

**LATERAL 3, MAIN 8, S.W.I.**  
**SANITARY SEWER EXTENSION TO SERVE**  
**J.W. RUSSELL 2ND ADDITION**  
**CITY OF WICHITA, KANSAS**

Michael E. Lindebak, P.E. City Engineer

Project Number  
**468-82844**  
 Index Code  
**743567**

**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

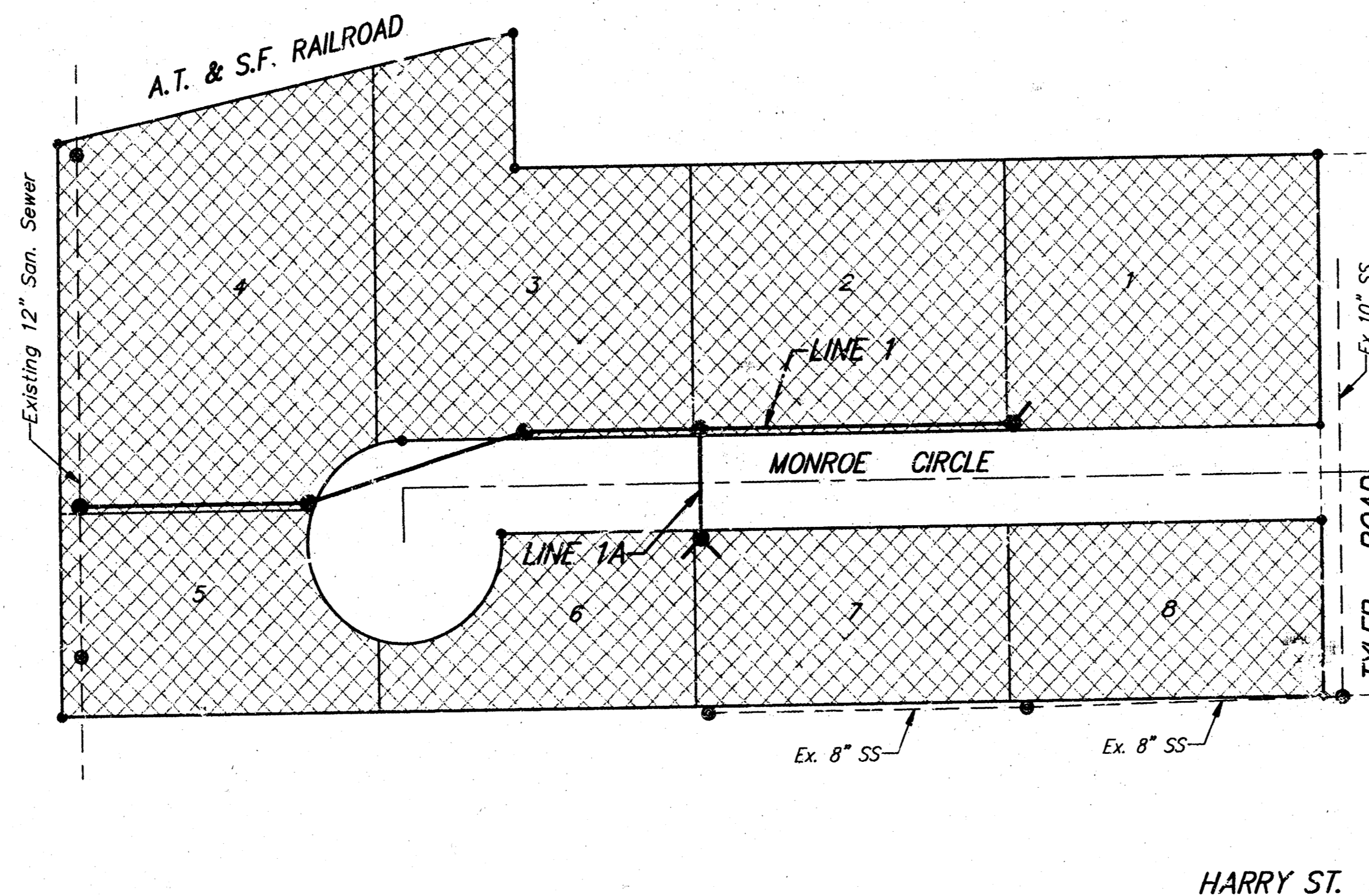
The Contractor must notify the following in case of an emergency:

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

4. The Contractor shall be responsible for maintaining continuous flow of sewage through construction. Contractor's proposed method for maintaining sewage flow shall be approved by the Engineer. Cost of maintaining flow of sewage through construction will not be paid for directly and this cost shall be considered as subsidiary to the other pay items of work.



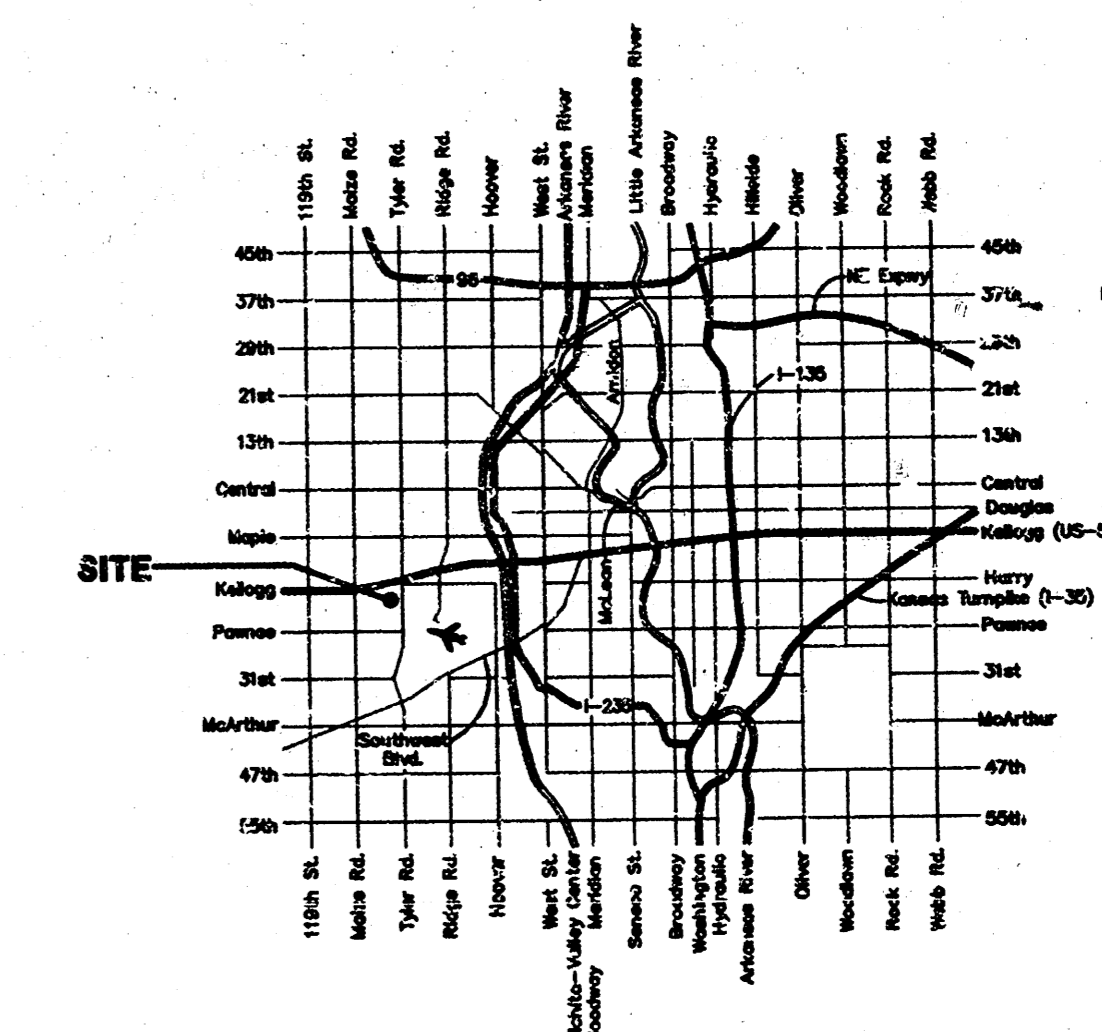
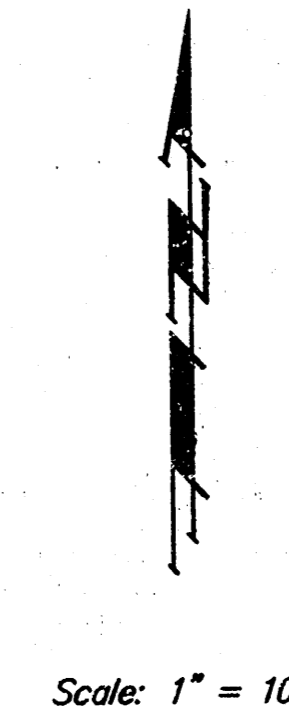
Benefit District:

**BENCHMARK:**

City of Wichita Disc SW Corner  
 of Tyler & Harry 44' West &  
 39' South of Center Line.  
 Elevation = 141.55

