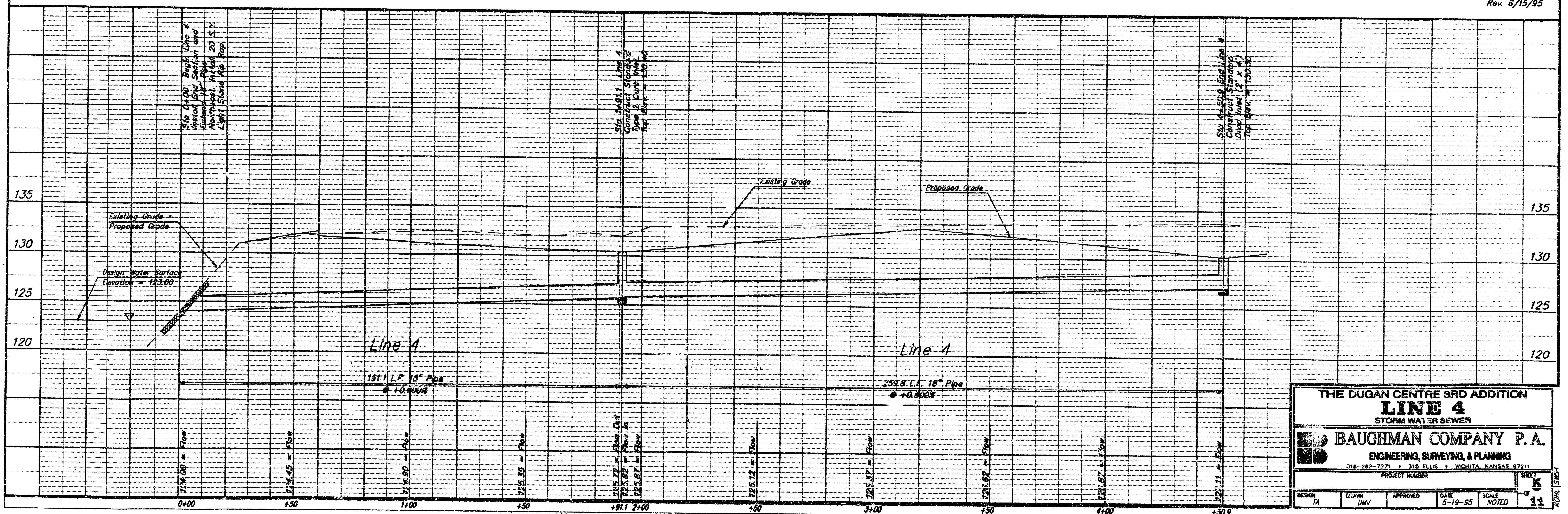
Sta 0+00 Begin Line 4  
Install End Section and  
Extend 18" Pipe  
Northeast. Install 20 S.Y.  
Light Stone Rip Rap.

Scale: Horizontal 1" = 20'  
Vertical 1" = 5'  
• = Iron

Scale: Horizontal 1" = 20'  
Vertical 1" = 5'  
• = Iron



Rev. 6/15/95



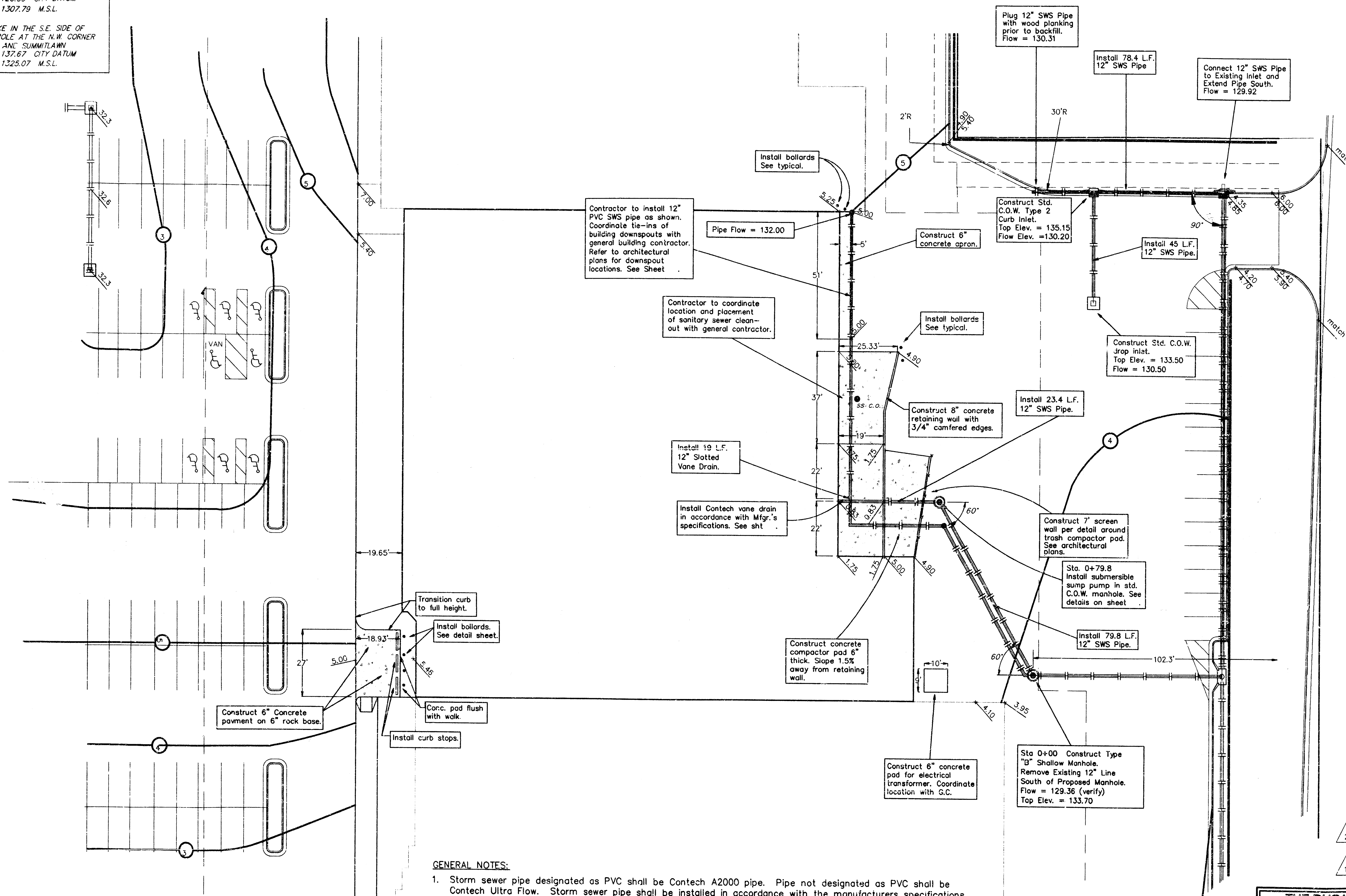
|                                                  |       |          |         |       |       |
|--------------------------------------------------|-------|----------|---------|-------|-------|
| THE DUGAN CENTRE 3RD ADDITION                    |       |          |         |       |       |
| <b>LINE 4</b>                                    |       |          |         |       |       |
| STORM WATER SEWER                                |       |          |         |       |       |
| BAUGHMAN COMPANY P.A.                            |       |          |         |       |       |
| ENGINEERING, SURVEYING, & PLANNING               |       |          |         |       |       |
| 318-282-7271 • 312 ELLIS • WICHITA, KANSAS 67211 |       |          |         |       |       |
| PROJECT NUMBER                                   |       |          |         |       |       |
| DESIGN                                           | CLARK | APPROVED | DATE    | SCALE | SHEET |
| TA                                               | DIV   |          | 5-19-95 | NOTED | 11    |



R.R. SPIKE IN SOUTH SIDE OF  
POWER POLE AT THE N.W. CORNER  
OF TAFT AND DUGAN  
ELEV. = 120.39 CITY DATUM  
ELEV. = 1307.79 M.S.L.

R.R. SPIKE IN THE S.E. SIDE OF  
POWER POLE AT THE N.W. CORNER  
OF TAFT AND SUMMITLAWN  
ELEV. = 137.67 CITY DATUM  
ELEV. = 1325.07 M.S.L.

SCALE: 1" = 20'



1. Storm sewer pipe designated as PVC shall be Contech A2000 pipe. Pipe not designated as PVC shall be Contech Ultra Flow. Storm sewer pipe shall be installed in accordance with the manufacturers specifications.
2. Building contractor will be required to obtain a permit from Central Inspection prior to connecting building down-spouts to the stormwater drainage system.

2 Revised Jan. 29, 1996

1 Revised Dec. 1, 1995

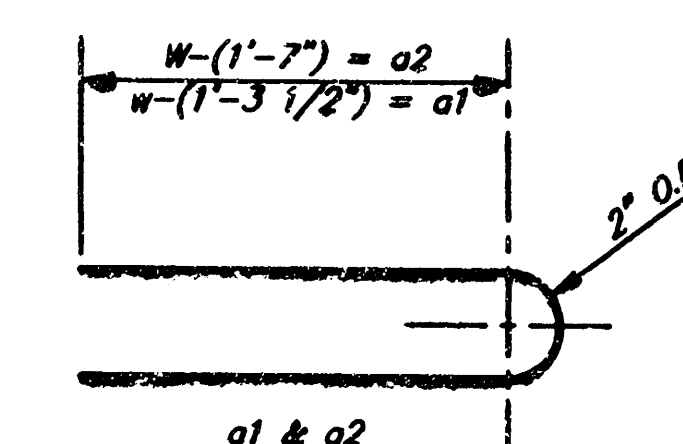
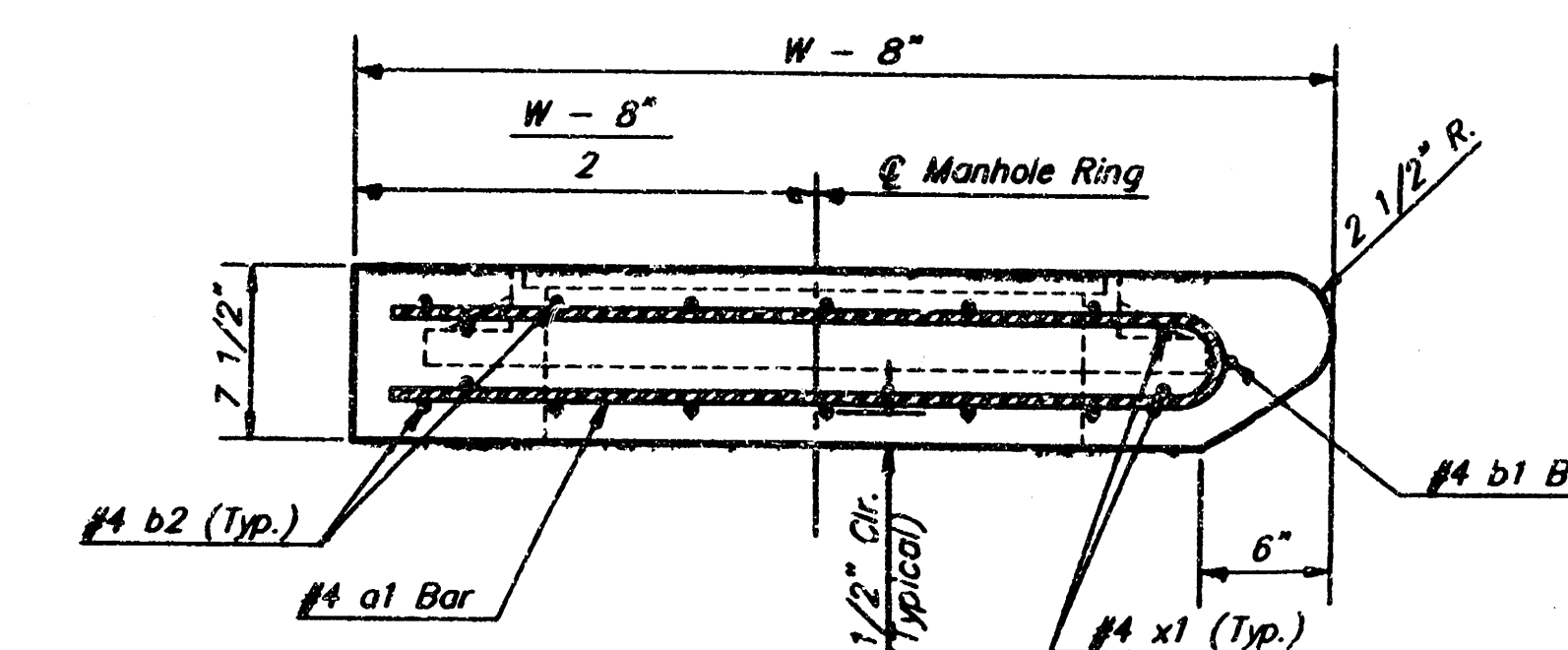
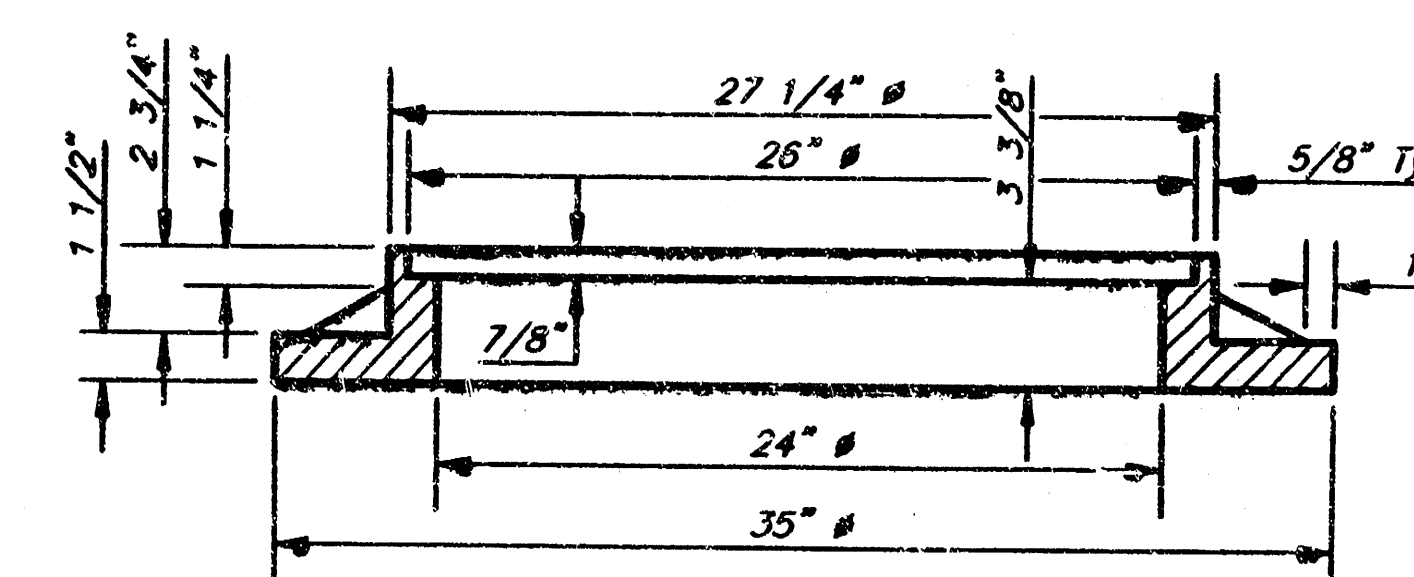
THE DUGAN CENTRE 3RD ADDITION  
**STORM SEWER**  
ADDITIONS

**BAUGHMAN COMPANY P. A.**  
ENGINEERING, SURVEYING, & PLANNING

|                                                  |                    |          |                       |                       |
|--------------------------------------------------|--------------------|----------|-----------------------|-----------------------|
| 318-262-7271 • 315 FILLIS • WICHITA KANSAS 67201 |                    |          |                       |                       |
| PROJECT NUMBER<br><b>560PPS(807881)</b>          |                    |          |                       | SHEET<br><b>50</b>    |
| DESIGN<br><i>TA</i>                              | DRAWN<br><i>TA</i> | APPROVED | DATE<br><i>OCT 95</i> | SCALE<br><i>NOTED</i> |

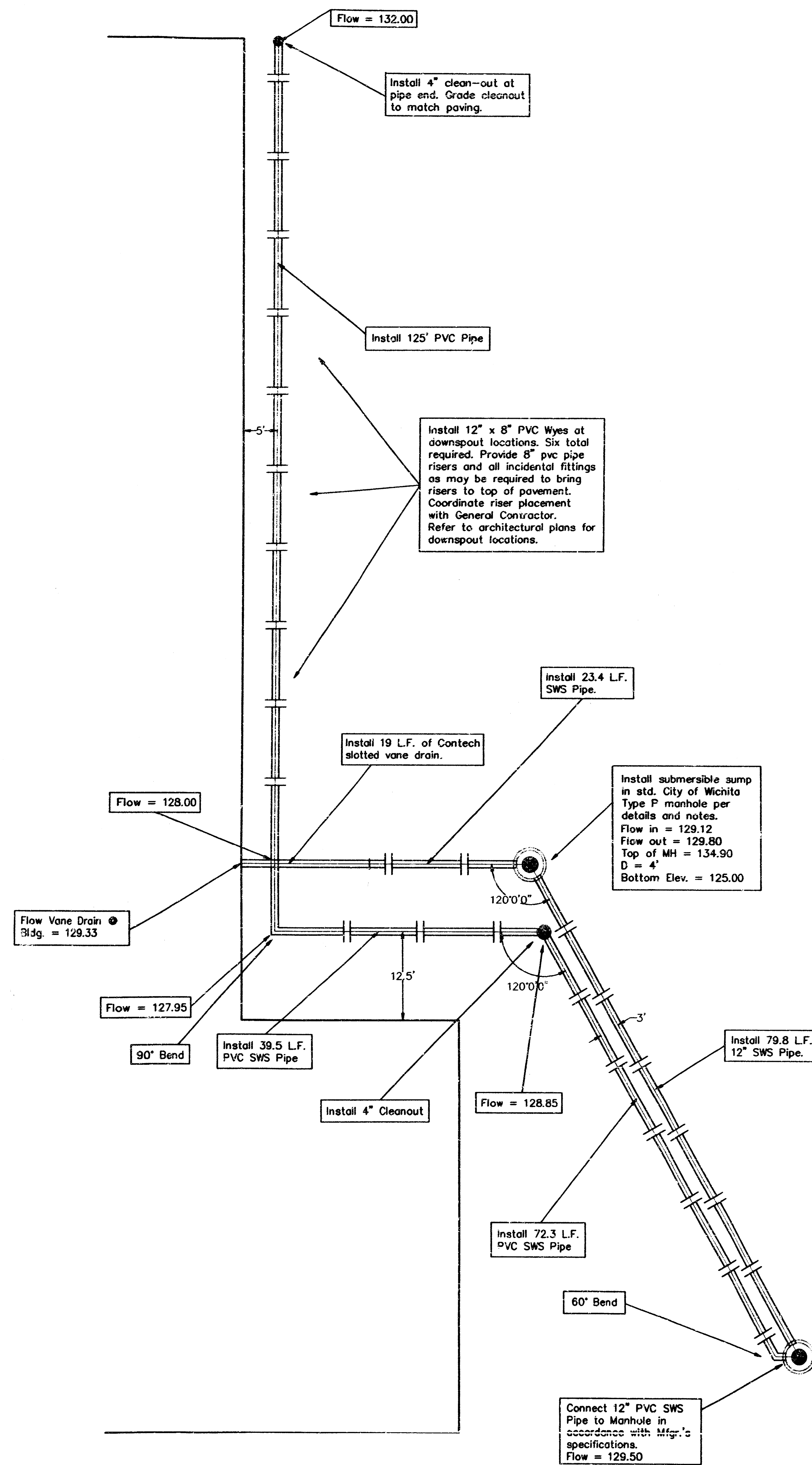
SHEET  
50





| W     | PRE-CAST TOP SIZE      | PIPE SIZE     | CU. YD. CO. |
|-------|------------------------|---------------|-------------|
| 4'-4" | 3'-8" x 6'-4" x 7 1/2" | 21" & SMALLER | 0.38±       |
| 5'-4" | 4'-8" x 6'-4" x 7 1/2" | 24" & 30"     | 0.51±       |
| 6'-4" | 5'-8" x 6'-4" x 7 1/2" | 36" & 42"     | 0.64±       |
| 7'-4" | 6'-8" x 6'-4" x 7 1/2" | 48" & 54"     | 0.77±       |
| 8'-4" | 7'-8" x 6'-4" x 7 1/2" | 60" & 66"     | 0.90±       |





