

LATERAL 267, MAIN 5, SANITARY SEWER NO. 22

to serve

Eck 4th Addition CITY OF WICHITA, KANSAS

Michael E. Lindobak, P.E. City Engineer

Project Number

468-82665

Index Code

748287

Benchmark

Curtis & 13th Street
City of Wichita Benchmark Disk, @ of
Curtis Extended, 2' South of South
Property Line 1-235 R/W 21' West of
Pole Line South Extended 74' North
Northwest of Street Light Pole 68'
West of Chainlink Fence Corner.
Elev. = 129.15 (City Datum)

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 #87-2470

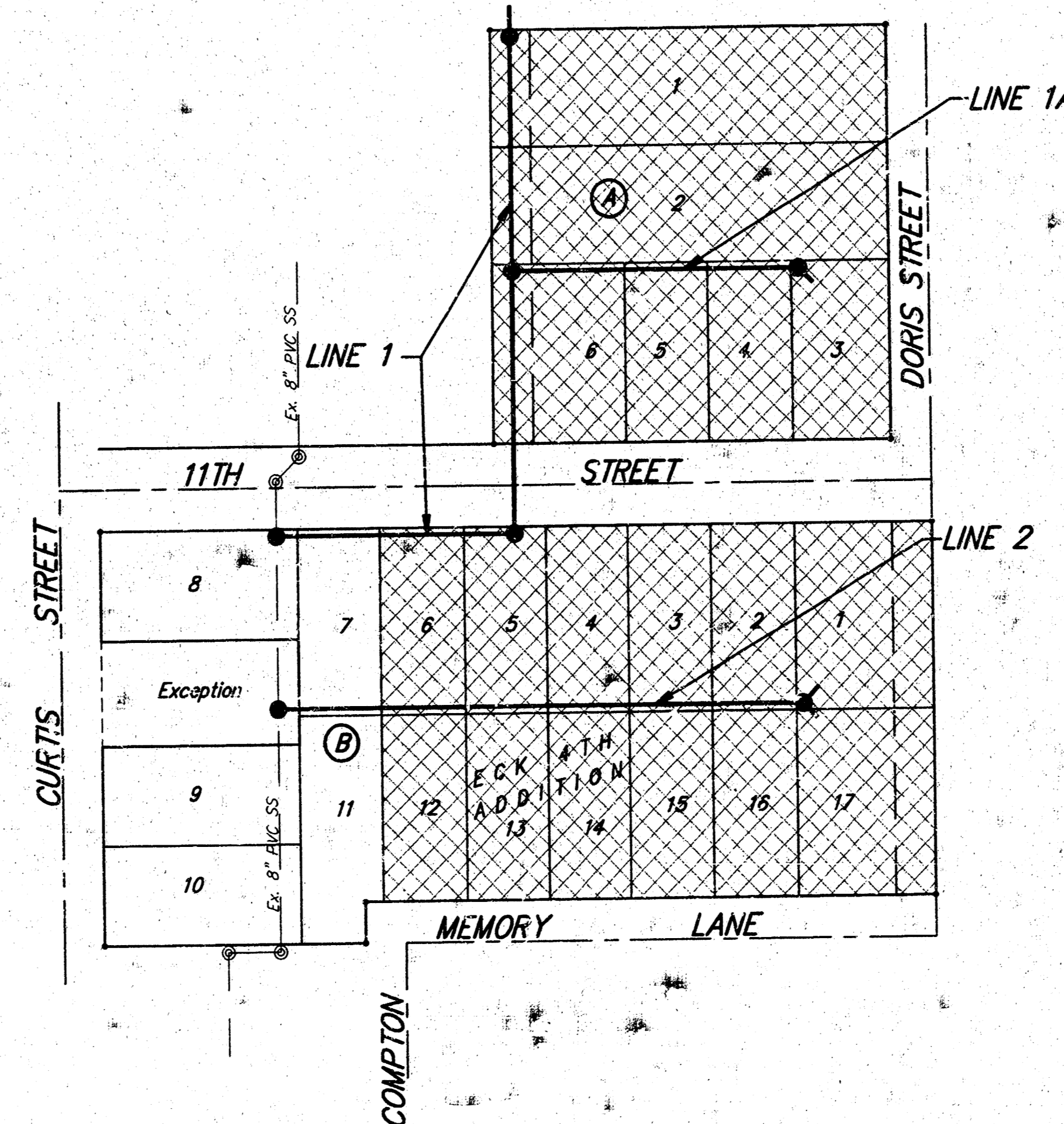
- Contractor must notify the following in case of an emergency:

Multimedia Cablevision 262-0661
K.P.L. Gas Service Company 383-8650
Kansas Gas & Electric Company 393-8600
Peoples Gas Company 942-8350
Southwestern Bell Telephone Company 1-571-2611
City of Wichita Water Dept. 268-4908
City of Wichita Traffic Engineering 269-4446

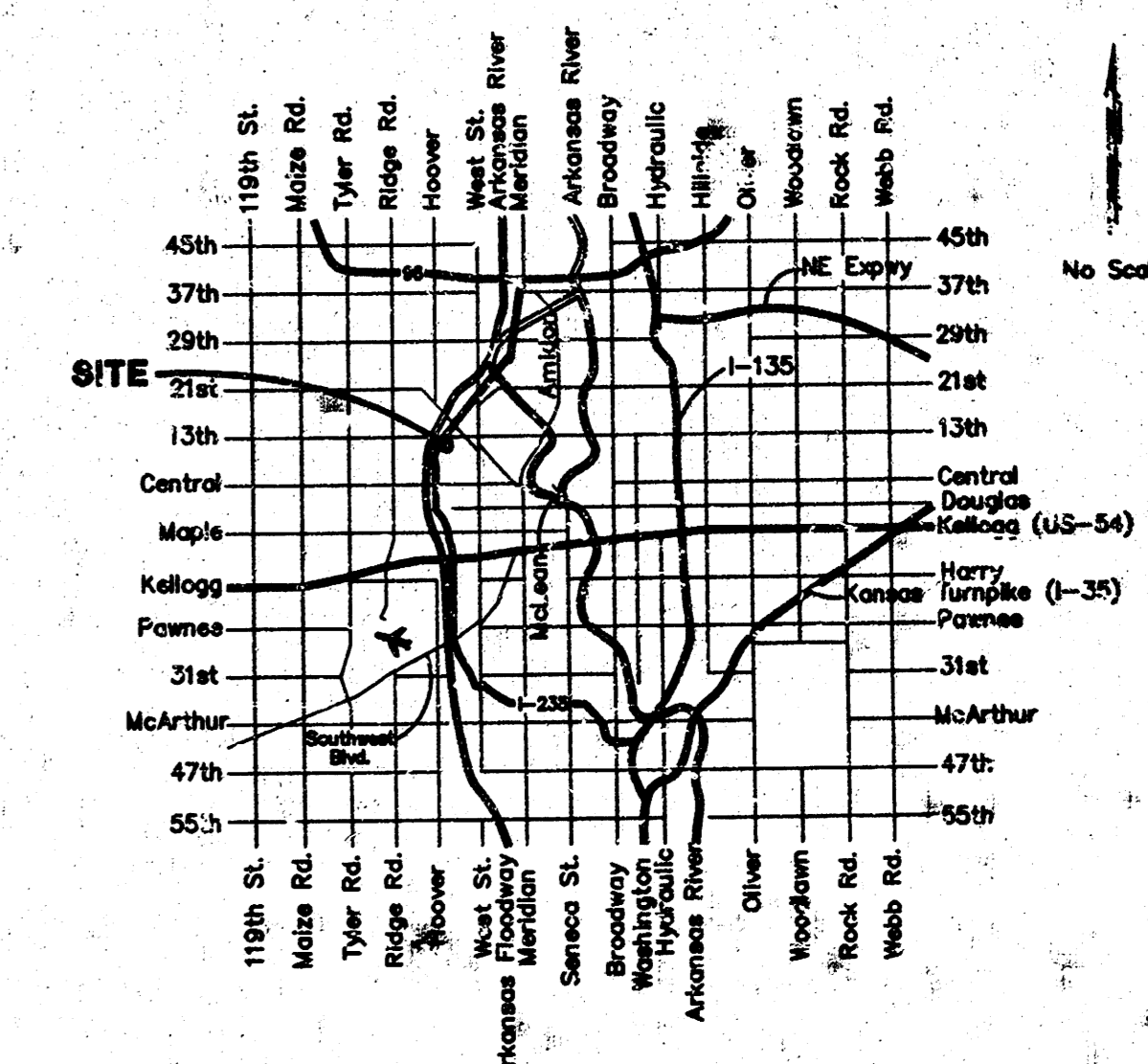
- Underground utility service lines and overhead utility pole lines are to be adjusted as necessary by others prior to construction unless the plans specifically call for their adjustment by the Contractor or unless the plans specifically identify a utility to be adjusted by its owner during construction. 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.
- 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.
- The Contractor shall give all property owners and/or tenants of developed property abutting the construction of this project a minimum of ten (10) days advance notice prior to start of construction.
- 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.
- Contractor shall grade the sanitary sewer alignment to the profile and elevations shown on the easement grading plans. All costs for grading shall be paid as lump sum for easement grading.
- All areas disturbed by construction operations shall be seeded with rye grass at a rate of 300 lbs/acre immediately following construction in that area. Prior to seeding, area shall be prepared per City specs.
- 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 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. All disposal sites must be approved by the Kansas Department of Health and Environment. Material either stockpiled or disposed of in a flood plain would require a Kansas State Board of Agriculture permit. Any material dumped in waters of the United States or wetlands is subject to U.S. Corps. of Engineers permitting regulations. Any material buried or stockpiled beyond approved construction limits would require additional archaeological investigations unless buried in a previously approved borrow location.

