

SANITARY SEWER IMPROVEMENTS TO SERVE LOT 1, CHAMBERLAIN'S BY-PASS ADDITION

PRIVATE PROJECT NUMBER:

847 PPS (607861)

CITY OF WICHITA, KANSAS

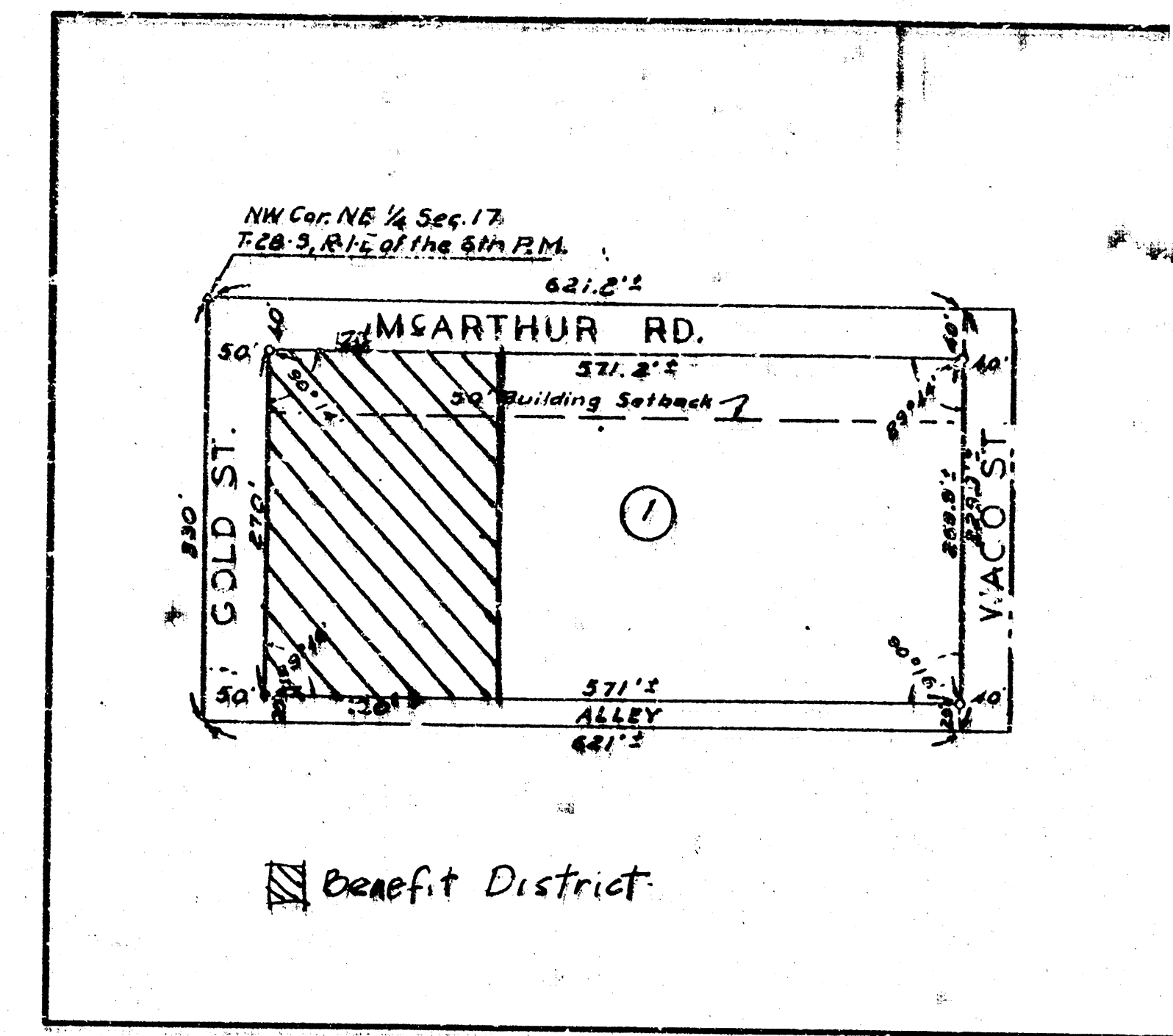
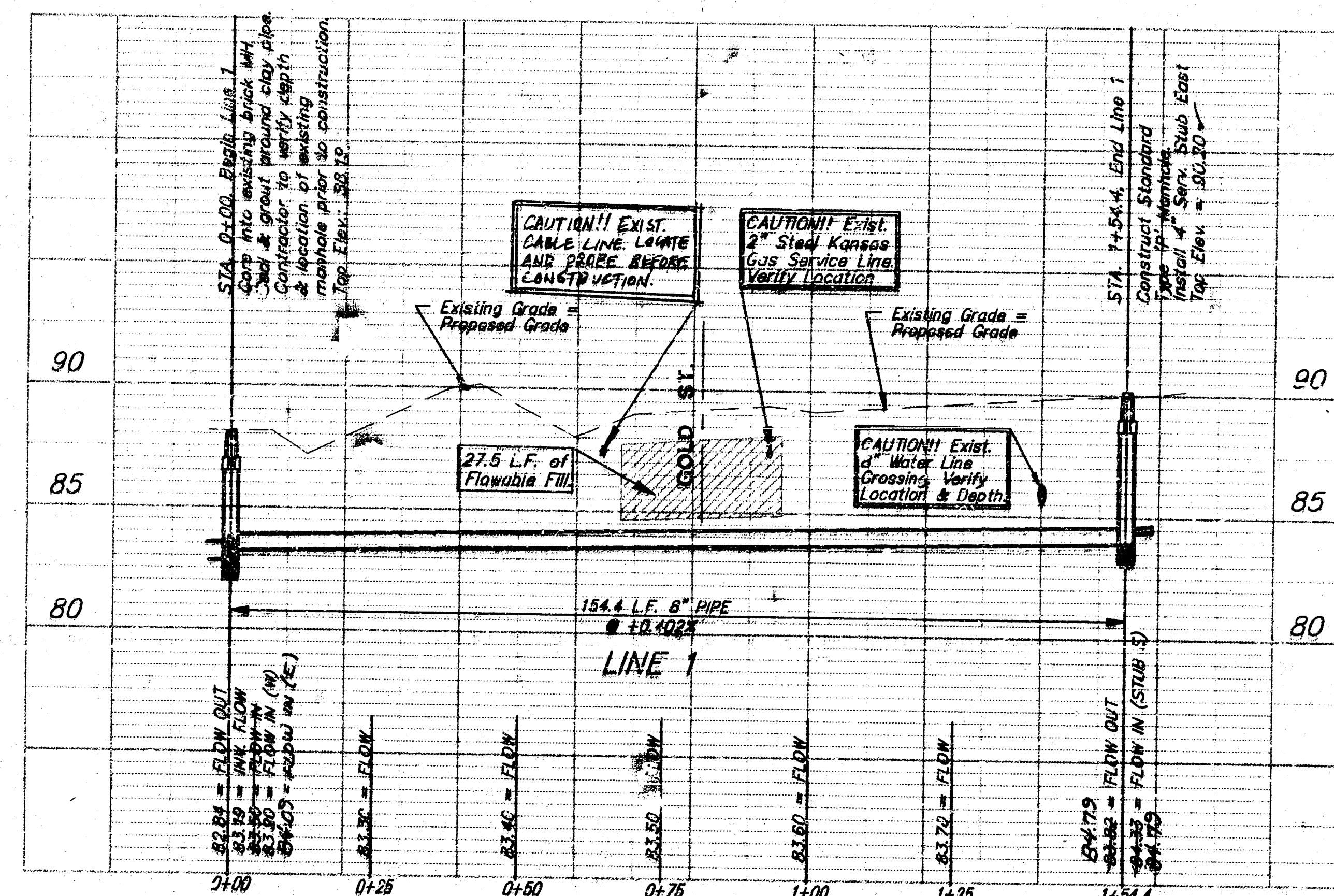
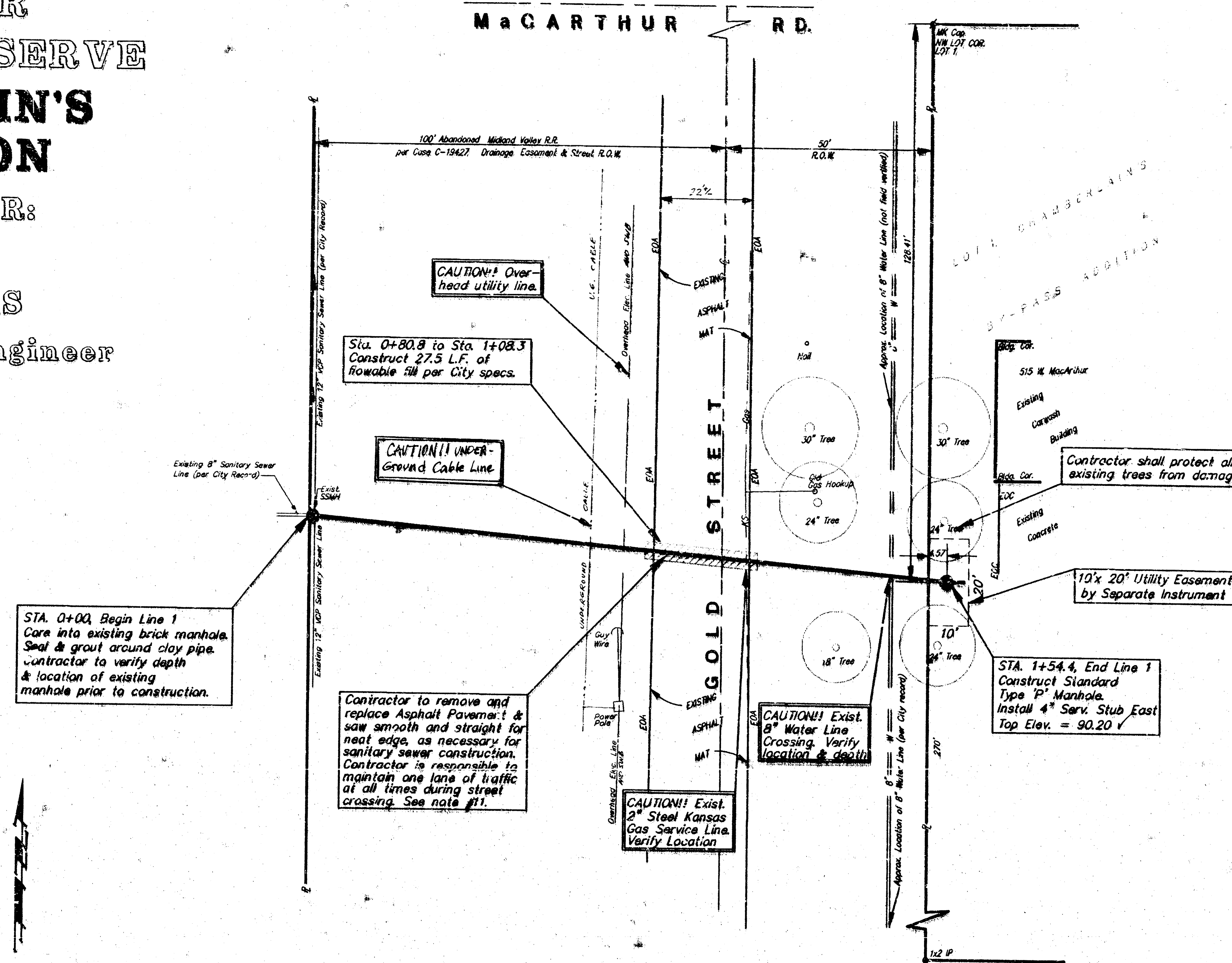
Michael E. Lindebak, P.E. City Engineer