**INDEX:**

Title Sheet	1
Line 1 & Line 1A	2
Standard Manhole Detail	3
MH Cover & Frame Detail	4
Copy of Plat	5

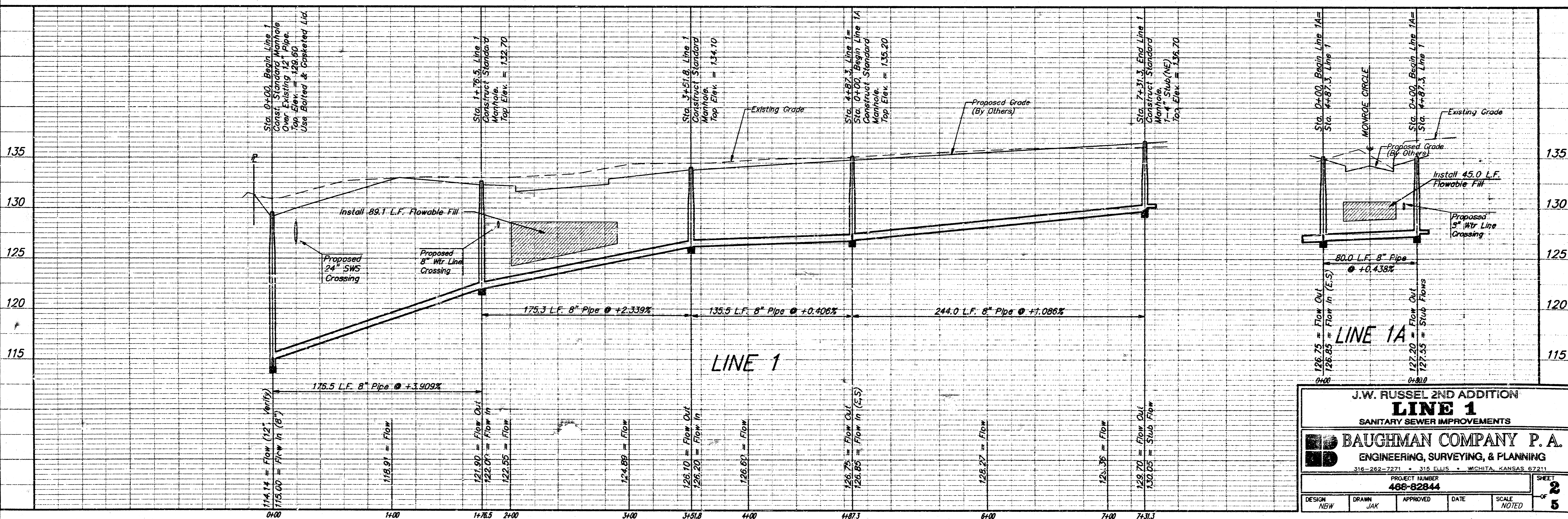
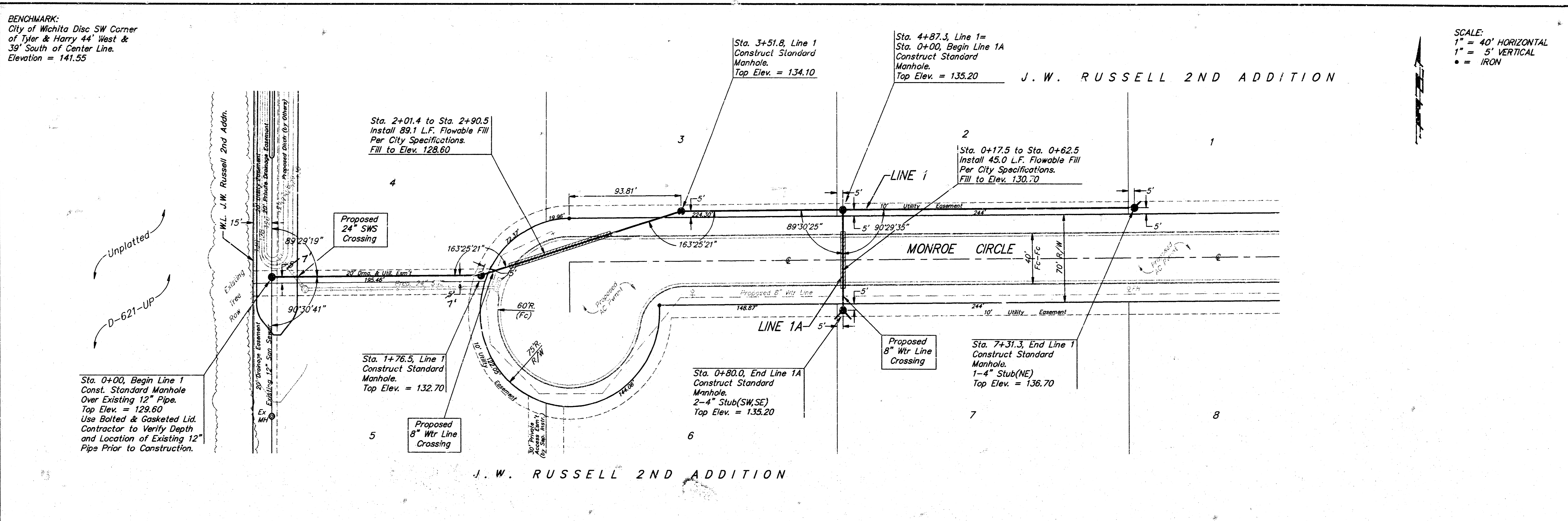


Booked  
 12-4-98  
 P-46  
 AS BUILT  
 RDL

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

BENCHMARK:  
City of Wichita Disc SW Corner  
of Tyler & Harry 44' West &  
39' South of Center Line.  
Elevation = 141.55

SCALE:  
1" = 40' HORIZONTAL  
1" = 5' VERTICAL  
● = IRON



**J.W. RUSSELL 2ND ADDITION**  
**LINE 1**  
SANITARY SEWER IMPROVEMENTS

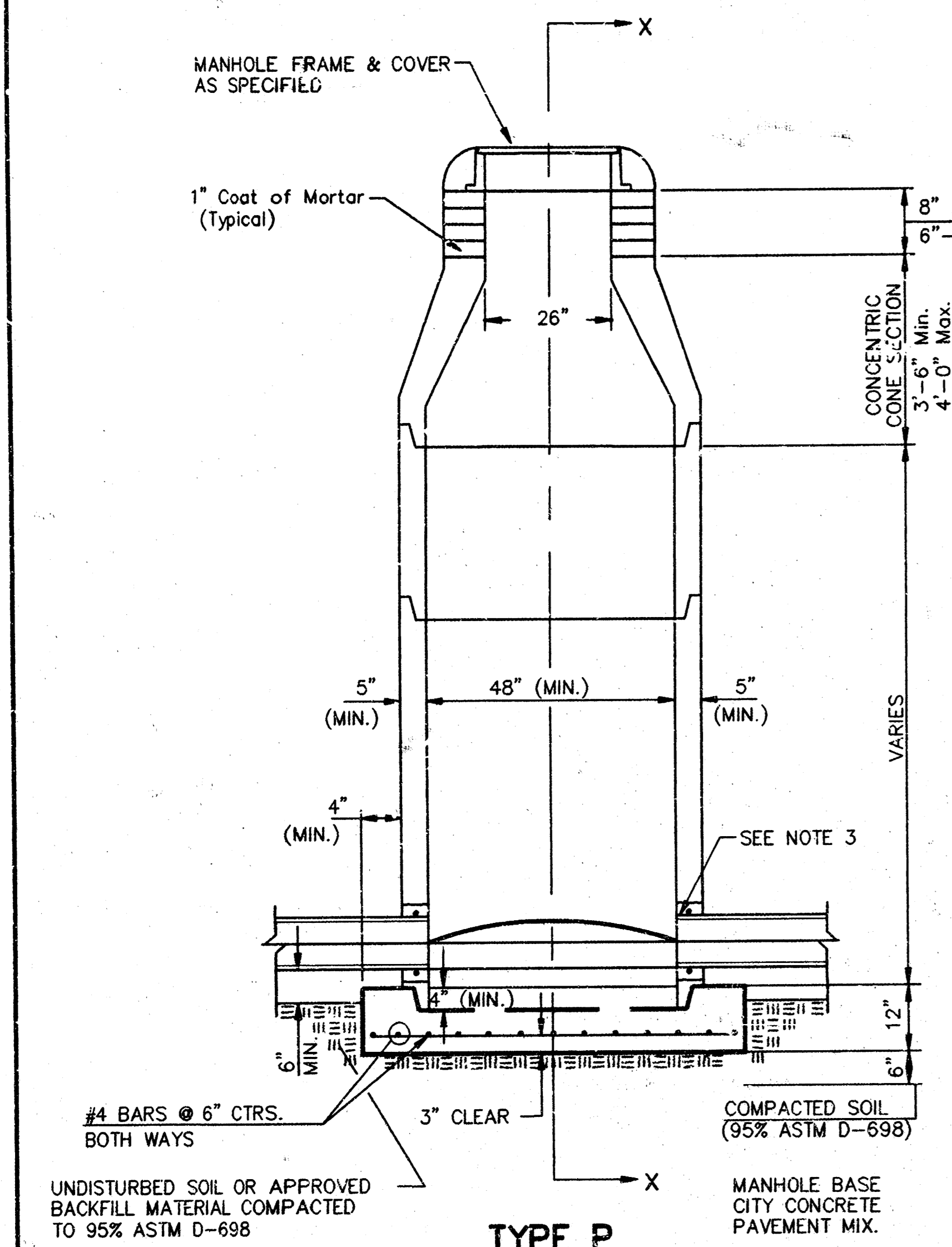
**BAUGHMAN COMPANY P. A.**  
ENGINEERING, SURVEYING, & PLANNING  
316-282-7271 • 315 ELLIS • WICHITA, KANSAS 67211