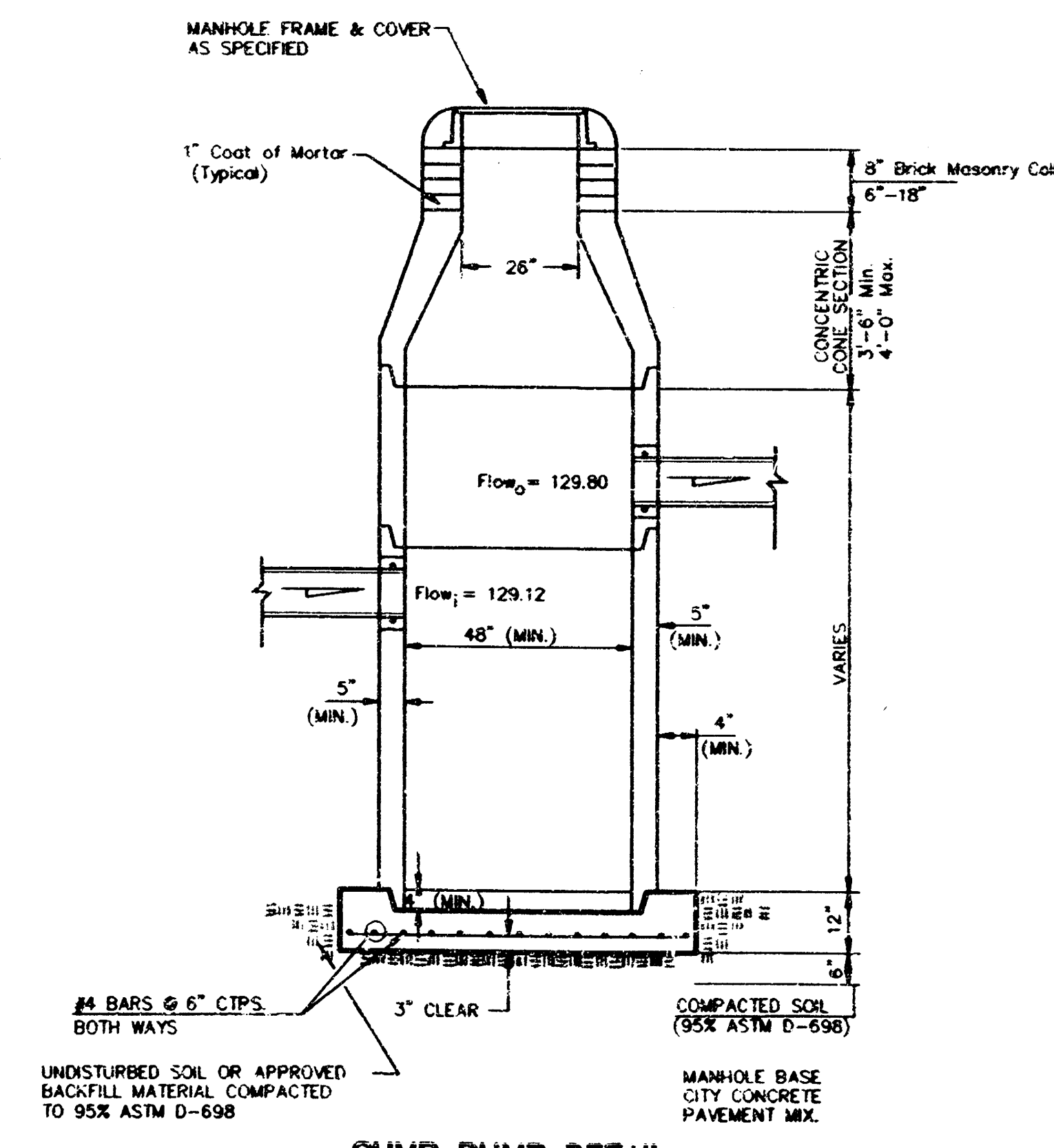
SCALE: 1" = 10'

**SUMP PUMP NOTES:**

1. Submersible pump shall be equal to a Weil Model 2501 submersible simplex sump pump. Heavy duty case iron, double mechanical seal pump, with cast iron open impeller capable of pumping a 2" solid sphere. Stainless steel shaft with permanently lubricated single row, double sealed bearings. NEMA-6 submersible hermetically sealed motor. Supply with appropriate length of neoprene jacketed power cable. Three inch discharge. Pump capacities 80 GPM @ 15' total head and 1 HP, 208/60/1, 1750RPM.
2. Pump accessories shall include: 1) a NEMA 1 indoor simplex control panel with locking hinged cover (number 8111). Control panel shall include motor contactor, main disconnect switch, circuit breakers, control circuit transmitter, TOA selector switch, running pilot light, and terminal strip. 2) NEMA 6 (number 8251) simplex junction box with terminal strip. Junction box shall be installed in outdoor pit. 3) Number 8233 mercury float switches to cycle pump on-off. Supply with mounting accessories.
3. Pump shall be installed in outdoor pit. Install piping union and ball valve in pump discharge pipe. Do not install check valve in discharge pipe. Securely anchor discharge pipe to inside walls of pit. Discharge pipe shall be Schedule 40 PVC with solvent welded joints.
4. All electrical wiring and conduit is to be provided by and installed by electrical contractor per the National Electrical Code and/or the appropriate City of Wichita code.
5. Junction box is to be installed above elevation 131.00 (city datum).
6. Work to be coordinated by General Contractor with site, plumbing, mechanical, and/or electrical sub-contractors. Location of control panel box on inside of building to be coordinated by general contractor with building architect.

**GENERAL NOTES:**

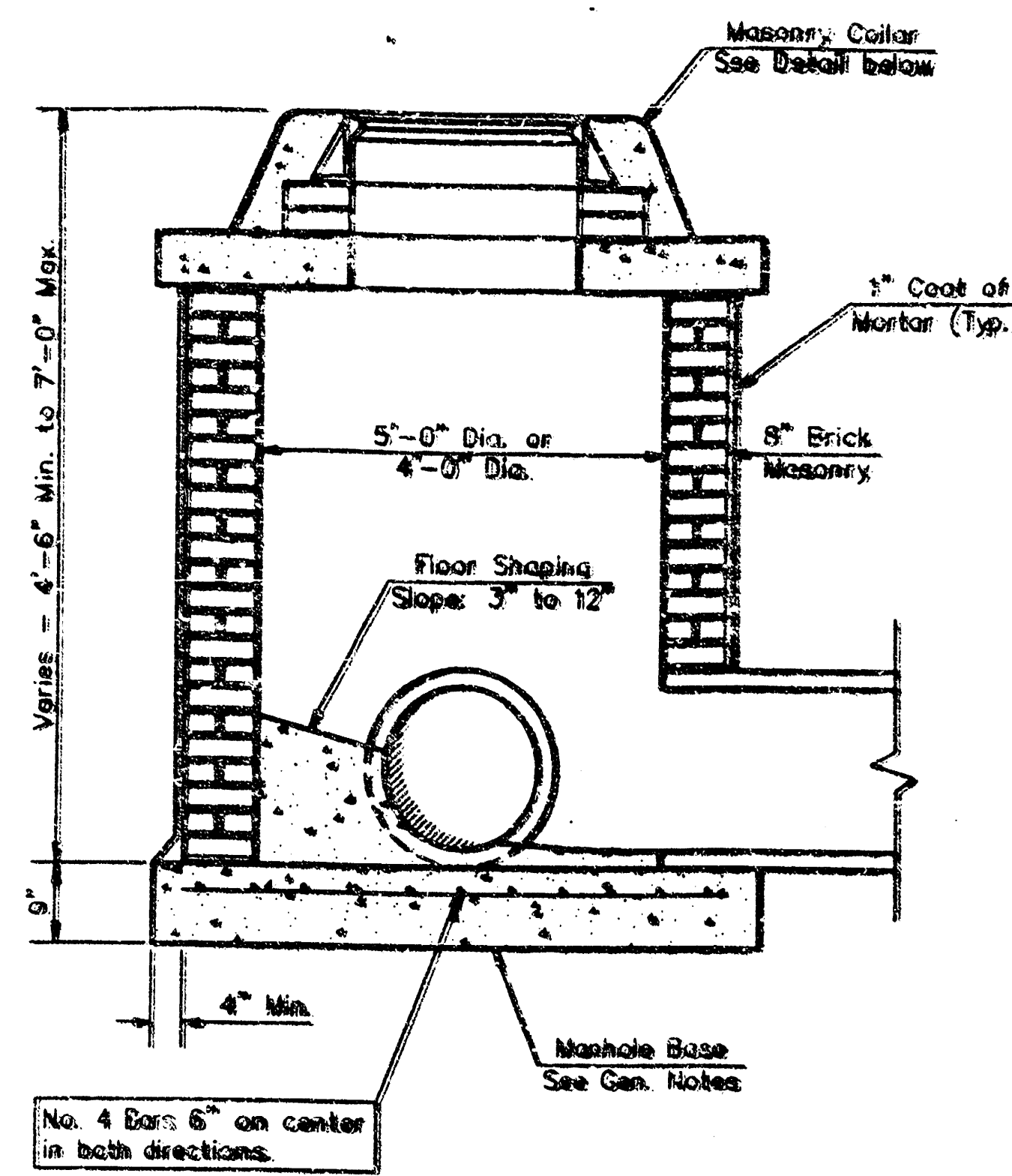
1. Storm sewer pipe designated as PVC shall be Contech A2000. Pipe shall be installed in accordance with the manufacturer's recommendations. Contractor to furnish and install all fittings as necessary to meet intent of plans.



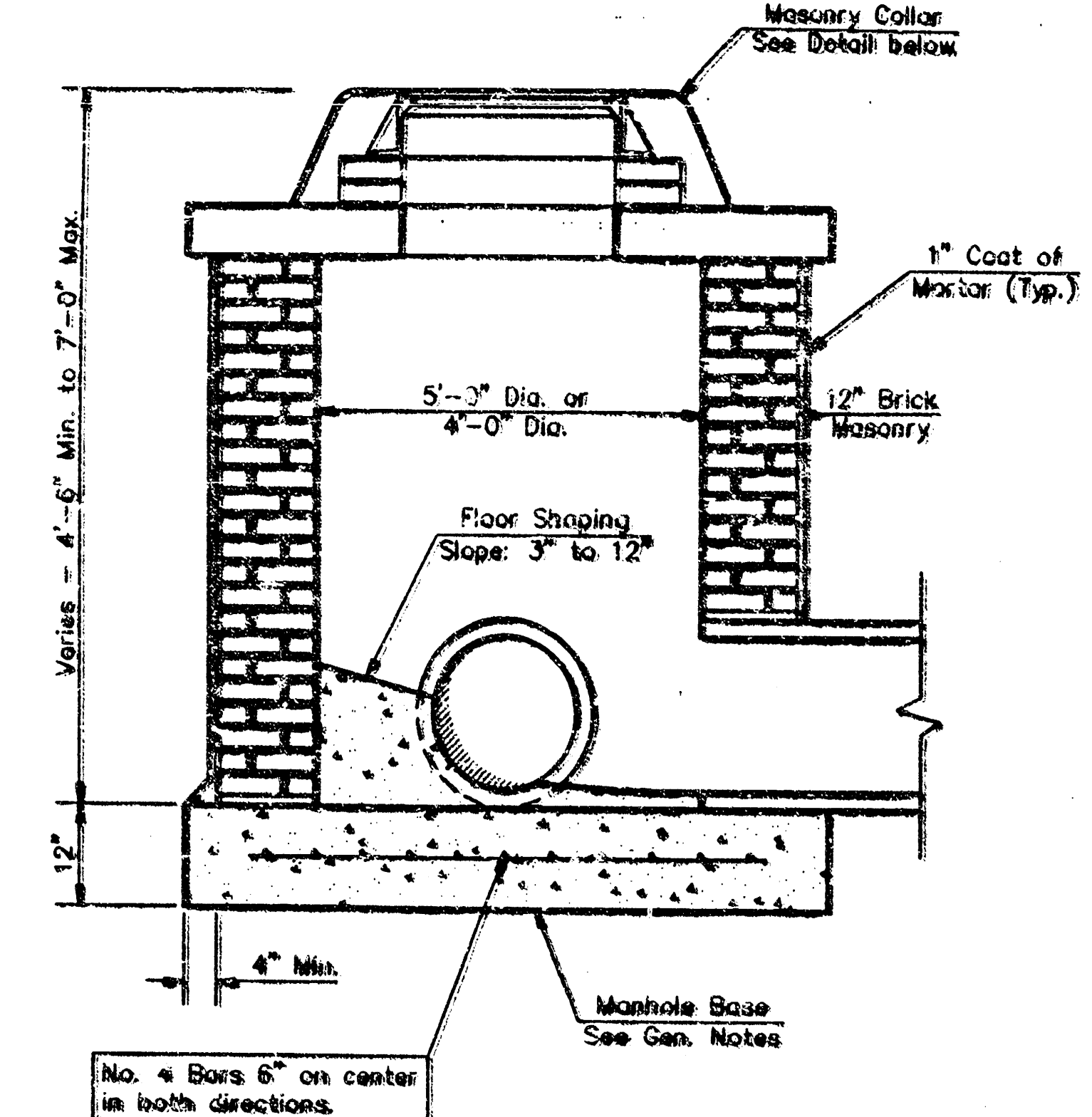
**SUMP PUMP DETAIL**

|                                                     |       |          |        |           |
|-----------------------------------------------------|-------|----------|--------|-----------|
| THE DUGAN CENTRE THIRD ADDITION                     |       |          |        |           |
| <b>SWS DETAILS</b>                                  |       |          |        |           |
| CIRCUIT CITY                                        |       |          |        |           |
| <b>BAUGHMAN COMPANY P.A.</b>                        |       |          |        |           |
| ENGINEERING, SURVEYING, & PLANNING                  |       |          |        |           |
| 316-262-7271 • 312 S.W. 8th • WICHITA, KANSAS 67211 |       |          |        |           |
| PROJECT NUMBER: 580PPS(607861)                      |       |          |        |           |
| DESIGN                                              | DRAWN | APPROVED | DATE   | SCALE     |
| TA                                                  | TA    |          | JAN/96 |           |
|                                                     |       |          |        | <b>5b</b> |

