

STORM WATER SEWER IMPROVEMENTS  
TO SERVE

**R & L CARPENTER 3RD ADDITION**

Private Project Number  
**765 PPS (607861)**

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

**BENCHMARK:**

City of Wichita Benchmark Disc -  
Southeast Corner Of The  
Intersection of the E of Woodlawn  
and the E of 37th St. North.  
Elev. = 183.04 City Datum

**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
K.P.L. Gas Service Company	263-2081
Kansas Gas & Electric Company	263-7511
Arka Gas Company	264-1141
or	942-8350
Southwestern Bell Telephone Company	263-8161
City of Wichita Water Department	1-571-2611
City of Wichita Sewer Maintenance	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.

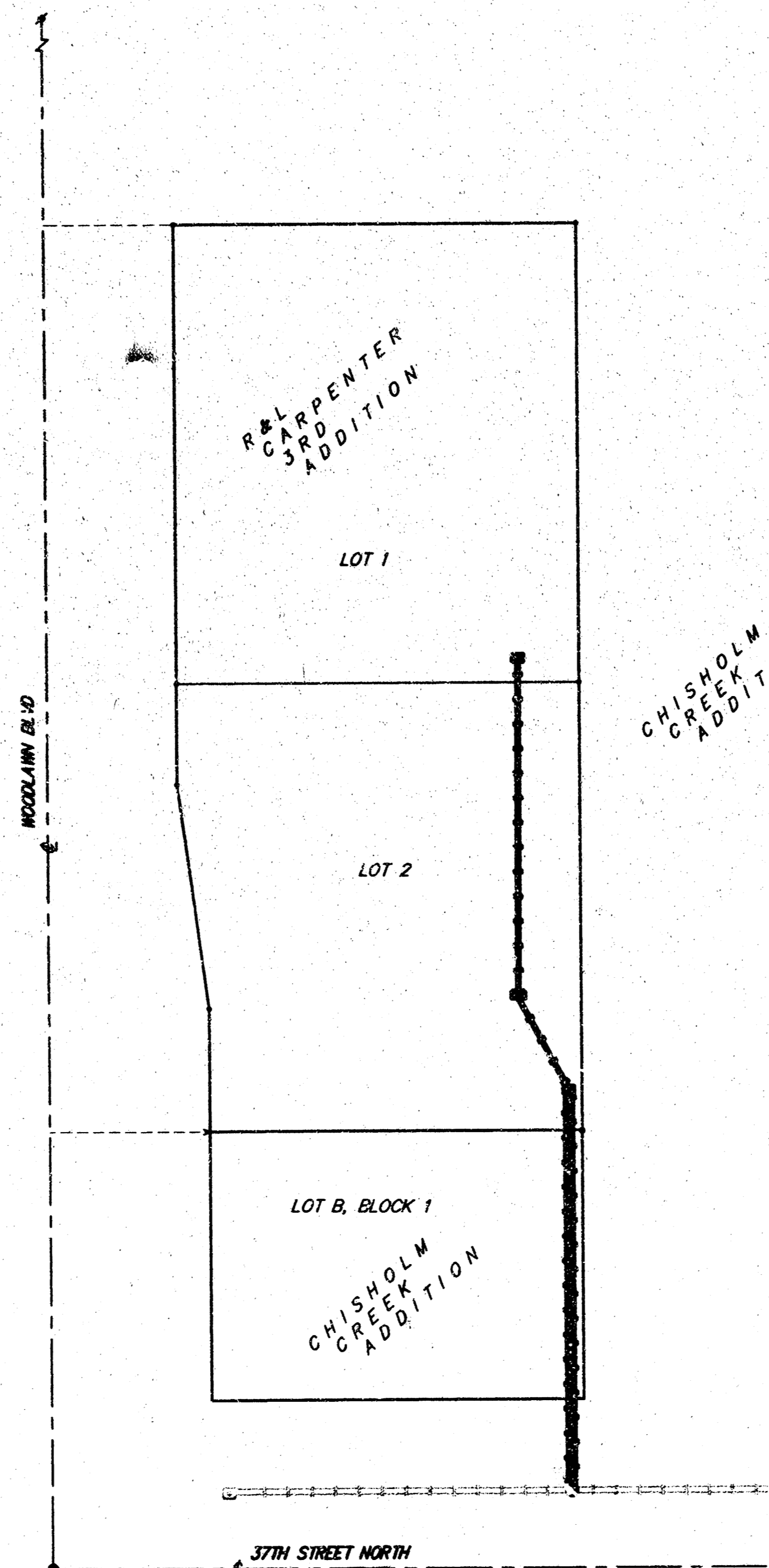
3. Contractor shall not start work on the project until the project inspector is assigned to the project and is present on the site. Any work done without inspection will be required to be uncovered for inspection.

4. All areas disturbed by construction operations shall be seeded with Kansas Premium Fescue Blend at the rate of 340 lbs./acre. Fertilizer (16-20-6) shall be applied at the rate of 170 lbs./acre.

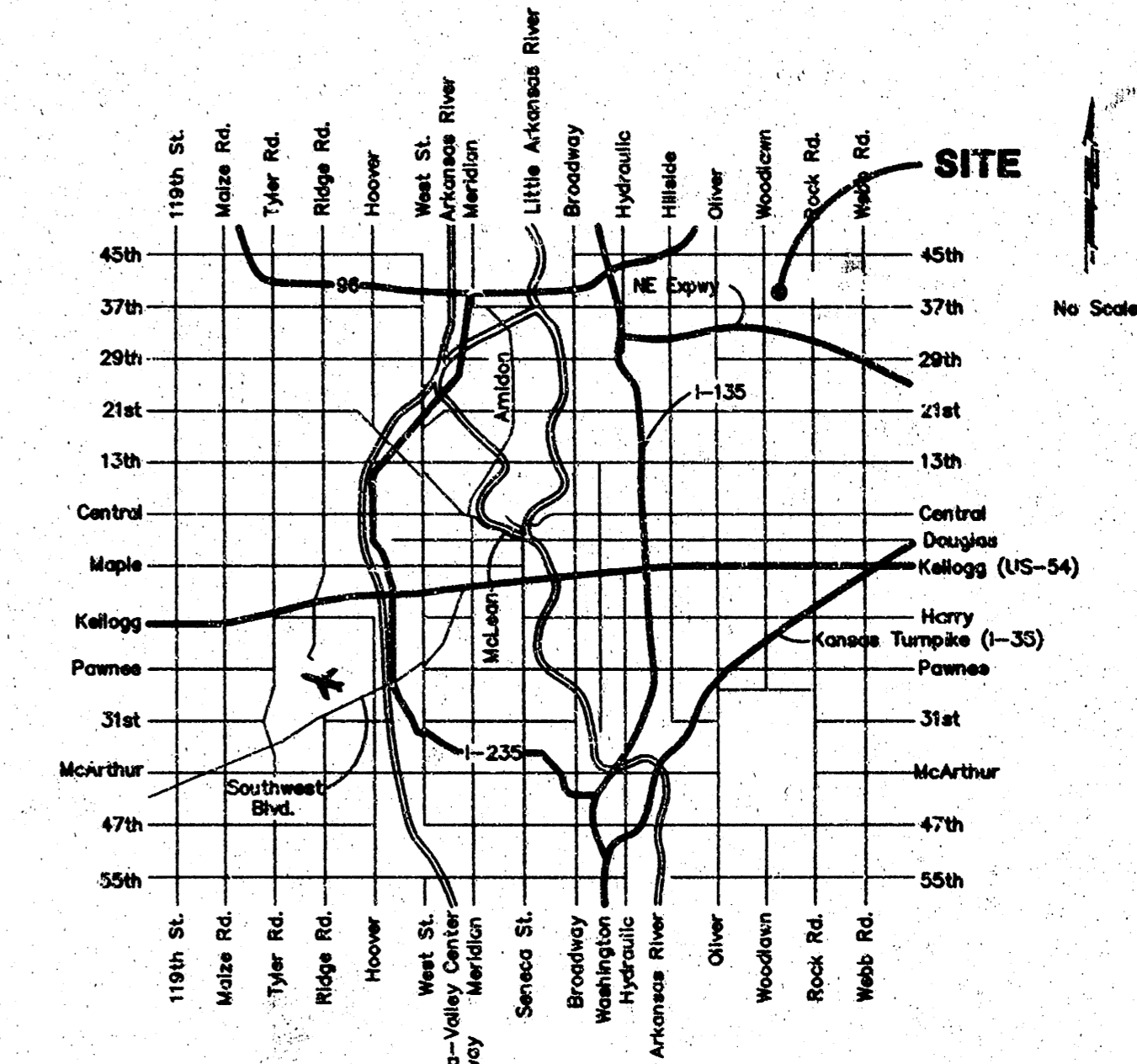
5. The Contractor shall notify pipeline companies at least 24 hours in advance of any work being performed across and/or adjacent to pipelines.

6. Trees and shrubs in public right-of-way which are in direct conflict with proposed new construction shall be removed by the Contractor with the Engineer's approval. Trees and shrubs which are not in direct conflict with proposed new construction shall be saved and protected from damage.

7. Rubble from the removal of miscellaneous structures and excess excavation which is to be wasted shall be disposed of on sites to be provided by the Contractor. These sites shall be approved by the engineer as to suitability, appearance and site location. Locations that, in the opinion of the Engineer, will leave an unsightly appearance will not be approved.



SCALE:  
1" = 60'  
• = Iron



APPROVED AS NOTED  
BY CITY ENGINEER OF WICHITA

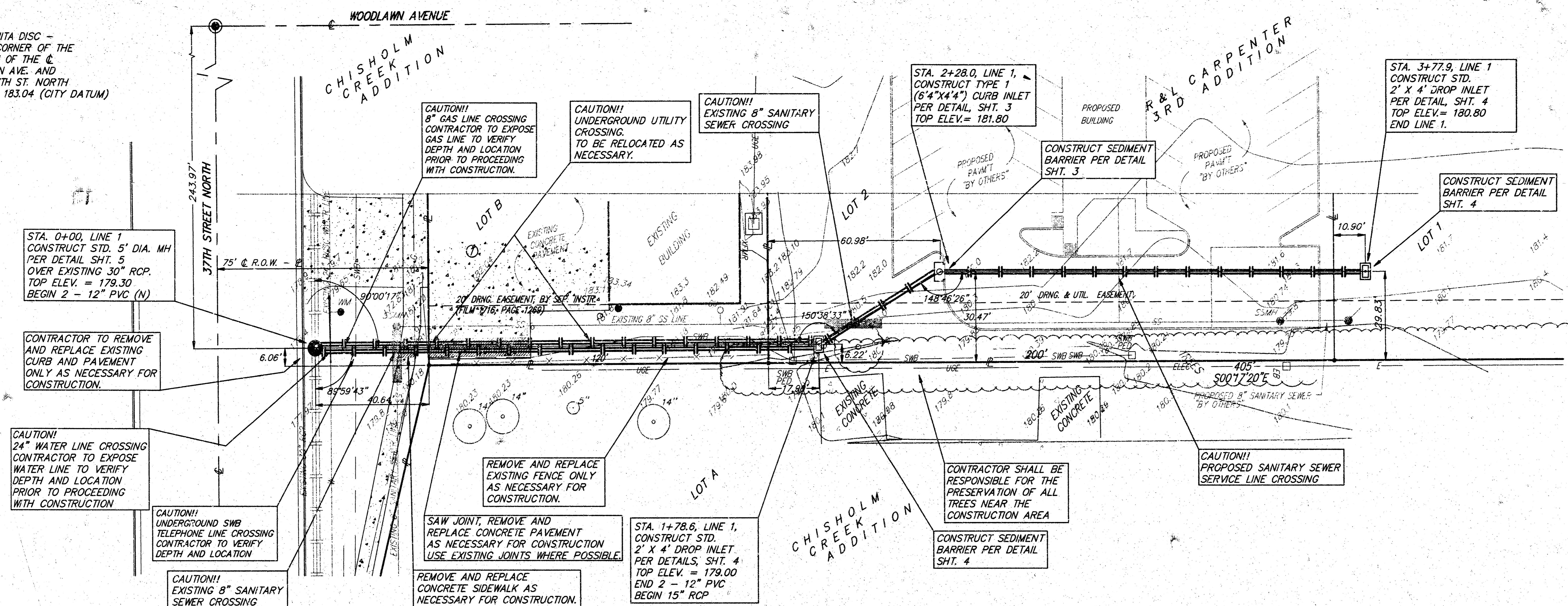
Storm Sewers VRH 1/21/98

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 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 (on file and available in the City Engineer's Office).