PROJECT NUMBER  
**468-82844**

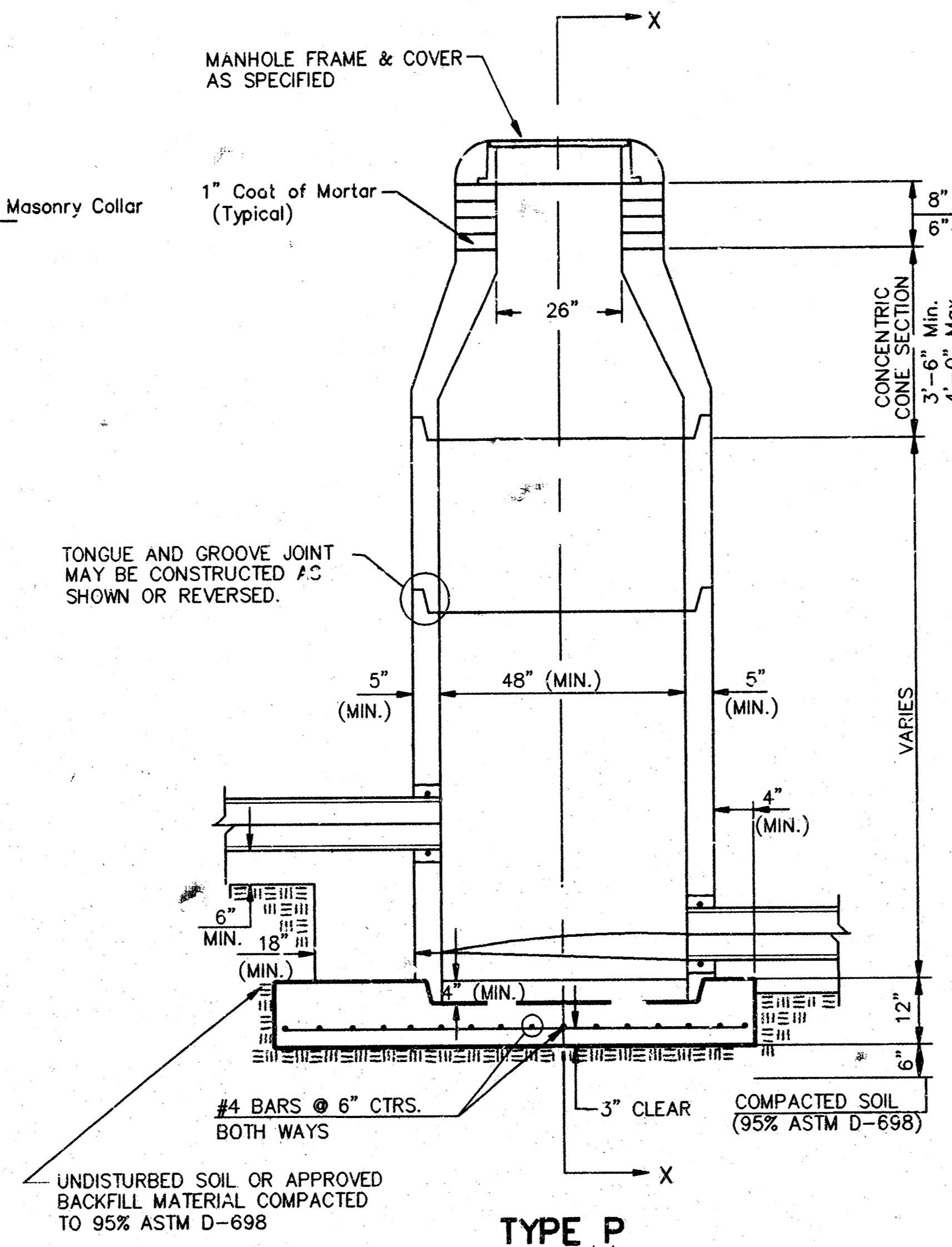
DESIGN NEW	DRAWN JAK	APPROVED	DATE	SCALE NOTED
---------------	--------------	----------	------	----------------