GENERAL NOTES:

- 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:
MultiMedia: 262-0661
Cablevision 263-2061
Security Systems 832-3121
Kansas Gas Service Company (Charlene) 942-8350
Energy One Company 800-344-7233
Southwestern Bell Telephone Company 268-4355
Wichita Water Department (Chuck Stevens) 268-4071
City of Wichita Sewer Maintenance (Shop 1) 268-4071
- 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.
- The Contractor shall notify pipeline companies at least 24 hours in advance of any work being performed across and/or adjacent to pipelines.
- 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.
- Contractor shall not start work on any part of the project contained within easement until the project inspector is assigned to the project and is present on site. Any work done within easement but without inspection will be required to be uncovered for inspection.
- The buried utilities as shown on the plans are approximate locations only. It should be noted that other buried lines and cables may exist which are not shown on these plans. The Contractor shall exercise extreme caution during trenching operations to avoid damaging these lines. Any lines damaged shall be replaced or repaired immediately as directed by the Engineer at the Contractor's expense.
- 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.
- Rubble from the removal of miscellaneous structures and excess excavation which is to be wasted shall be disposed of on site 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.
- Prior to bid preparation, it will be the Contractor's responsibility to field check the project area to determine the extent of Site Clearing and Restoration to be performed.
- Contractor shall seed all disturbed areas on the project with a mixture blend for grass establishment. The mixture shall contain 2 lbs. per 1,000 sq.ft. of Rye Grass, and 4 lbs. per 1,000 sq.ft. of Sharps Improved Buffalo Grass with 2 tons Prairie Hay per Acre "patted" into soil for erosion control.
- Contractor shall follow the latest addition of KDOT traffic standards and City of Wichita Codes and Specifications for allowing one thru lane open during construction across Gold Street.