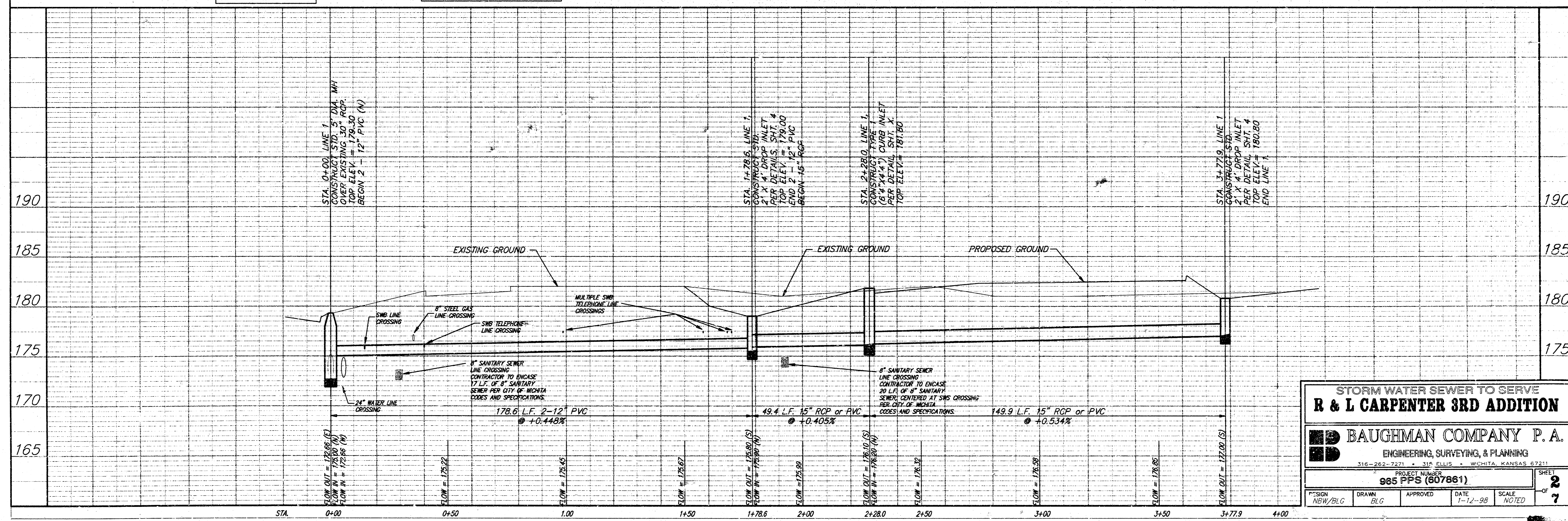


BENCHMARK:  
CITY OF WICHITA DISC -  
SOUTHEAST CORNER OF THE  
INTERSECTION OF THE C.  
OF WOODLAWN AVE. AND  
THE C. OF 37TH ST. NORTH  
ELEVATION = 183.04 (CITY DATUM)



SCALE:  
1" = 20' HORIZONTAL  
1" = 5' VERTICAL  
• = IRON

REVISED 1-20-98



STORM WATER SEWER TO SERVE  
**R & L CARPENTER 3RD ADDITION**

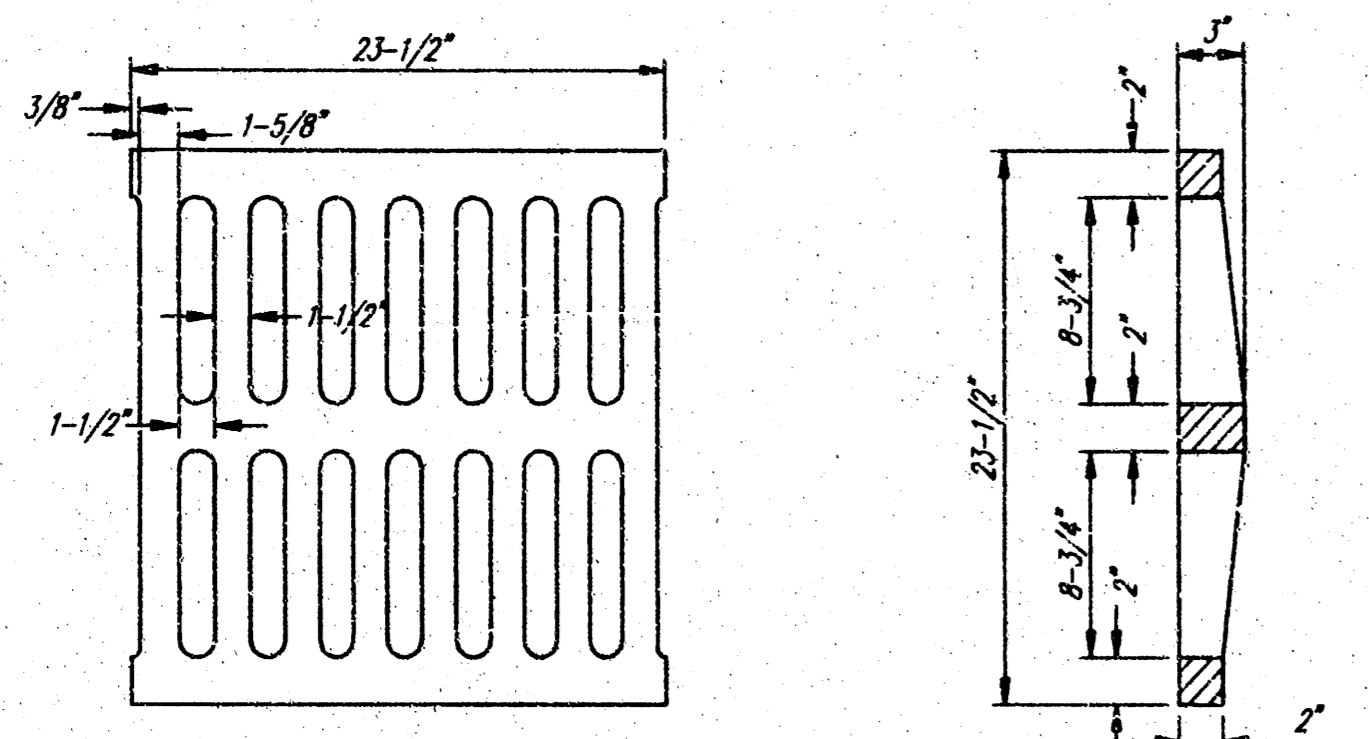
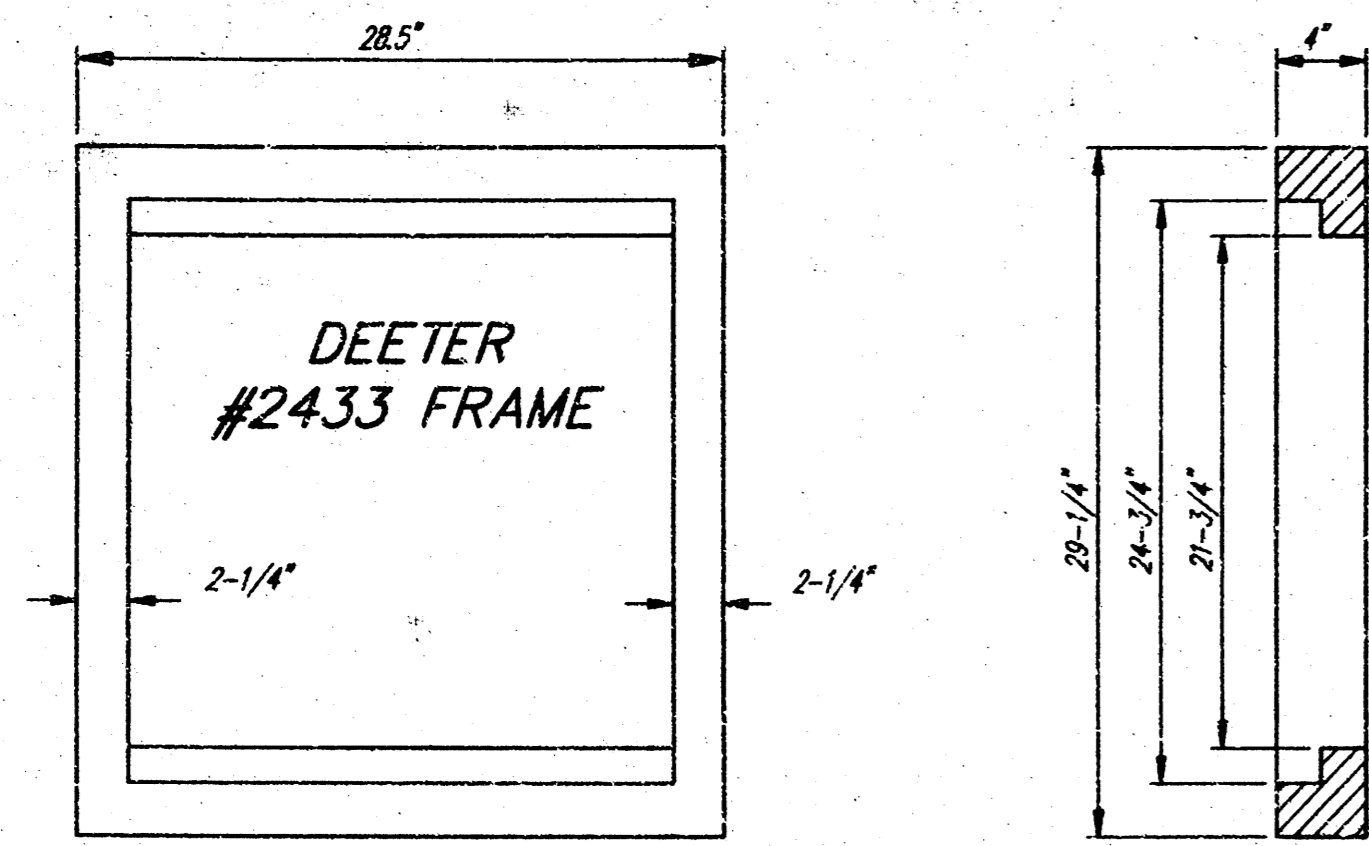
**BAUGHMAN COMPANY P.A.**  
ENGINEERING, SURVEYING, & PLANNING  
316-262-7271 • 315 ELLIS • WICHITA, KANSAS 67211