SHEET **2** OF **5**

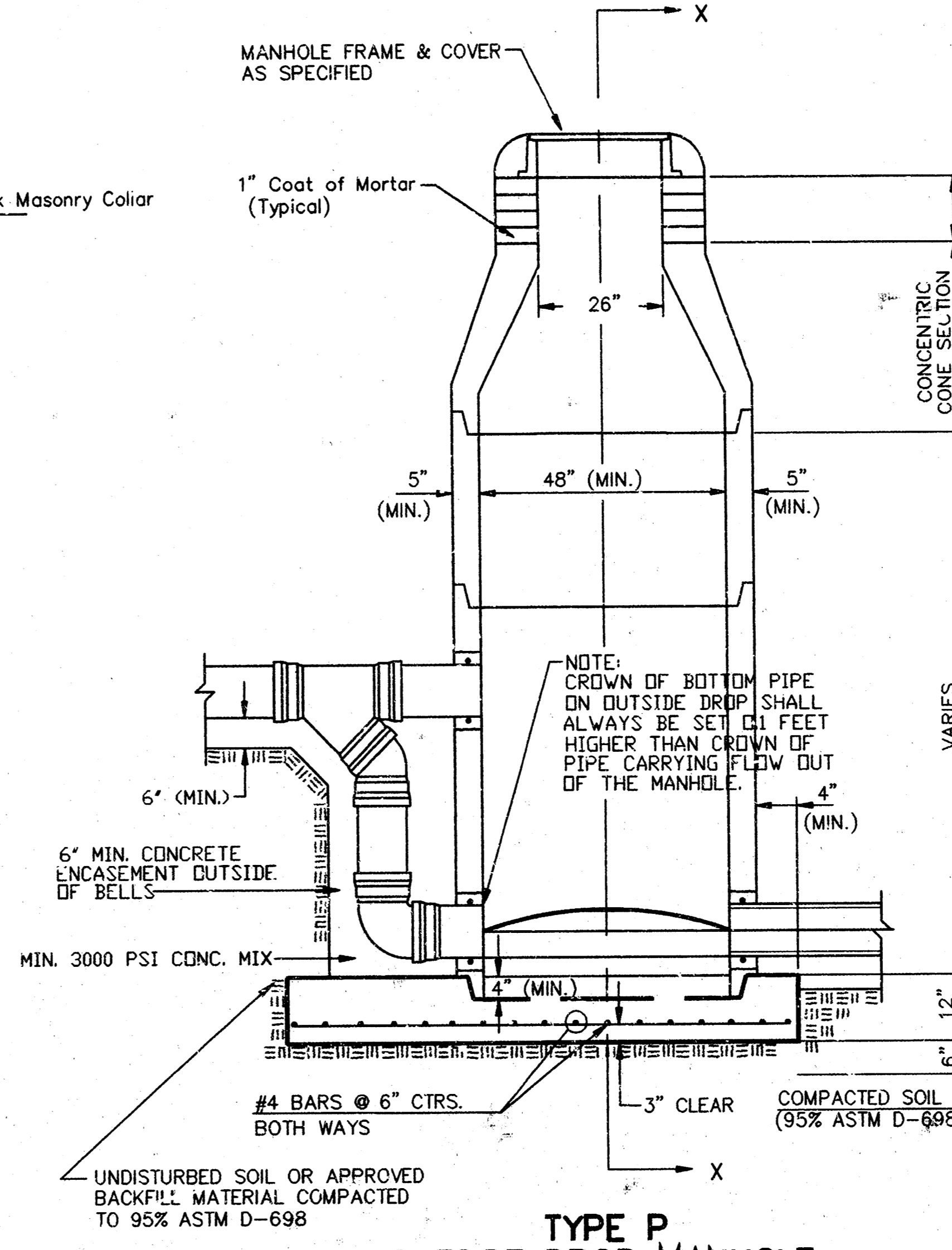
# SEWER APPURTENANCES DETAILS



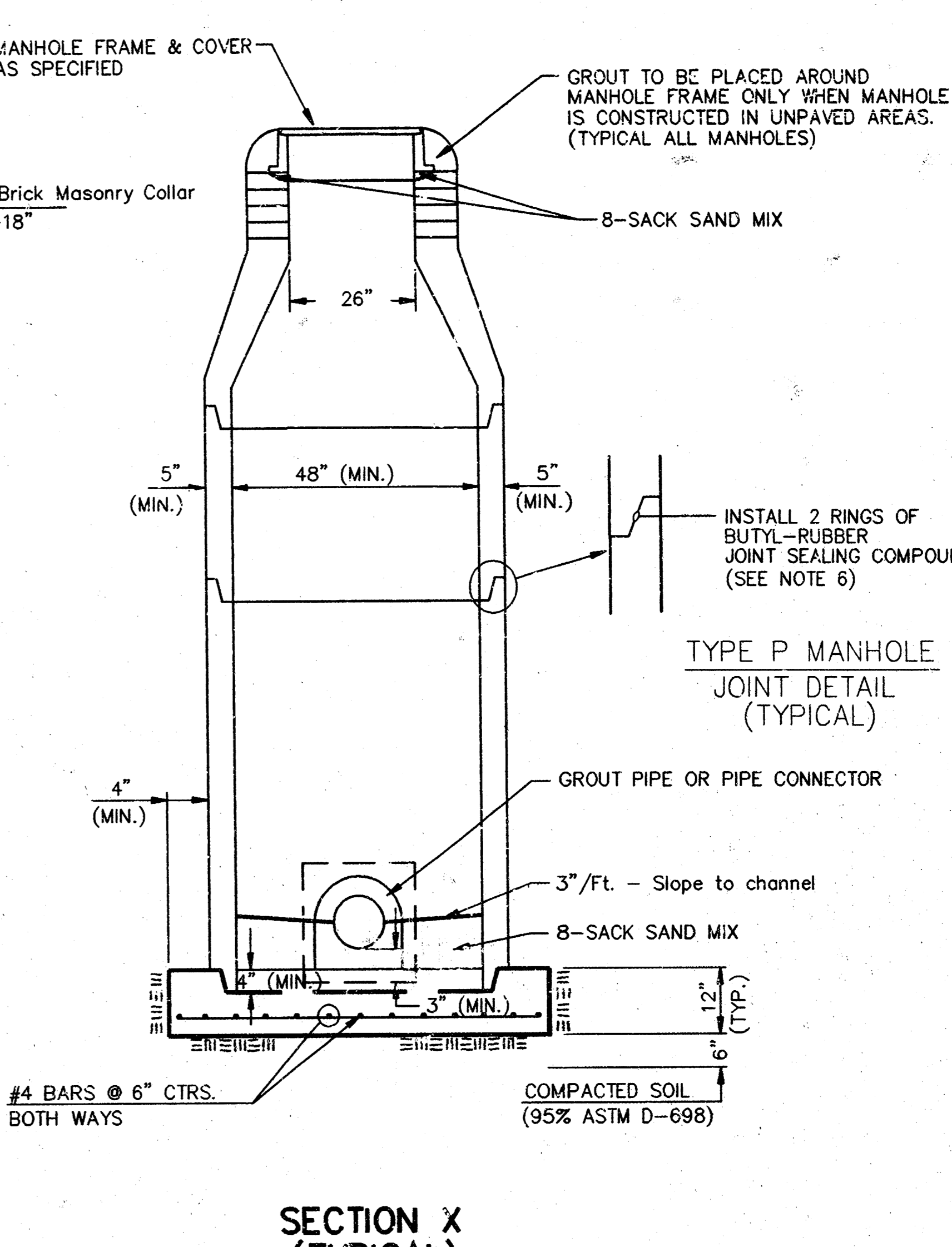
**TYPE P STANDARD MANHOLE**



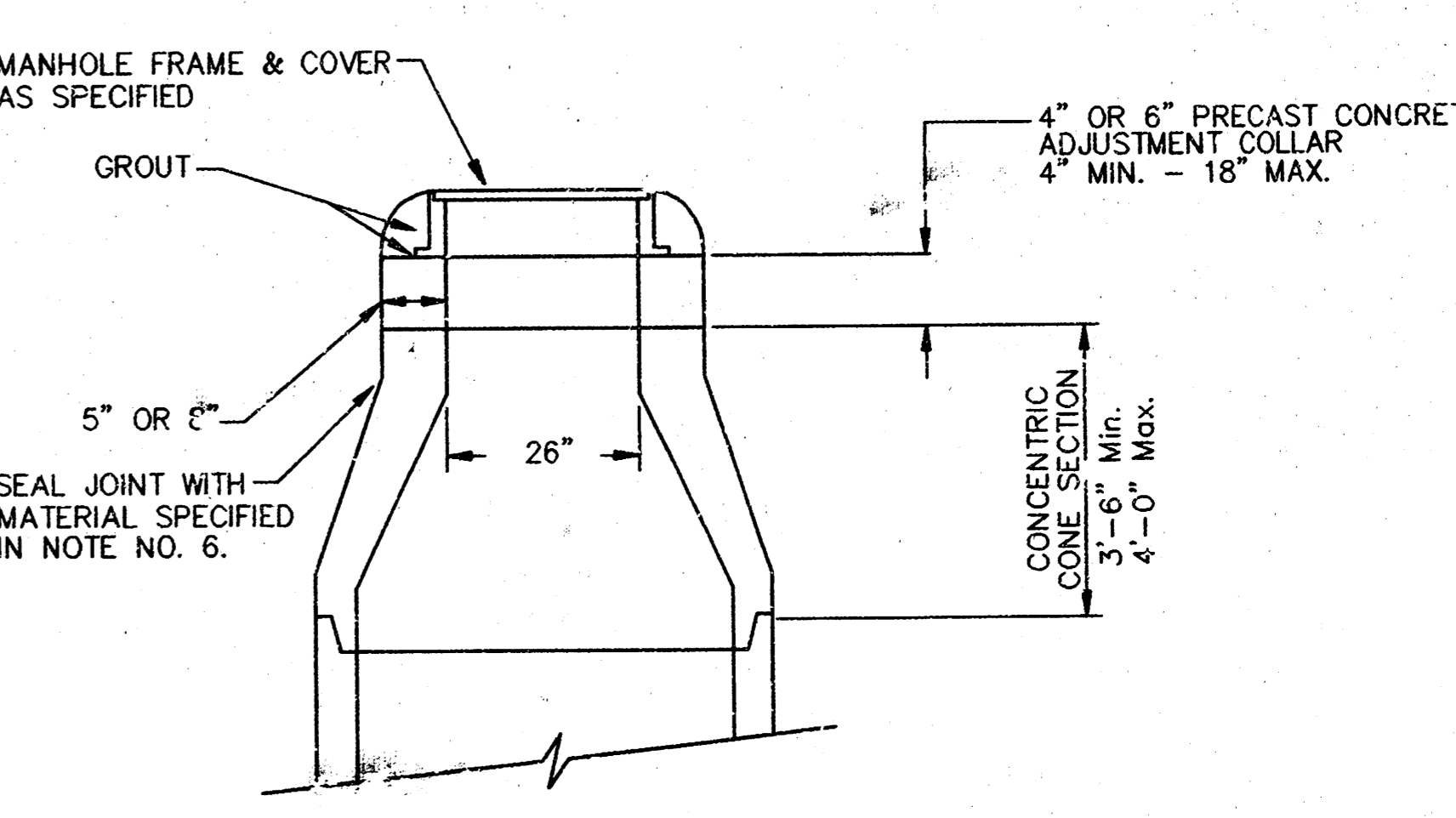
**TYPE P INSIDE DROP MANHOLE**



**TYPE P OUTSIDE DROP MANHOLE**



**SECTION X (TYPICAL)**



**ALTERNATE CONSTRUCTION IN UNPAVED AREAS**

- GENERAL NOTES**
- PRECAST MANHOLE NOTES**
1. ALL PRECAST CONCRETE MANHOLE SECTIONS SHALL CONFORM TO THE LATEST REVISIONS OF A.S.T.M. C478 AS MODIFIED BY THE SPECIFICATIONS.
  2. NON-SHRINK GROUT SHALL BE NON-METALLIC TYPE.
  3. 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.
  4. ALL INSIDE SURFACES OF THE CONCRETE MANHOLE WHICH WOULD BE EXPOSED TO SEWER GAS SHALL BE COATED WITH 2 COATS TNEC SERIES 66 H-BUILD EPOXOLINE, DRY THICKNESS OF 8 MILS (MIN.)
  5. EXTERIOR MANHOLE WALLS SHALL BE COATED WITH 1 COAT MOBILARMA 633 BITUMINOUS COATING.
  6. JOINT SEALING COMPOUND SHALL BE KENT SEAL NO. 2 OR APPROVED EQUAL.
  7. PRECAST MANHOLES SHALL BE SET AT LEAST 4 INCHES INTO THE MANHOLE BASE.
  8. 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.
  9. LIFTING HOLES SHALL BE FILLED WITH NON-SHRINK GROUT AND THE INTERIOR SURFACE COATED AS SPECIFIED.
  10. 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 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. MANHOLES CONSTRUCTED WHERE PIPE SIZES ARE 24" OR LARGER 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.

11. 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.
12. 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 INSIDE 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.
13. 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.
14. 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.