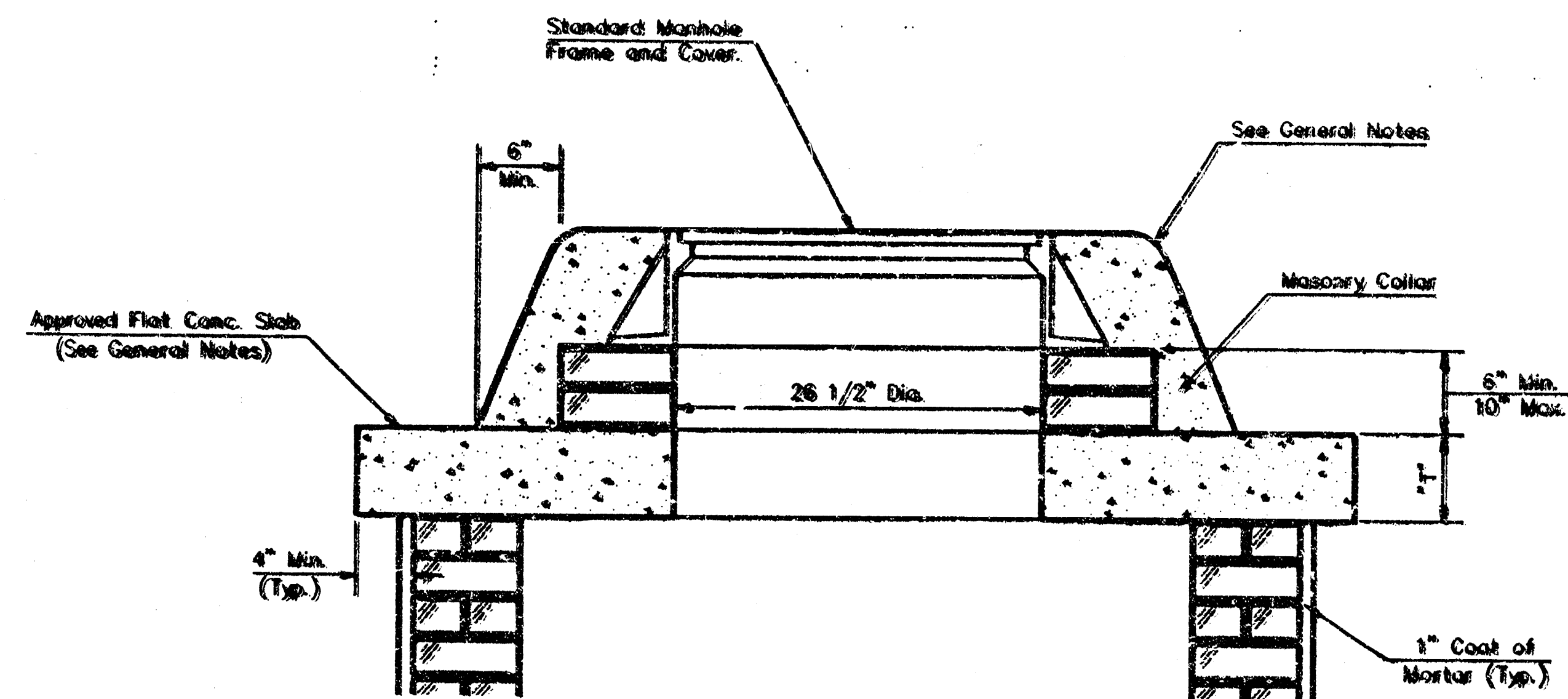




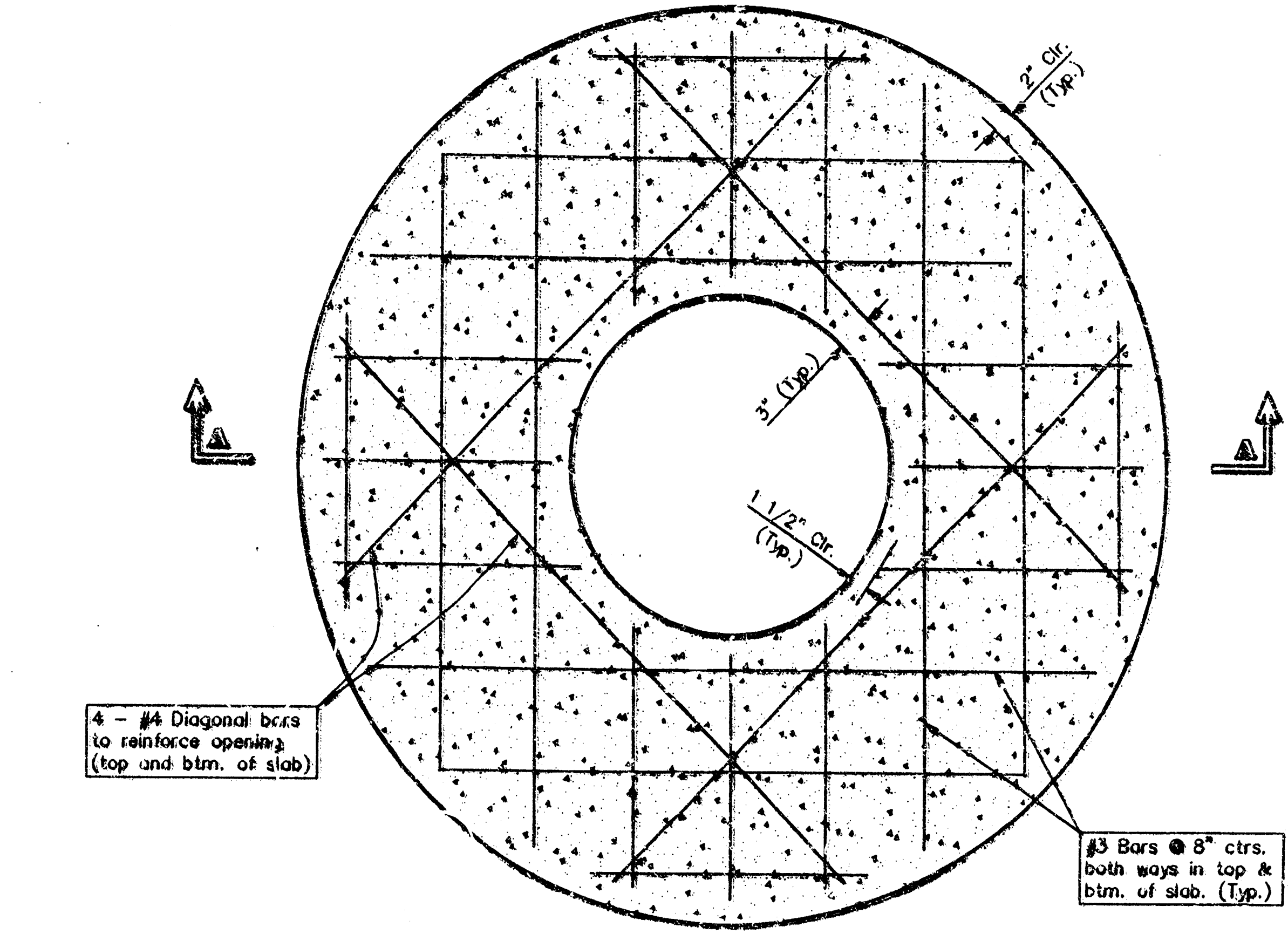
SHALLOW TYPE "A" MANHOLE



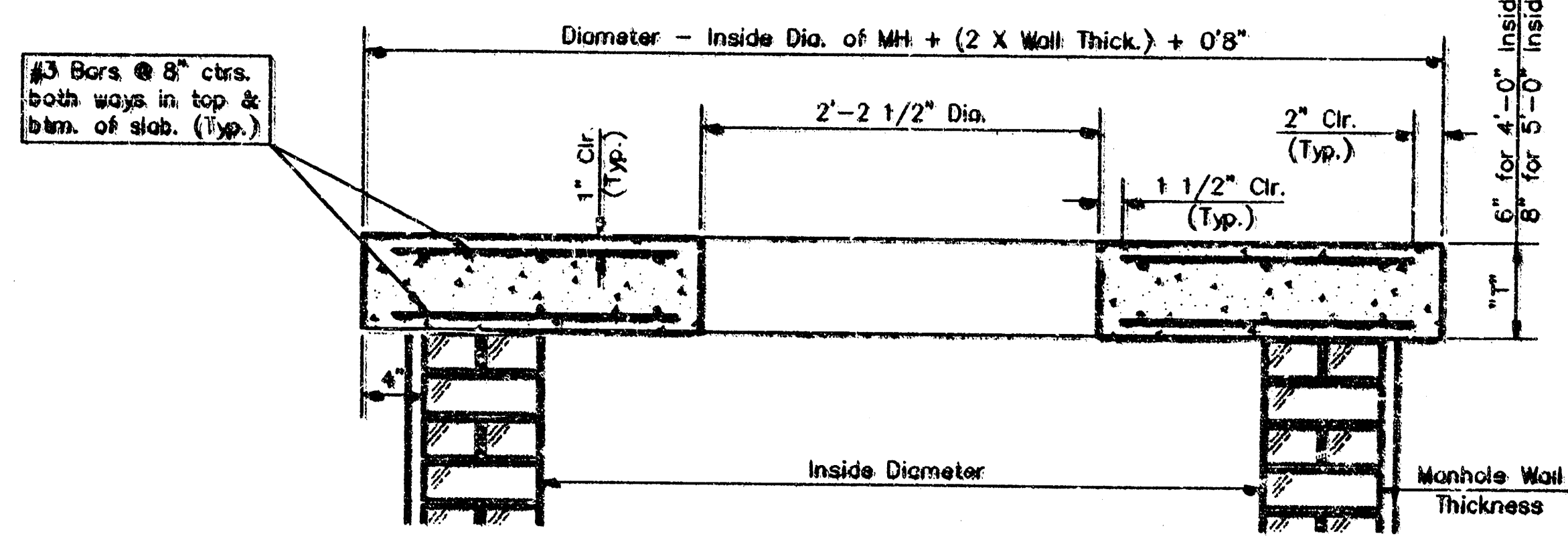
SHALLOW TYPE "B" MANHOLE



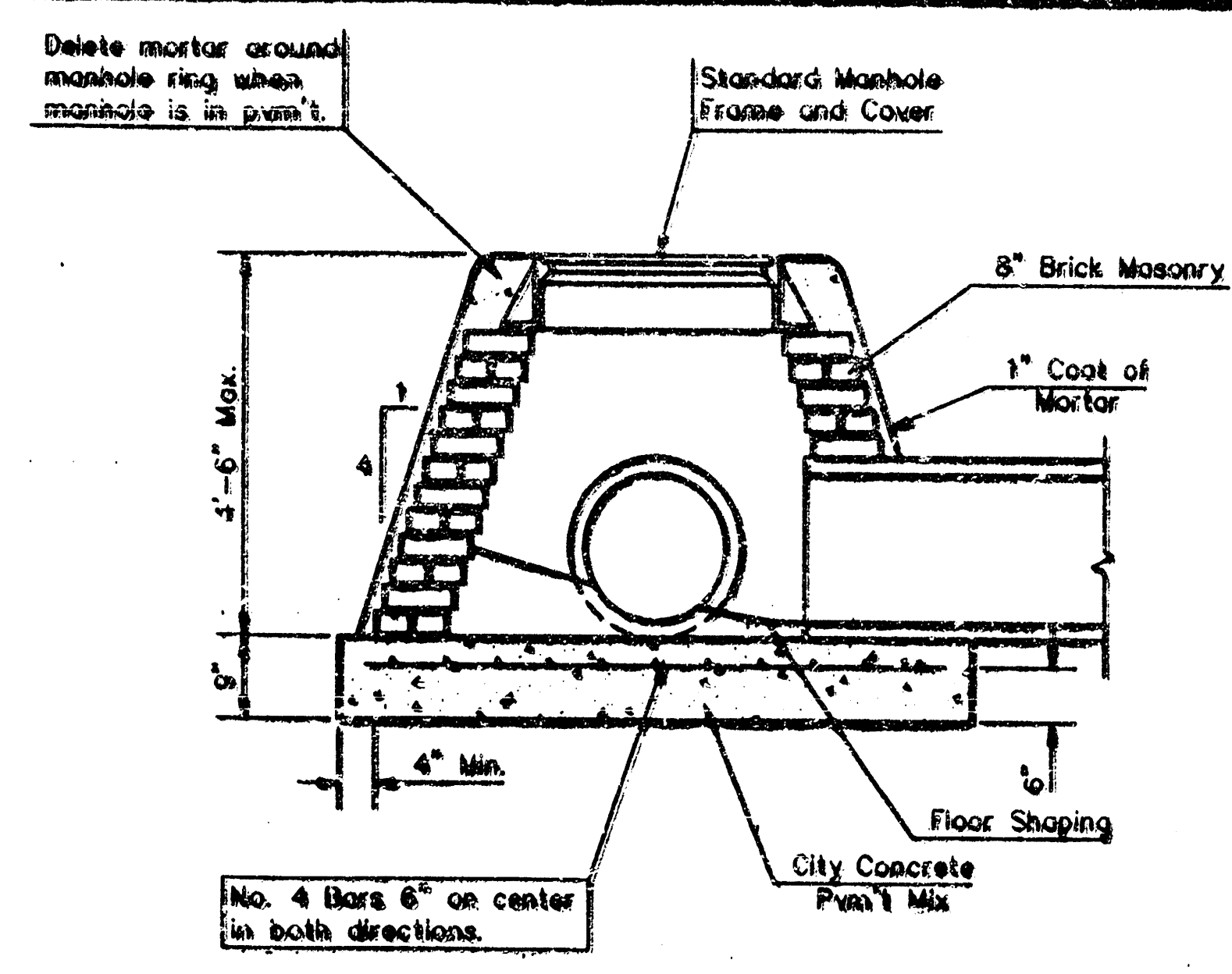
MASONRY COLLAR DETAIL



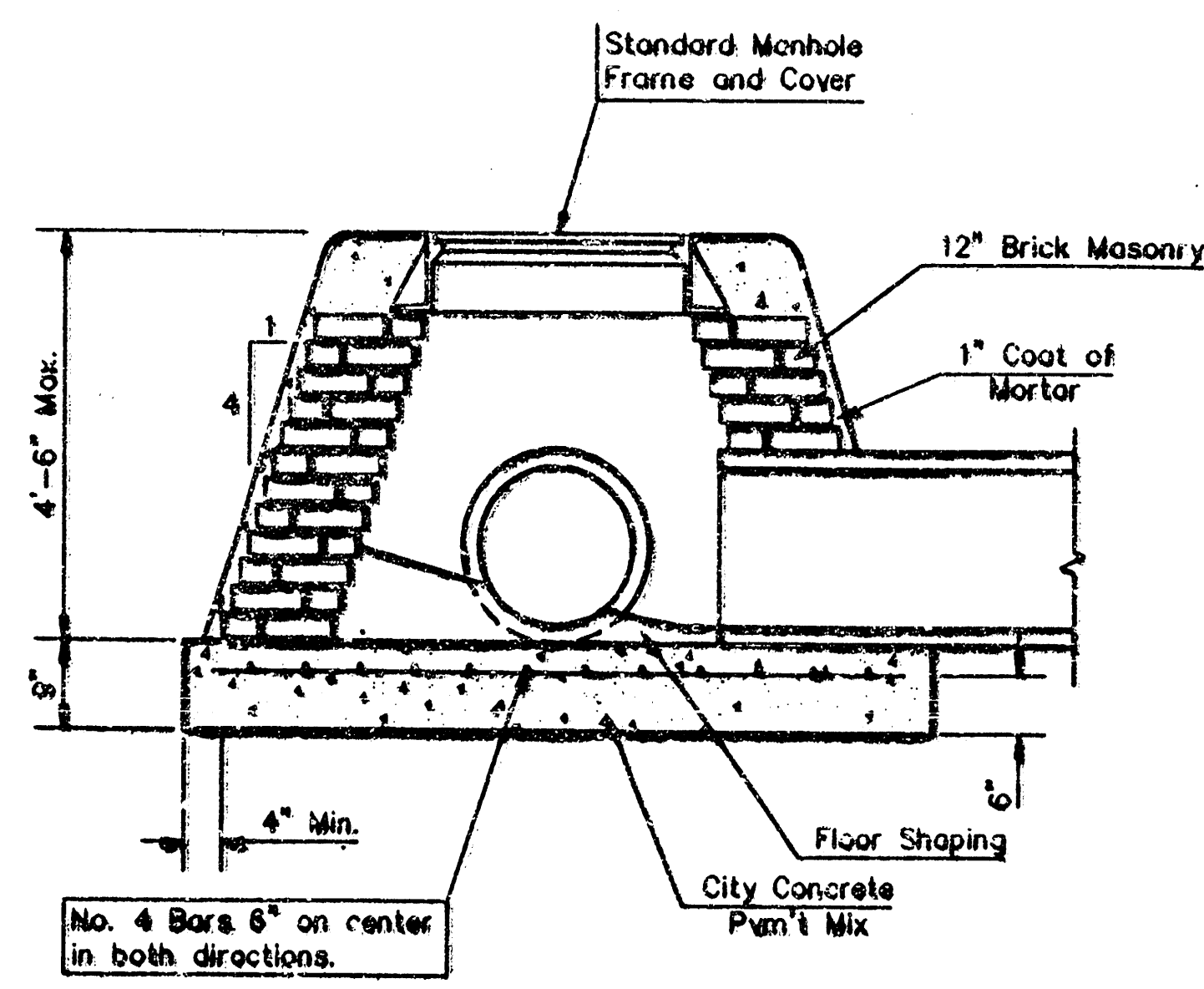
PLAN



SECTION A-A  
FLAT CONCRETE SLAB DETAILS



SPECIAL SHALLOW TYPE "A" MANHOLE



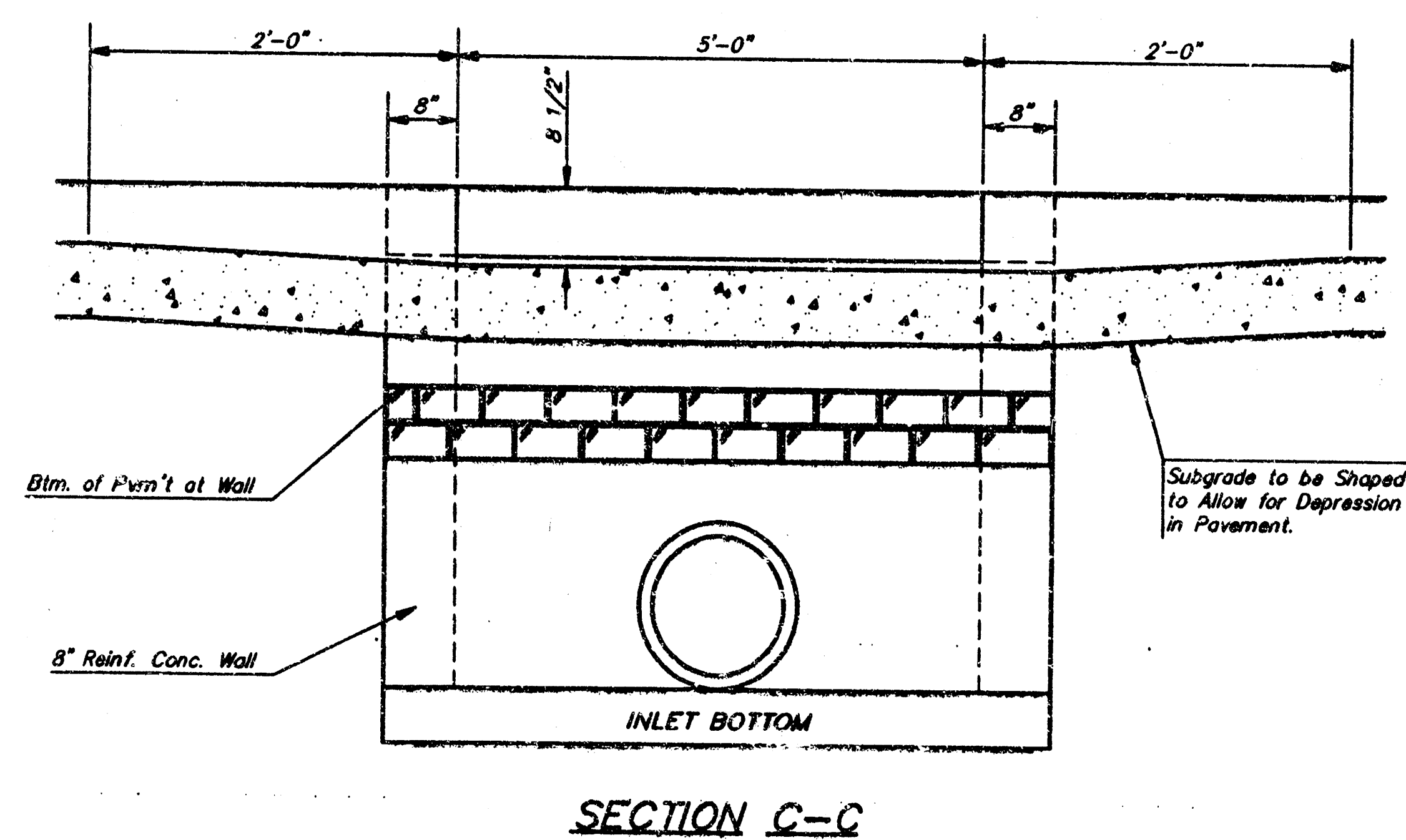
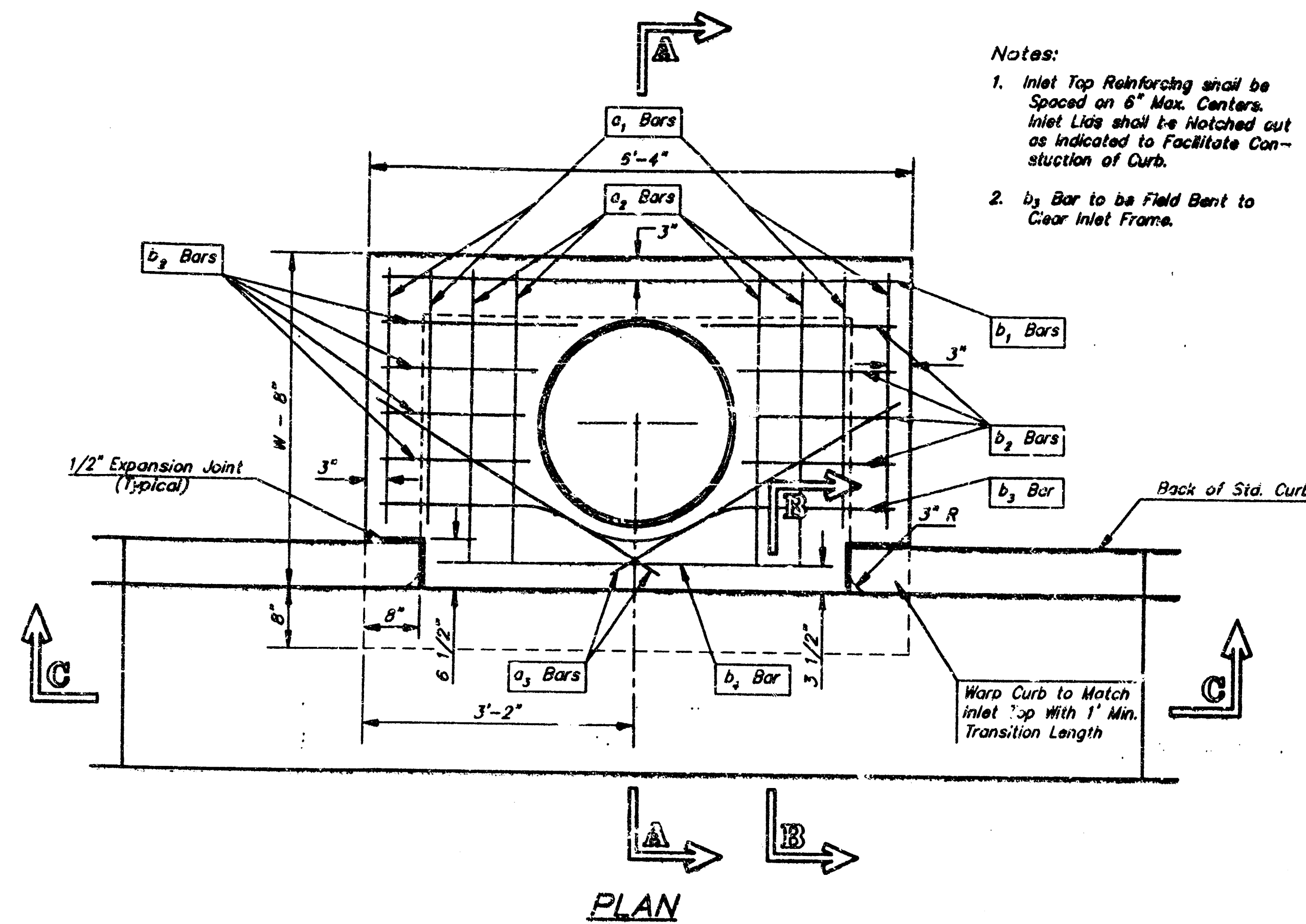
SPECIAL SHALLOW TYPE "B" MANHOLE

GENERAL NOTES

1. Mortar used in masonry construction shall contain 8 sacks of cement per cubic yard. Concrete used in manhole bases shall conform to the requirements of concrete for concrete pavement construction as specified in the city standard paving specifications using city concrete cement 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. Type "A" shallow manholes can be used on sewers when the manhole is not located within public street pavement. Manholes constructed where pipe sizes are smaller than 24" shall have an inside diameter of 4'. Manholes constructed where pipe sizes are 24" or larger shall have an inside diameter of 5'. Completed manhole shall be without leaks and water tight.
2. Reinforcing steel shall be installed in the manhole bases and shall consist of no. 4 bars placed on 6" centers in both directions. The manhole base reinforcement shall be placed 6" above the bottom of the manhole base. All costs for furnishing and installing reinforcing steel shall be included in the unit price bid for the manhole.
3. The floors of all manholes shall be shaped with flow channels such that the manholes will be self cleaning and free of areas where solids could be deposited as sewage flows through the manhole from all inlet pipes to the outlet pipe. Flow channels shall be formed to match the bottom halves of the flowing pipe and the outflowing pipe as shown by the drawings. Manhole floors shall have slopes of 3 inches per foot in the areas outside of the flow channels sloped toward the flow channels. Pipes laid through manholes shall have the top half removed to next lines for the full inside diameter of the manhole. Manhole floors shall then be sloped around the bottom half of the pipe which forms the flow channel.
4. Pipes installed within the excavation made for the manhole shall be cradled with concrete to the limits of the manhole excavation. When clay pipe is used, the cradle shall extend to the first joint outside the manhole. The cradle shall be terminated at the clay pipe joint in a manner which will maintain the flexibility of the joint. Cost of cradle within manhole excavation or to clay pipe joints adjacent to manhole shall be included in the unit price bid for the manhole.
5. 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 drawings.
6. The crowns of inflowing pipes shall never be set lower than the crown of the outflowing pipe.
7. Standard shallow manholes type "A" and "B" shall be paid for at the unit price bid per each for the type and diameter indicated. Standard special shallow manholes type "A" and "B" shall be paid for at the unit price bid per each for the type indicated. All standard shallow manhole diameters will be 4' unless indicated otherwise.
8. All brick used in manhole construction shall meet Grade SW of ASTM C652 or C82-87.