PROJECT NUMBER  
**985 PPS (607861)**

DESIGN: NEW/BLG  
DRAWN: BLG  
APPROVED: [Signature]  
DATE: 1-1-98  
SCALE: NOTED

SHEET  
2  
7

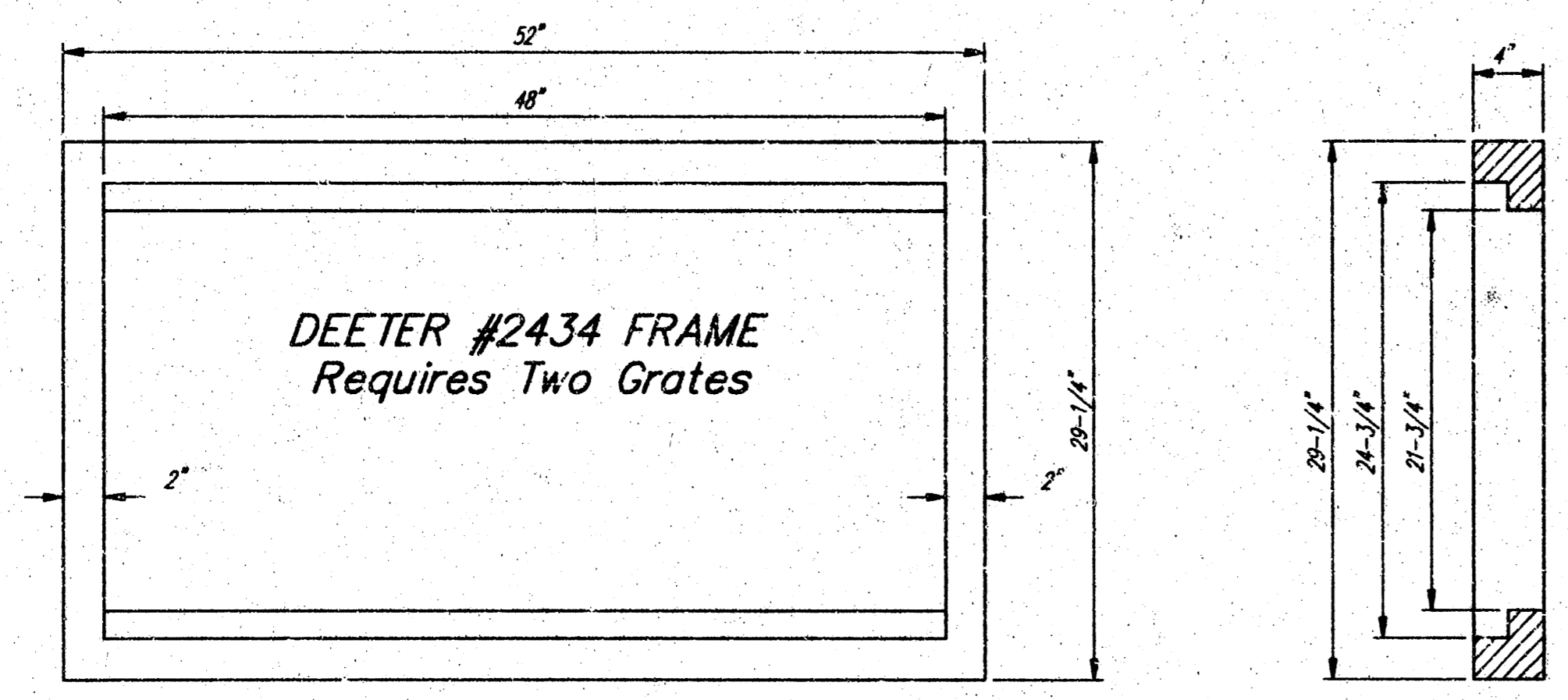




DEETER #2433 GRATE

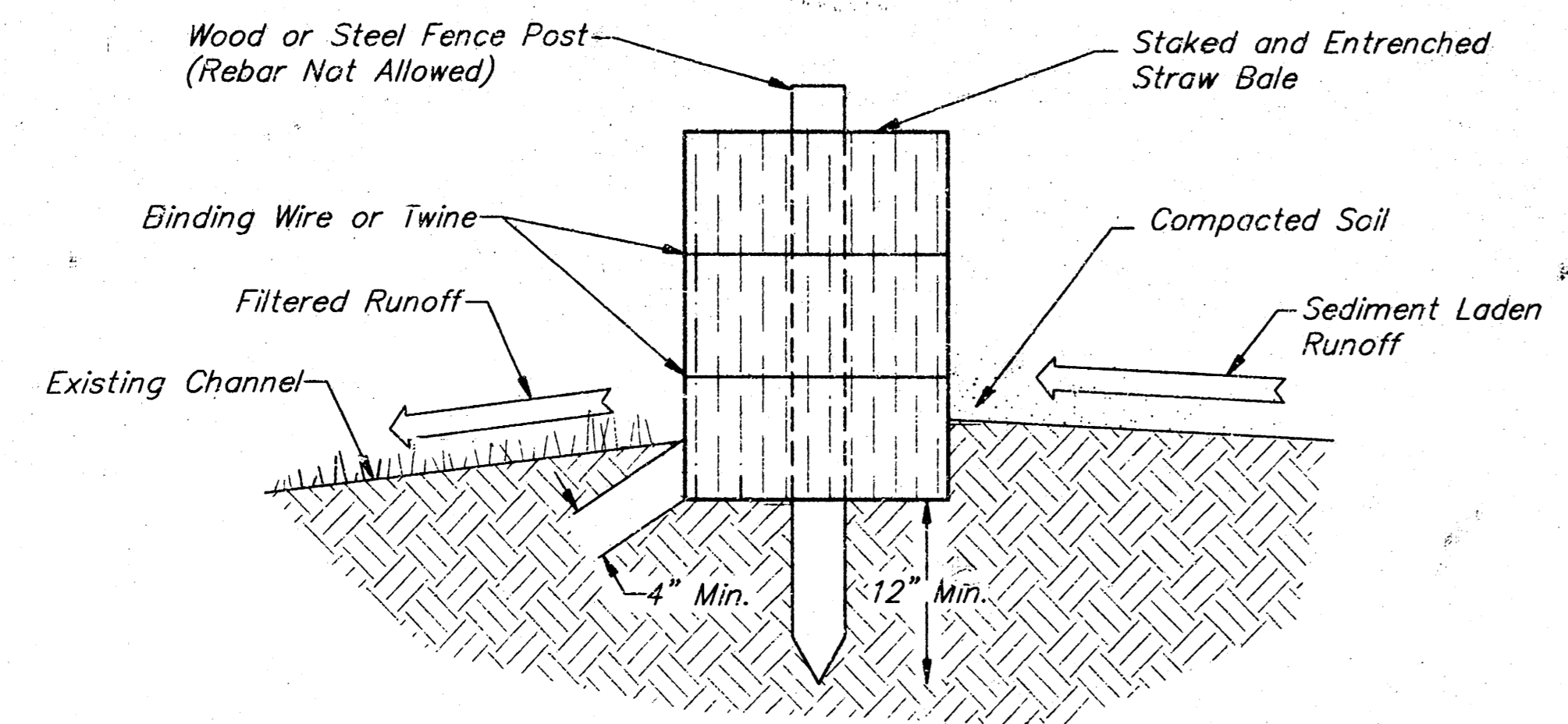
24" x 24" Frame and Grate Detail

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

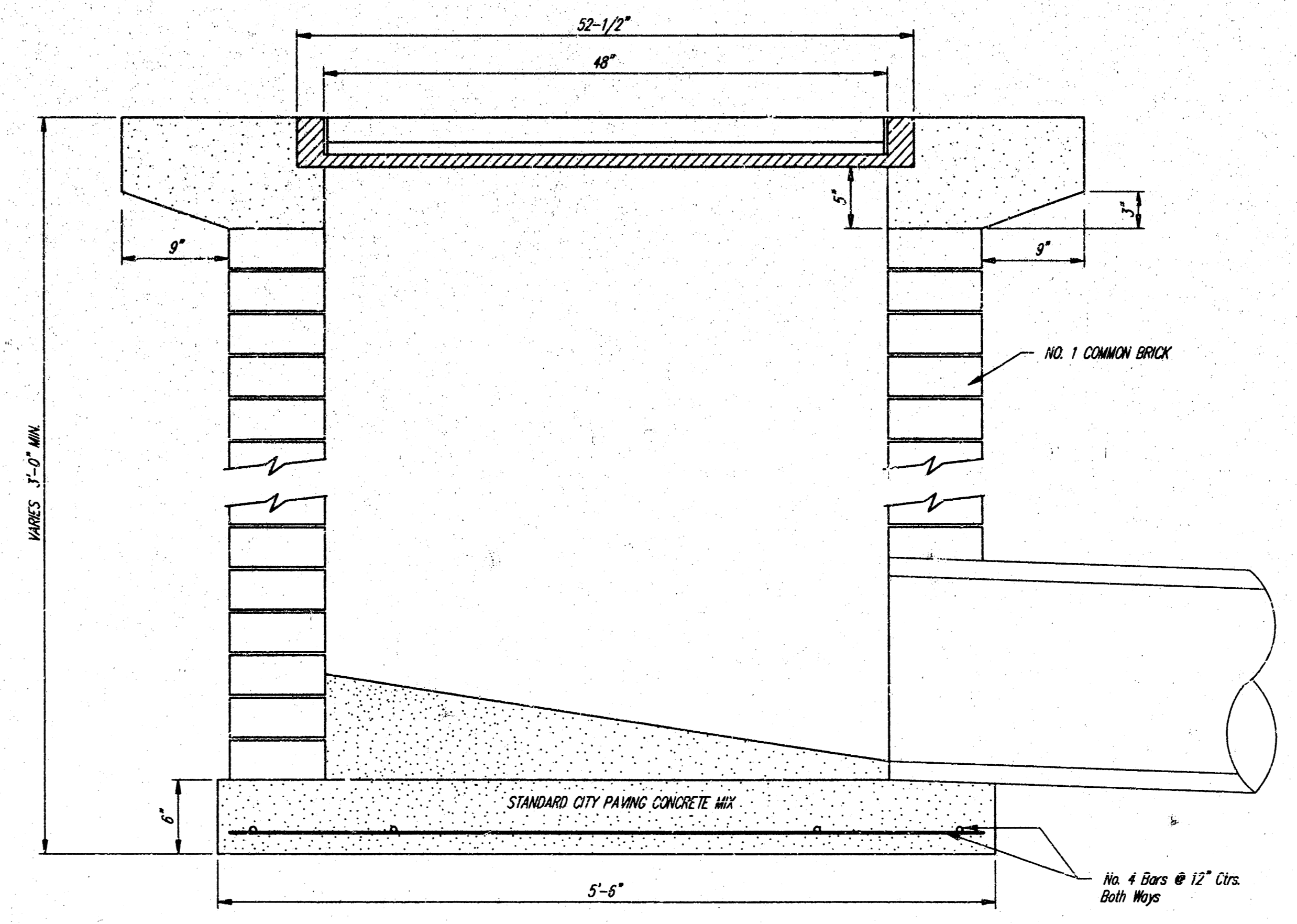
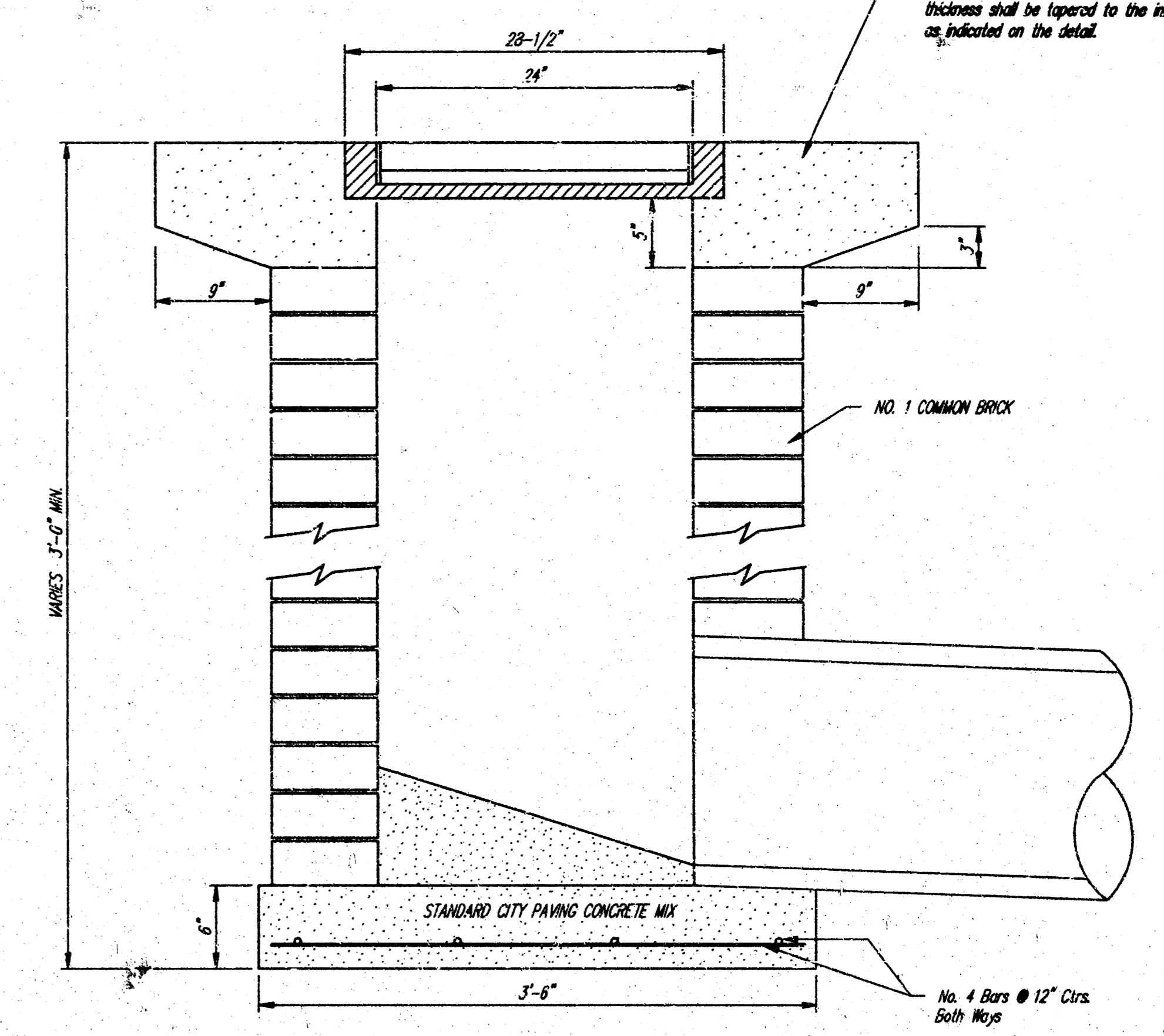
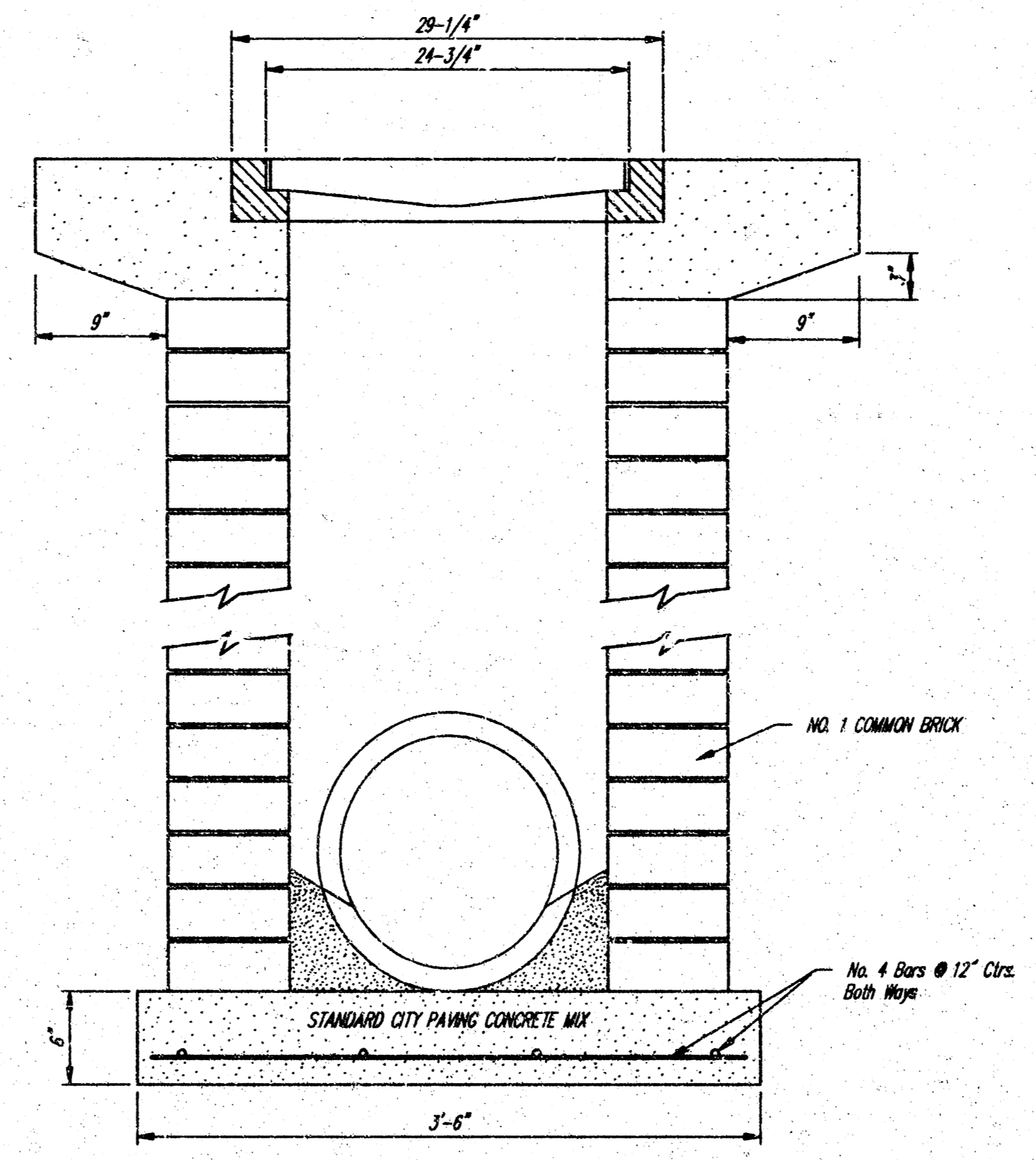