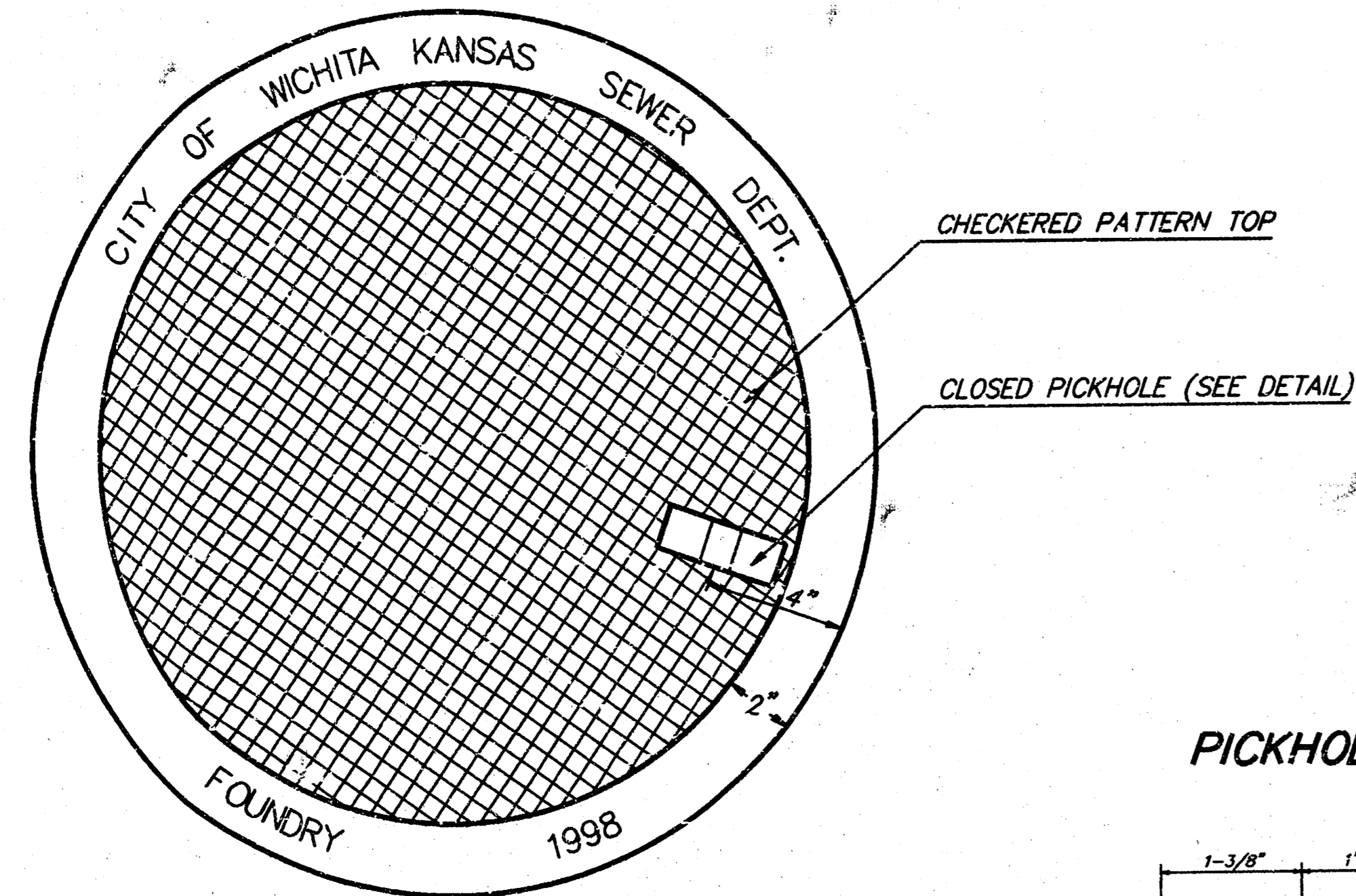
15. MANHOLE COVER CASTINGS AND MANHOLE FRAME CASTINGS SHALL CONFORM TO THE REQUIREMENTS AS INDICATED IN THE STANDARD SPECIFICATIONS AND AS SHOWN IN THE STANDARD DETAIL DRAWING.
16. THE VERTICAL DROP IN INSIDE DROP MANHOLES SHALL NOT EXCEED 2' FOR INFLOWING PIPES SIZED 12" OR SMALLER AND 2' FOR INFLOWING PIPES LARGER THAN 12". THE CROWNS OF INFLOWING PIPES SHALL NEVER BE SET LOWER THAN THE CROWN OF THE OUTFLOWING PIPE.
17. 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.
18. 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			
<b>BAUGHMAN COMPANY P. A.</b>			
ENGINEERING, SURVEYING, & PLANNING			
318-262-7271 • 310 ELLIS • WICHITA, KANSAS 67211			
PROJECT NUMBER <b>489-82844</b>		SHEET <b>3</b>	
DESIGN C.O.W.	DRAWN Staff	APPROVED	DATE 7/27/98
		SCALE None	

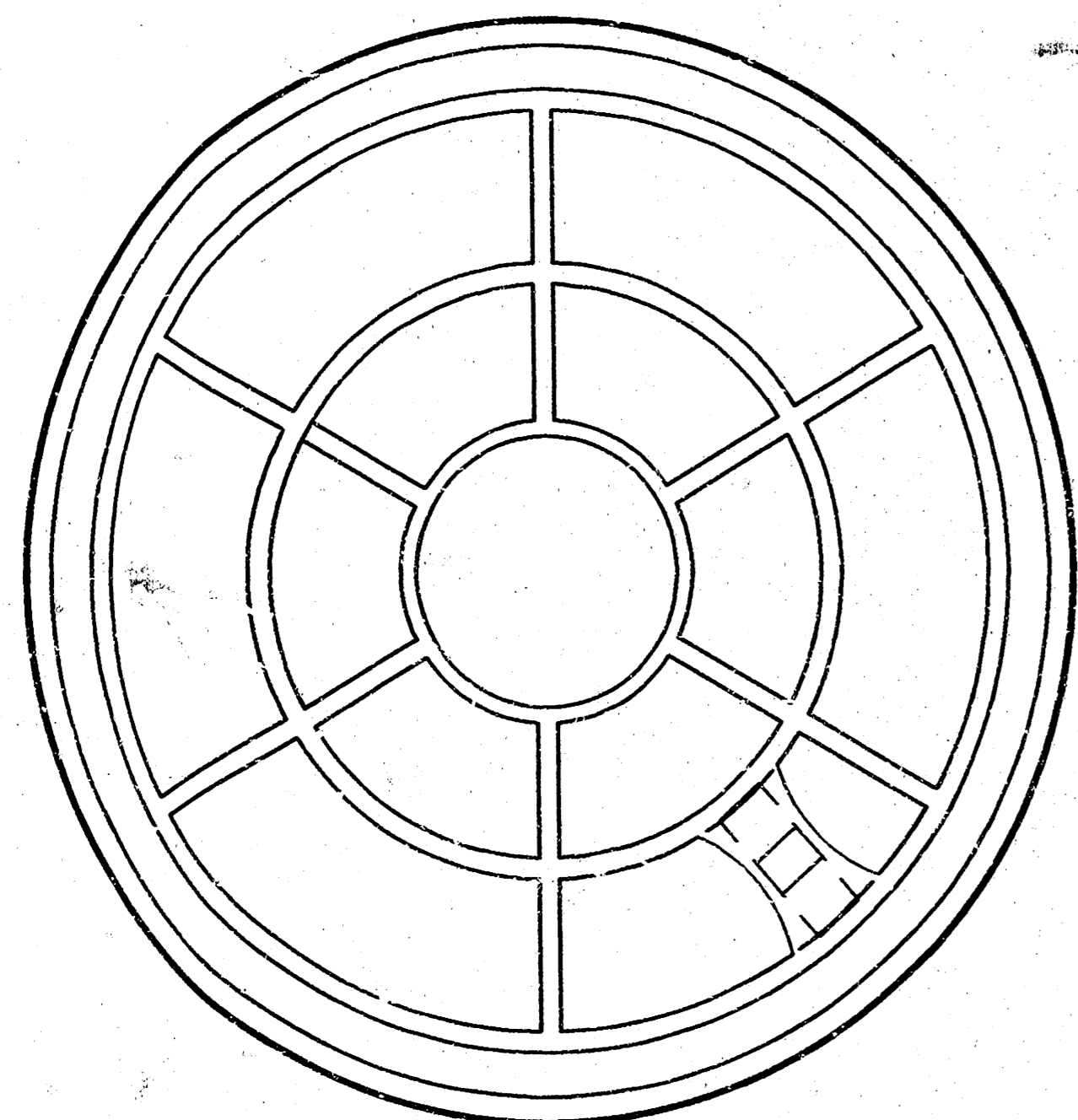
**MANHOLE COVER**  
Weight = 180 Lbs.