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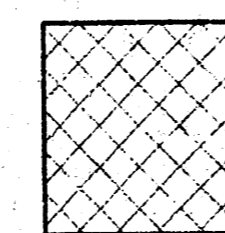


Scale: 1" = 100'

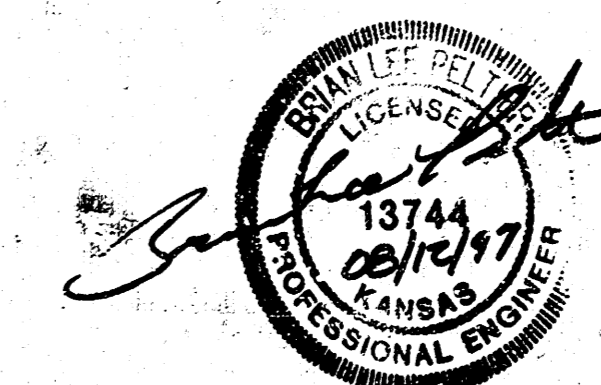


Vicinity Map

Benefit District



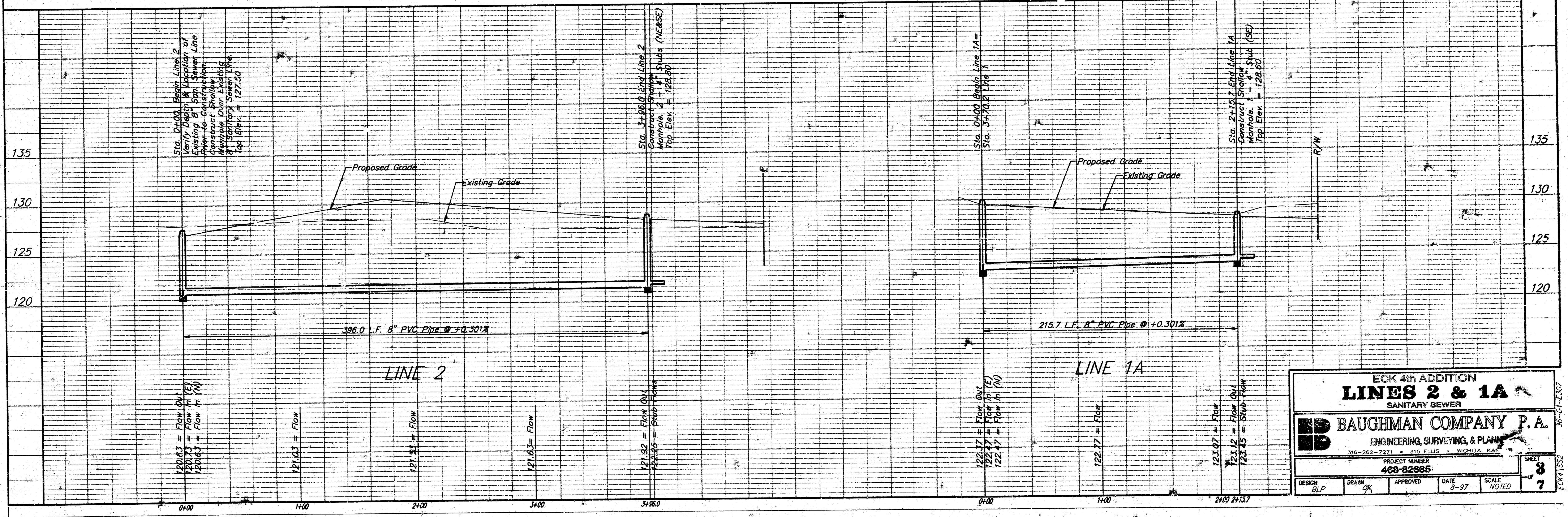