DEETER #2434 FRAME  
Requires Two Grates

Double 24" x 24" Frame Detail



Straw Bale Barrier Detail  
No Scale



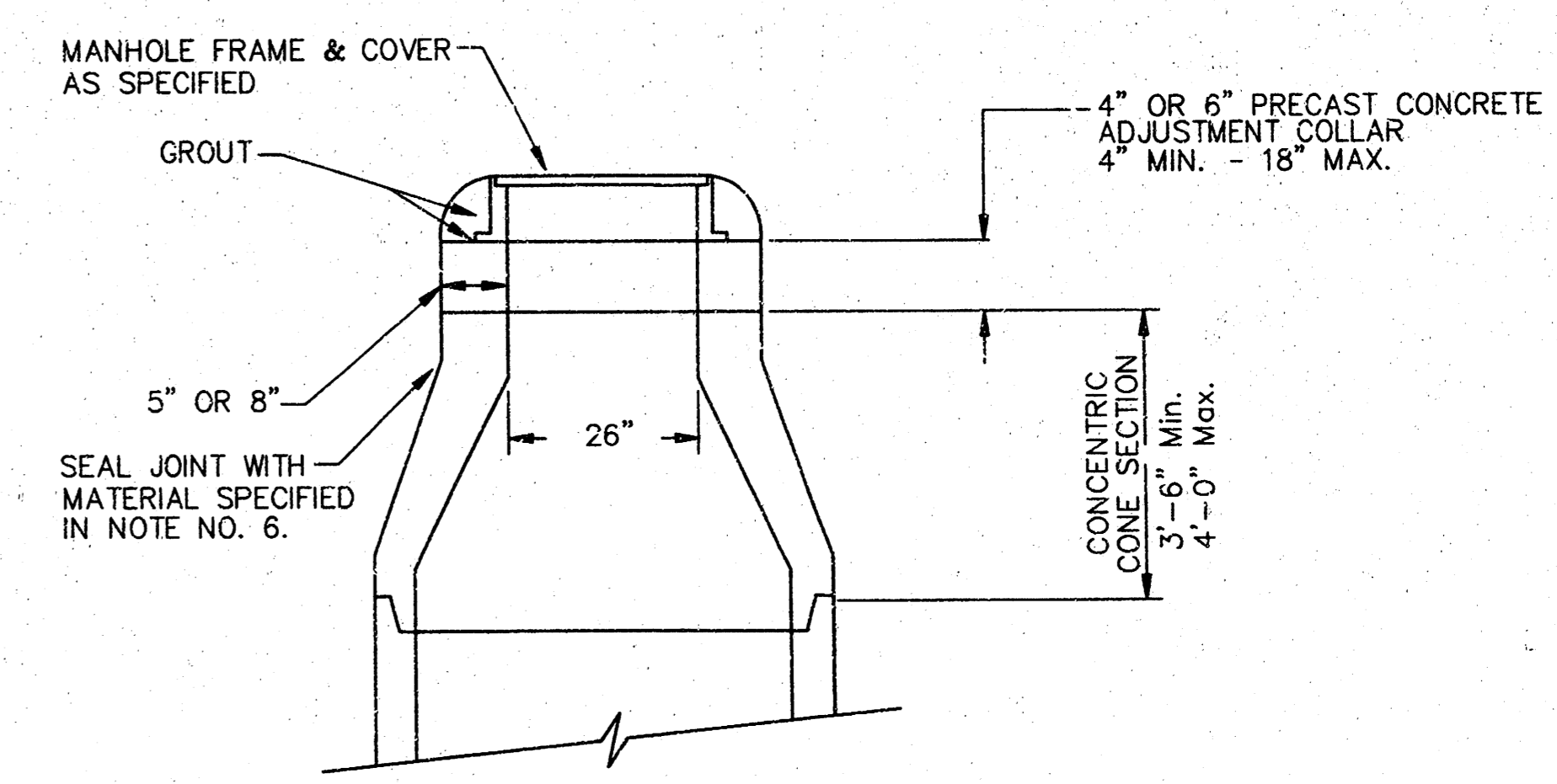
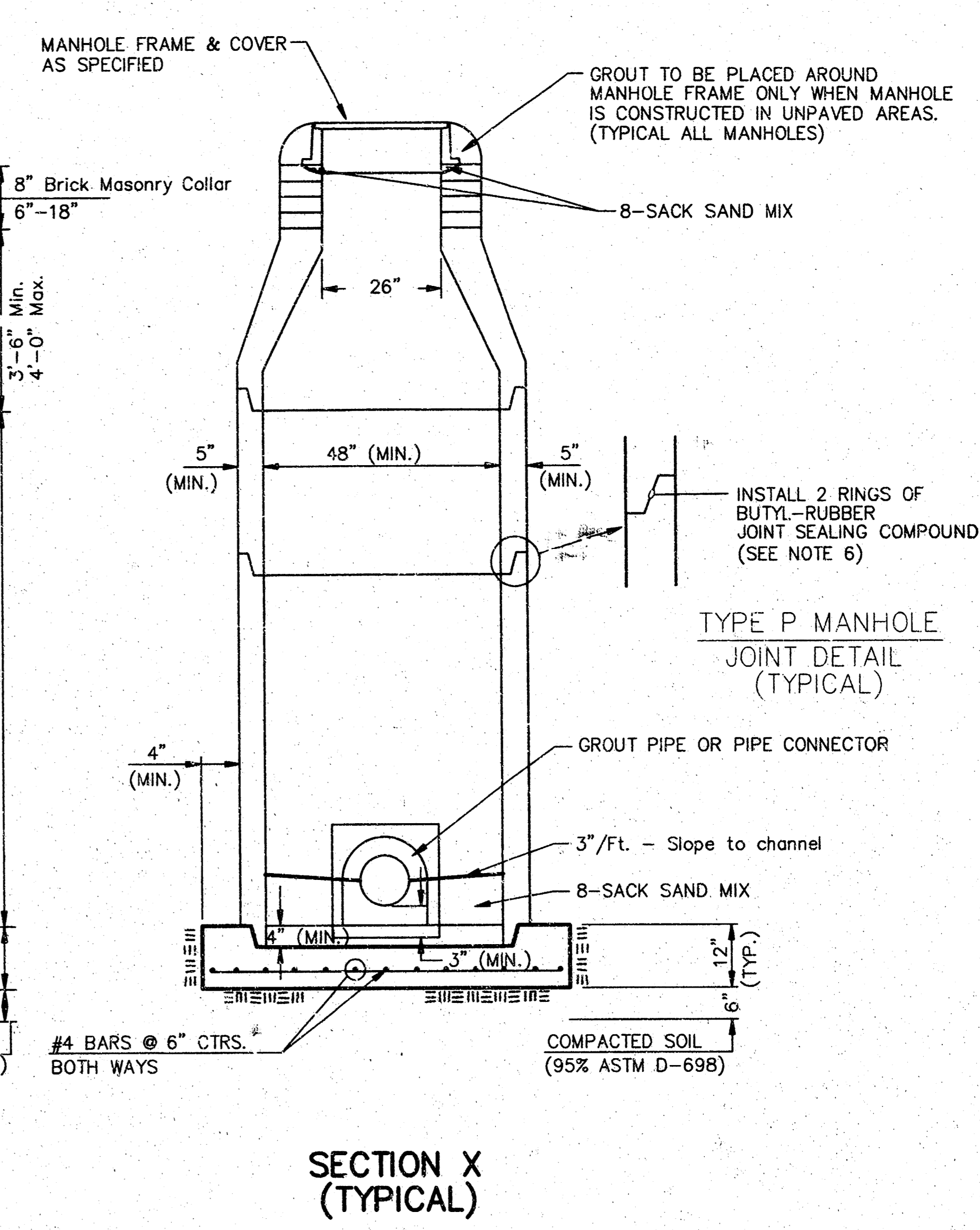
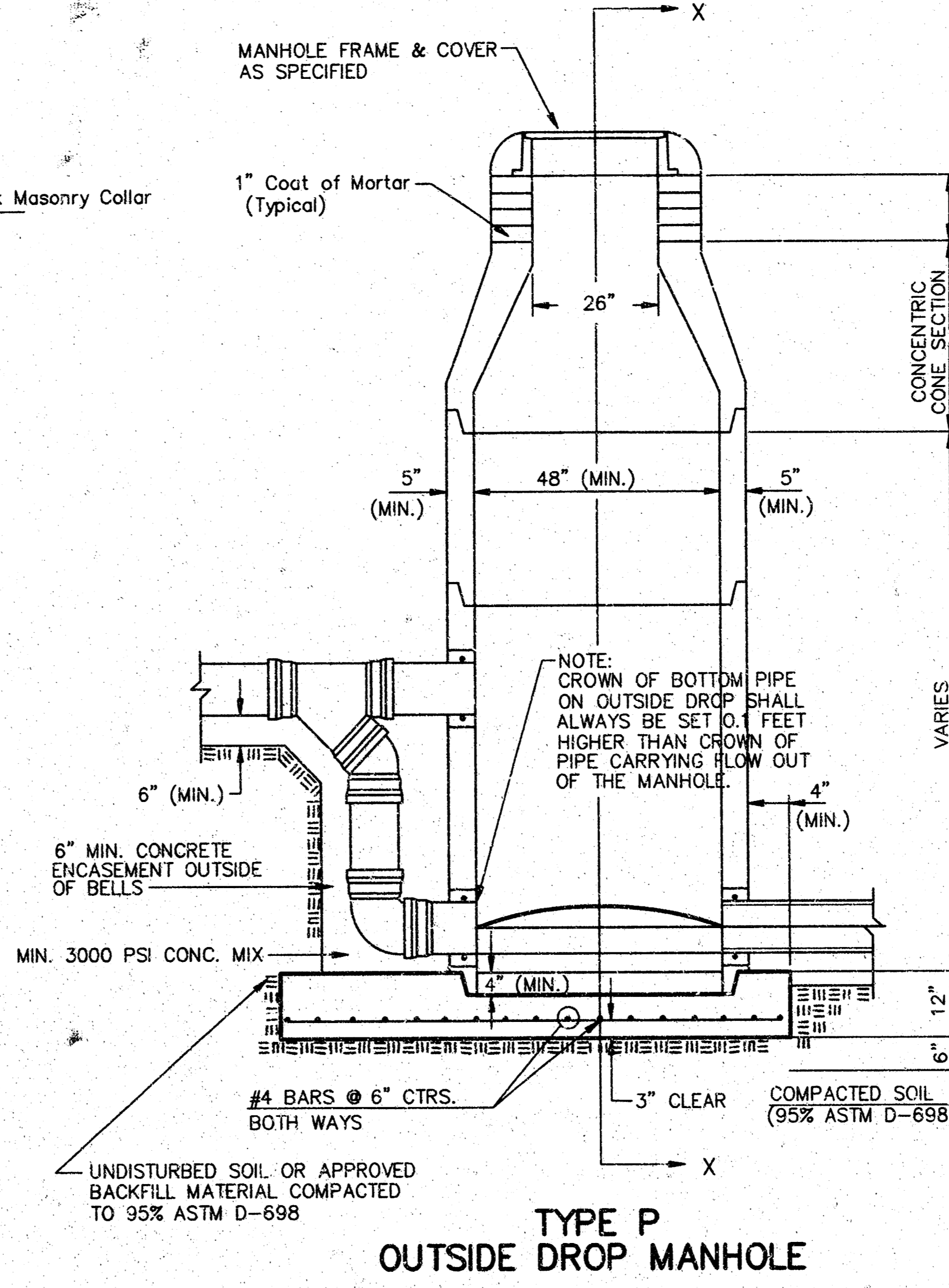
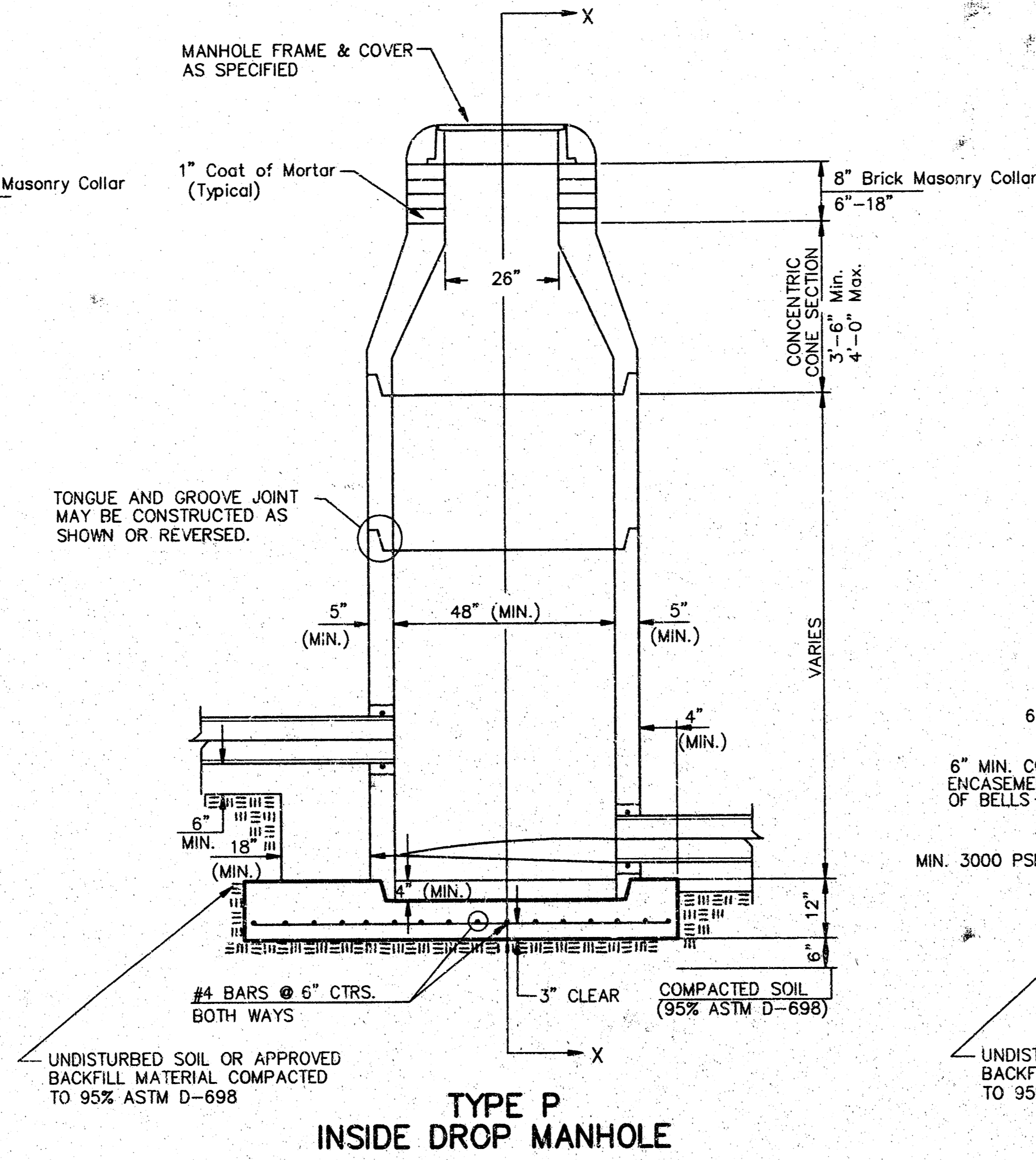
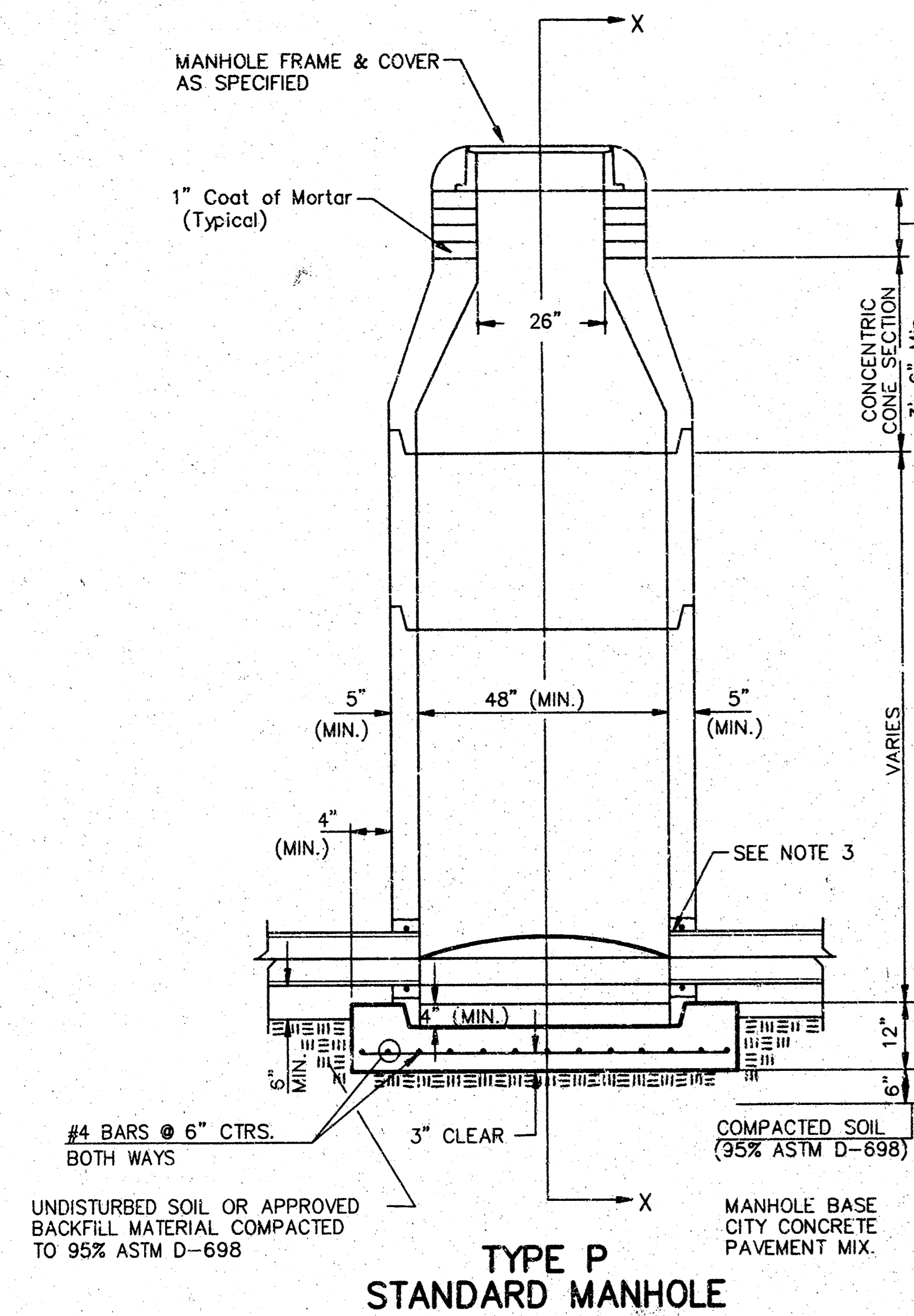
City of Wichita Standard  
**Drop Inlet**

**BAUGHMAN COMPANY P. A.**  
ENGINEERING, SURVEYING, & PLANNING  
318-262-7271 • 318 ELLIS • WICHITA, KANSAS 67211

PROJECT NUMBER  
**785 PPS (607861)**

DESIGN C.O.W.	DRAWN Staff	APPROVED	DATE 7-97	SCALE NONE	SHEET <b>4</b> OF <b>7</b>
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# SEWER APPURTENANCES DETAILS



- GENERAL NOTES**
- PRECAST MANHOLE NOTES**
- ALL PRECAST CONCRETE MANHOLE SECTIONS SHALL CONFORM TO THE LATEST REVISIONS OF A.S.T.M. C478 AS MODIFIED BY THE SPECIFICATIONS.
  - NON-SHRINK GROUT SHALL BE NON-METALLIC TYPE.
  - APPROVED FLEXIBLE WATERSTOP GASKETS SHALL BE INSTALLED TO JOIN THE SEWER TO THE MANHOLE WALL WHEN A.B.S. COMPOSITE PIPE OR P.V.C. PIPE IS USED. FOR OTHER TYPES OF PIPE THE SEWER SHALL BE GROUTED IN PLACE WITH NON-SHRINK