Scale: 1" = 20' HORIZ.
1" = 5' VERT.
O = IP (Iron Pipe)
= MK (Mid-Kansas Cop)

NOTE:
Contractor shall be responsible for all costs of any relocation or adjustments of any utility that is in direct conflict of the proposed Sanitary Sewer Improvements.



LOCATION MAP

No Scale

BENCHMARKS

COW Benchmark 89.8' west of centerline of Gold Street North. 38.6' north of centerline of MacArthur. 123.41' NW of 1/4 Sec. corner from 12.59' MHW of centerline MacArthur and centerline Gold south (iron in thimble) 2' west of light pole. 5.4' north of back of walk. 29.5' east of centerline drive, 516 W. MacArthur.
Elevation = 89.80

INDEX:

- Line 1 - Sanitary Sewer improvements
- Standard Manhole Detail
- Standard Frame and Cover Detail
- Chamberlain's By-Pass Addition

APPROVED AS NOTED
BY CITY ENGINEER OF WICHITA

Sanitary Sewers VRH 10/20/98

NOTE TO CONTRACTORS

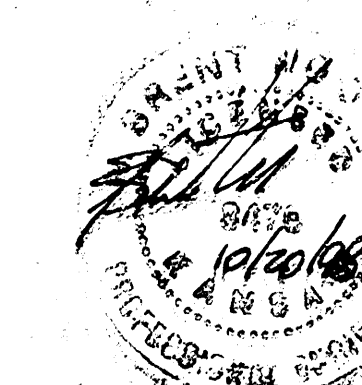
Inspection and testing for this project is to be provided by a Licensed Consulting Engineering Firm under contract with the Owner/Developer. Said inspection to be in accordance with the City of Wichita standard construction engineering practices and certified by a Licensed Professional Engineer. No work 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).

Nowak Construction

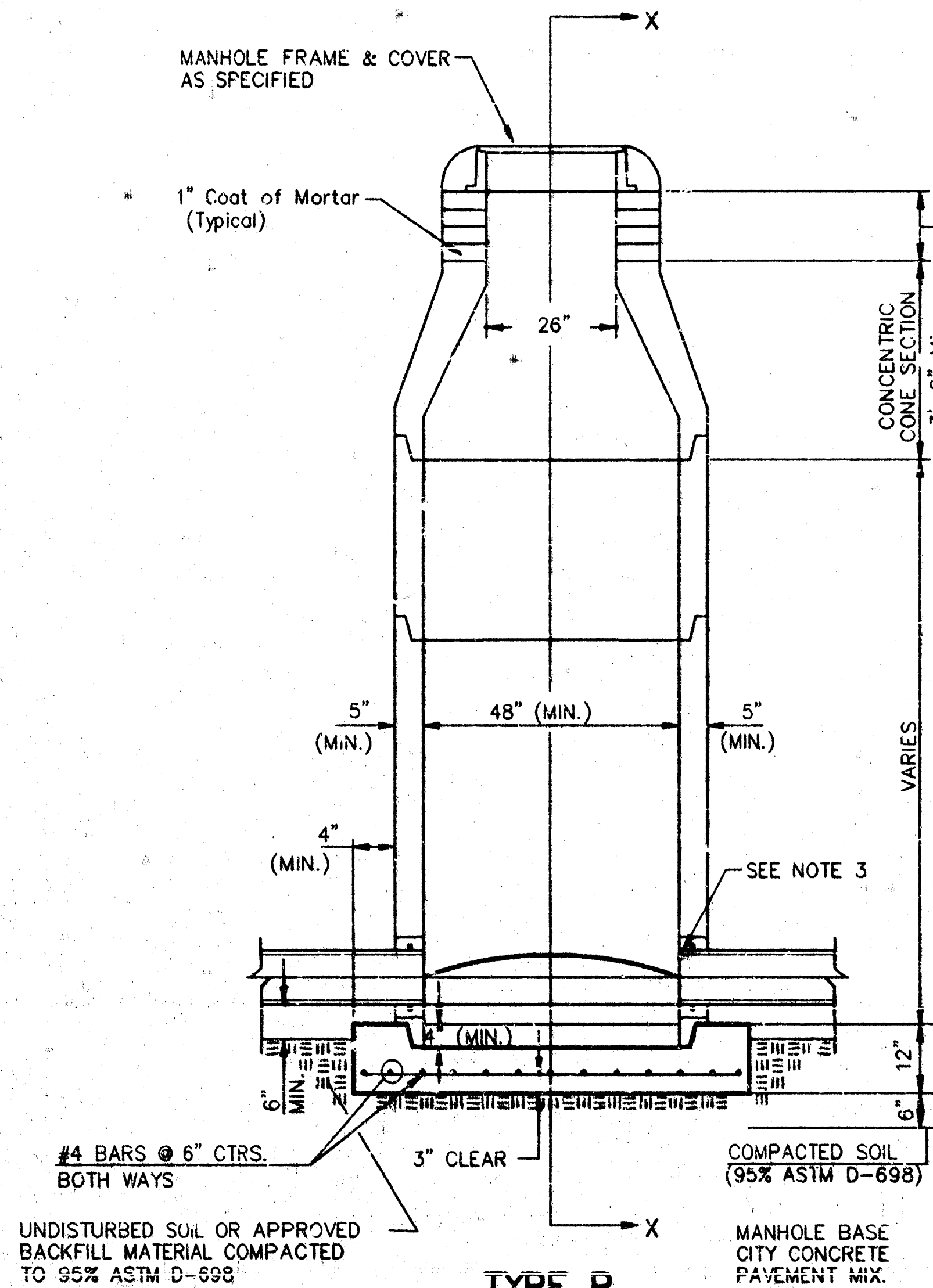
PROJECT INSPECTED BY BAUGHMAN CO. P.A.
ASBUILT 11/98 - 20