# MANHOLE FRAME AND COVER DETAIL

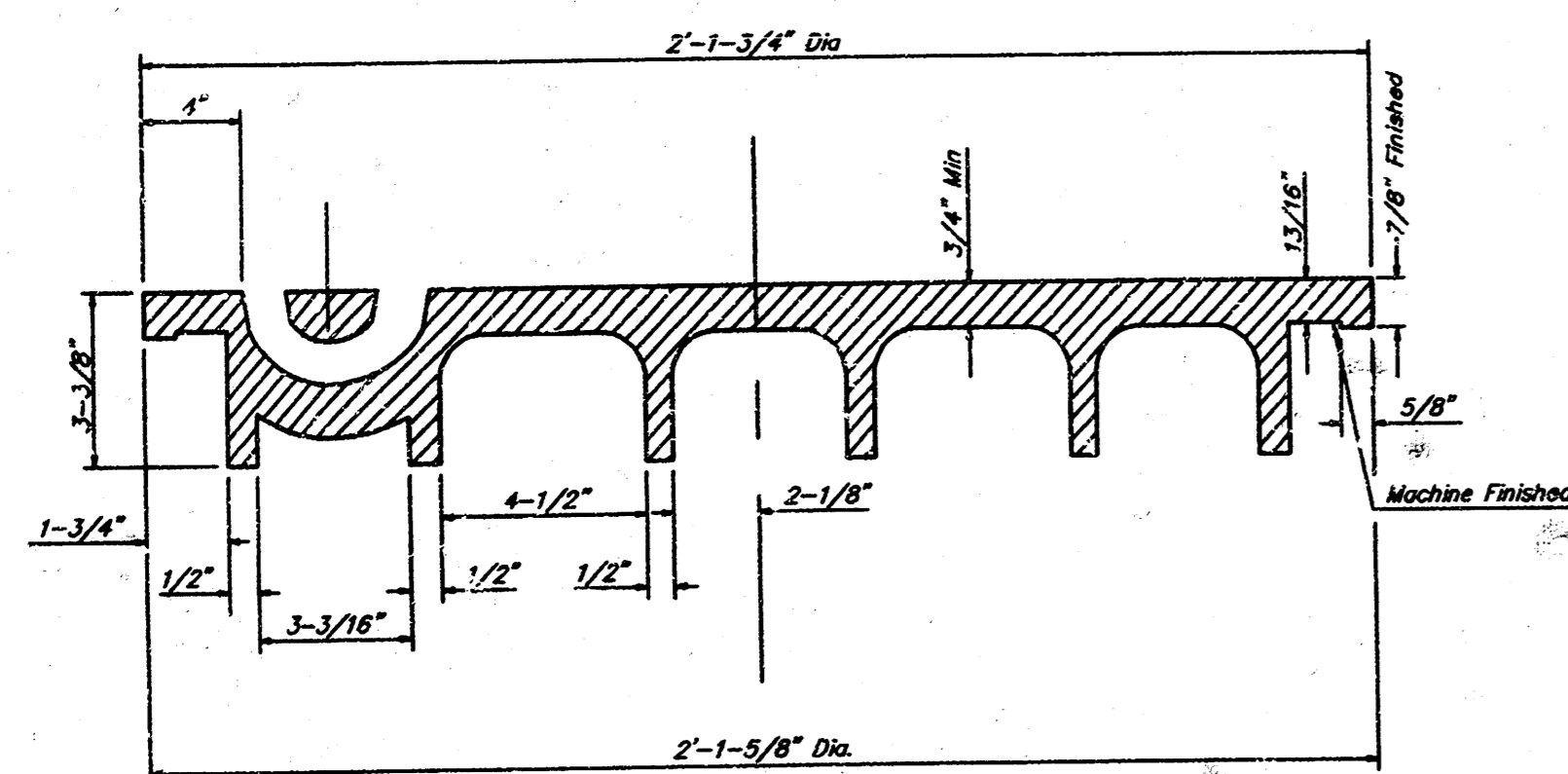
ADOPTED AS STANDARD DESIGN BY  
CITY OF WICHITA, KANSAS



TOP VIEW



BOTTOM VIEW

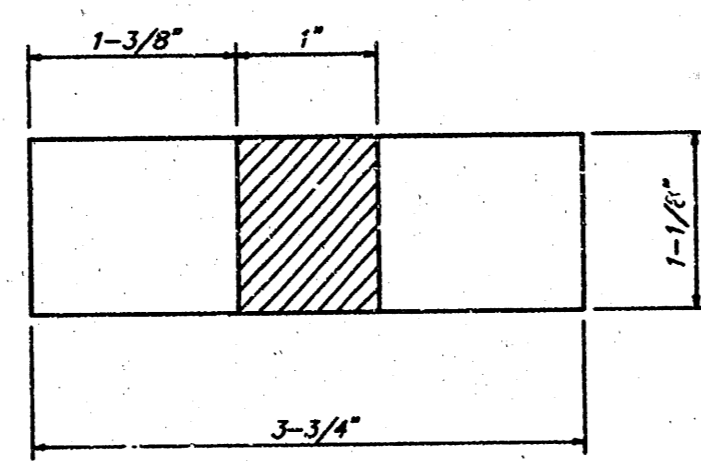


SECTION VIEW

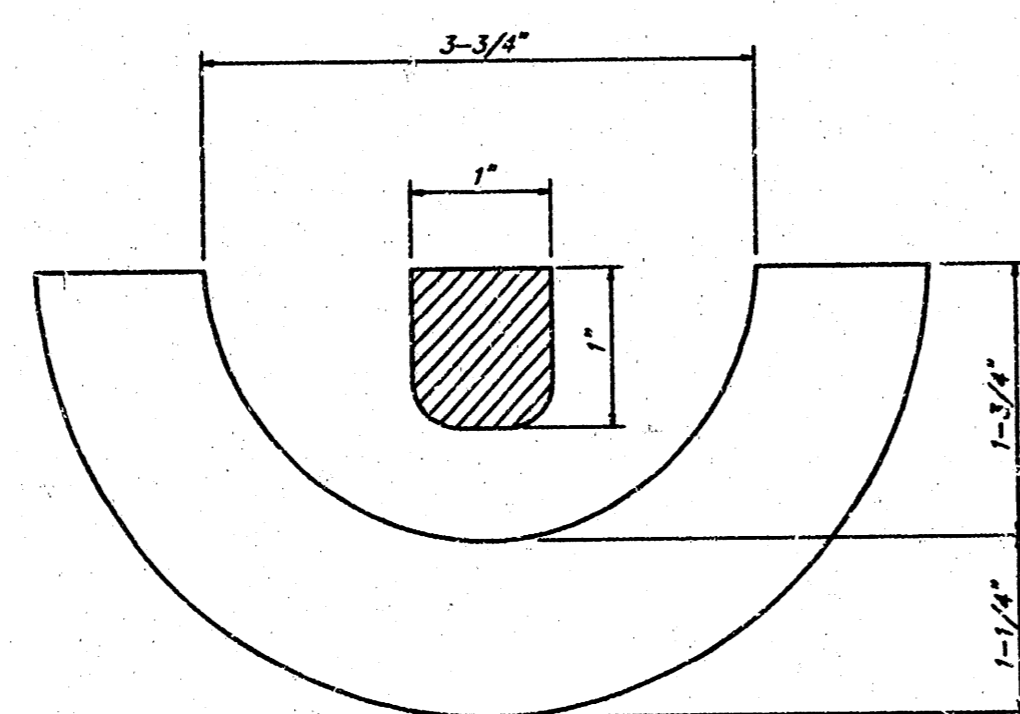
CHECKERED PATTERN TOP

CLOSED PICKHOLE (SEE DETAIL)