CITY OF WICHITA, KANSAS  
**STD. SHALLOW MANHOLES**  
 TYPE "A" AND TYPE "B"  
**BAUGHMAN COMPANY P.A.**  
 ENGINEERING, SURVEYING, & PLANNING  
 315-252-7271 • 315 ELLIS • WICHITA, KANSAS 67211  
 PROJECT NUMBER \_\_\_\_\_  
 DESIGN \_\_\_\_\_ DRAWN \_\_\_\_\_ APPROVED \_\_\_\_\_ DATE \_\_\_\_\_ SCALE \_\_\_\_\_  
 SHEET 6 OF 11





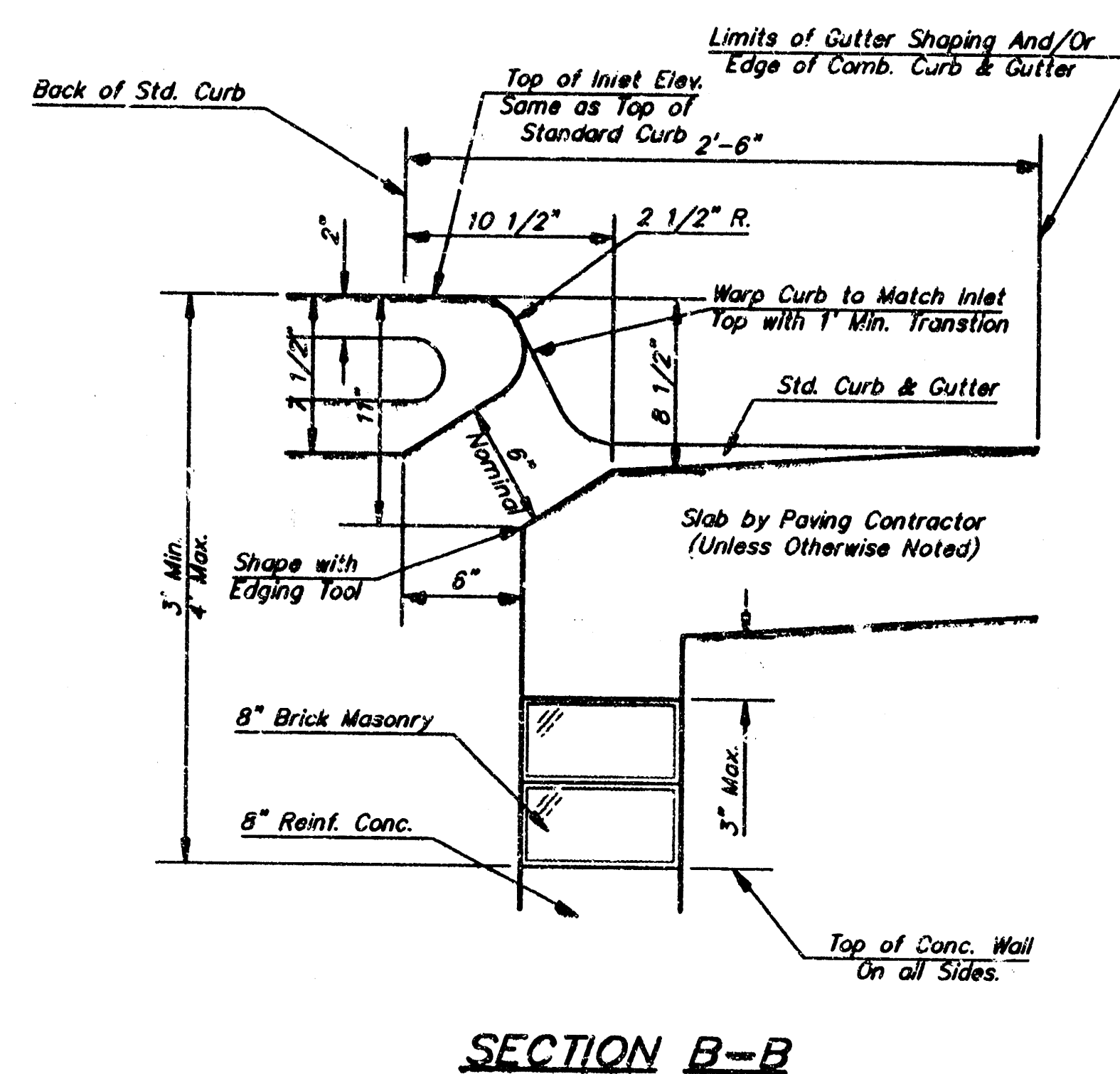
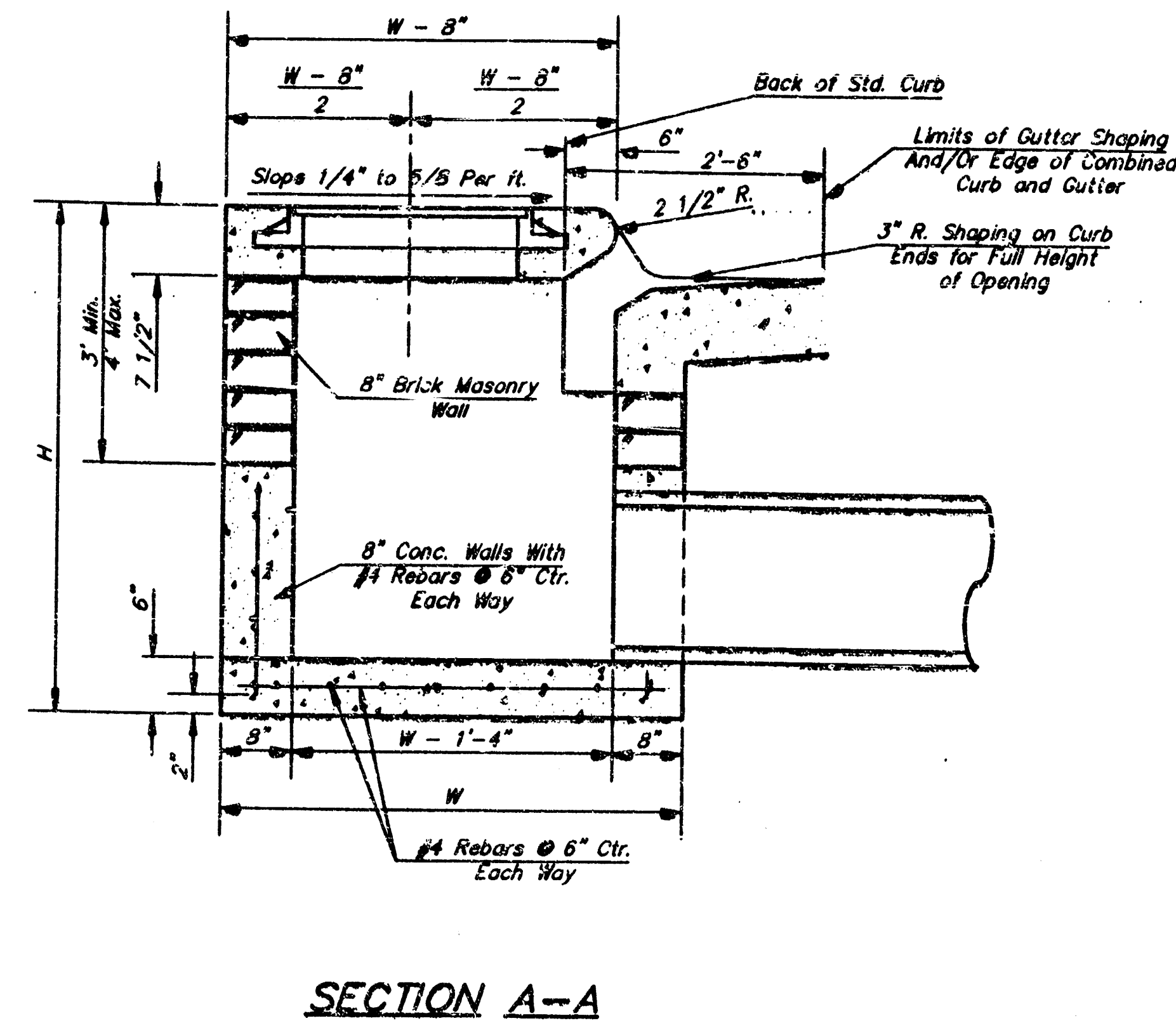
**STEEL SCHEDULE**

| BAR    | a <sub>1</sub> | a <sub>2</sub> | a <sub>3</sub> | b <sub>i</sub>   |                  |                  |                  |                  |                  | b <sub>2</sub> | b <sub>3</sub> | b <sub>4</sub> | WT.<br>LBS. |
|--------|----------------|----------------|----------------|------------------|------------------|------------------|------------------|------------------|------------------|----------------|----------------|----------------|-------------|
|        |                |                |                | b <sub>1-1</sub> | b <sub>2-2</sub> | b <sub>3-3</sub> | b <sub>4-4</sub> | b <sub>5-5</sub> | b <sub>6-6</sub> |                |                |                |             |
| NUMBER | 4              | 4              | 2              | 1                | 3                | 5                | 7                | 9                | 6                | 1              | 1              |                |             |
| SIZE   | #4             | #4             | #4             | #4               | #4               | #4               | #4               | #4               | #4               | #4             | #6             |                |             |
| LENGTH | W=4'-4"        | 5'-7"          | 6'-7"          | 4'-0"            | 6'-1"            | -                | -                | -                | -                | 1'-9"          | 6'-2"          | 4'-8"          | 60±         |
|        | W=5'-4"        | 7'-7"          | 8'-7"          | 5'-0"            | 6'-1"            | -                | -                | -                | -                | 1'-9"          | 6'-2"          | 4'-8"          | 81±         |
|        | W=6'-4"        | 9'-7"          | 10'-7"         | 6'-0"            | -                | 5'-1"            | -                | -                | -                | 1'-9"          | 6'-2"          | 4'-8"          | 101±        |
|        | W=7'-4"        | 11'-7"         | 12'-7"         | 7'-0"            | -                | -                | -                | 6'-1"            | -                | 1'-9"          | 6'-2"          | 4'-8"          | 121±        |
|        | W=8'-4"        | 13'-7"         | 14'-7"         | 8'-0"            | -                | -                | -                | -                | 6'-1"            | 1'-9"          | 6'-2"          | 4'-8"          | 141±        |

Note: a<sub>3</sub> Bars to be Placed Approx. 2" Below Top of Inlet Cover.

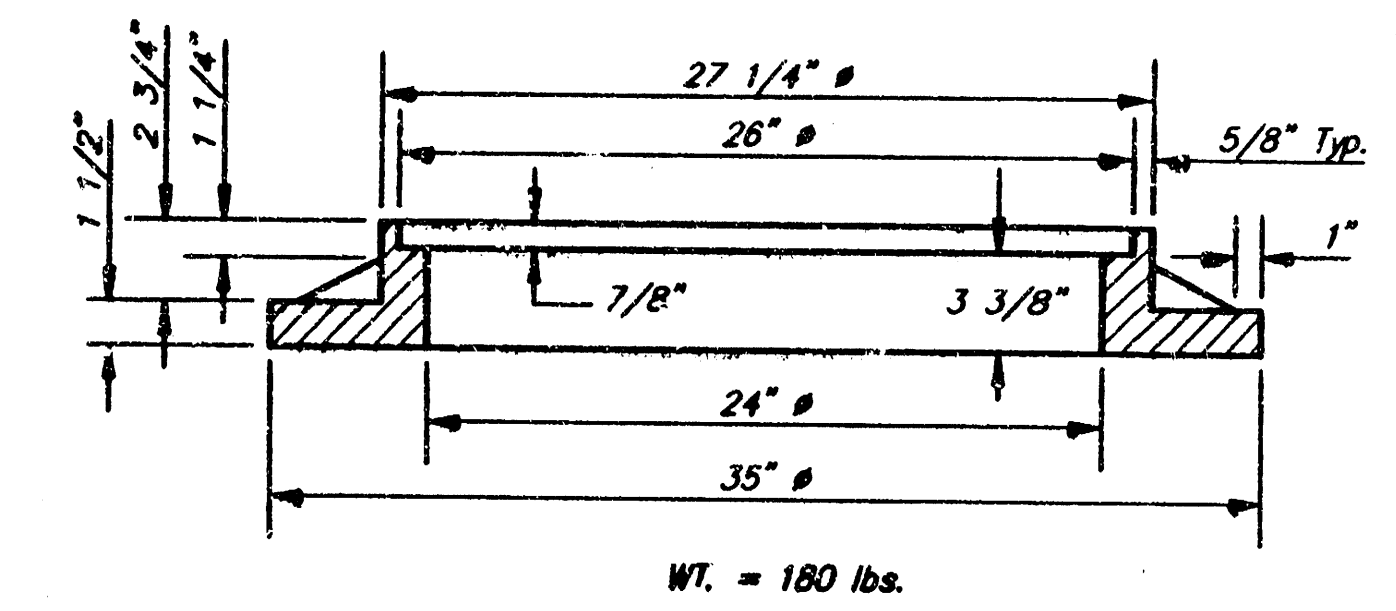
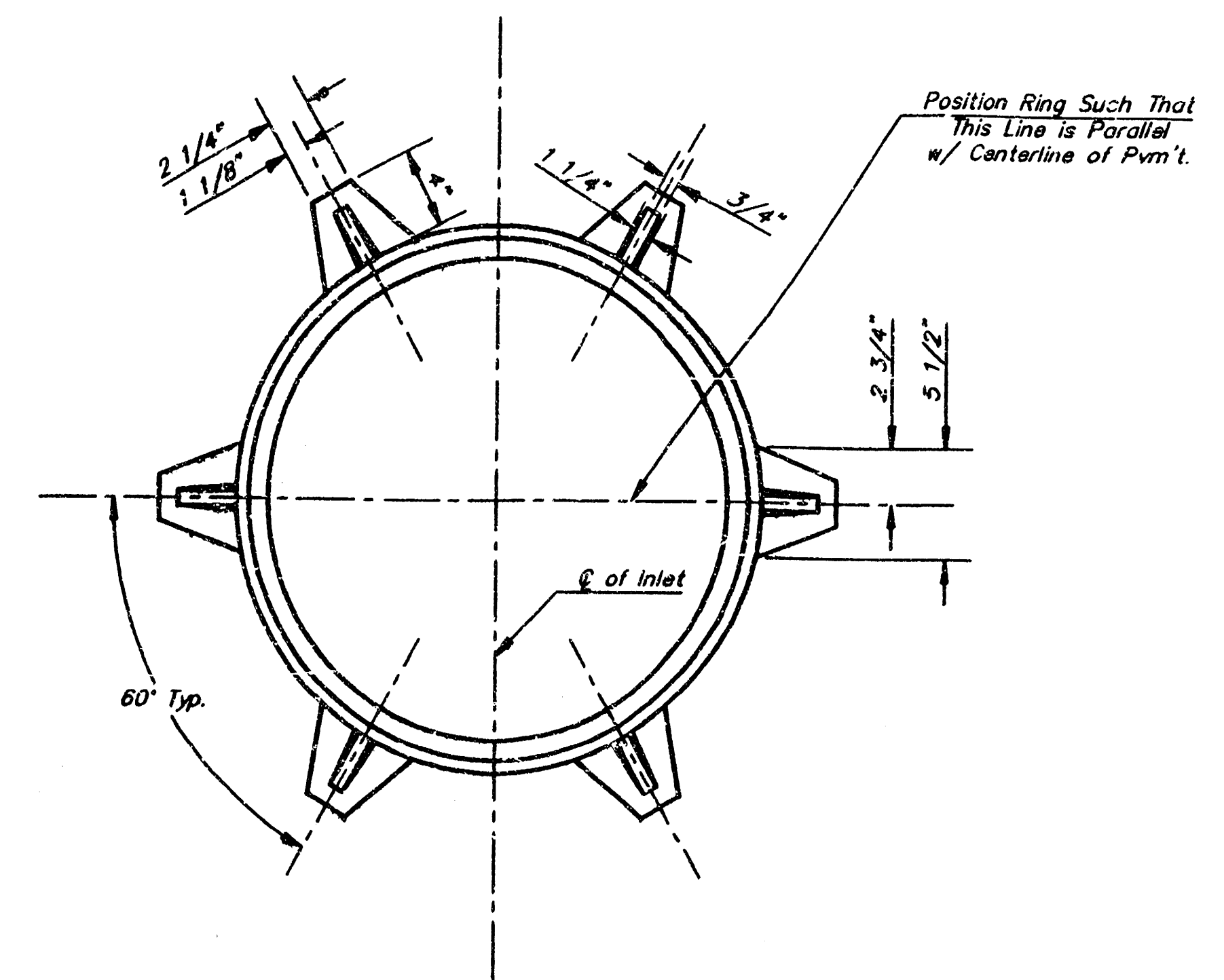
**STANDARD CURB INLET PRECAST TOPS**

| W     | PRE-CAST TOP SIZE  | PIPE SIZE     | CU. YD. CONC. |
|-------|--------------------|---------------|---------------|
| 4'-4" | 3'-8" 6'-4" 7 1/2" | 21" & SMALLER | 0.386         |
| 5'-4" | 4'-8" 6'-4" 7 1/2" | 24" & 30"     | 0.512         |
| 6'-4" | 5'-8" 6'-4" 7 1/2" | 36" & 42"     | 0.648         |
| 7'-4" | 6'-8" 6'-4" 7 1/2" | 48" & 54"     | 0.772         |
| 8'-4" | 7'-8" 6'-4" 7 1/2" | 60" & 66"     | 0.902         |



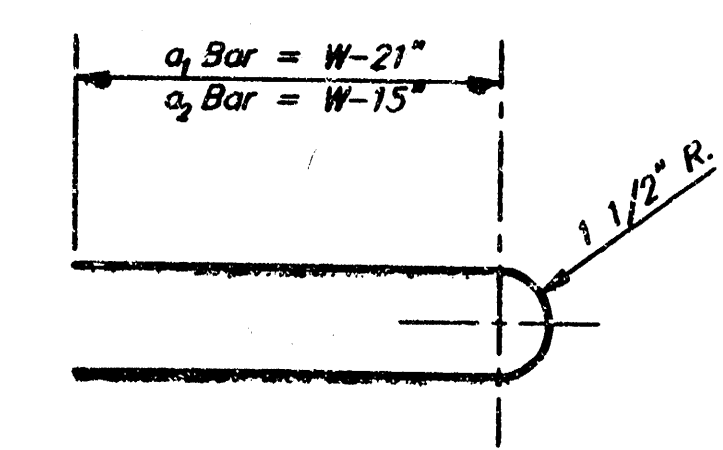
#### GENERAL NOTES

- Concrete tops to be installed on thin mortar cushion to insure full support along brick walls. Concrete tops may be cast in place or precast. Concrete used for inlet construction shall be concrete pavement mix.
- Contractor shall have the option of constructing 8" brick masonry joints between the concrete inlet base and top on this inlet when W=6'-4" and H=7'-0" or less.
- Inlet invert shall be shaped with 8 sack sand 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.
- The ends of all pipes installed in inlets shall be cut off flush with the inside face of the inlet wall.



#### MANHOLE RING AND COVER

\*See City of Wichita Standard Manhole Ring and Cover Detail Sheet for Cover Details to Be Used With Inlet Frame.