GROUT. THE SEWER PIPE SHALL BE SUPPORTED WITH CONCRETE ENCASEMENT A MINIMUM OF 3 FEET FROM THE MANHOLE WALL AND TO THE FIRST JOINT FOR V.C.P. SUCH THAT THE JOINT REMAINS FLEXIBLE.
  - ALL INSIDE SURFACES OF THE CONCRETE MANHOLE WHICH WOULD BE EXPOSED TO SEWER GAS SHALL BE COATED WITH 2 COATS TNEC SERIES 66 HI-BUILD EPOXOLINE, DRY THICKNESS OF 8 MILS (MIN.)
  - EXTERIOR MANHOLE WALLS SHALL BE COATED WITH 1 COAT MOBILARMA 633 BITUMINOUS COATING.
  - JOINT SEALING COMPOUND SHALL BE KENT SEAL NO. 2 OR APPROVED EQUAL.
  - PRECAST MANHOLES SHALL BE SET AT LEAST 4 INCHES INTO THE MANHOLE BASE.
  - TOP OF MANHOLE FLOOR SLAB SHALL BE AT LEAST 3 INCHES BELOW THE FLOW LINE OF THE OUTLET PIPE TO INSURE SUFFICIENT MINIMUM THICKNESS OF SHAPED INVERT.
  - LIFTING HOLES SHALL BE FILLED WITH NON-SHRINK GROUT AND THE INTERIOR SURFACE COATED AS SPECIFIED.
  - 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 PAVING CONSTRUCTION AS SPECIFIED IN THE CITY STANDARD PAVING SPECIFICATIONS USING CITY CONCRETE PAVERMENT 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. 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.