## PICKHOLE DETAIL

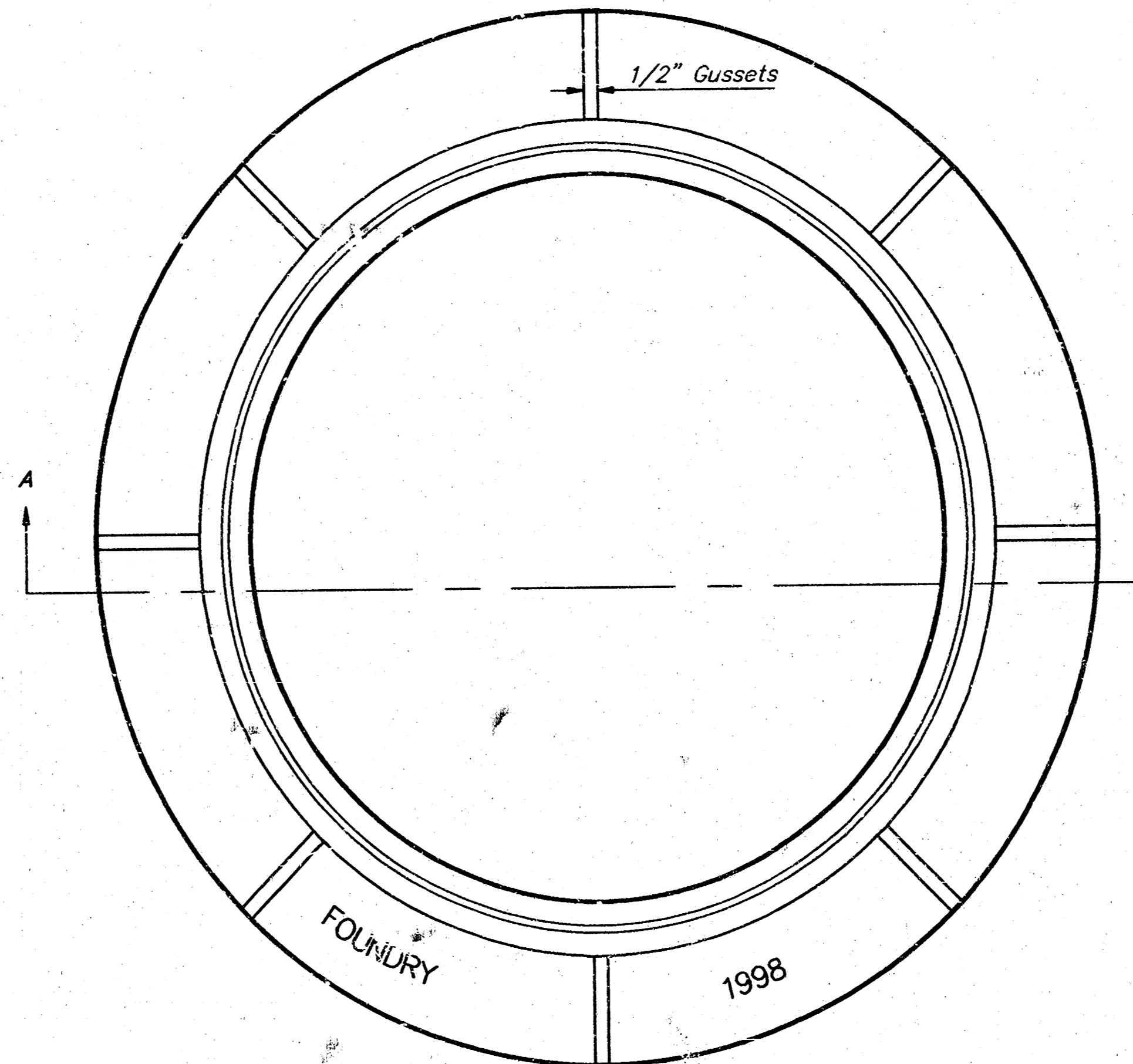


TOP VIEW

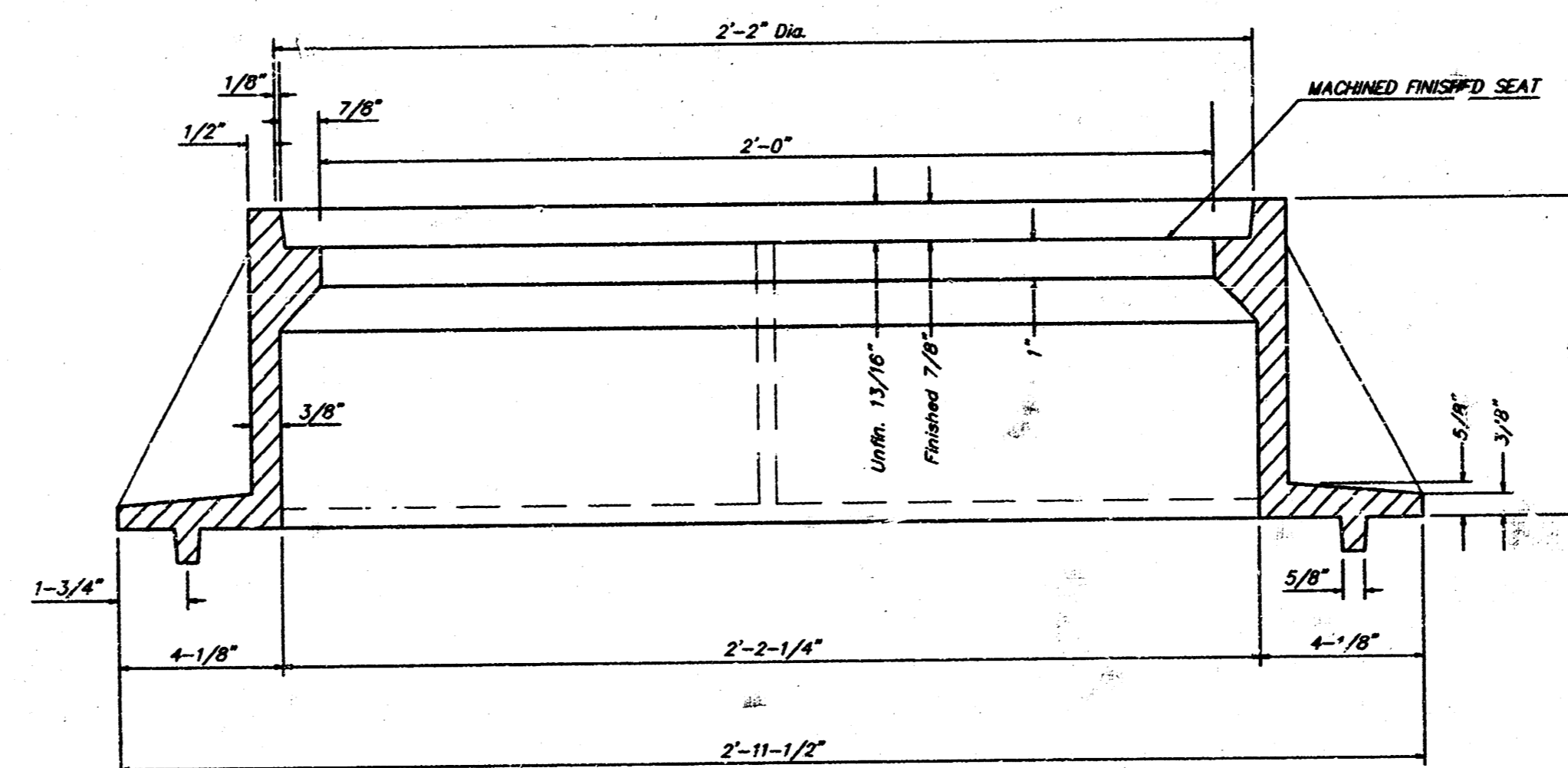


SECTION VIEW

**MANHOLE FRAME**  
Weight = 145 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.

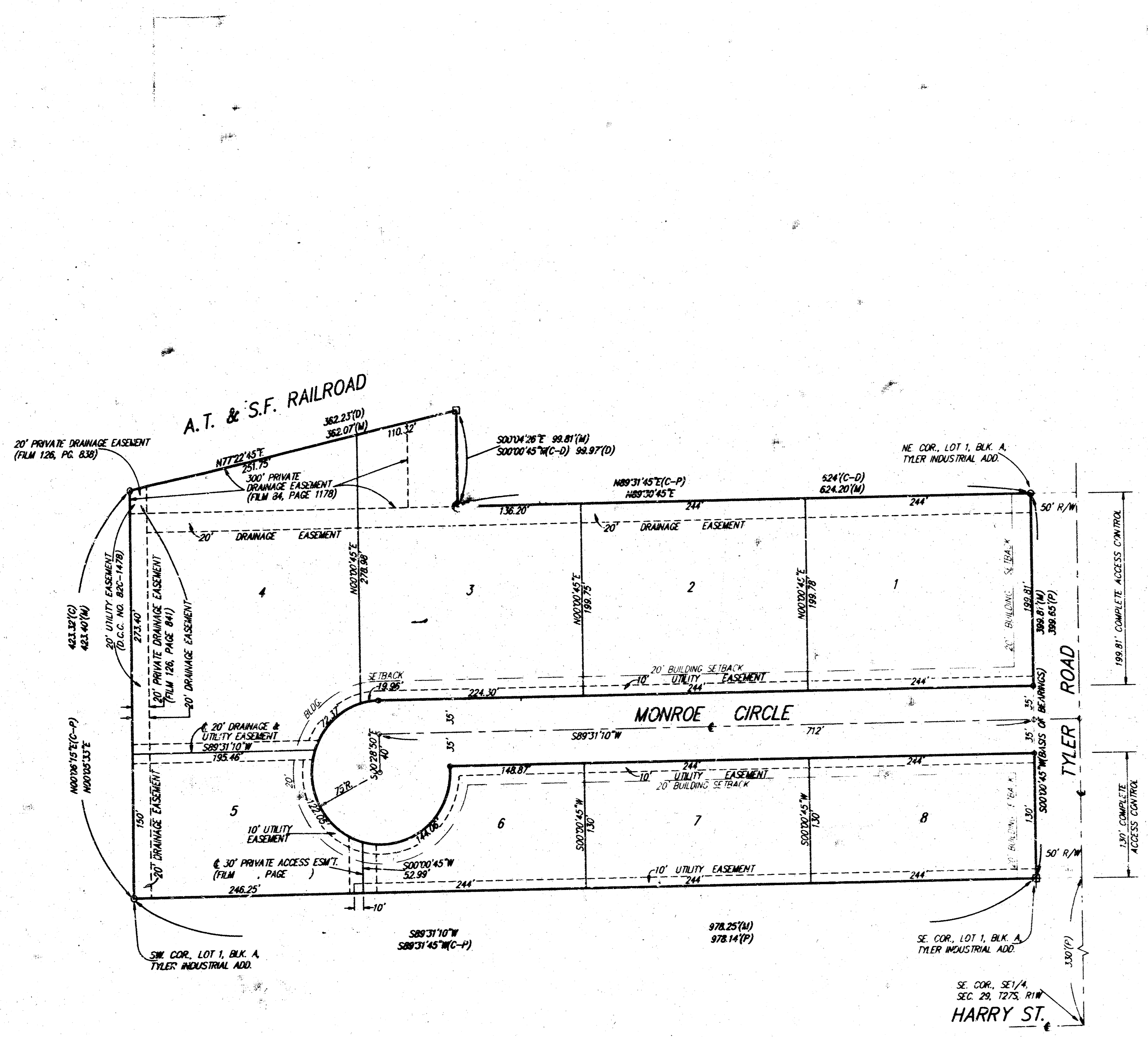
THE OUTSIDE CIRCUMFERENCE OF THE VERTICAL FACE OF THE COVER AND THE INSIDE CIRCUMFERENCE OF THE VERTICAL FACE IN THE FRAME RECESS SHALL BE MANUFACTURED TO TOLERANCES SUCH THAT THE CLEARANCE BETWEEN THE COVER AND FRAME WILL NOT EXCEED 1/8" AT ANY POINT AROUND THE CIRCUMFERENCE OF THE COVER. THE SEATING 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				
BAUGHMAN COMPANY P. A.				
ENGINEERING, SURVEYING, & PLANNING				
316-262-7271 • 315 ELLIS • WICHITA, KANSAS 67211				
PROJECT NUMBER 468-82844				
DESIGN C.O.W.	DRAWN Staff	APPROVED	DATE 7/22/98	SCALE None
				SHEET 4 OF 5