CITY OF WICHITA STANDARD TYPE 1  
**CURB INLET DETAILS**  
 INLET OPENING - 6'X5'-0"

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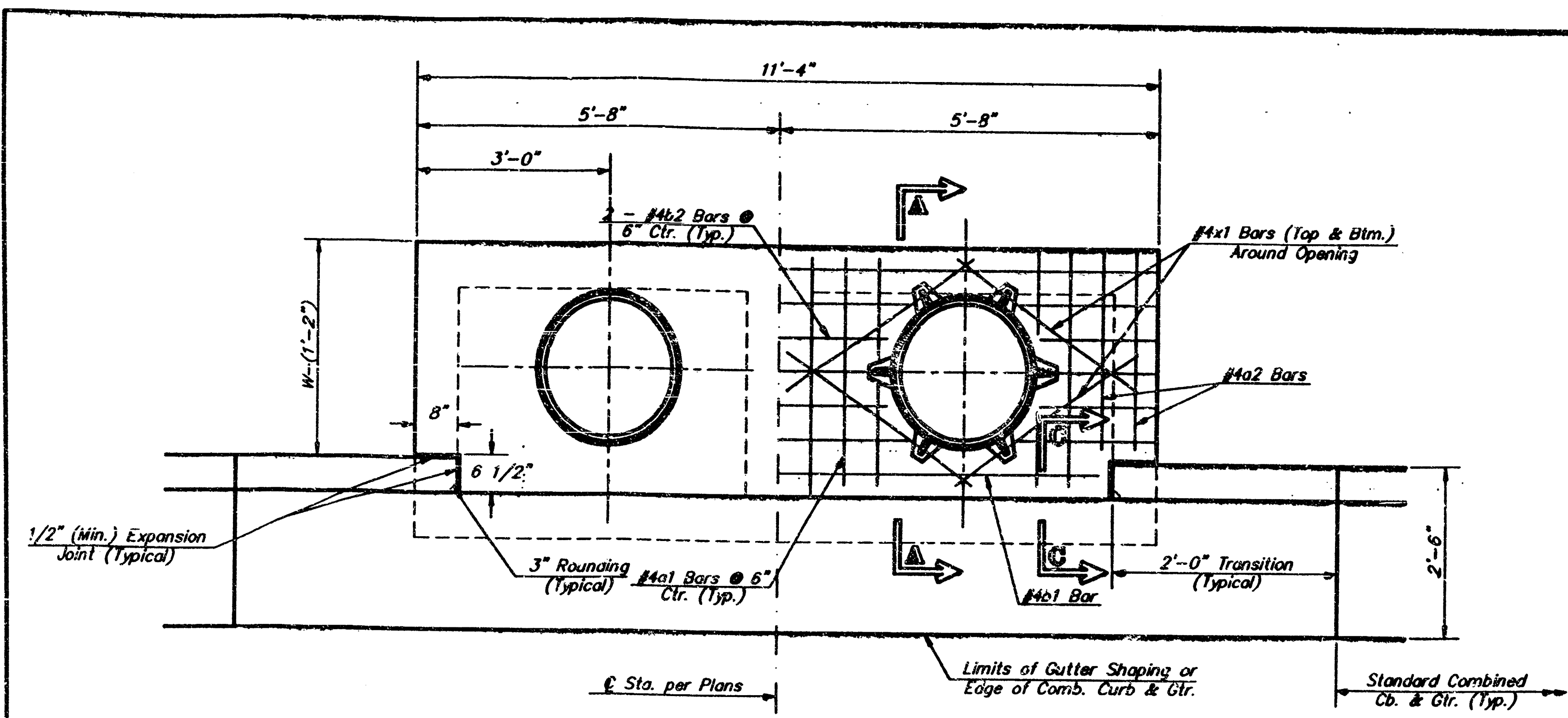
PROJECT NUMBER \_\_\_\_\_

DESIGN C.D.W. DRAWN STAFF APPROVED DATE SCALE

SHEET 7 OF 11

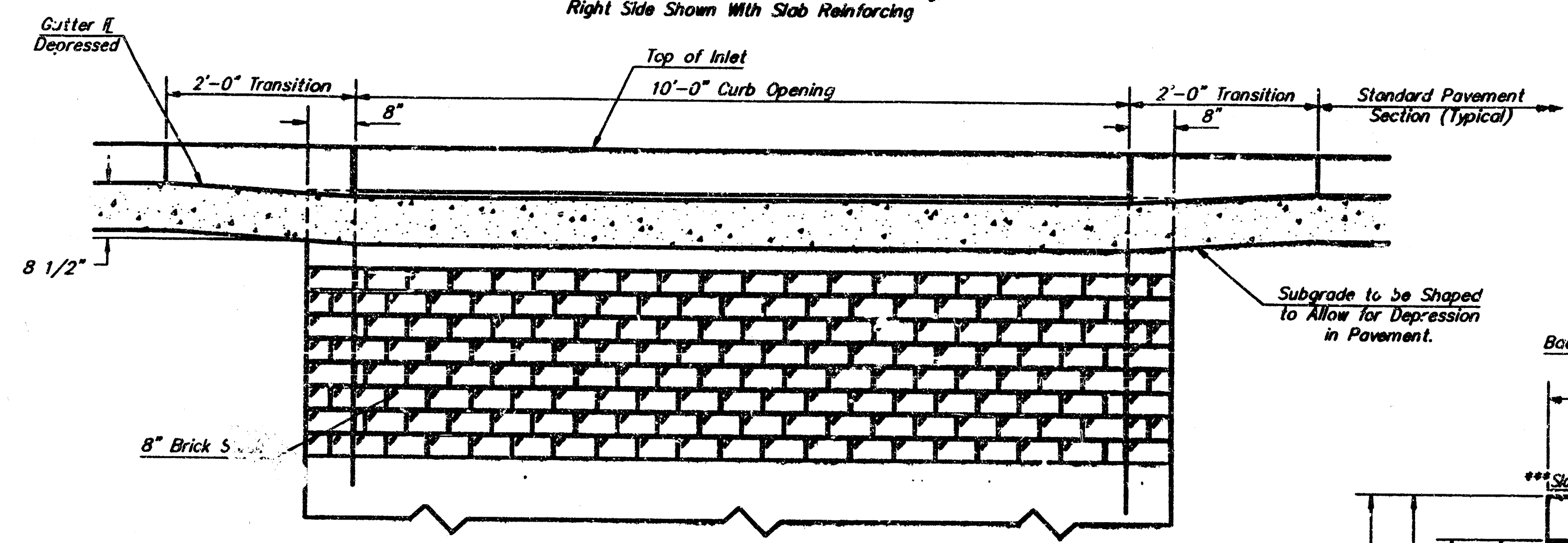
Revised - Dec. 21, 1984



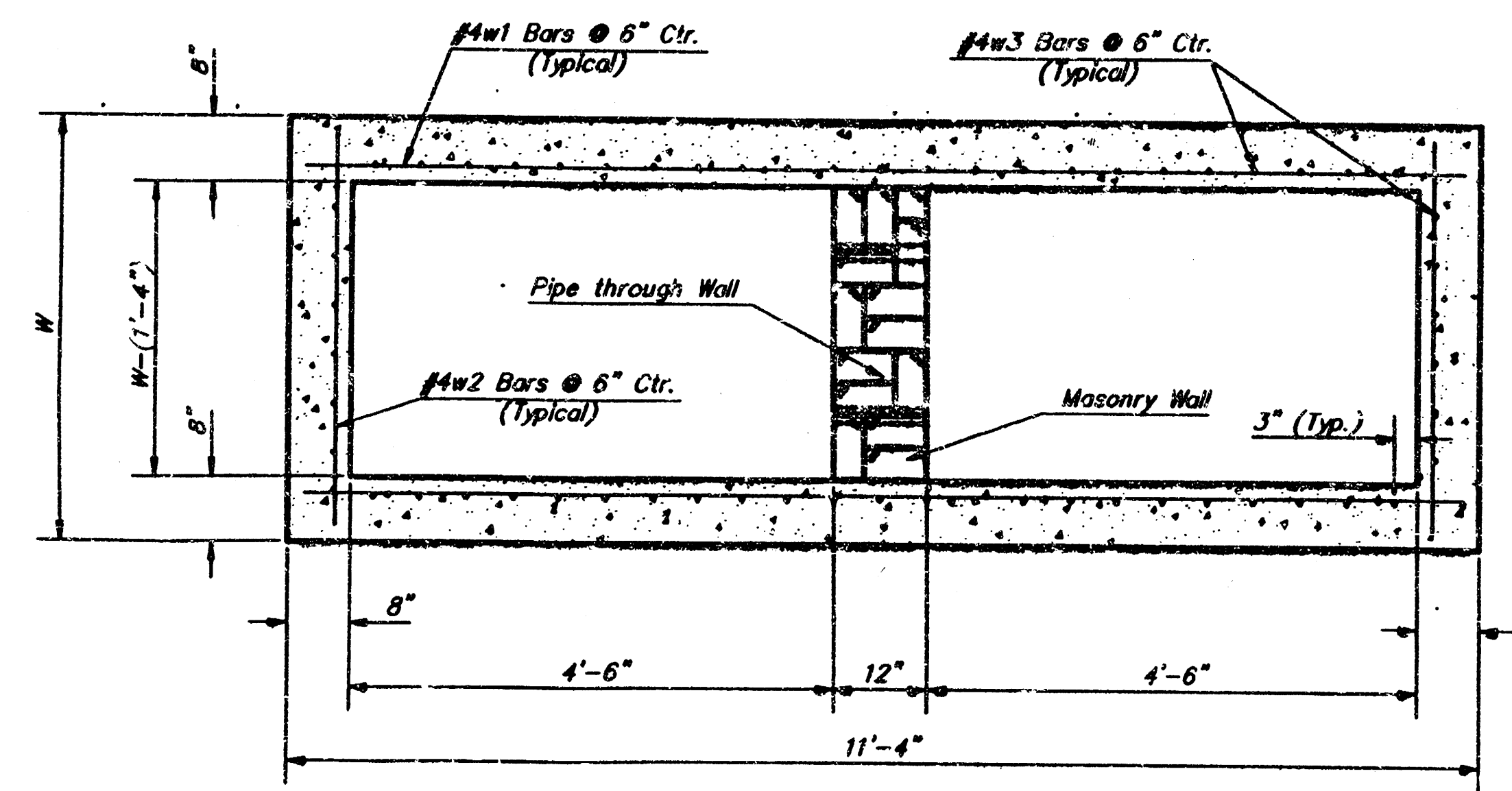


**PLAN**

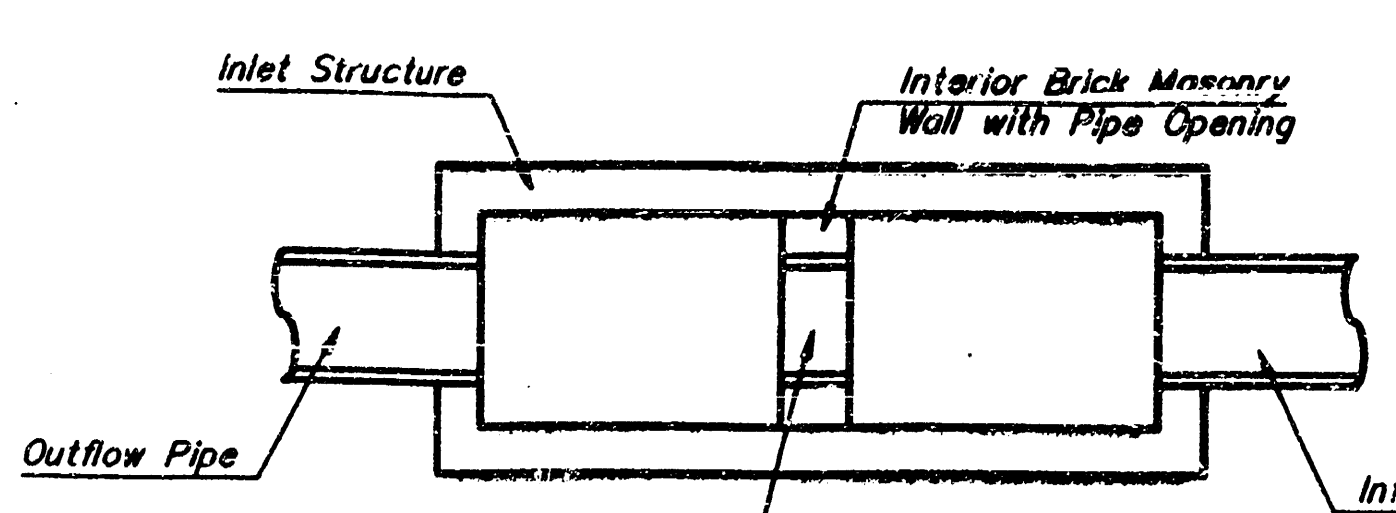
Left Side Shown Without Slab Reinforcing,  
Right Side Shown With Slab Reinforcing



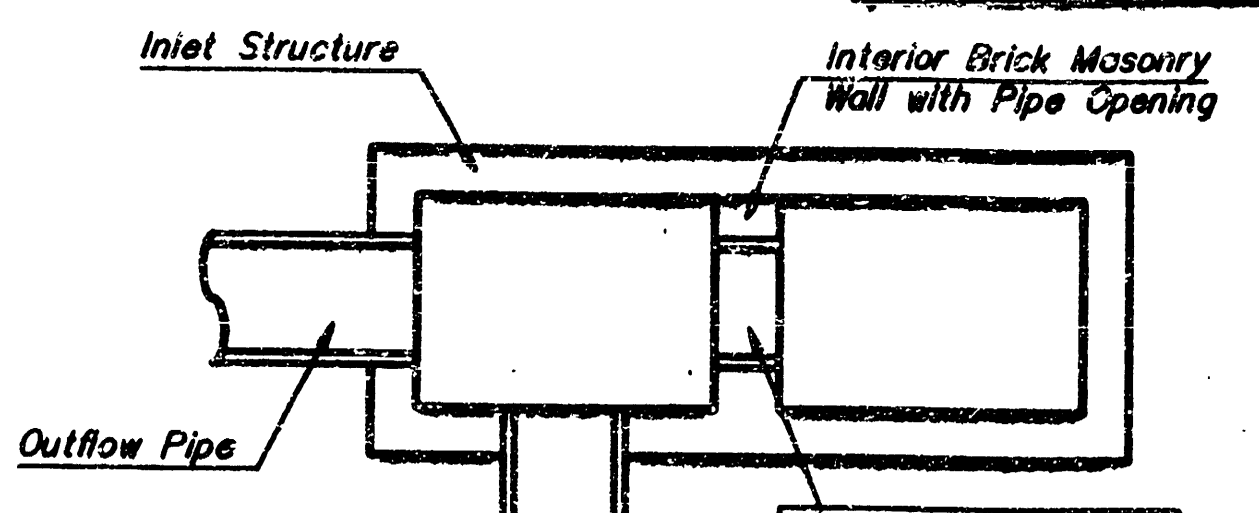
**ELEVATION**



**SECTION B-B**

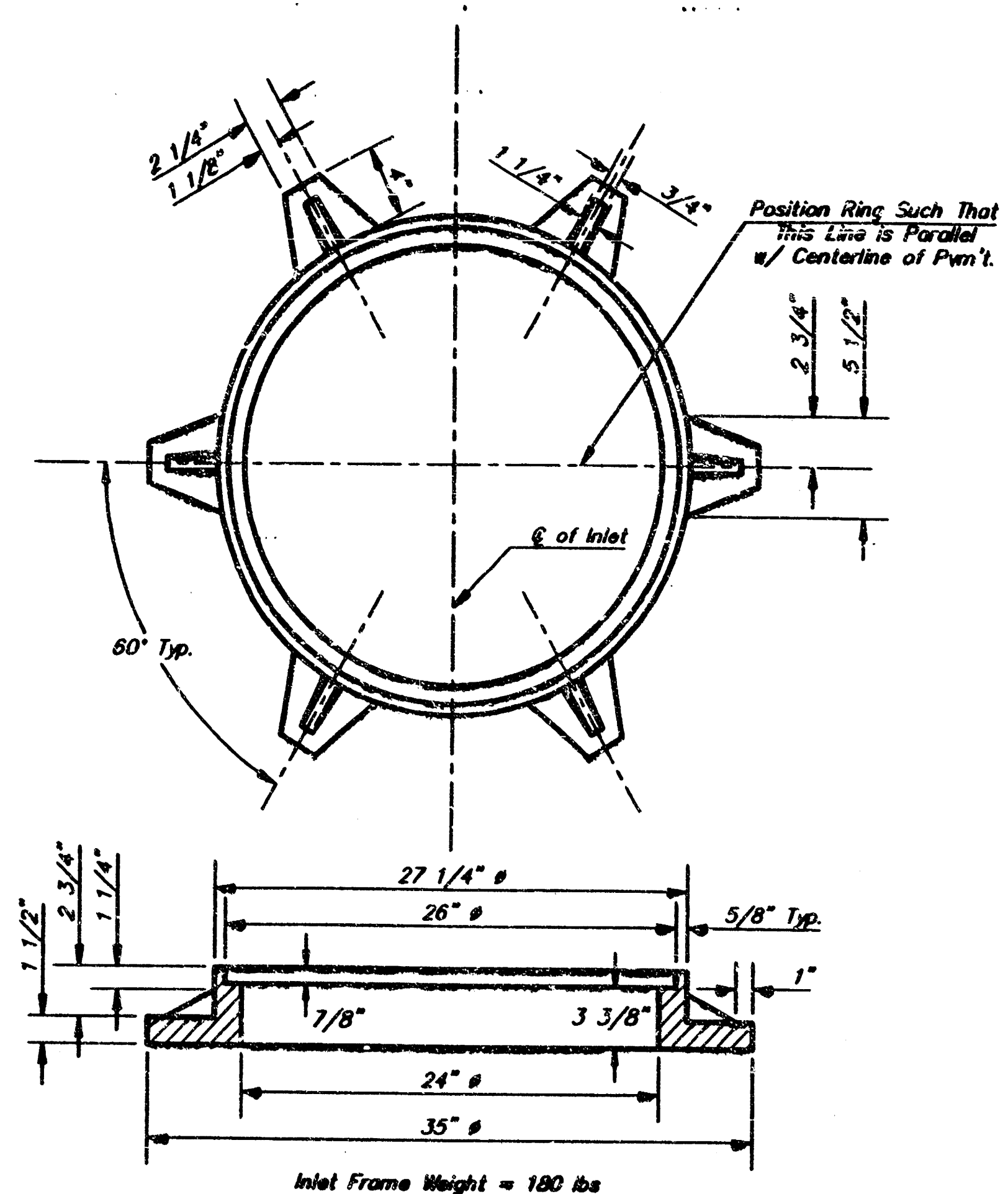


**CASE I**



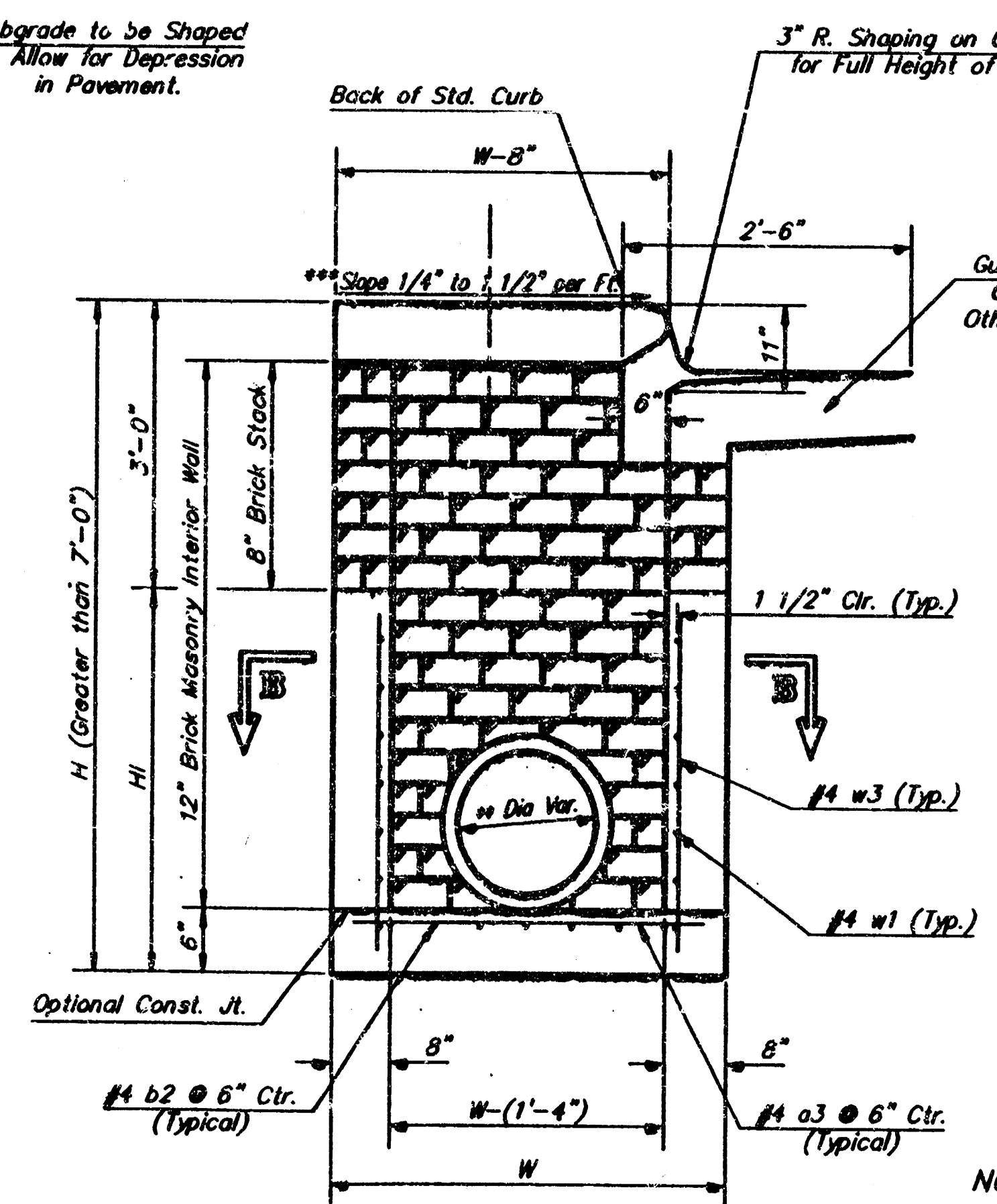
**CASE II**

**NOTE:**  
Center Wall Pipe Size shall be as Specified in Inlet Construction Notes on the Plan/Profile Sheets for those Cases not Shown Here.