- 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 AT LEAST 3" 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.
- OPENINGS SHALL BE CUT INTO THE MANHOLE WALL WHEN OUTSIDE DROPS ARE CONSTRUCTED ON EXISTING MANHOLES. SUCH OPENINGS CUT INTO EXISTING MANHOLES SHALL BE AS SMALL AS PRACTICAL TO FACILITATE INSTALLING AND GROUTING THE NEW PIPE IN PLACE. WATERSTOP GASKETS SHALL BE USED WITH P.V.C. AND A.B.S. COMPOSITE PIPE. THE NEW PIPE SHALL BE GROUTED INTO THE OPENING USING AN APPROVED NONSHRINK GROUT FOR THE FULL MANHOLE WALL THICKNESS. THE EXTERIOR OF THE COMPLETED CONNECTION SHALL BE SEALED WITH AN APPROVED BITUMINOUS COATING SUCH THAT THE CONNECTION WILL BE WATER TIGHT. FLOOR OF MANHOLE SHALL BE MODIFIED TO FORM NEW FLOW CHANNEL FOR THE NEW CONNECTION AS INDICATED BY THE DRAWING. THIS WORK, INCLUDING MODIFICATION OF MANHOLE FLOOR, SHALL BE PAID FOR AT THE UNIT PRICE BID FOR OUTSIDE DROP STACK CONSTRUCTED ON EXISTING MANHOLE.
- 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 INFLOWING PIPES AND THE OUTFLOWING PIPE AS SHOWN BY THE DRAWINGS EXCEPT FOR INSIDE DROP MANHOLES. FLOW CHANNELS FOR INSIDE DROP MANHOLES SHALL BE CONSTRUCTED AS INDICATED BY THE DRAWING. 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 NEAT LINES FOR THE FULL INSIDE DIAMETER OF THE MANHOLE. MANHOLE FLOORS SHALL THEN BE SHAPED AROUND THE BOTTOM HALF OF THE PIPE WHICH FORMS THE FLOW CHANNEL.
- 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.

- 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.
- THE VERTICAL DROP IN INSIDE DROP MANHOLES SHALL NOT EXCEED 2' FOR INFLOWING PIPES SIZED 12" OR SMALLER AND 2' FOR INFLOWING PIPES LARGER THAN 12". THE CROWNS OF INFLOWING PIPES SHALL NEVER BE SET LOWER THAN THE CROWN OF THE OUTFLOWING PIPE.
- STANDARD MANHOLES AND STANDARD INSIDE DROP MANHOLES SHALL BE BID AS STANDARD MANHOLES FOR THE TYPE AND DIAMETER INDICATED. OUTSIDE DROP MANHOLES SHALL BE BID AS STANDARD OUTSIDE DROP MANHOLES FOR THE TYPE AND DIAMETER INDICATED. ALL MANHOLE DIAMETERS WILL BE 4' UNLESS INDICATED OTHERWISE.
- A BRICK MASONRY COLLAR SHALL BE INSTALLED BETWEEN THE CAST IRON FRAME AND THE CONCENTRIC CONE. THE COLLAR WILL HAVE 8" WALLS AND A VERTICAL HEIGHT OF 6" MINIMUM AND 18" MAXIMUM. A 1" COAT OF MORTAR WILL BE PLASTERED ON THE OUTSIDE OF THE COLLAR. THE USE OF PRE-CAST CONCRETE SPACERS FOR MANHOLE TOP ADJUSTMENT IS ALSO ALLOWED.

CITY OF WICHITA  
**STD. MANHOLE DETAILS**  
 & SEWER APPURTENANCES DETAIL

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

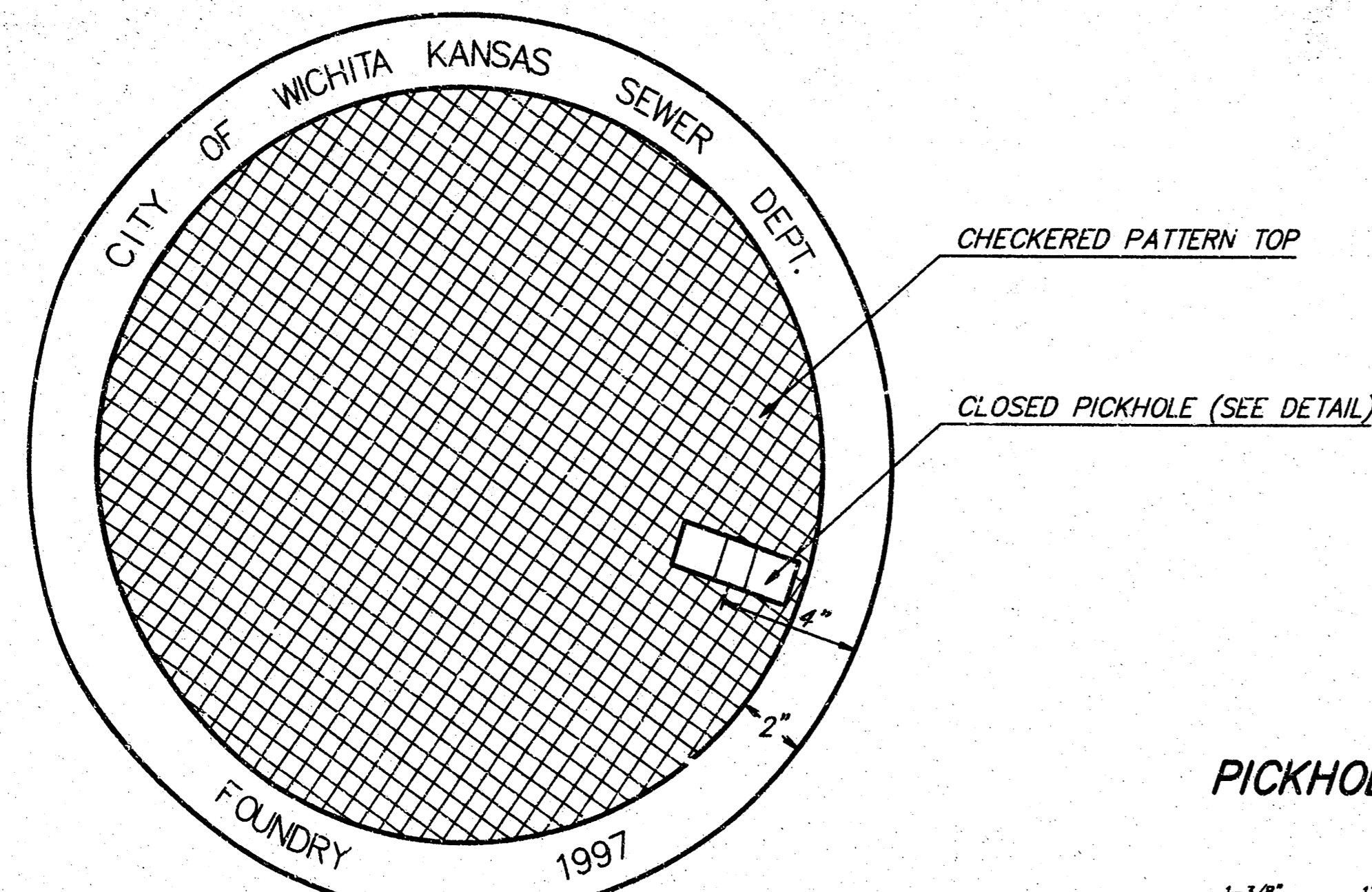
316-262-7271 • 315 ELLIS • WICHITA, KANSAS 67211

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

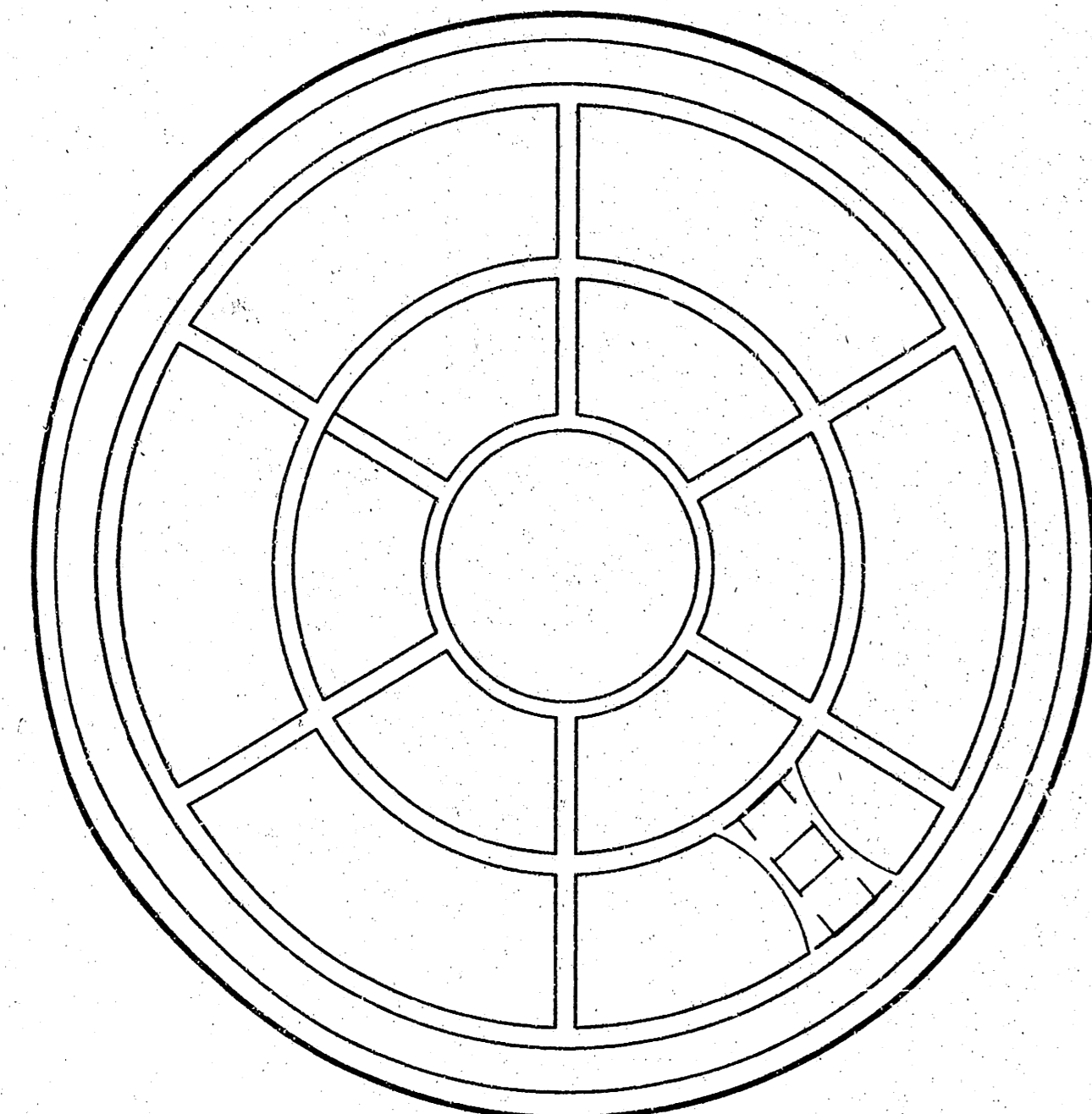
DESIGN: C.O.W. DRAWN: Staff APPROVED: \_\_\_\_\_ DATE: \_\_\_\_\_ SCALE: \_\_\_\_\_