LOT 1, CHAMBERLAIN'S BY-PASS ADDITION			
LINE 1			
SANITARY SEWER IMPROVEMENTS			
BAUGHMAN COMPANY P.A.			
ENGINEERING, SURVEYING, & PLANNING			
316-282-7271 • 316 ELLIS • WICHITA, KANSAS 67211			
PROJECT NUMBER			
847 PPS (607861)			
DESIGN	DRAWN	APPROVED	DATE
JUL	JUL	NEW/DY	AUG 1998
SCALE	NOTED		
1	4		

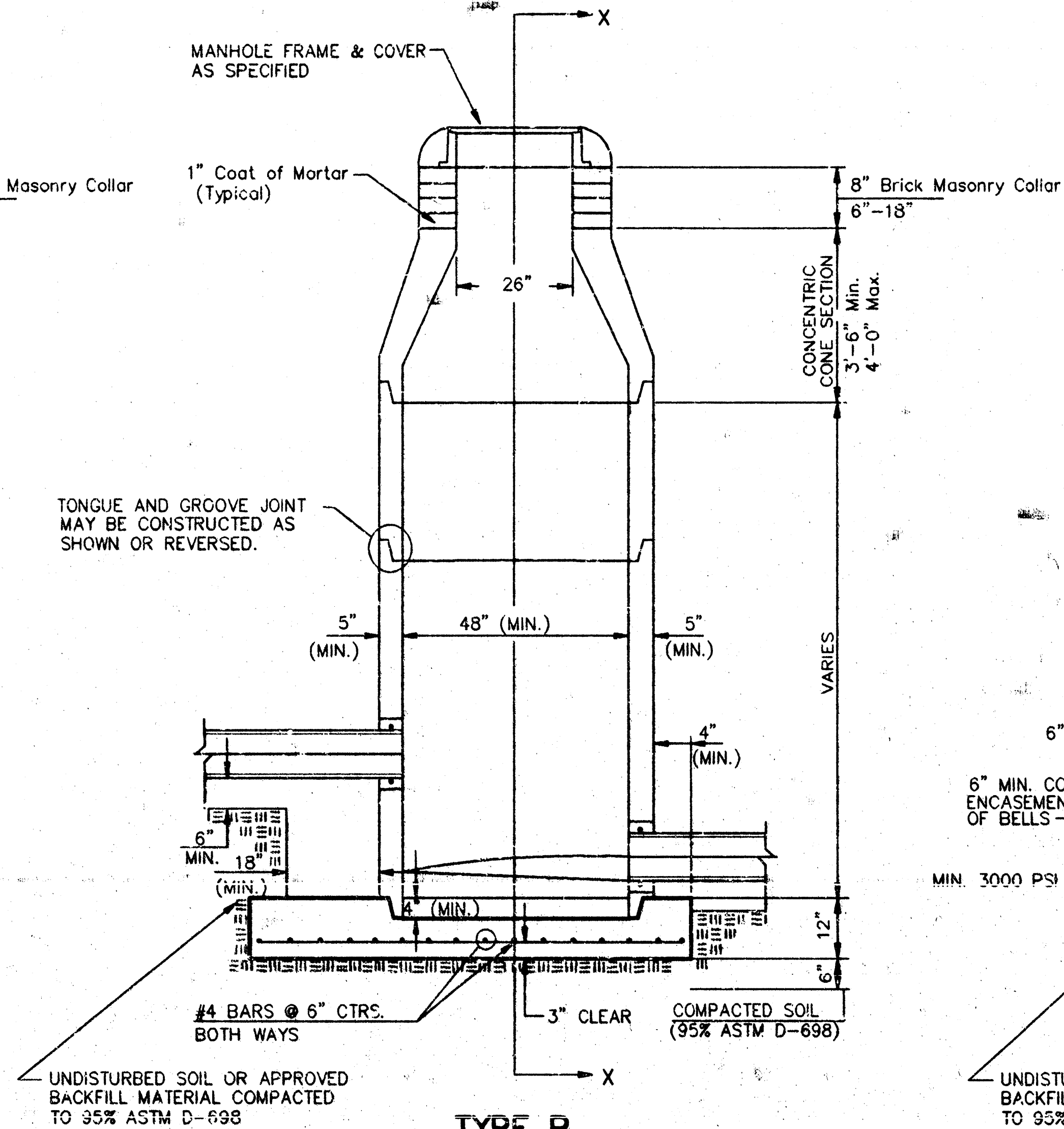
Booked
3-2-99
P-65
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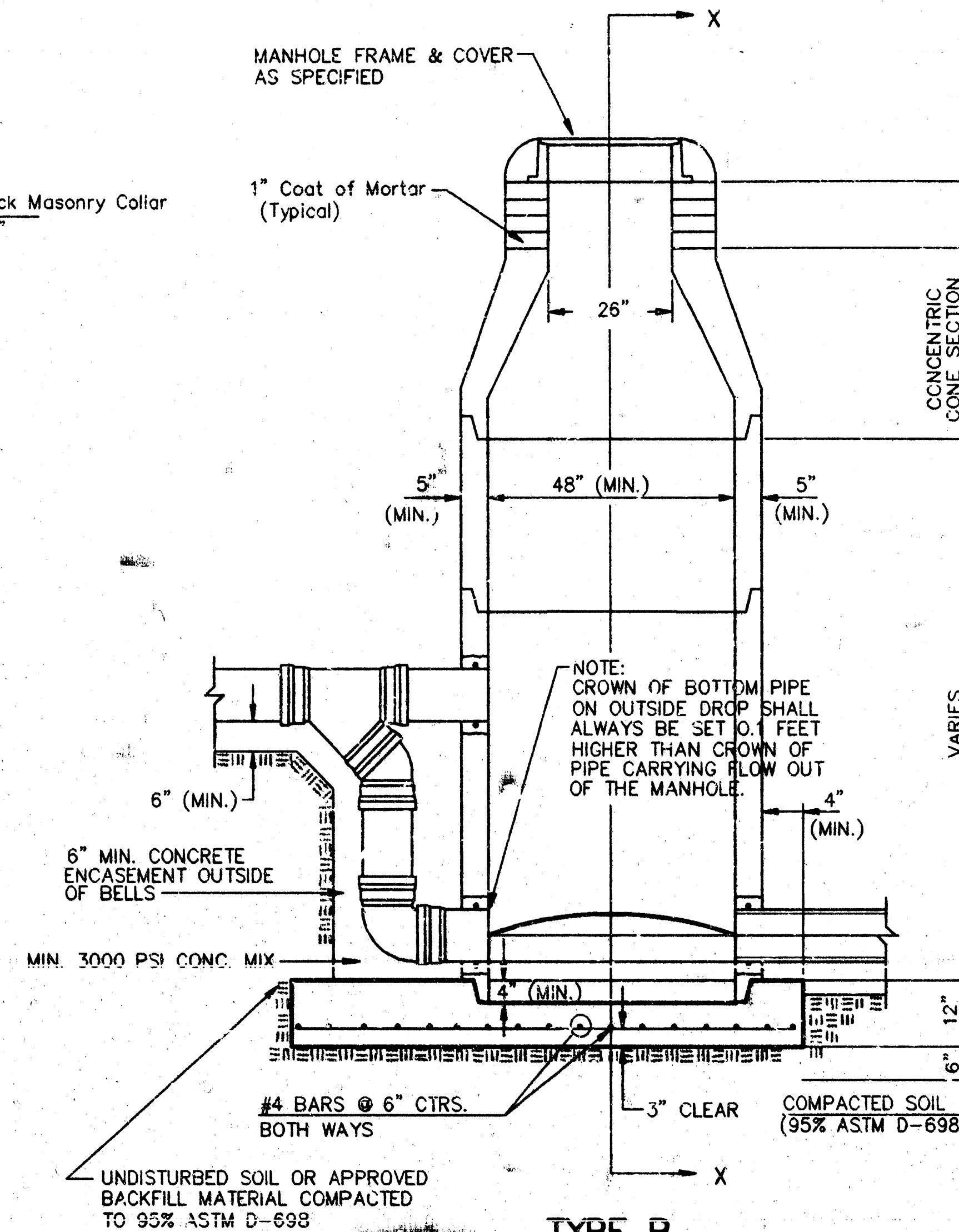
SEWER APPURTENANCES DETAILS