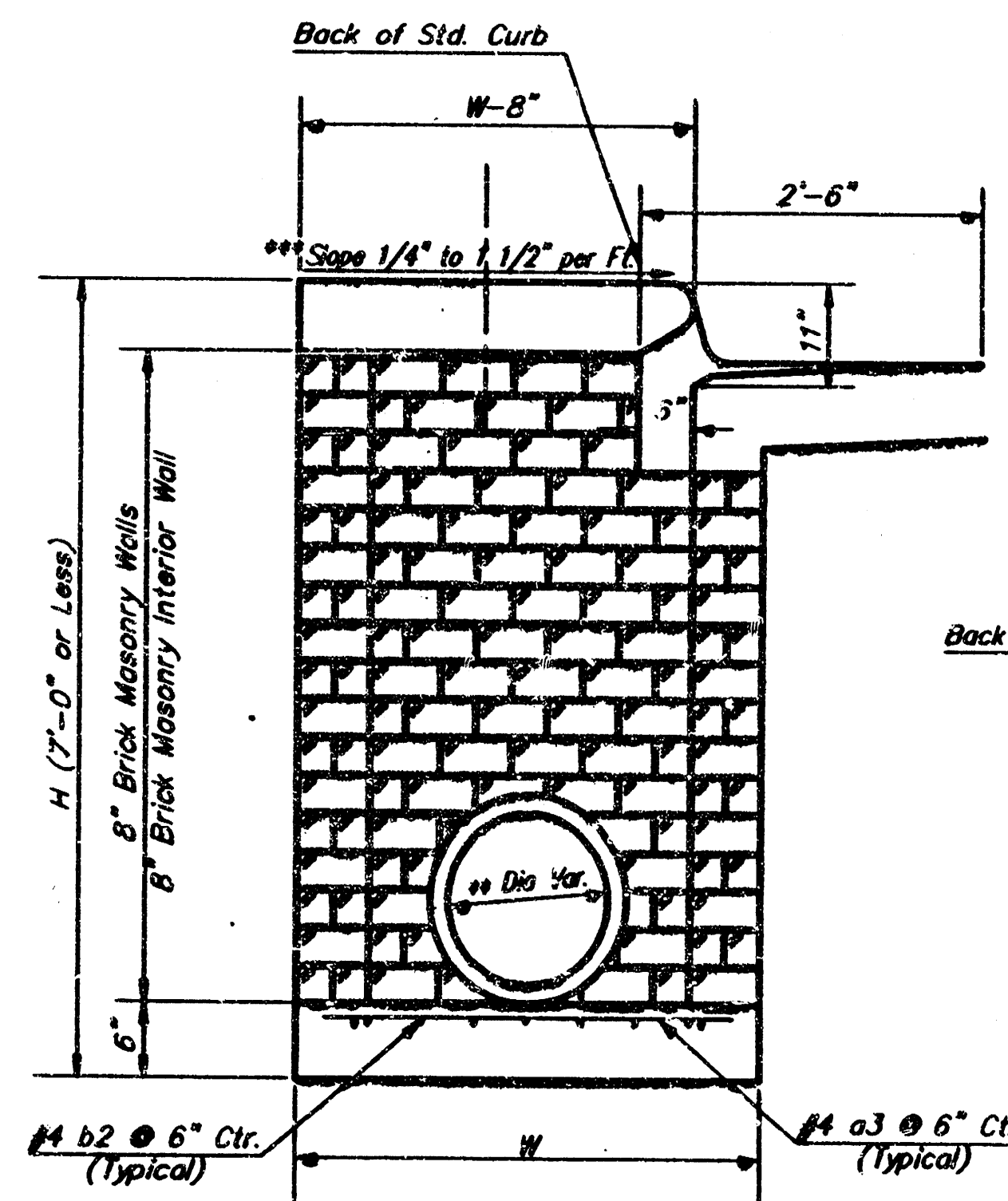
**MANHOLE RING AND COVER**

See City of Wichita Standard Manhole Ring and Cover Detail Sheet for Cover Details to Be Used With Inlet Frame.

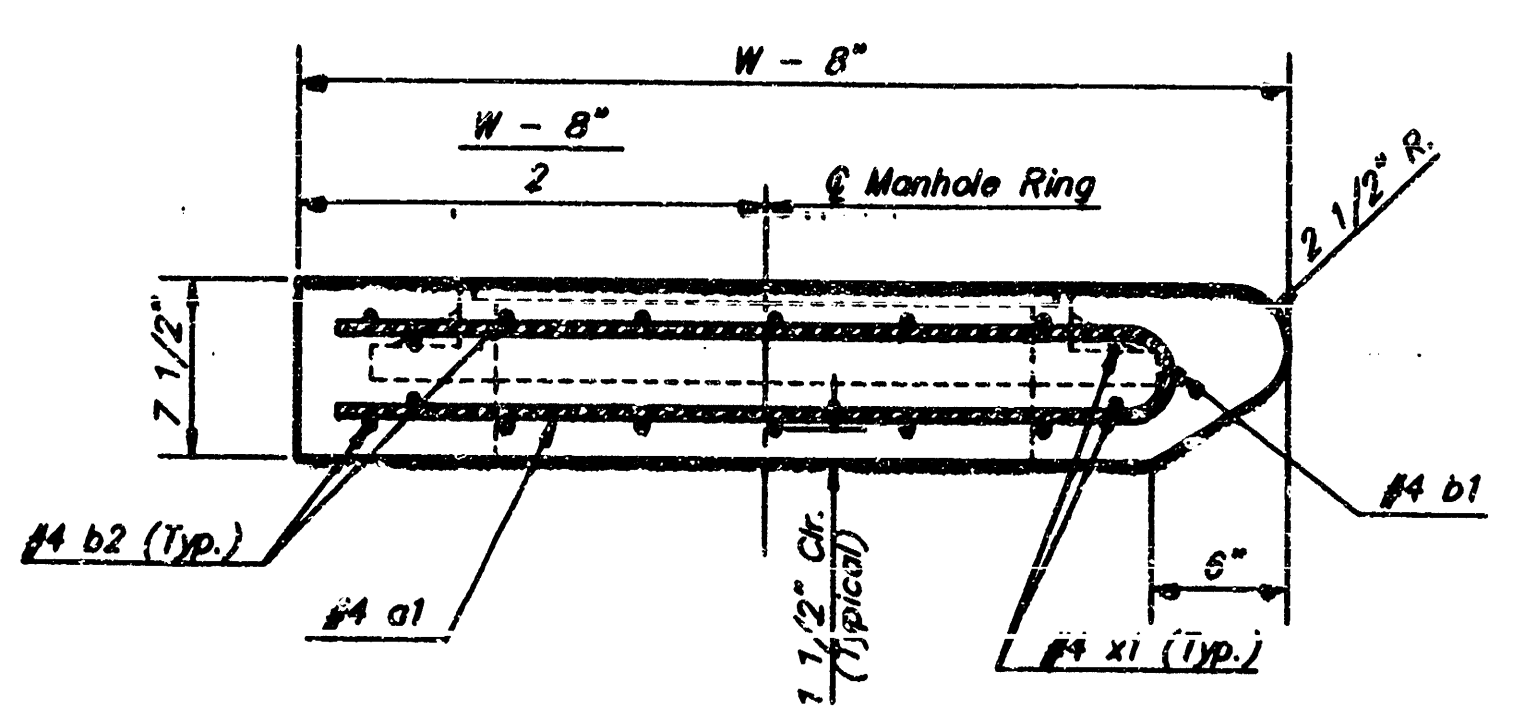


**TYPICAL INLET SECTION AT CENTER WALL (REINFORCED CONCRETE WALLS)**

**NOTES:**  
\*\* A center wall opening shall be provided by means of a section of reinforced concrete pipe. See Case I and Case II below.  
\*\*\* Slope of inlet tops to match sidewalk of parking slopes within limits indicated



**TYPICAL INLET SECTION AT CENTER WALL (MASONRY WALLS)**



**SECTION A-A**

**PRECAST SLAB AND FLOOR REINFORCING**

| MARK | SIZE | W = 4'-4" |        | W = 5'-4" |        | W = 6'-4" |        | W = 7'-4" |        | W = 8'-4" |        |
|------|------|-----------|--------|-----------|--------|-----------|--------|-----------|--------|-----------|--------|
|      |      | NO.       | LENGTH | NO.       | LENGTH | NO.       | LENGTH | NO.       | LENGTH | NO.       | LENGTH |
| a1   | #4   | 13        | 6'-7"  | 13        | 8'-7"  | 13        | 10'-7" | 13        | 12'-7" | 13        | 14'-7" |
| a2   | #4   | 4         | 6'-0"  | 4         | 8'-0"  | 4         | 10'-0" | 4         | 12'-0" | 4         | 14'-0" |
| a3   | #4   | 23        | 4'-1"  | 23        | 5'-1"  | 23        | 6'-1"  | 23        | 7'-1"  | 23        | 8'-1"  |
| b1   | #4   | 1         | 9'-9"  | 1         | 9'-9"  | 1         | 9'-9"  | 1         | 9'-9"  | 1         | 9'-9"  |
| b2   | #4   | 23        | 11'-1" | 29        | 11'-1" | 35        | 11'-1" | 41        | 11'-1" | 47        | 11'-1" |
| x1   | #4   | 16        | 3'-10" | 16        | 4'-2"  | 16        | 4'-6"  | 16        | 4'-10" | 16        | 5'-2"  |

**WALL REINFORCING**

| MARK | SIZE | W = 4'-4" |        | W = 5'-4" |        | W = 6'-4" |        | W = 7'-4" |        | W = 8'-4" |        |
|------|------|-----------|--------|-----------|--------|-----------|--------|-----------|--------|-----------|--------|
|      |      | NO.       | LENGTH | NO.       | LENGTH | NO.       | LENGTH | NO.       | LENGTH | NO.       | LENGTH |
| w1   | #4   | 1         | 11'-1" | 1         | 11'-1" | 1         | 11'-1" | 1         | 11'-1" | 1         | 11'-1" |
| w2   | #4   | 1         | 4'-1"  | 1         | 5'-1"  | 1         | 6'-1"  | 1         | 7'-1"  | 1         | 8'-1"  |
| w3   | #4   | 52        | 2      | 56        | 2      | 60        | 2      | 64        | 2      | 68        | 2      |

\* Field Bend or Cut Reinforcing as Required for Clearance.  
① 4 (H - 12") (H = 21") Rounded down to nearest 0.5"  
② H = 3"

**STANDARD CURB INLET PRECAST TOPS**

| W     | PRE-CAST TOP SIZE       | PIPE SIZE     | CU. YD. CONC. |
|-------|-------------------------|---------------|---------------|
| 4'-4" | 3'-8" x 11'-4" x 7 1/2" | 21" & SMALLER | 0.83±         |
| 5'-4" | 4'-8" x 11'-4" x 7 1/2" | 24" & 30"     | 1.09±         |
| 6'-4" | 5'-8" x 11'-4" x 7 1/2" | 36" & 42"     | 1.35±         |
| 7'-4" | 6'-8" x 11'-4" x 7 1/2" | 48" & 54"     | 1.61±         |
| 8'-4" | 7'-8" x 11'-4" x 7 1/2" | 60" & 66"     | 1.87±         |

**BENDING DIAGRAM**

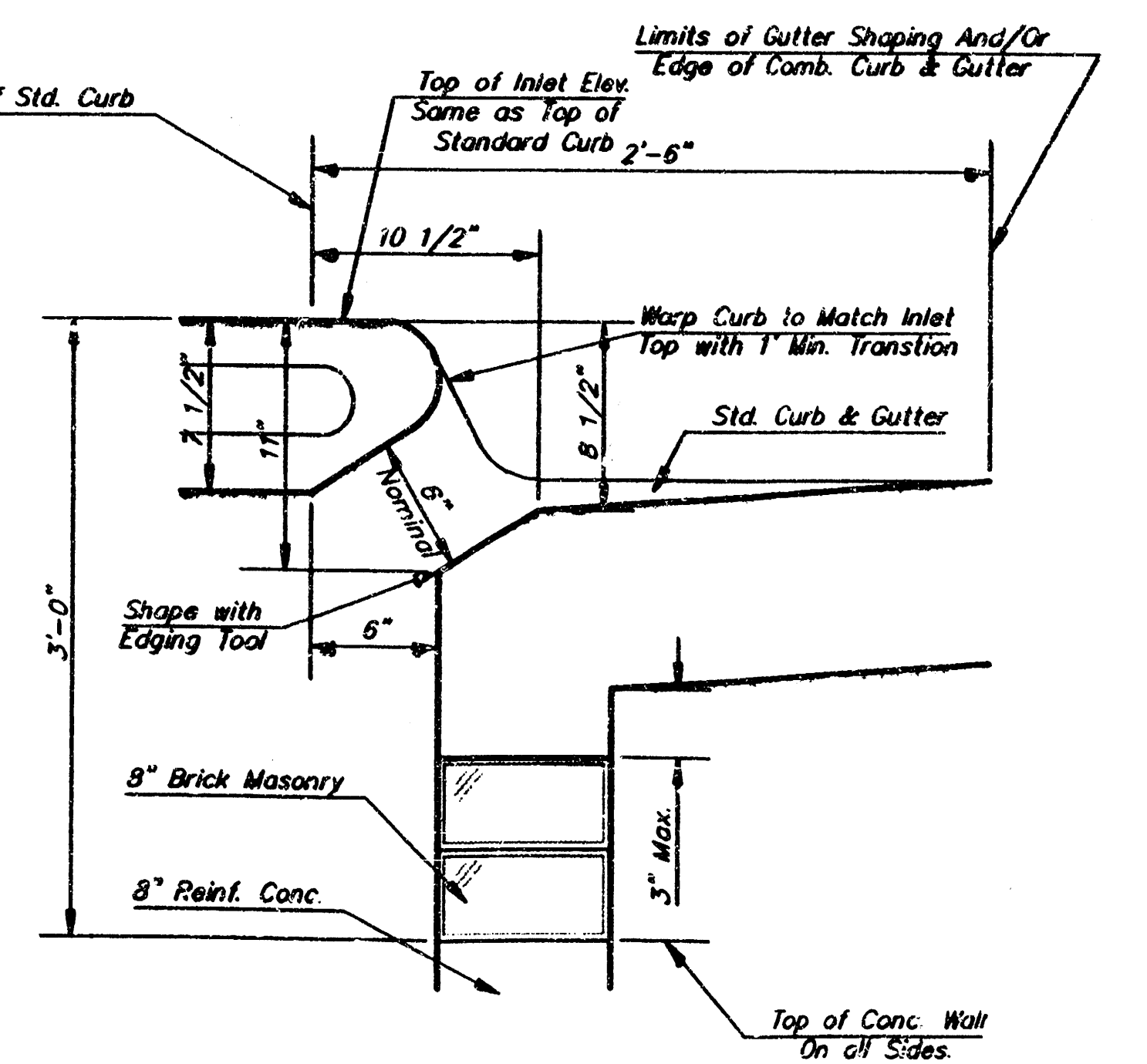
**GENERAL NOTES:**

Concrete shall be C.O.W. standard paving mix. All exposed edges shall be finished with an edging tool. Reinforcing bars shall be field bent or cut to clear pipes and inlet rings. All bars are #4 bars @ 6" spacing and shall have a minimum clearance of 1 1/2" unless otherwise noted. Floors of inlet shall be shaped with 3" sack sand mix concrete to increase hydraulic efficiency such that the inlet will be self cleaning between all inlet and/or outlet pipe(s). The contractor will be required to construct 8" brick masonry walls between the inlet base and top on this inlet when H=7'-0" or less and W=6'-4" or less. When W is greater than 6'-4" and H is less than 7'-0", the outside inlet walls below the brick stock shall be reinforced concrete construction.

Concrete tops to be installed on thin mortar cushion to insure full support along brick walls. Concrete tops may be cast in place or precast.

The ends of all pipes installed in inlets shall be cut off flush with the inside face of the inlet wall.

This detail is identical to the standard detail drawing except that the gutter transition length is increased from 2'-0" to 2'-6".



**SECTION C-C**

Revised - Feb. 16, 1989

**CITY OF WICHITA STANDARD TYPE 1 CURB INLET DETAILS**  
INLET OPENING = 6" X 10'-0"

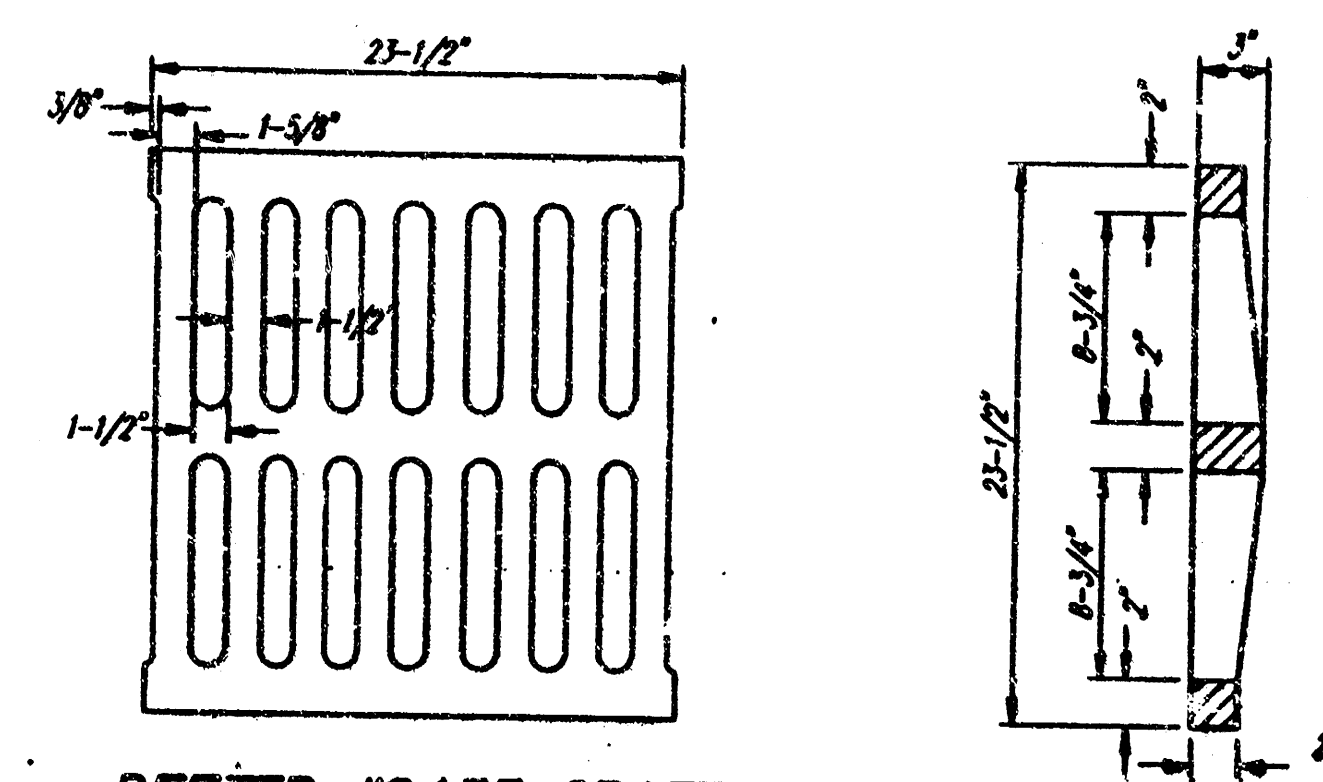
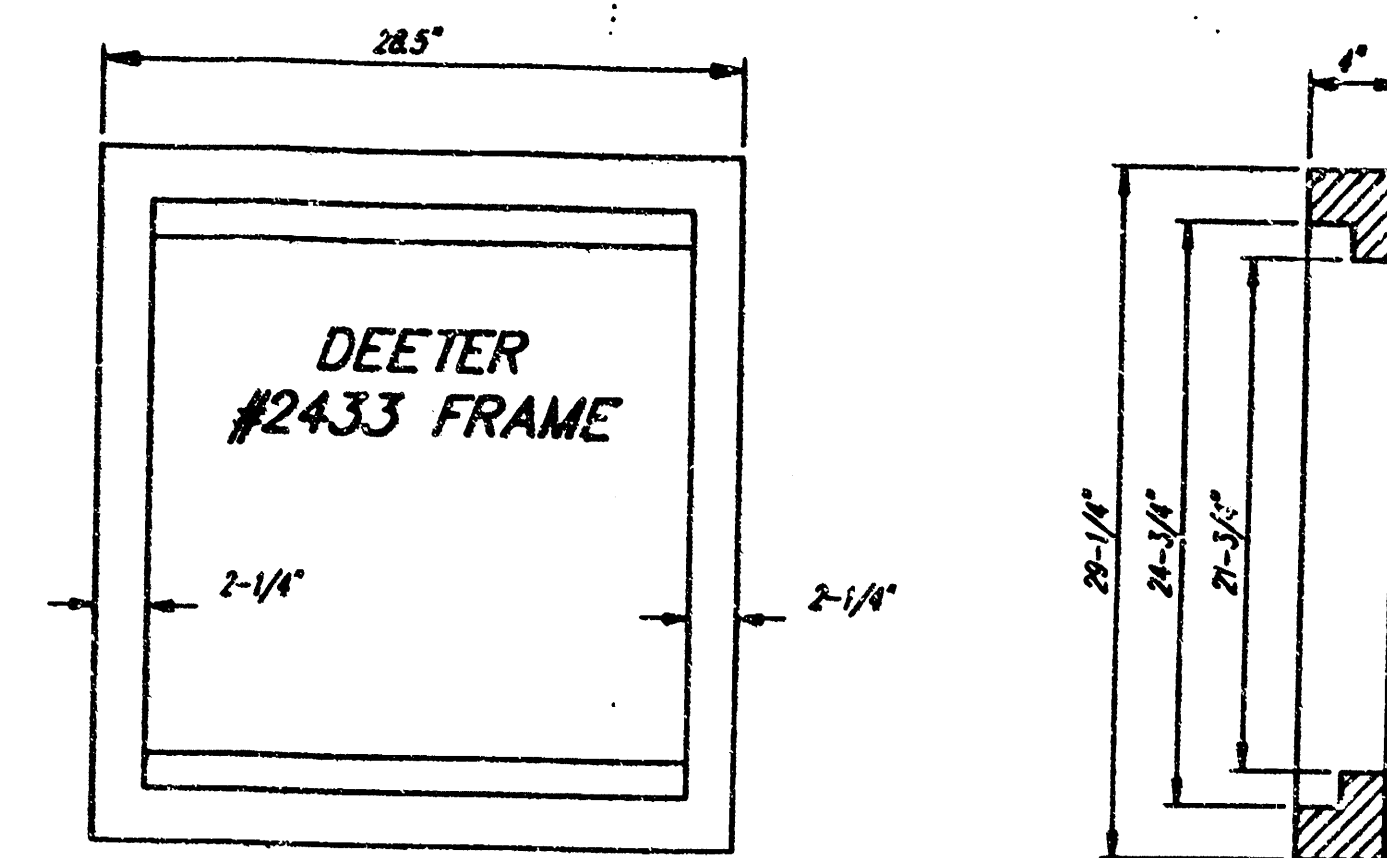
**BAUGHMAN COMPANY P.A.**  
ENGINEERING, SURVEYING, & PLANNING