SHEET 3 OF 7

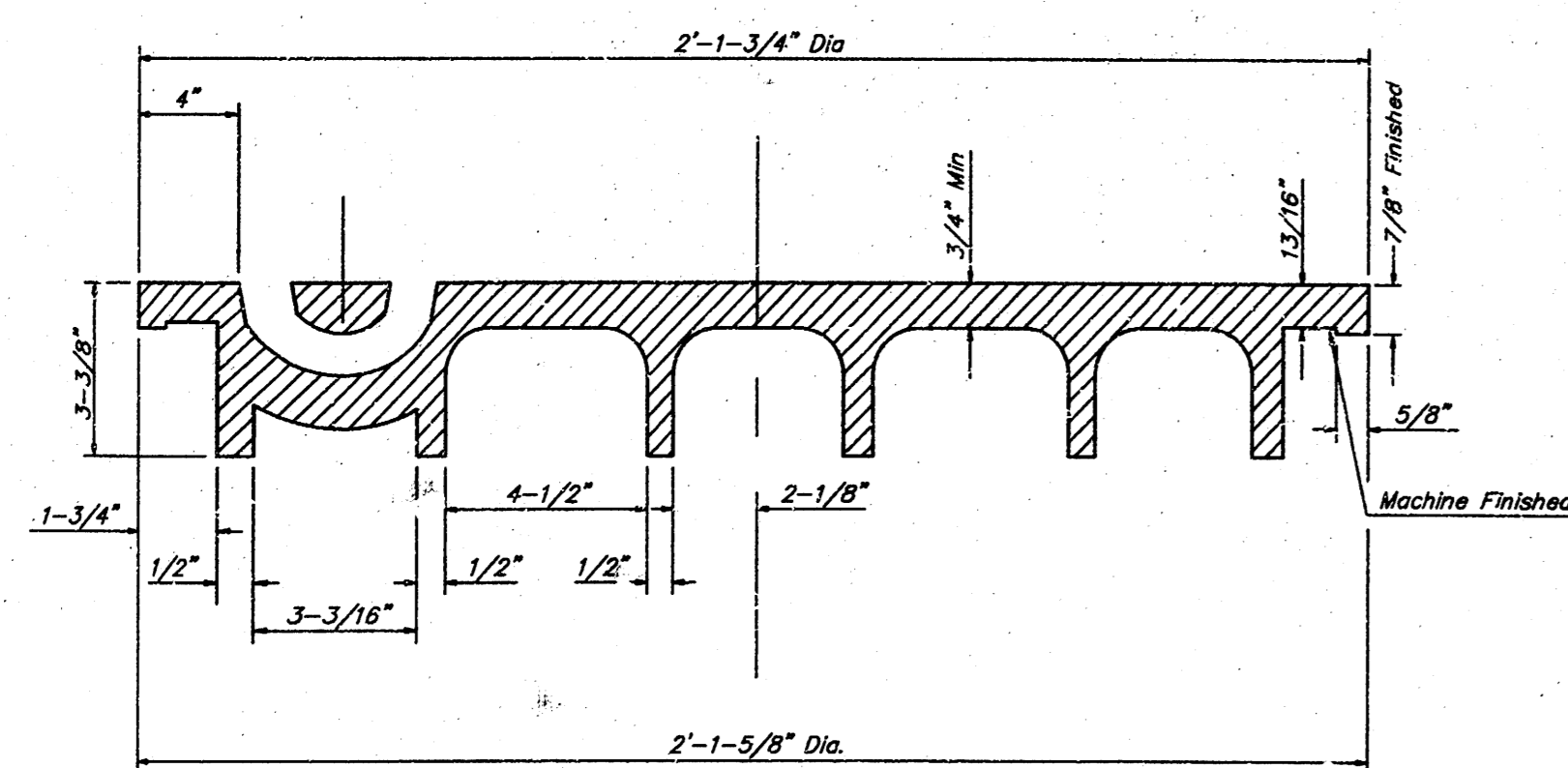
**MANHOLE COVER**  
Weight = 180 Lbs.