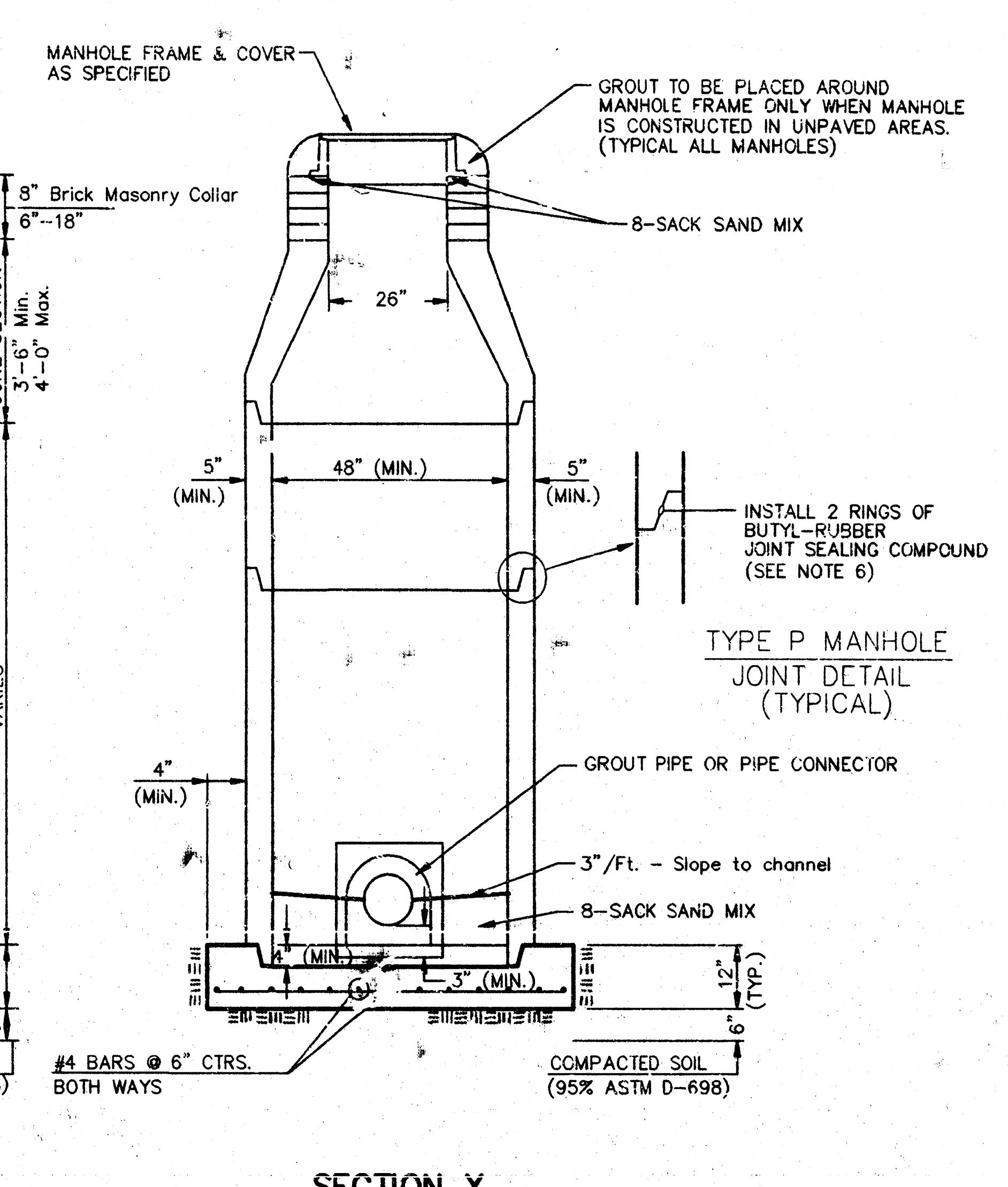
TYPE P
STANDARD MANHOLE



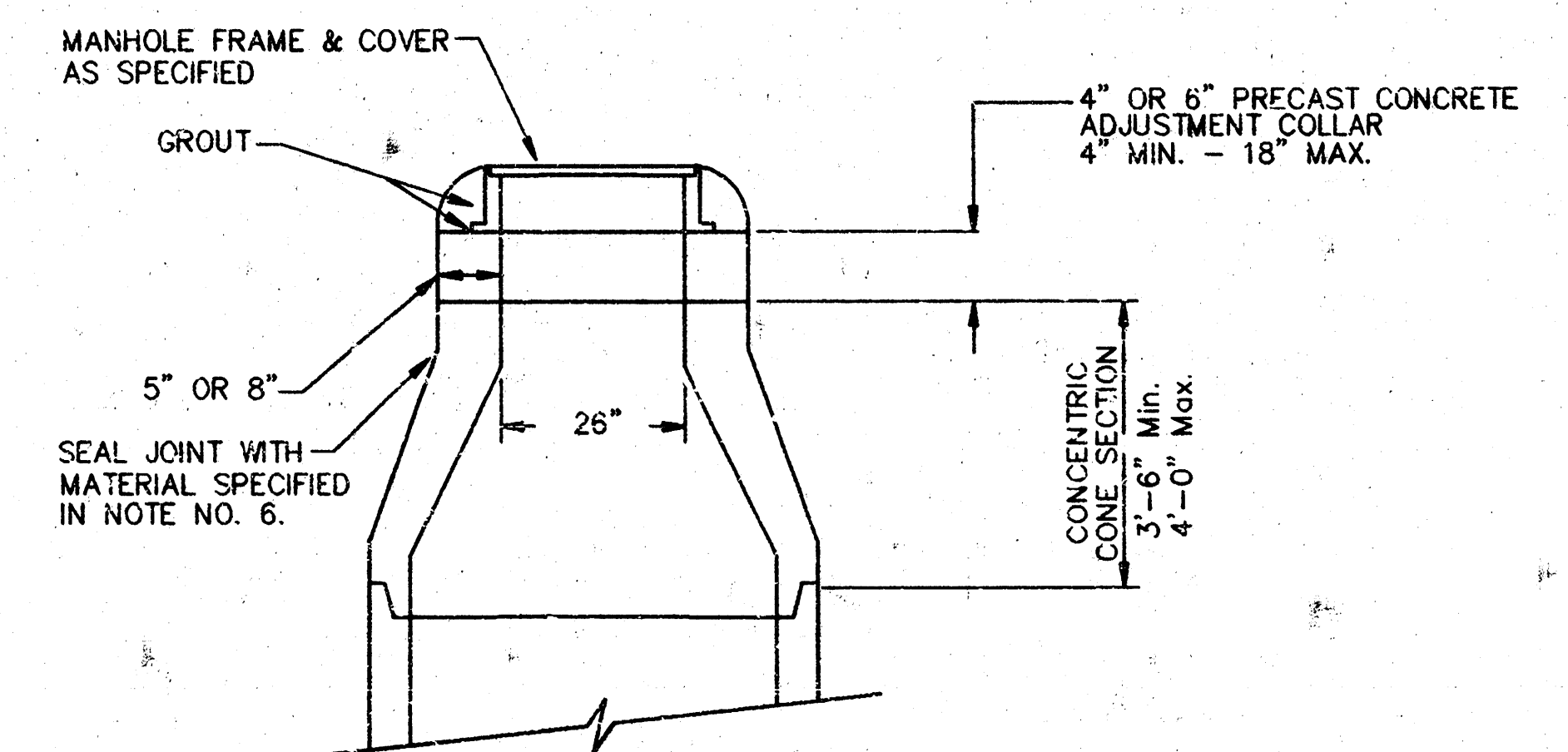
TYPE P
INSIDE DROP MANHOLE



TYPE P
OUTSIDE DROP MANHOLE



SECTION X
(TYPICAL)



ALTERNATE CONSTRUCTION IN UNPAVED AREAS

- 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 GROUT JOINT SHALL BE SURFACED WITH CONCRETE ENCASEMENT. 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 NEMECOX 68 HI-BUILD EPOXYLINE, 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 BAGS OF CEMENT PER CUBIC YARD. CONCRETE USED IN MANHOLE BASES SHALL CONFORM TO THE REQUIREMENTS OF CONCRETE FOR CONCRETE PAVEMENT CONSTRUCTION AS SHOWN ON THE CITY STANDARD PAVEMENT 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 SMALLER THAN 24" SHALL HAVE AN INSIDE DIAMETER OF 8". 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 FORMING AND INSTALLATION OF THE 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 INSTALLING AND GROUTING THE NEW PIPE IN PLACE. WATERSTOP JOINTS SHALL BE USED IN ALL C.C. AND CONCRETE 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 APPROPRIATE BUTYRIC ACID BASED SEALANT TO 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 COMPLETED AT THE UNIT PRICE BID FOR THE 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 FLOW 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 CHANNELS AND THE OUTLET PIPE. FLOW CHANNELS SHALL BE FORMED 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 THREE INCHES PER FOOT IN THE DIRECTION OF THE OUTSIDE OF THE MANHOLE. SLOPED MANHOLE FLOW CHANNELS. PIPES LAID THROUGH MANHOLES SHALL HAVE THE TOP HALF REMOVED TO LEAN LINES FOR THE FULL INSIDE DIAMETER OF THE MANHOLE. MANHOLE FLOORS SHALL 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 CONSTRUCTED WITHIN THE 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. WHEN CAST IRON PIPE 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. ALL MANHOLES 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				
 BAUGHMAN COMPANY P. A. ENGINEERING, SURVEYING, & PLANNING 316-262-7271 • 315 ELLIS • WICHITA, KANSAS 67211				
PROJECT NUMBER				SHEET
847 PPS (070831)				2
DESIGN	DRAWN	APPROVED	DATE	SCALE
				1" = 4'

MANHOLE COVER
Weight = 180 Lbs.

PICKHOLE DETAIL

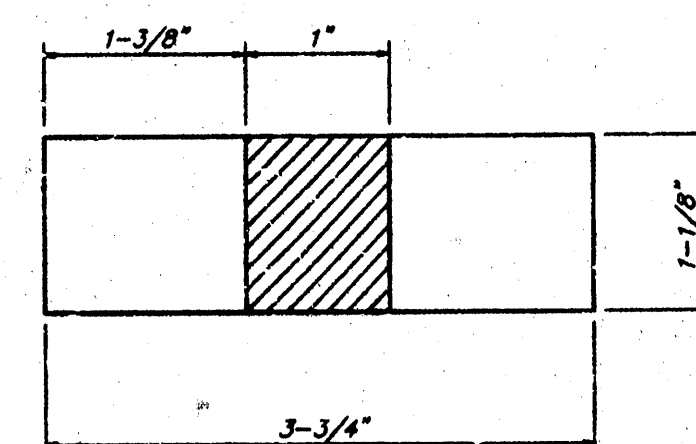


Diagram of a U-shaped container with a rectangular block inside. The container has a width of $5\frac{3}{4}$ inches and a height of $1\frac{1}{4}$ inches. The block has a width of 1 inch and a height of 1 inch. The block is shaded with diagonal lines.

A circular diagram consisting of two concentric circles. Between these circles, there are eight radial lines that divide the annular space into eight equal segments. The entire diagram is enclosed within a larger circle.