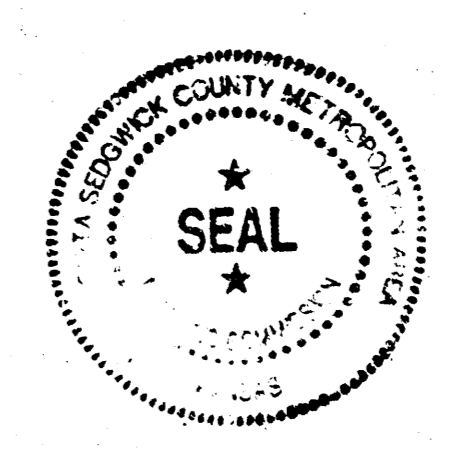
58-06-1005

# J. W. RUSSELL 2ND ADDITION WICHITA, SEDGWICK COUNTY, KANSAS



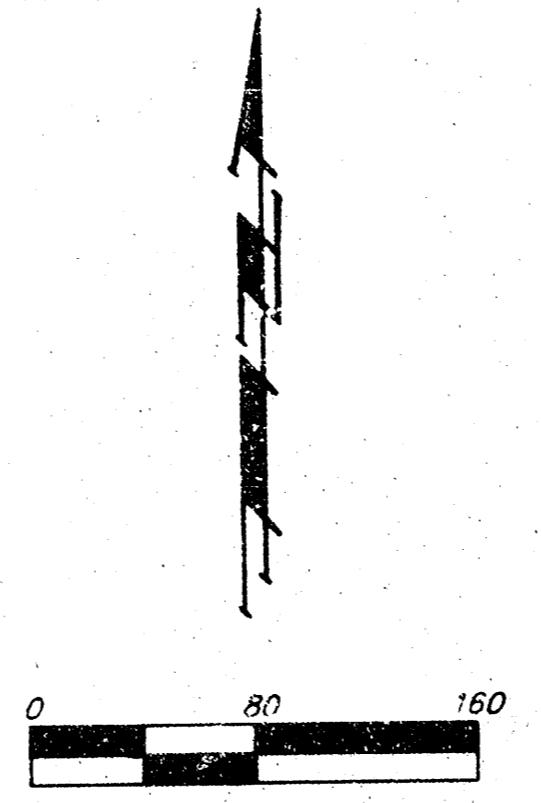
State of Kansas) SS We, Baughman Company, P.A., Surveyors in  
Sedgwick County) do hereby certify that we have surveyed  
and platted "J. W. RUSSELL 2ND ADDITION", Wichita, Sedgwick County,  
Kansas, and that the accompanying plat is a true and correct exhibit  
of the property surveyed, described as follows: Lot 1, Block A,  
Tyler Industrial Addition, Wichita, Sedgwick County, Kansas, together  
with a tract in the SE 1/4 of Sec. 29, Twp. 27-S, R-1-W of the 6th P.M.,  
Sedgwick County, Kansas, described as follows: Beginning at a  
point 729.65 feet north and 674 feet west of the SE corner of said  
SE 1/4, thence west parallel with the south line of said SE 1/4,  
353.3 feet to a point 1520.5 feet east of the west line of said SE 1/4;  
thence north parallel with the west line of said SE 1/4, 23.67 feet to  
the southerly right-of-way of the A.T. & S.F. Railroad; thence north-  
easterly along said railroad right-of-way, 362.23 feet to a point  
674 feet east of the east line of said SE 1/4; thence south, parallel with  
the east line of said SE 1/4, 99.97 feet to beginning.

This plat of "J.W. RUSSELL 2ND ADDITION",  
Wichita, Sedgwick County, Kansas has been submitted to and  
approved by the Wichita-Sedgwick County Metropolitan Area  
Planning Commission, Wichita, Kansas.  
Dated this 12th day of FEBRUARY, 1998.  
Wichita-Sedgwick County Metropolitan Area Planning Commission



*Richard Lopez*, Chairman  
*Marvin S. Krout*, Secretary

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

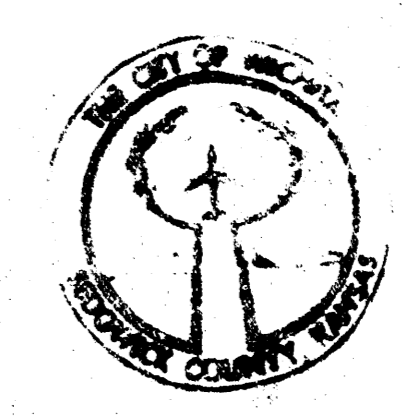


*Michael G. Conroy*, Surveyor  
Michael G. Conroy, Surveyor

Know all men by these presents that we,  
the undersigned, have caused the land in the surveyors certificate to  
be platted into Lots and a Street to be known as "J. W. RUSSELL  
2ND 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 abutters rights of access to or from Tyler Road  
over and across the east line of Lots 1 and 8 are hereby granted to the  
City of Wichita, Kansas.

J. Russell Roofing, Inc.  
*Jay W. Russell*, President  
American Excavating Company, Inc.  
*Jay W. Russell*, President

This plat approved and all dedications  
shown hereon accepted by the City Council of the City of Wichita,  
Kansas, this 16th day of JUNE, 1998.

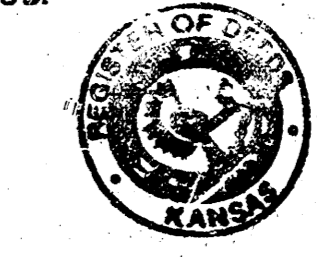


*Bob Knight*, Mayor  
*Pot Burnett*, City Clerk

Entered on transfer record this 30th day  
of JUNE, 1998.

*James Allard*, County Clerk

State of Kansas) SS This is to certify that this plat has been  
filed for record in the office of the Register of Deeds, this 15th day  
of JULY, 1998, at 10:30 o'clock A.M., and is duly  
recorded.



*Bill MBEK*, Register of Deeds

State of Kansas) SS The foregoing instrument acknowledged be-  
fore me, this 16th day of APRIL, 1998, by Jay W. Russell,  
President of J. Russell Roofing, Inc., on behalf of the corporation.

*Judith M. Terhune*, Notary Public

My App'l. Exp. 11-7-2001  
JUDITH M. TERHUNE  
Notary Public, State of Kansas  
My App'l. Expires 11-7-2001

#1704491

We the undersigned, holders of a mortgage  
on the above described property, do hereby consent to this plat of  
"J. W. RUSSELL 2ND ADDITION", Wichita, Sedgwick County, Kansas.  
Emprise Bank

*Sam E. Trummel*, SVP

State of Kansas) SS The foregoing instrument acknowledged be-  
fore me, this 16th day of APRIL, 1998, by Jay W. Russell,  
President of American Excavating Company, Inc., on behalf of the  
corporation.

*Judith M. Terhune*, Notary Public

My App'l. Exp. 11-7-2001  
JUDITH M. TERHUNE  
Notary Public, State of Kansas  
My App'l. Expires 11-7-2001

State of Kansas) SS The foregoing instrument acknowledged be-  
fore me, this 17th day of APRIL, 1998, by *Sam E. Trummel*,  
S.V.P. of the Emprise Bank, on behalf of the bank.

*Sam E. Trummel*, Notary Public

20.00  
ck