PROJECT NUMBER: \_\_\_\_\_

DESIGN: C.O.W. DRAWN: \_\_\_\_\_ APPROVED: \_\_\_\_\_ DATE: \_\_\_\_\_ SCALE: NONE

SHEET 8 OF 11

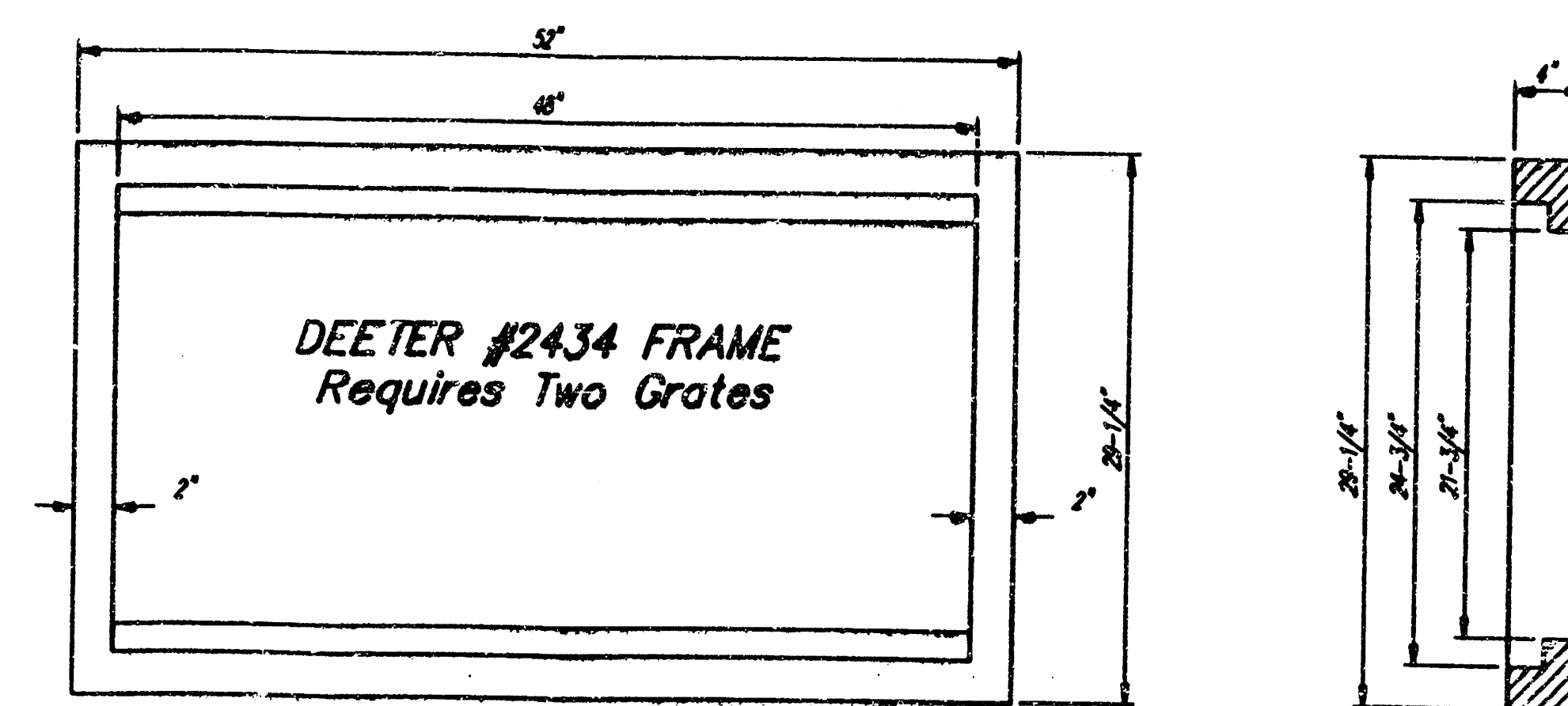




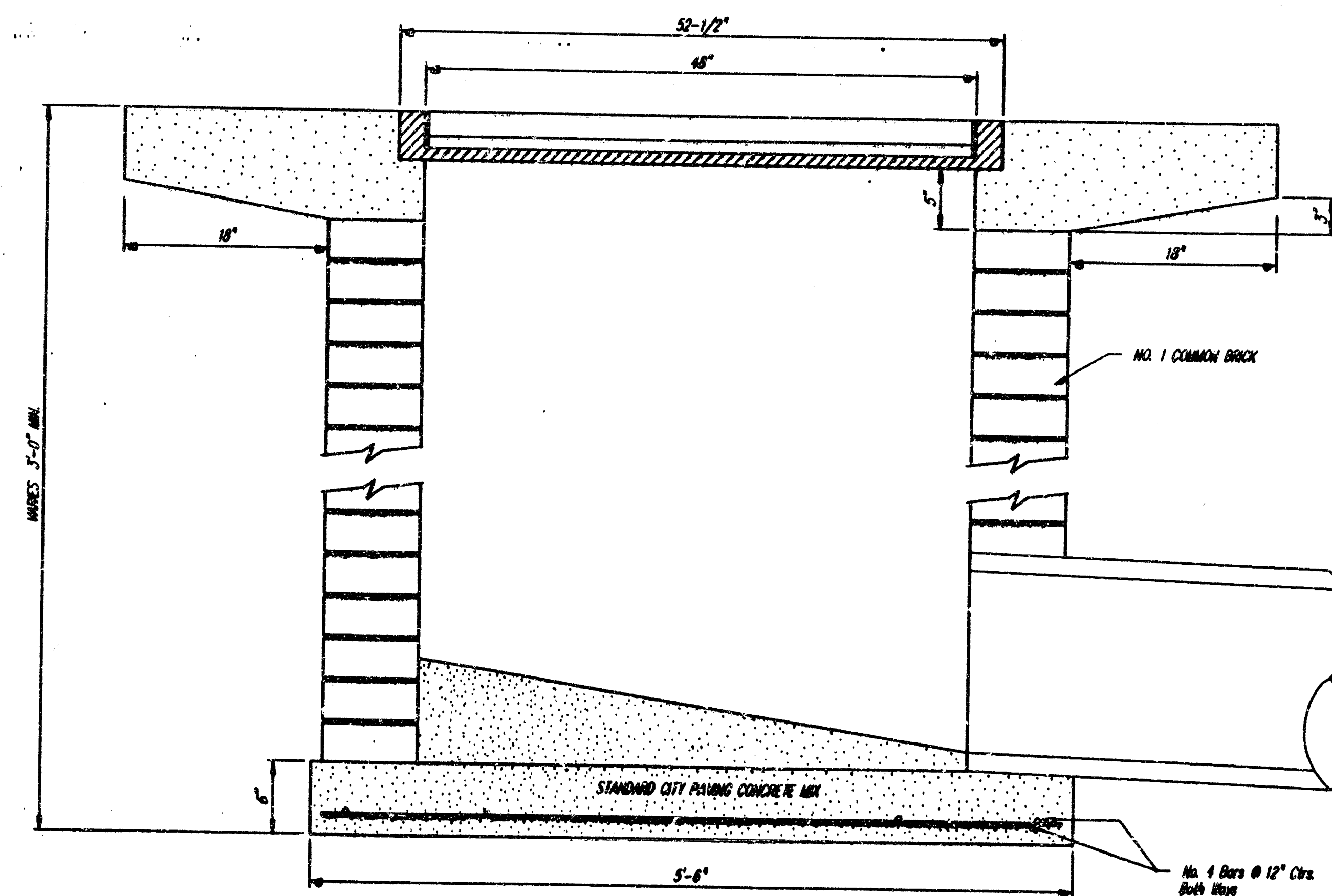
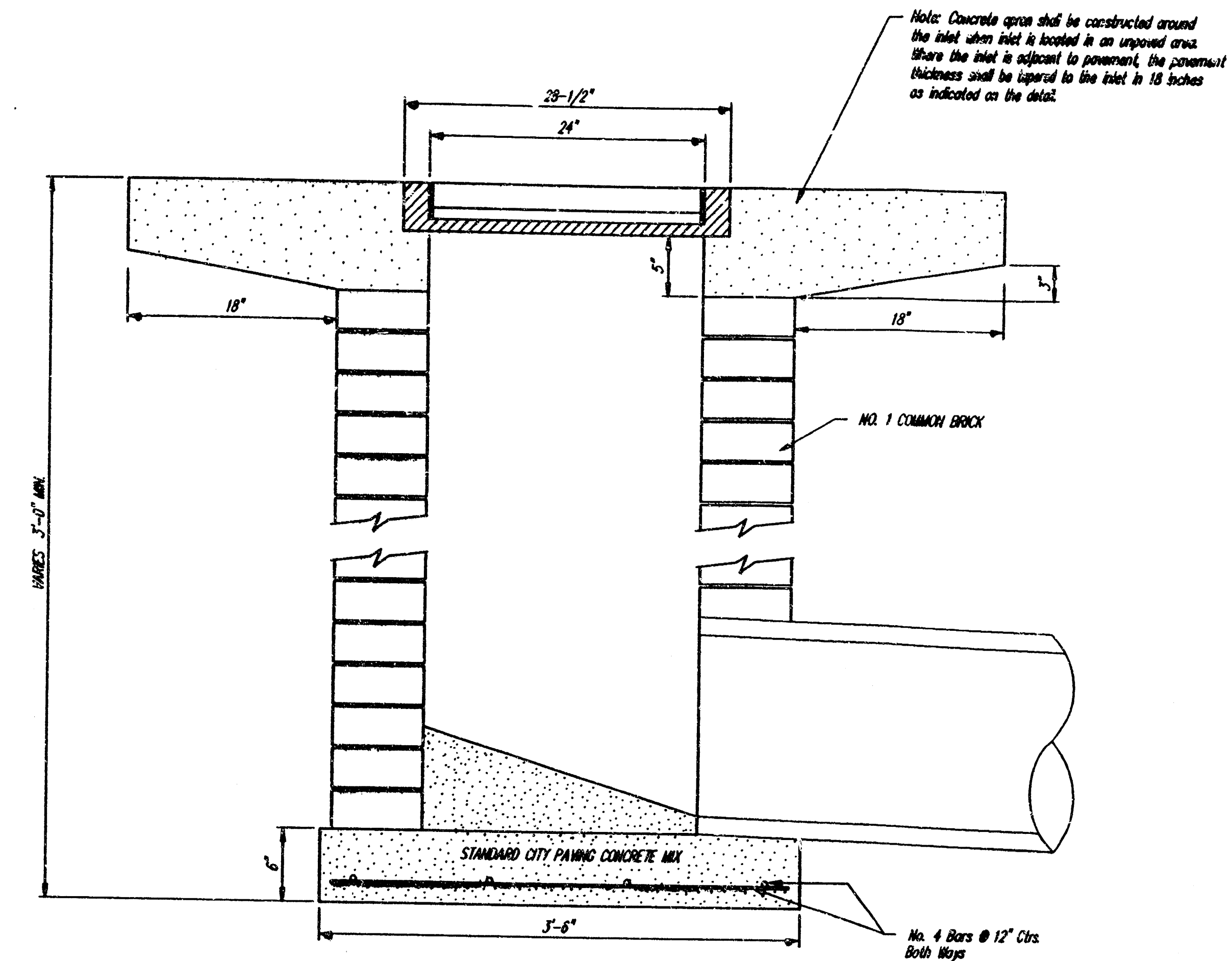
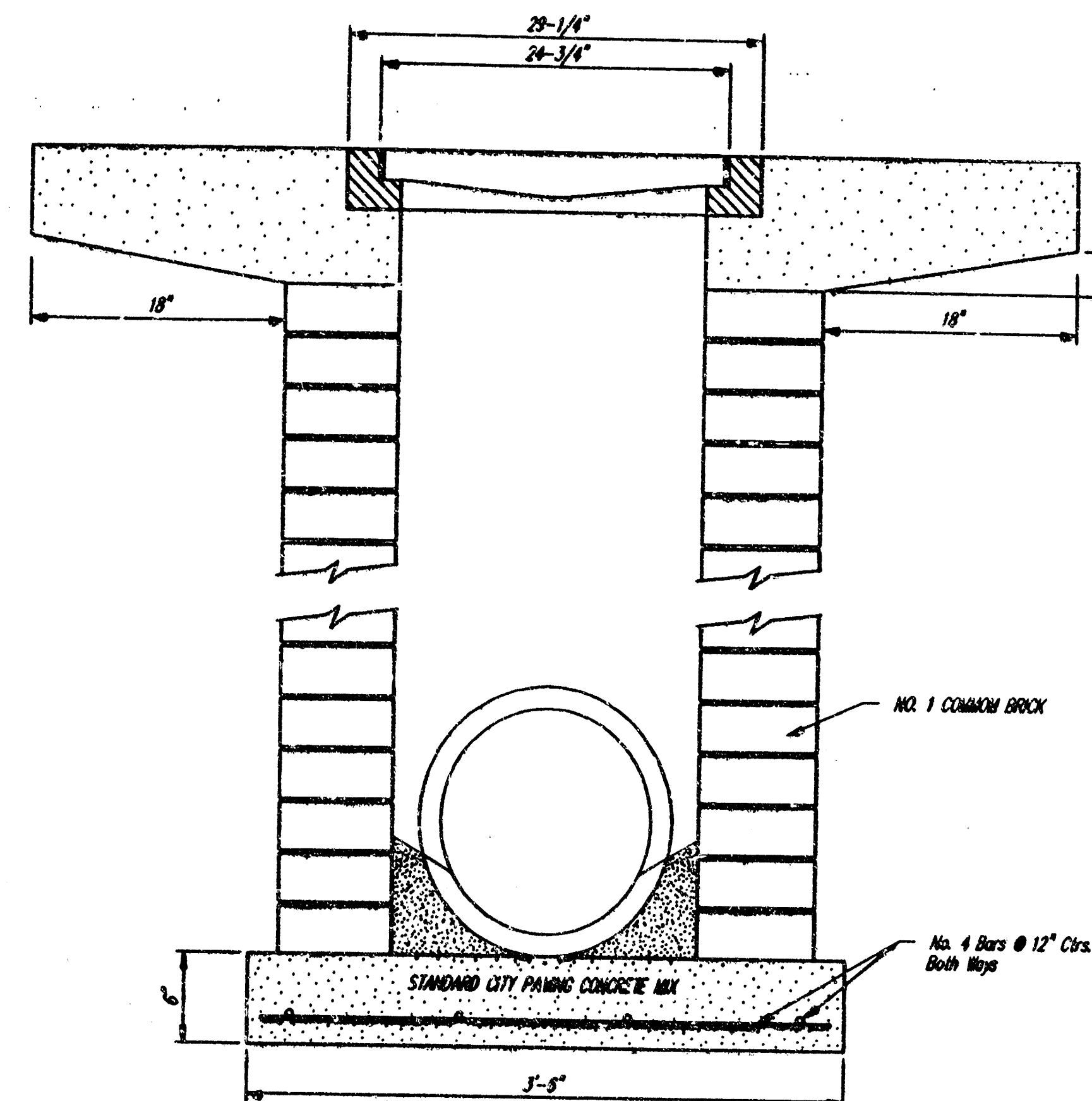
DEETER #2433 GRATE

24" x 24" Frame and Grate Detail

NOTE: Grates shall be imprinted on the top surface with "CITY OF WICHITA" using letters of least 1" in height. Other marking methods may be approved by the engineer.