TOP VIEW



BOTTOM VIEW

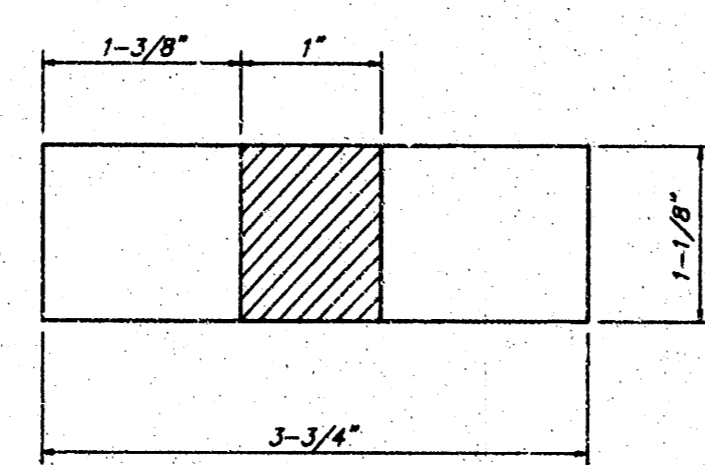


SECTION VIEW

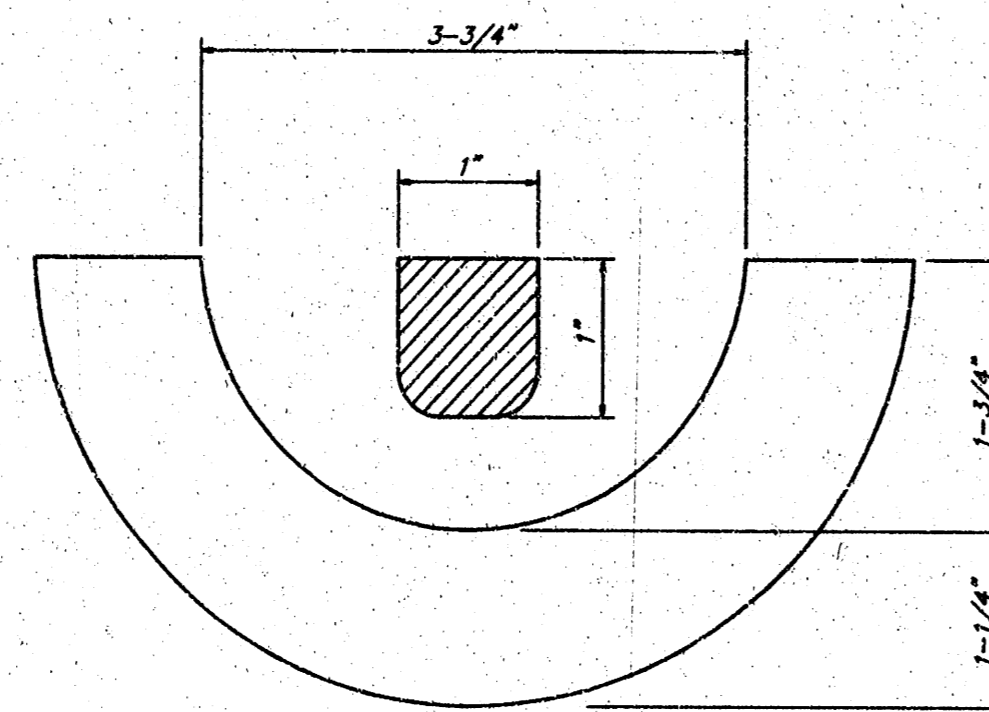
# MANHOLE FRAME AND COVER DETAIL

ADOPTED AS STANDARD DESIGN BY  
CITY OF WICHITA, KANSAS

PICKHOLE DETAIL

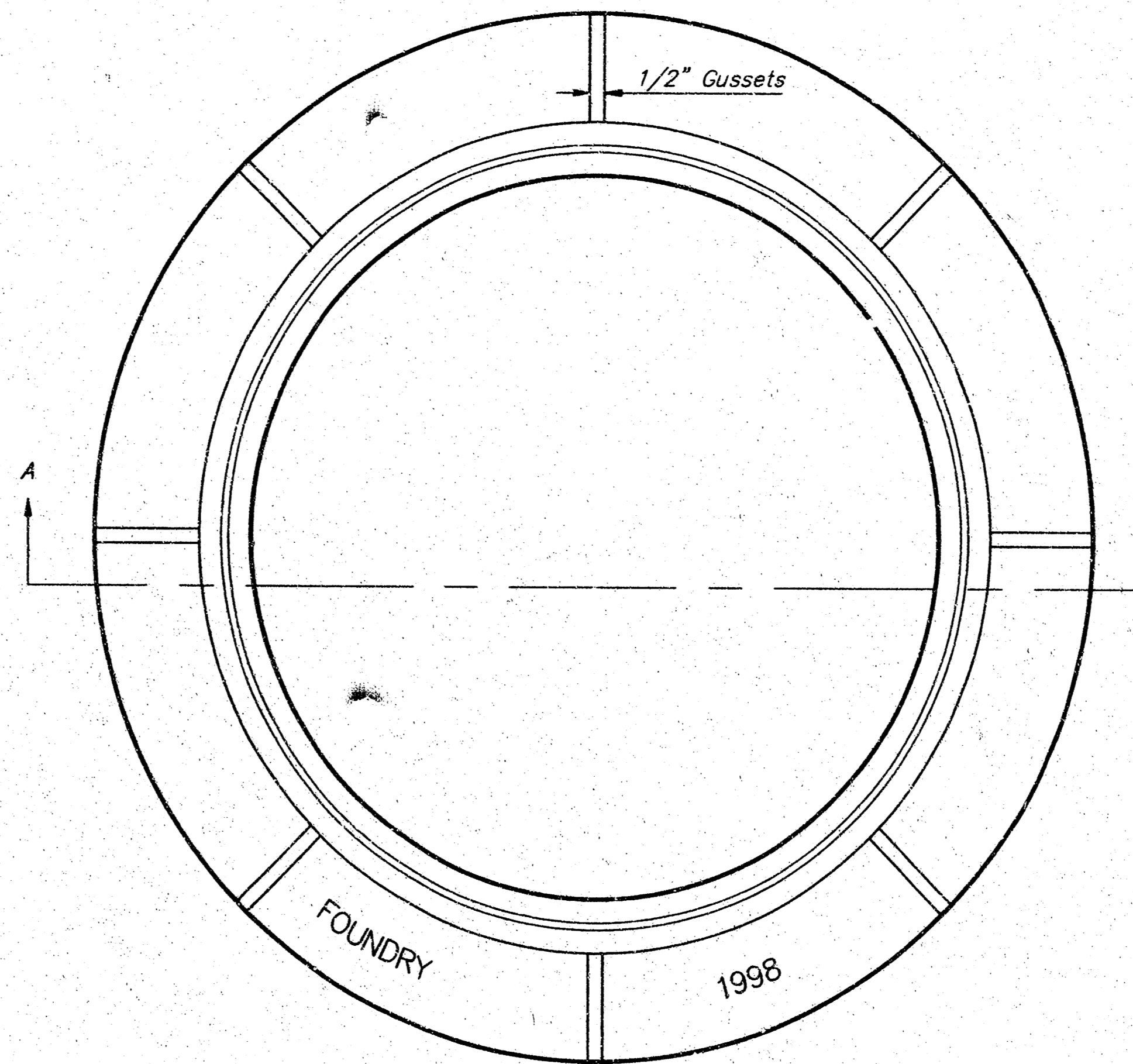


TOP VIEW

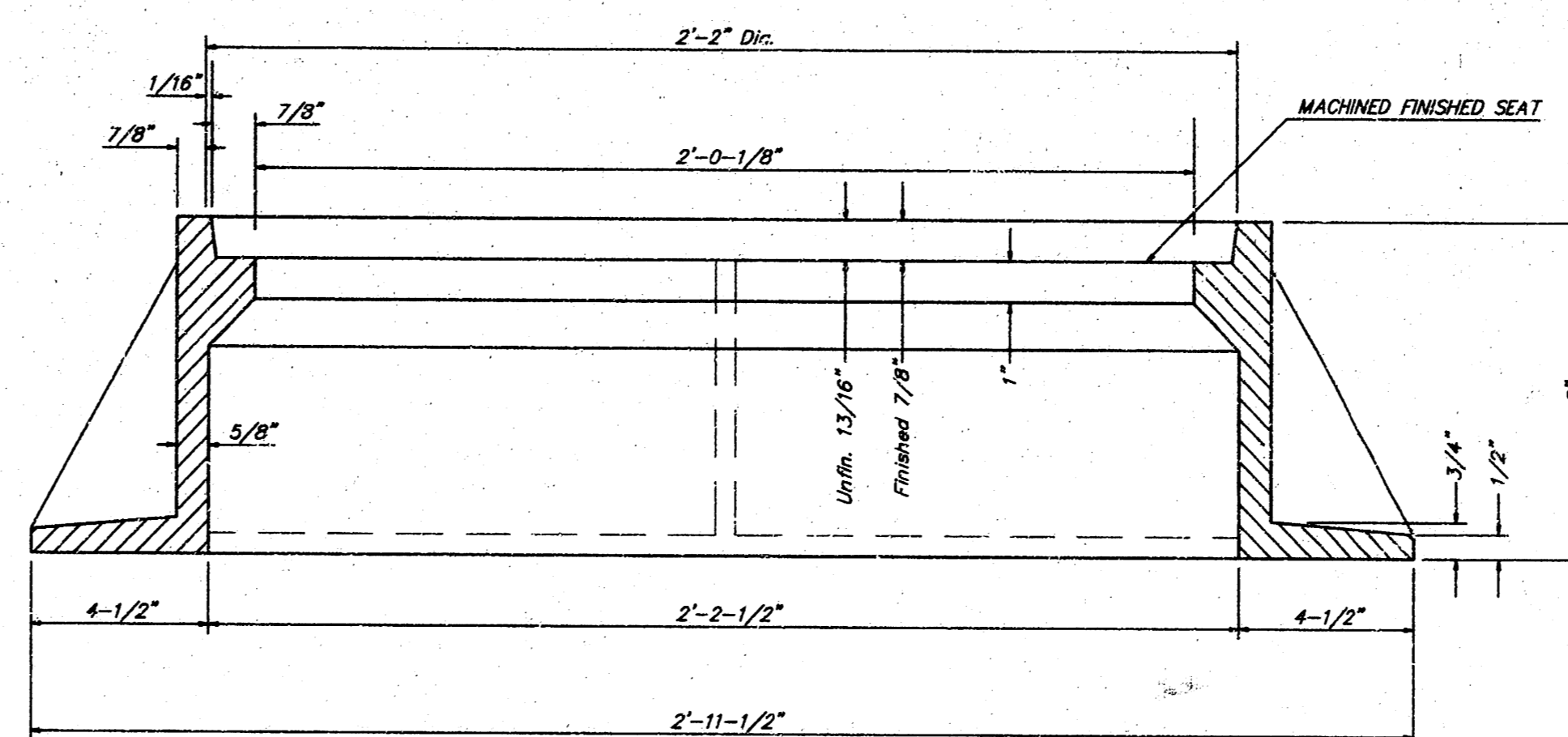


SECTION VIEW

**MANHOLE FRAME**  
Weight = 240 Lbs.



TOP VIEW



SECTION A-A

## GENERAL NOTES

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.

MANHOLE CASTINGS SHALL BE COATED WITH AN ASPHALT PAINT RESULTING IN A SMOOTH, TOUGH AND TENACIOUS COATING WHICH IS NOT BRITTLE OR TACKY.

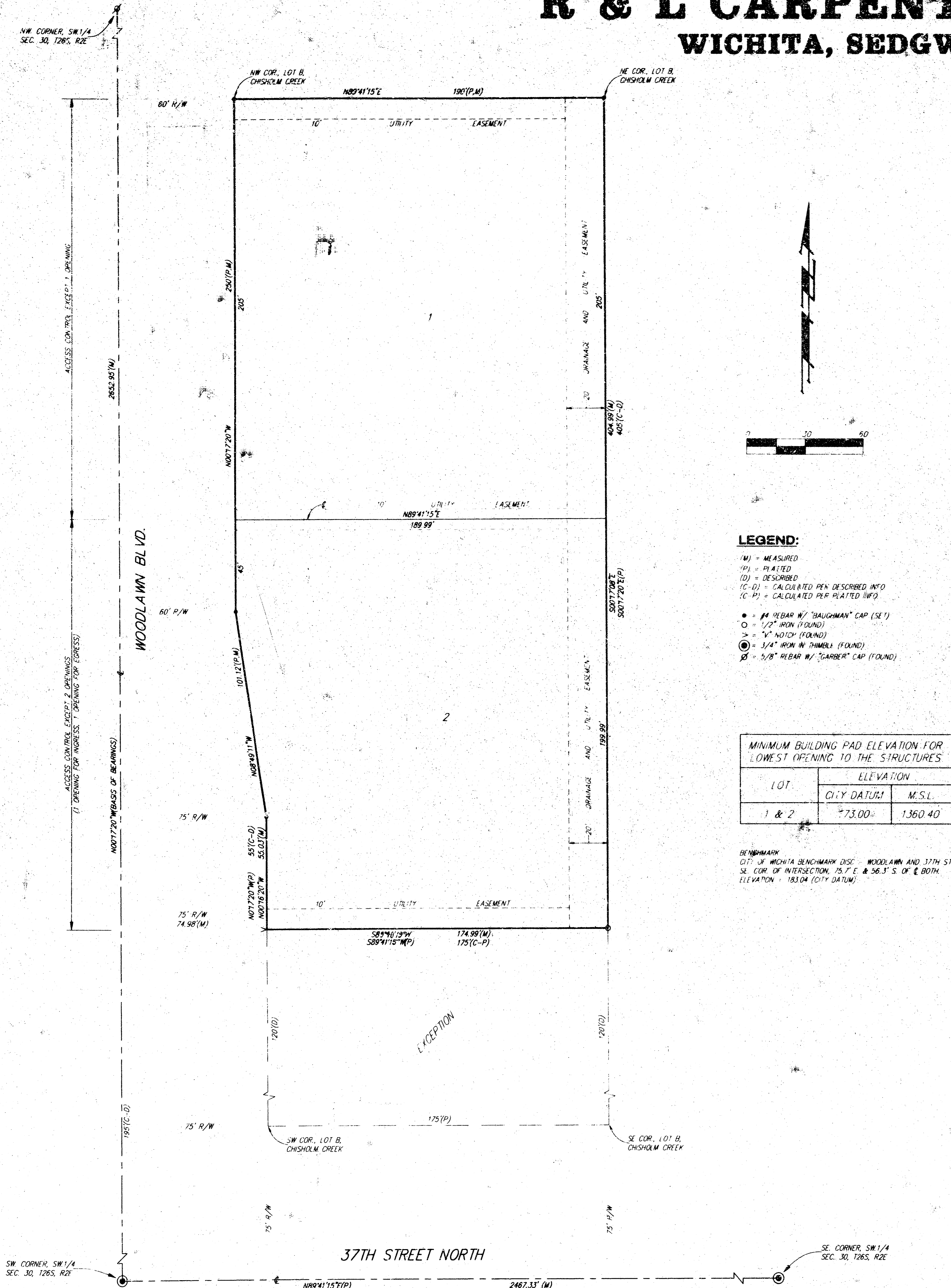
MANHOLE CASTINGS SHALL BE MANUFACTURED SUCH THAT A COVER MANUFACTURED BY ANY ONE FOUNDRY WILL FIT INTERCHANGEABLY INTO A FRAME MANUFACTURED BY ANOTHER FOUNDRY AND STILL MEET ALLOWABLE CLEARANCES AND NON-ROCKING REQUIREMENTS. THIS WILL REQUIRE MANUFACTURING OF THE MATCHING FACES ON THE COVER AND THE FRAME TO CLOSE TOLERANCES.

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 AS THESE SURFACES SHALL MAKE FULL CONTACT FOR THEIR FULL CIRCUMFERENCE TO PRECLUDE THE COVER FROM ROCKING IN THE FRAME.

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 INCH 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.

MANHOLE FRAME AND COVER DETAIL					
ADOPTED AS STANDARD DESIGN BY CITY OF WICHITA, KANSAS					
<b>BAUGHMAN COMPANY P. A.</b> ENGINEERING, SURVEYING, & PLANNING 316-262-2271 315 E. 15th St. WICHITA, KANSAS 67211					
PROJECT NUMBER <b>785 PPS (607861)</b>					
DESIGN	DRAWN	APPROVED	DATE	SCALE	SHEET
	Staff			As Shown	6 OF 7

# R & L CARPENTER 3RD ADDITION WICHITA, SEDGWICK COUNTY, KANSAS



**LEGEND:**  
 (M) = MEASURED  
 (P) = PLATTED  
 (D) = DESCRIBED  
 (C-D) = CALCULATED PER DESCRIBED INFO  
 (C-M) = CALCULATED PER PLATTED INFO

• = #4 REBAR W/ "BAUGHMAN" CAP (SET)  
 ○ = 1/2" IRON (FOUND)  
 + = "X" NOTCH (FOUND)  
 ⊙ = 3/4" IRON IN THIMBLE (FOUND)  
 ⊗ = 5/8" REBAR W/ "GARBER" CAP (FOUND)

LOT	ELEVATION	
	CITY DATUM	M.S.L.
1 & 2	73.00	1360.40

BY BENCHMARK  
 QTY. OF WICHITA BENCHMARK DISC: WOODLAWN AND 37TH ST. NO.  
 SE COR. OF INTERSECTION, 75.7' E & 36.3' S OF E. 80TH.  
 ELEVATION = 183.04 (CITY DATUM)

State of Kansas) SS We, Baughman Company P.A., Surveyors in aforesaid  
 Sedgwick County) do hereby certify that we have surveyed and platted  
 "R & L CARPENTER 3RD ADDITION", Wichita, Sedgwick County, Kansas, and  
 that the accompanying plat is a true and correct exhibit of the property  
 surveyed, described as and being a replat of Lot B, except the South 120 feet  
 thereof, Block 1, Chisholm Creek Addition to Sedgwick County Kansas.

All being situated in the SW 1/4 of Sec. 30, Twp. 26-S,  
 R-2-E of the 6th P.M., Sedgwick County, Kansas.

Existing public easements and dedications being  
 vacated by virtue of K.S.A. 12-512(b).

Baughman Co., P.A.

Michael G. Conrey, Surveyor  
 18-07-825-97

Know all men by these presents that we, the undersigned, have caused the land in the surveyors certificate to be platted into Lots to be known as "R & L CARPENTER 3RD ADDITION", Wichita, Sedgwick County, Kansas. The utility easements are hereby granted as indicated for the construction and maintenance of all public utilities. The drainage and utility easement is hereby granted as indicated for drainage purposes and for the construction and maintenance of all public utilities. All egress rights of access to or from Woodlawn Blvd. over and across the west line of Lots 1 and 2 are hereby granted to the City of Wichita, Kansas provided, however, that Lot 1 shall have access to Woodlawn Blvd. at one location and Lot 2 shall have access to Woodlawn Blvd. at two locations, (one opening for ingress and one opening for egress), all as shall be determined by the City Engineer of the City of Wichita, Kansas. The Minimum Building Pad Elevation for the lowest opening to the structures for Lots 1 and 2 shall be 173.00 City Datum (1360.40 M.S.L.).

R & L Carpenter Enterprises, LLC

Roger L. Carpenter, Member  
 Roger L. Carpenter

State of Kansas) SS The foregoing instrument acknowledged before  
 Montgomery County) me, this 26th day of August, 1997, by Roger L. Carpenter,  
 Member of R & L Carpenter Enterprises, LLC, on behalf of the company.

Paula J. Mansfield, Notary Public  
 My App'l. Exp. 10-13-98

This plat of "R & L CARPENTER 3RD ADDITION", an Addition to Wichita, Sedgwick County, Kansas has been submitted to and approved by the Wichita-Sedgwick County Metropolitan Area Planning Commission, Wichita, Kansas. Dated this 14th day of June, 1997. Wichita-Sedgwick County Metropolitan Area Planning Commission

John C. Frye, Chairman  
 Marvin S. Krout, Secretary

This plat approved and all dedications shown hereon accepted by the City Council of the City of Wichita, Kansas, this 23rd day of September, 1997.

Bob Knight, Mayor  
 Pat Burnett, City Clerk

Entered on transfer record this 15th day of October, 1997.

James Alford, County Clerk  
 James Alford

State of Kansas) SS This is to certify that this plat has been  
 Sedgwick County) filed for record in the office of the Register of Deeds, this 15th day  
 of October, 1997, at 4:30 o'clock P.M. and is duly recorded.

Larry Consover, Register of Deeds  
 Micheal D. Hurtt, Deputy

#1639610

BAUGHMAN COMPANY P. A.  
 ENGINEERING, SURVEYING, & PLANNING  
 (316)-262-7271 • 315 ELLIS • WICHITA, KANSAS 67211

SHEET 7 OF 7

10 40 91