Technical drawing of a mechanical part with the following dimensions and specifications:

- Top horizontal dimension: $2'-1-3/4"$ Dia.
- Top left vertical dimension: $4"$
- Top right vertical dimension: $3/4"$ Dia.
- Top right vertical dimension: $13/16"$
- Top right vertical dimension: $1/8"$ Finished
- Left vertical dimension: $3-1/2"$
- Left vertical dimension: $1-3/8"$
- Left vertical dimension: $1/2"$
- Bottom left horizontal dimension: $3-3/16"$
- Bottom left horizontal dimension: $1/2"$
- Bottom left horizontal dimension: $4-1/2"$
- Bottom left horizontal dimension: $1/2"$
- Bottom left horizontal dimension: $1/2"$
- Bottom left horizontal dimension: $2-1/8"$
- Bottom right horizontal dimension: $5/8"$
- Bottom right horizontal dimension: Machine Finish
- Bottom horizontal dimension: $2'-1-5/8"$ Dia.

MANHOLE FRAME
Weight = 240 Lbs.

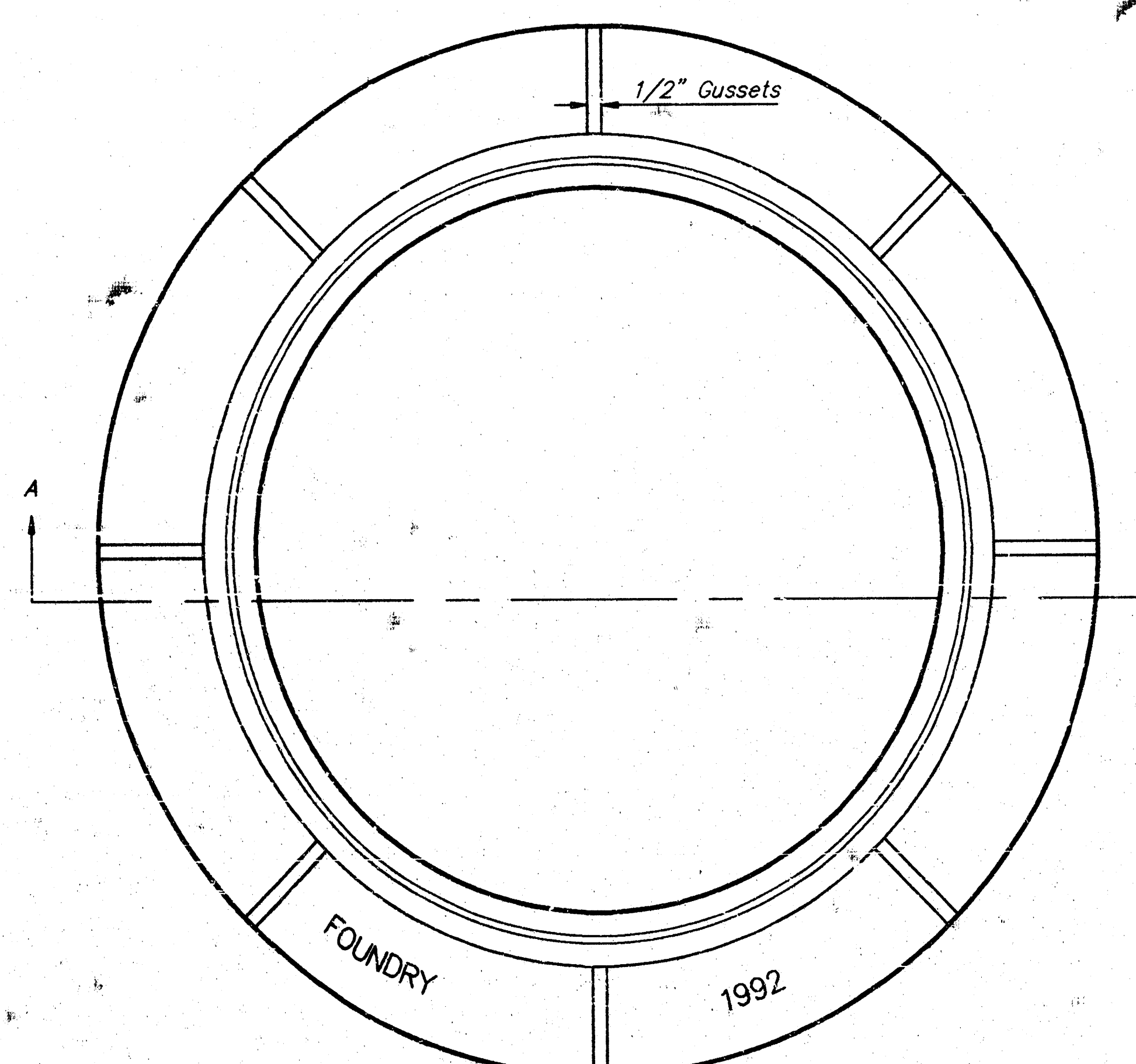


Fig. 1

2'-2" Dia

1/16"

7/8"

2'-0-1/8"

MACHINED FINISHED SEAT

13/16"

7/8"

1"

5/8"

4-1/2"

2'-2-1/2"

4-1/2"

2'-11-1/2"

GENERAL NOTES

MANHOLE CASTINGS SHALL BE MANUFACTURED USING GOOD QUALITY GRAY IRON CONFORMING TO CLASS 30 OF A.S.T.M. DESIGNATION A-4E. 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, HART 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.