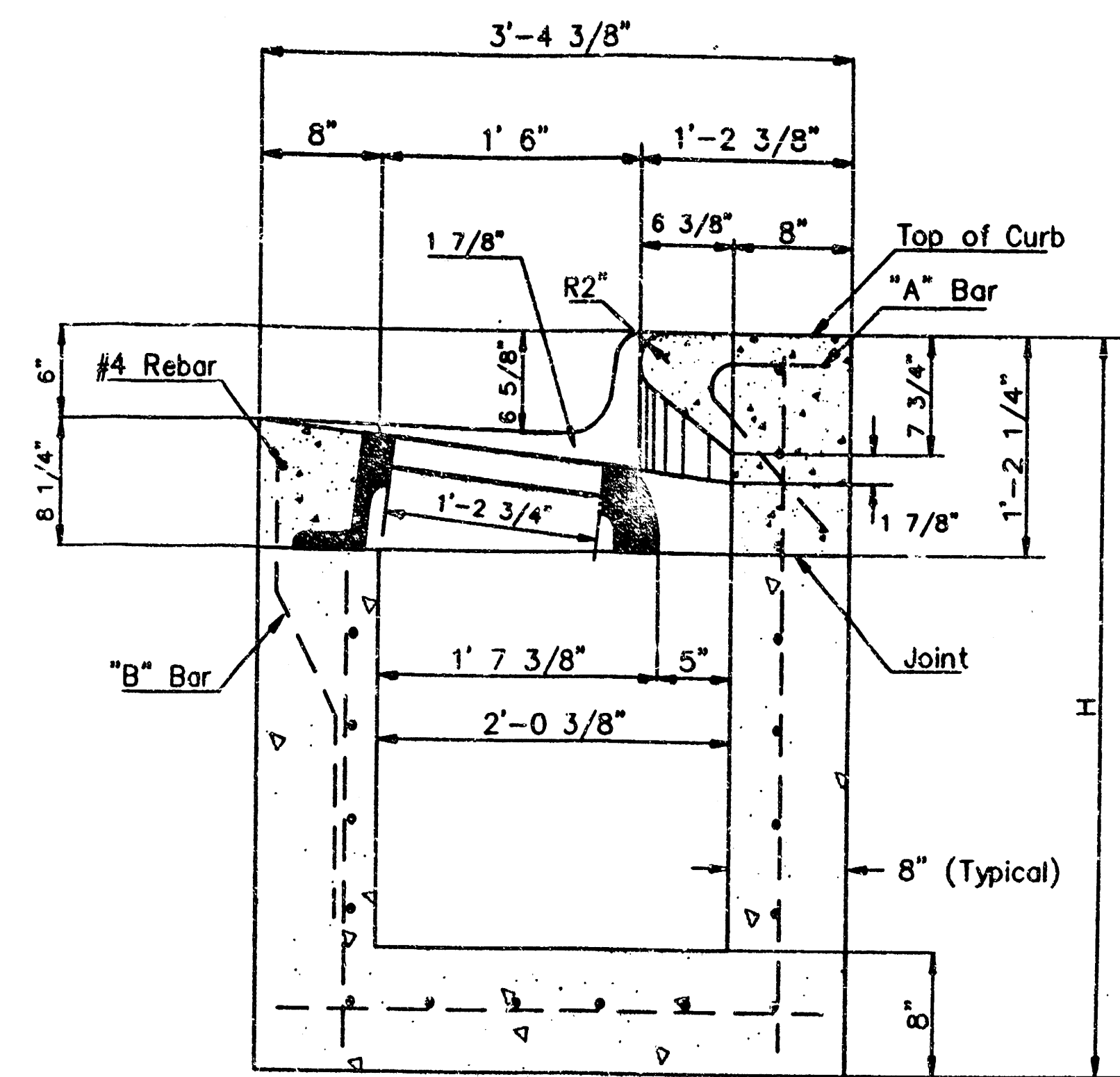
Double 24" x 24" Frame Detail



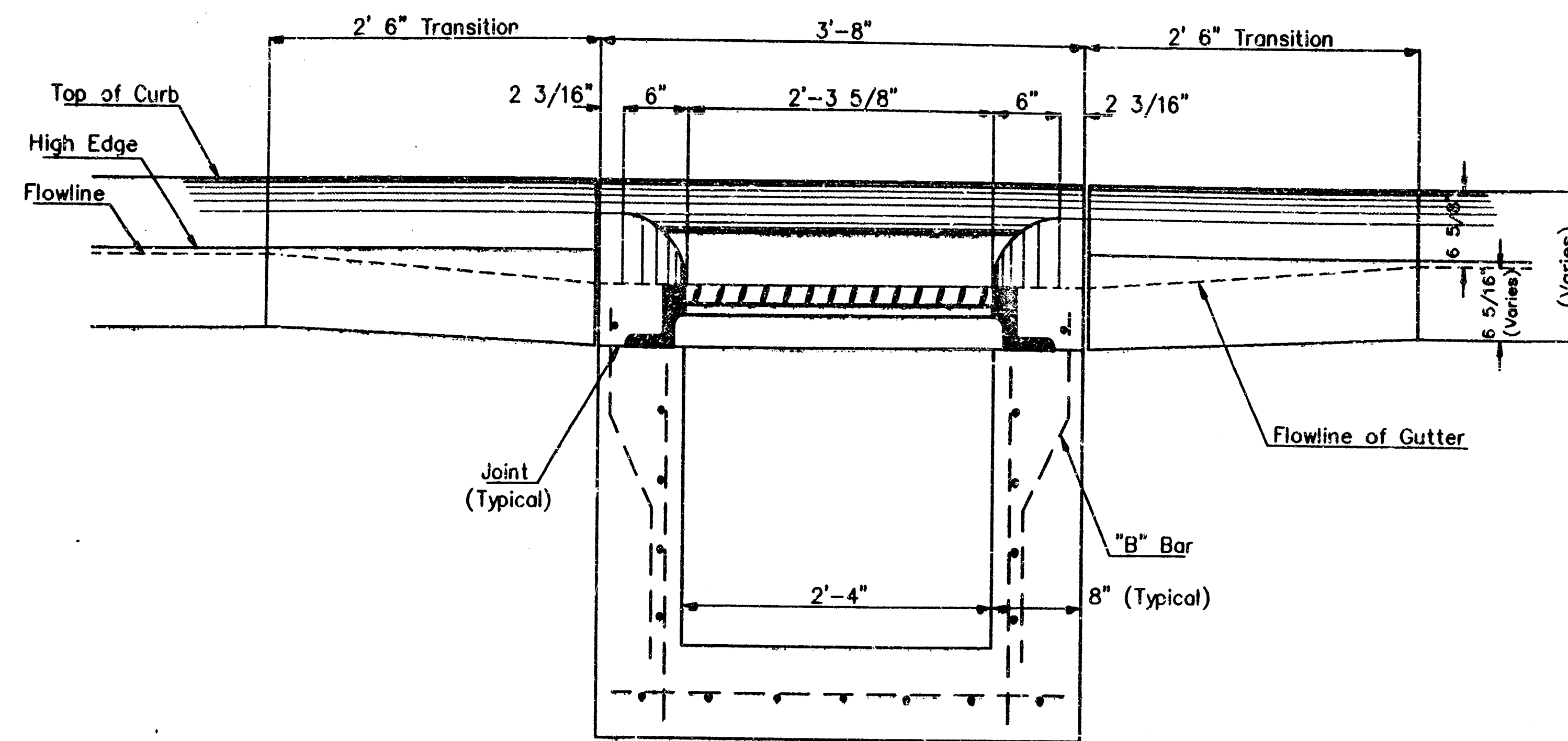
|                                                                                                                  |       |          |      |       |         |
|------------------------------------------------------------------------------------------------------------------|-------|----------|------|-------|---------|
| City of Wichita Standard<br><b>Drop Inlet</b>                                                                    |       |          |      |       |         |
| BAUGHMAN COMPANY P. A.<br>ENGINEERING, SURVEYING, & PLANNING<br>318-282-7771 • 318 ELLIS • WICHITA, KANSAS 67211 |       |          |      |       |         |
| PROJECT NUMBER                                                                                                   |       |          |      |       |         |
| DESIGN                                                                                                           | DRAWN | APPROVED | DATE | SCALE | SHEET   |
|                                                                                                                  |       |          |      |       | 9 OF 11 |

DETAILS DROPHLET

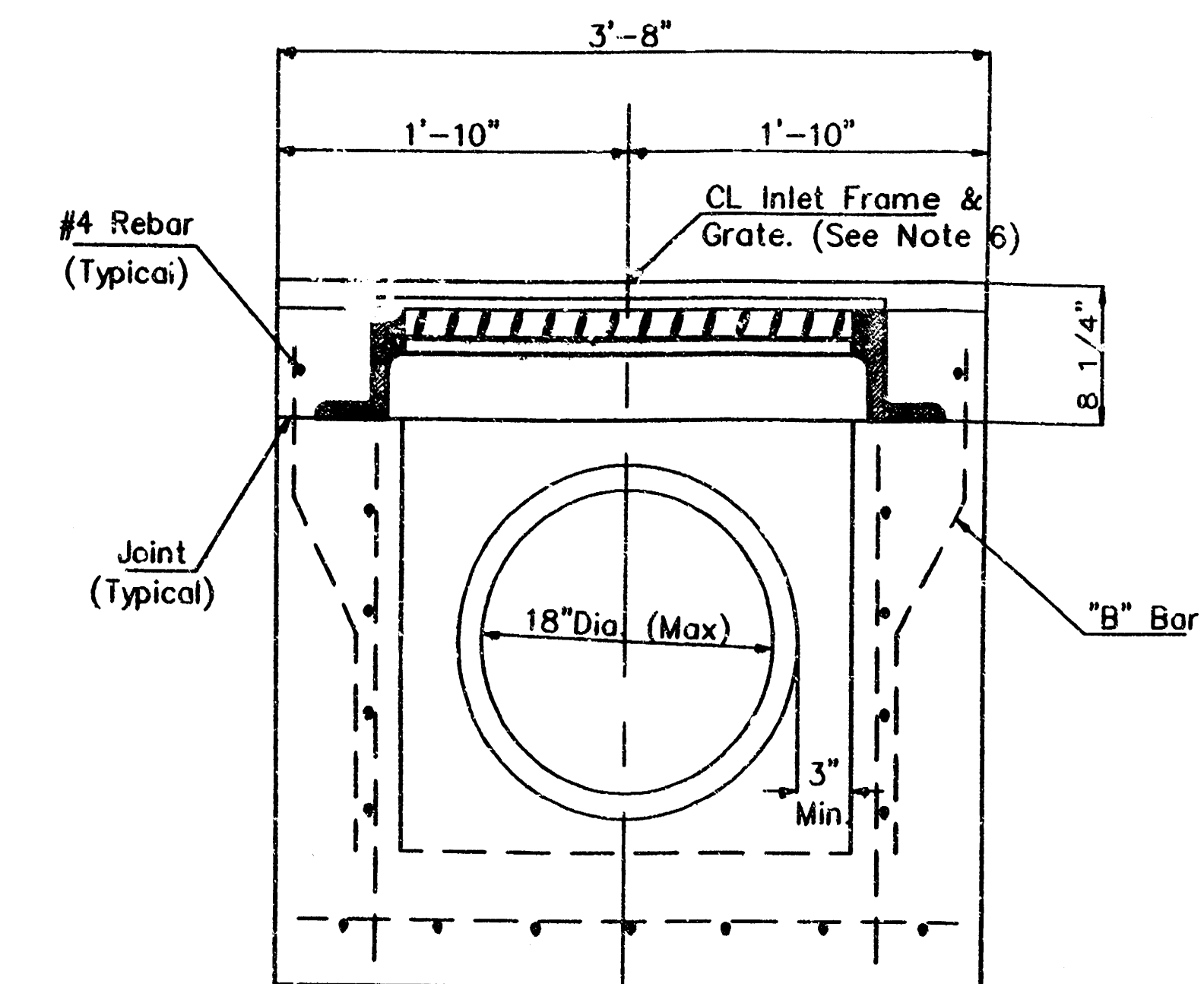




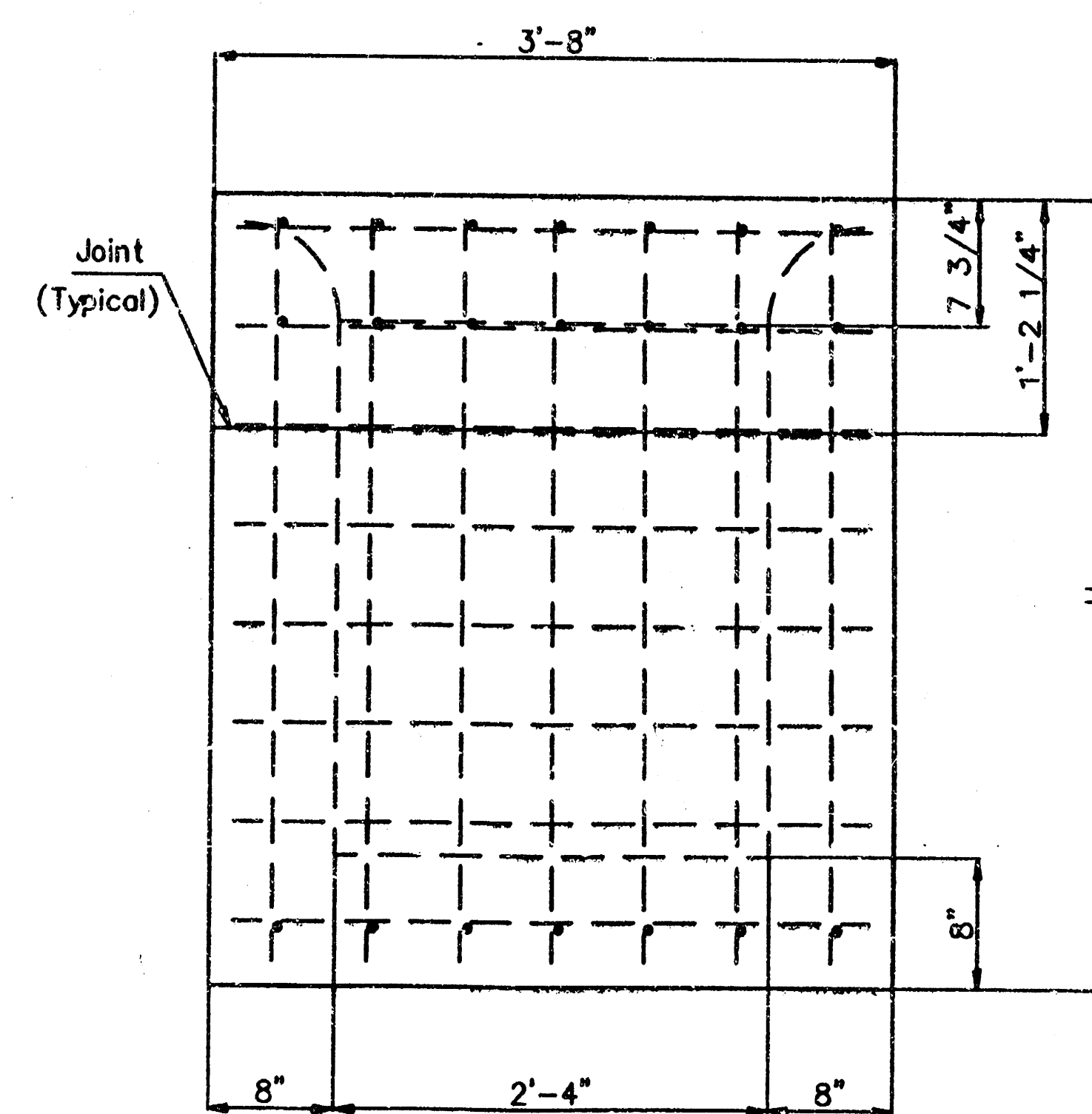
SECTION A-A



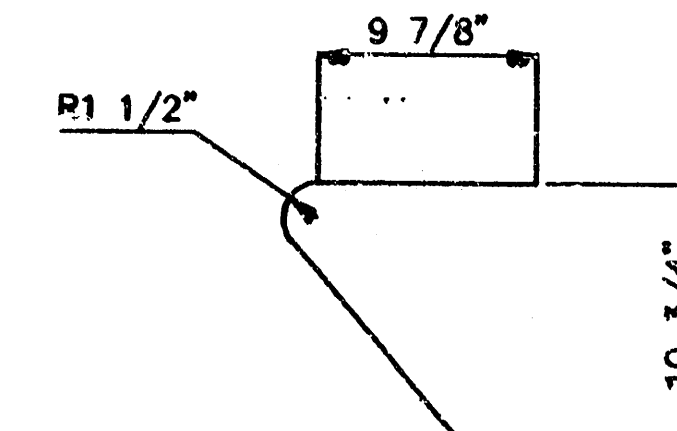
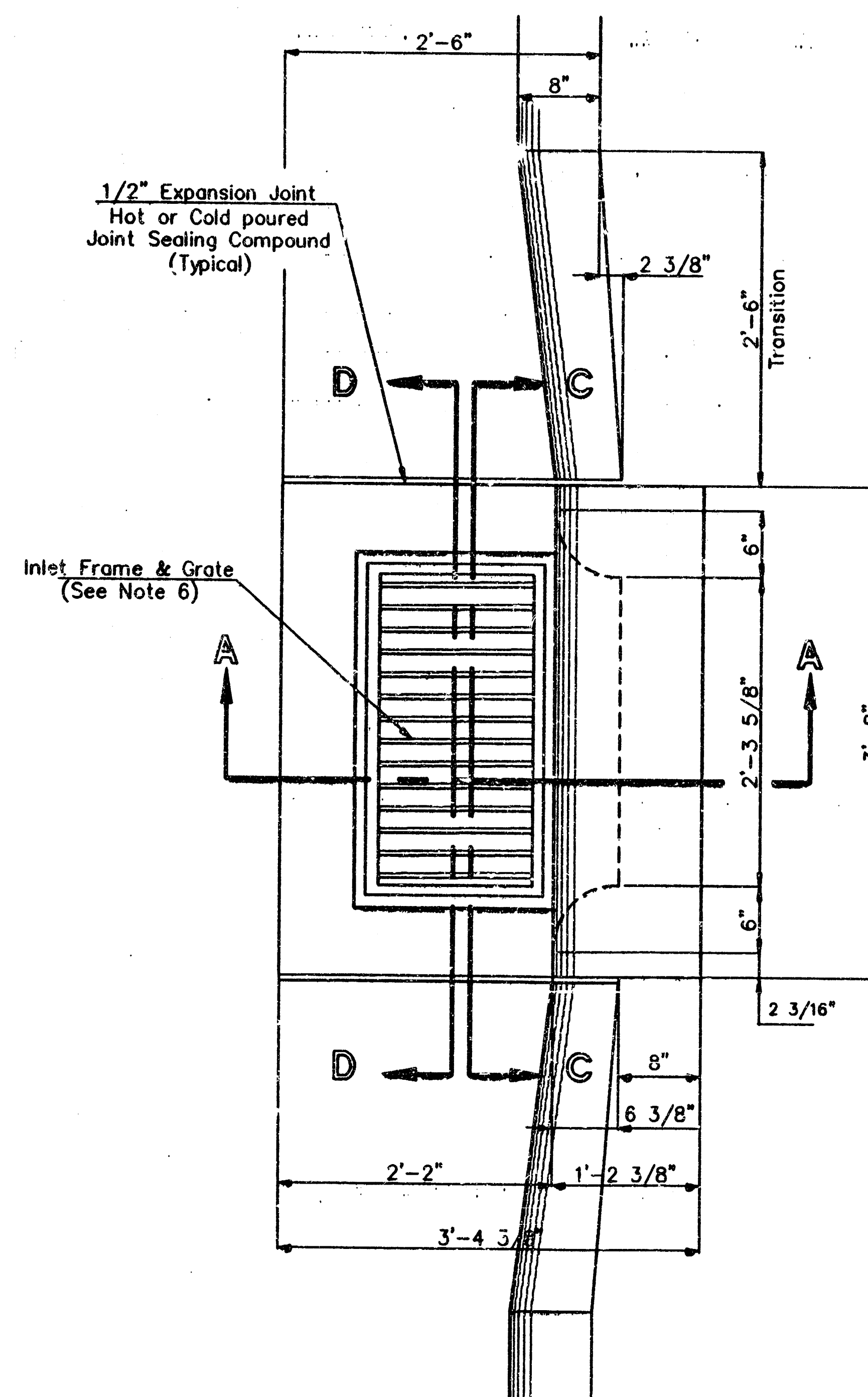
SECTION C-C



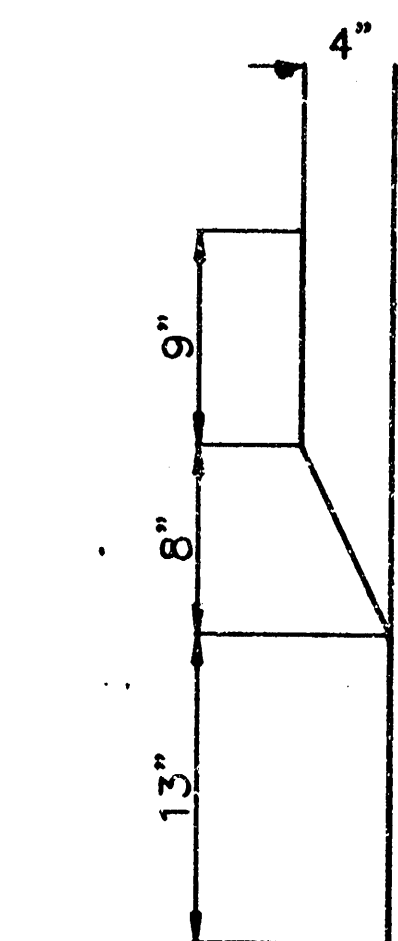
SECTION D-D



REAR WALL



"A" Bar



"B" Bar

### 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. When directed by the Engineer, a small opening may be required in the back of the inlet in order to drain a low area. Reinforcing bars will extend through the openings. No deductions in concrete quantities will be made for these openings.
5. No deductions will be made in pay length of curb, gutter, or curb and gutter through the inlet area.
6. Use Neenah R-3289 HV Single Inlet Frame and Grate or approved equal. Inlet frame to be proof load tested to 40,000 lbs. on unsupported side.
7. Reinforcing bars shall be cut or bent around pipes. No deduction in concrete quantities shall be made for pipe openings.
8. The vanes of the grate shall be oriented with respect to the flow arrows shown on the plans.

Redrawn Jan.1992

|                                                 |        |          |      |       |       |
|-------------------------------------------------|--------|----------|------|-------|-------|
| CITY OF WICHITA                                 |        |          |      |       |       |
| STD. TYPE II CURB INLET                         |        |          |      |       |       |
| INLET OPENINGS - 6" X 2'-3 5/8"                 |        |          |      |       |       |
| BAUGHMAN COMPANY P. A.                          |        |          |      |       |       |
| ENGINEERING, SURVEYING, & PLANNING              |        |          |      |       |       |
| 316-782-7271 • 316 ELKS • WICHITA, KANSAS 67211 |        |          |      |       |       |
| PROJECT NUMBER                                  |        |          |      |       |       |
| DESIGN                                          | DRAWN  | APPROVED | DATE | SCALE | SHEET |
|                                                 | JAN.87 |          |      |       | 10    |
|                                                 |        |          |      |       | 11    |