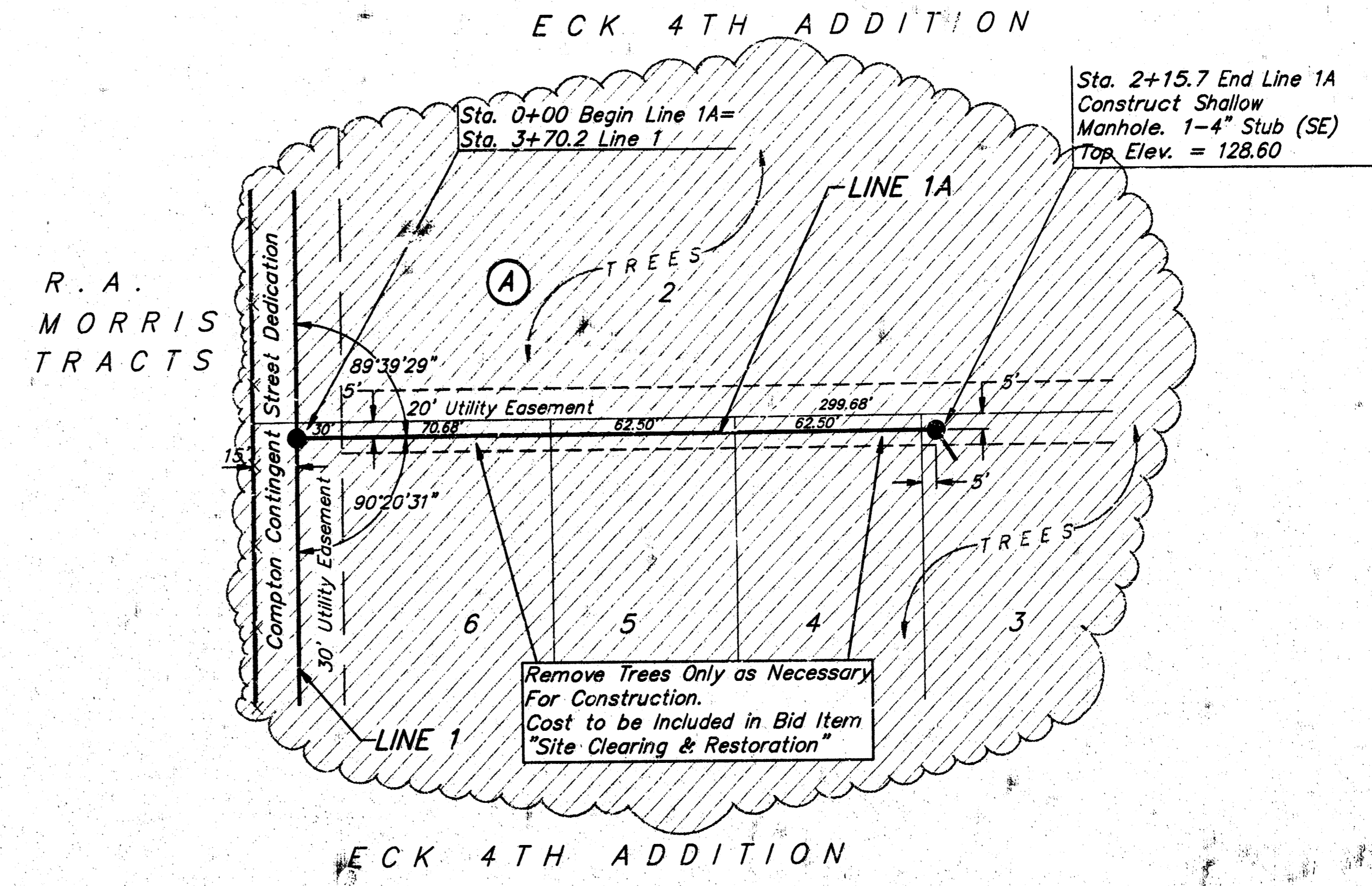
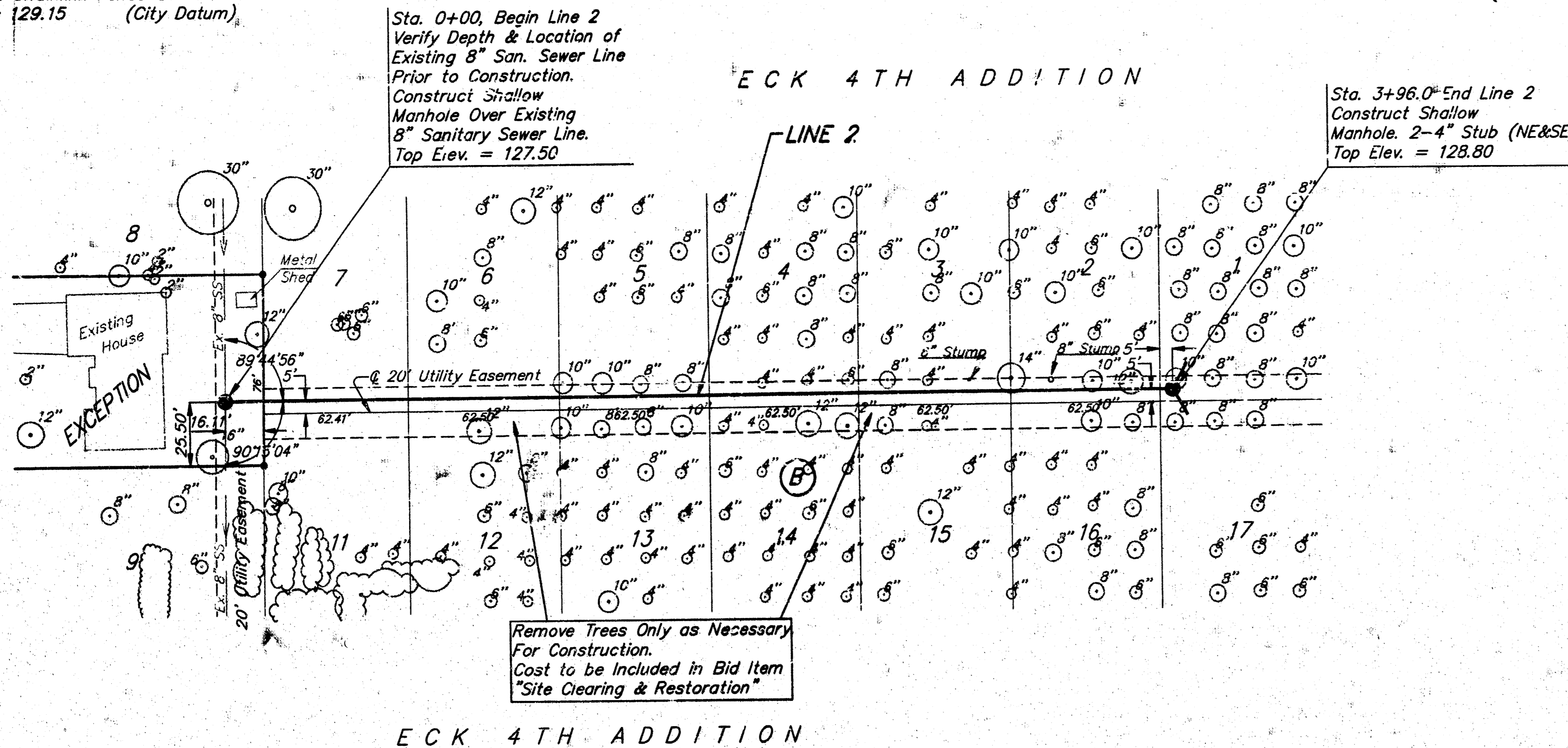
Booked
5/6/98
P-6
Per Plan
R. Loomis