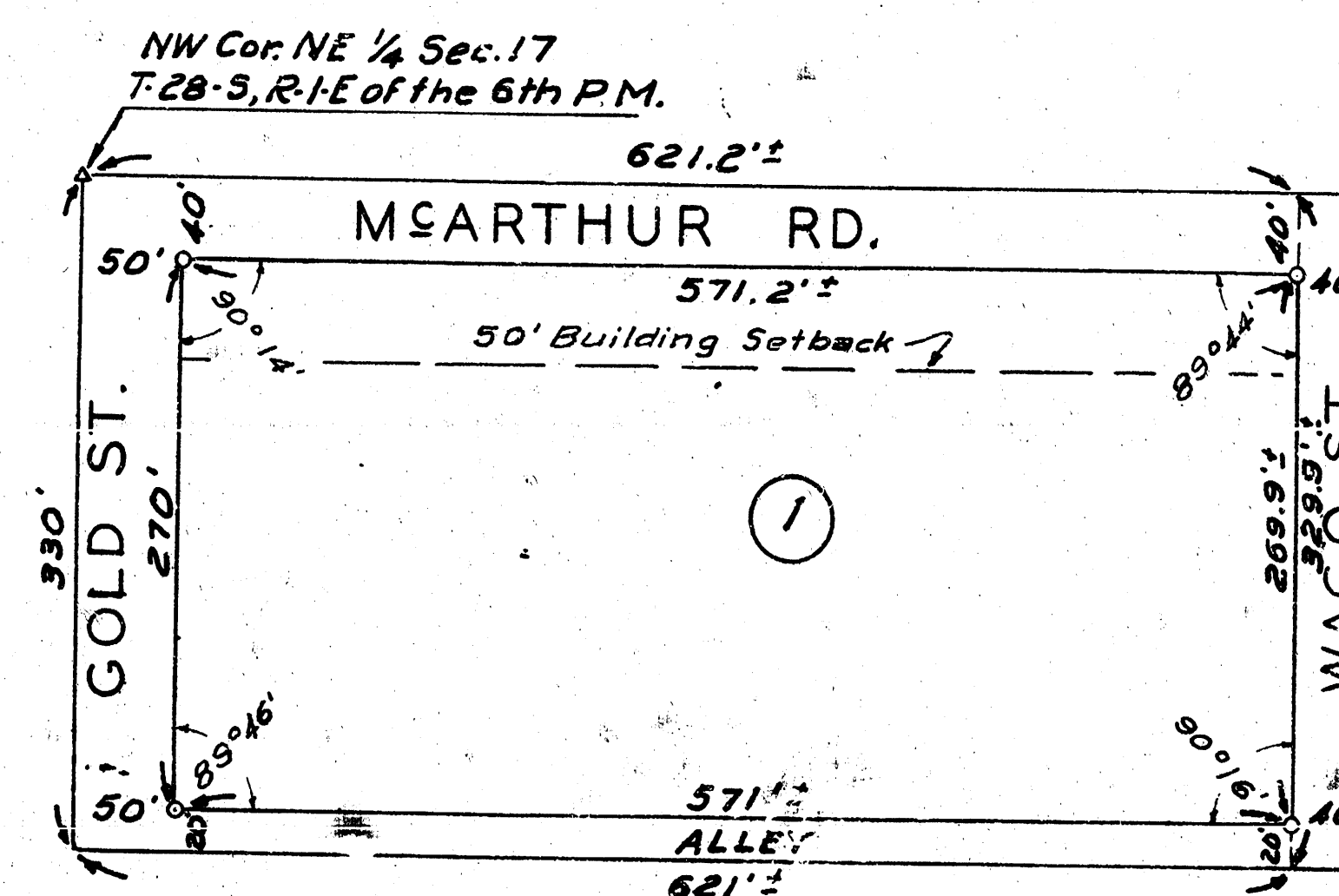
THE OUTSIDE CIRCUMFERENCE OF THE VERTICAL FACE OF THE COVER AND THE INSIDE CIRCUMFERENCE OF THE VERTICAL FACE IN THE FRAME RECESS SHALL BE MANUFACTURED TO TOLERANCES SUCH THAT THE DISTANCE BETWEEN THE COVER AND FRAME SHALL NOT EXCEED .08" AT ANY POINT AROUND THE CIRCUMFERENCE OF THE COVER. THE SEATING 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 OF THE COVER OR FRAME 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 MINIMIZE THE LETTERING AREA. THE LETTERING ON THE SMOOTH SURFACE OF SMOOTH BLOCKOUT SHALL NOT EXCEED 1/4" 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					
LAWSON CARWASH					
CITY OF WICHITA STANDARD DETAIL					
 BAUGHMAN COMPANY P.A. ENGINEERING, SURVEYING, & PLANNING 316-262-7271 • 315 ELLIS • WICHITA, KANSAS 67211					
PROJECT NUMBER					
4847 PPS (607881)					
DESIGN	DRAWN	CHECKED	APPROVED	DATE	SCALE
1/1	1/1	1/1	1/1	1/1	1/1

CHAMBERLAIN'S BY-PASS ADDITION

SEDGWICK COUNTY, KANSAS



Scale - 1" = 100'
0 = 1/8 inch

Entered on transfer record this 10th day of February 1961.
H. O. Williams County Clerk

State of Kansas) s.s. This is to certify that this plat was filed for record in the office of Register of Deeds this 10th day of February 1961, at 10 o'clock and is duly recorded.

Rufus E. Weering Register of Deeds
Paul Gilbert Deputy

State of Kansas) s.s. I, Guy S. Guthrie, Civil Engineer in aforesaid county and state, do hereby certify that I have surveyed and platted "CHAMBERLAIN'S BY-PASS ADDITION" Sedgwick County, Kansas and that accompanying plat is a true and correct exhibit of the property surveyed described as follows: The North 1/2 of the NW 1/4 of the NE 1/4, except the East 40 feet thereof, of Sec. 17, T-28-S, R-1-E of the 6th P.M.

Guy S. Guthrie Civil Engineer

Know all men by these presents that we, John W. Chamberlain and Mildred H. Chamberlain, his wife, have caused the land described in the surveyors certificate to be platted into a block, road, street, and alley, to be known as "CHAMBERLAIN'S BY-PASS ADDITION" Sedgwick County, Kansas. The road, street, and alley are hereby dedicated to and for the use of the public.

John W. Chamberlain
Mildred H. Chamberlain

State of Kansas) s.s. Be it remembered that on this 27th day of December 1960 before me a notary public in aforesaid county and state came John W. Chamberlain and Mildred H. Chamberlain, his wife, to me known to be the same persons who executed the foregoing instrument of writing and duly acknowledged the execution of the same as their voluntary act and deed. In testimony whereof I have hereunto set my hand and affixed my notarial seal the day and year above written.

My Commission Expires 10-14-63
Laurie D. Dwyer Notary Public

This plat of "CHAMBERLAIN'S BY-PASS ADDITION" Sedgwick County, Kansas has been submitted to and considered by the Wichita-Sedgwick County Metropolitan Area Planning Commission, Wichita, Kansas, and is hereby transmitted to the Board of Commissioners of the City of Wichita, Kansas, with the recommendation that such plat be approved as proposed.

The Wichita-Sedgwick County Metropolitan Area Planning Commission

Dated this 17th day of January 1961

By Charles W. Hansen Chairman
R. Little Secretary

Approved by the board of City Commissioners this 31st day of January 1961

John B. Humphrey Mayor
C. H. G. City Clerk

Approved by the Board of County Commissioners this 10th day of February 1961

H. O. Williams County Clerk

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C-162