BENCHMARK:
 Curtis & 13th Street
 City of Wichita Benchmark Disk, @ of
 Curtis Extended, 2' South of South
 Property Line 1-235 R/W 21' West of
 Pole Line South Extended 74' North
 Northwest of Street Light Pole 68'
 West of Chainlink Fence Corner.
 Elev. = 129.15 (City Datum)

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

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



ECK 4th ADDITION
LINES 2 & 1A
 SANITARY SEWER

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

316-262-7271 • 315 ELLIS • WICHITA, KAN.

PROJECT NUMBER
488-82665

DESIGN: BLP DRAWN: JK APPROVED: [Signature] DATE: 8-97 SCALE: NOTED

SHEET **8** OF **7**

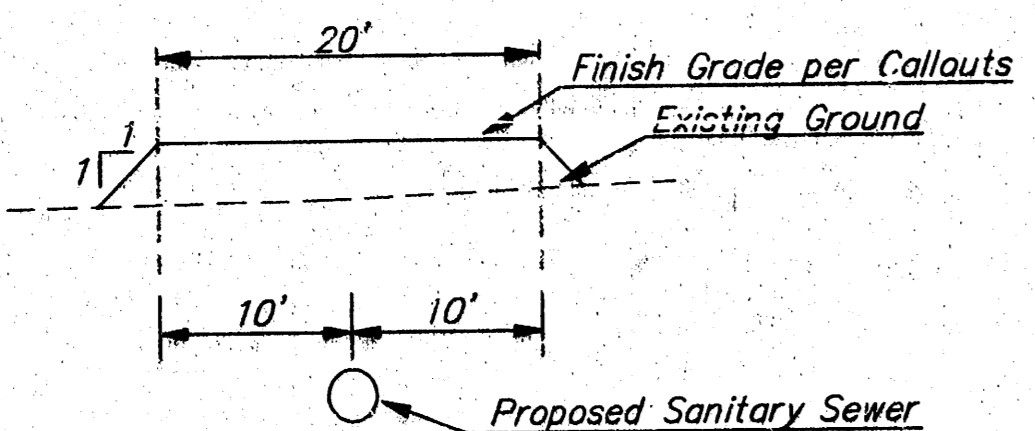
BENCHMARK:
 Curtis & 13th Street
 City of Wichita Benchmark Disk, @ of
 Curtis Extended, 2' South of South
 Property Line 1-235 R/W 21' West of
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 Elev. = 129.15 (City Datum)

 = Easements To Be Graded

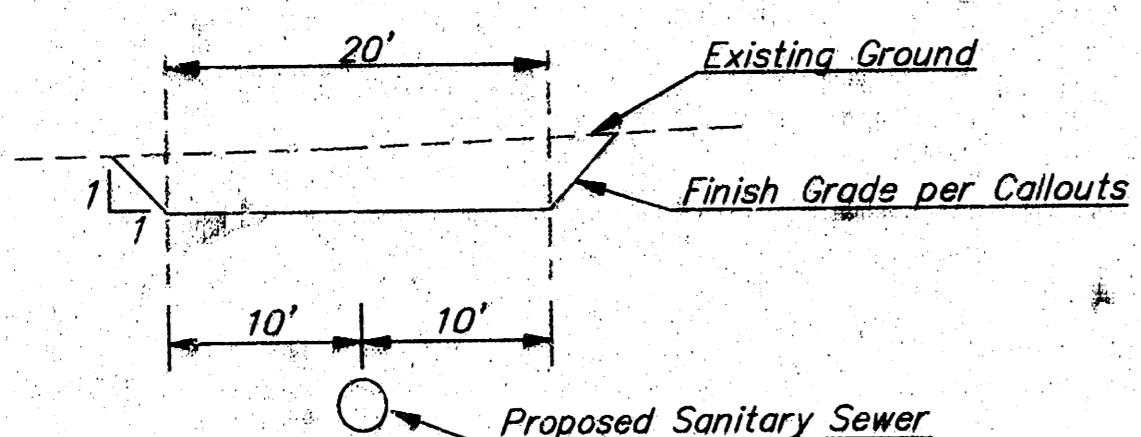
NOTE: The approximate quantity of easement grading is 611 yd³ fill. (Contractor Furnishes)

The contractor shall grade the easements as shown to the elevations given on the easement grading plan. All costs for grading shall be incidental to the Easement Grading Bid Item.

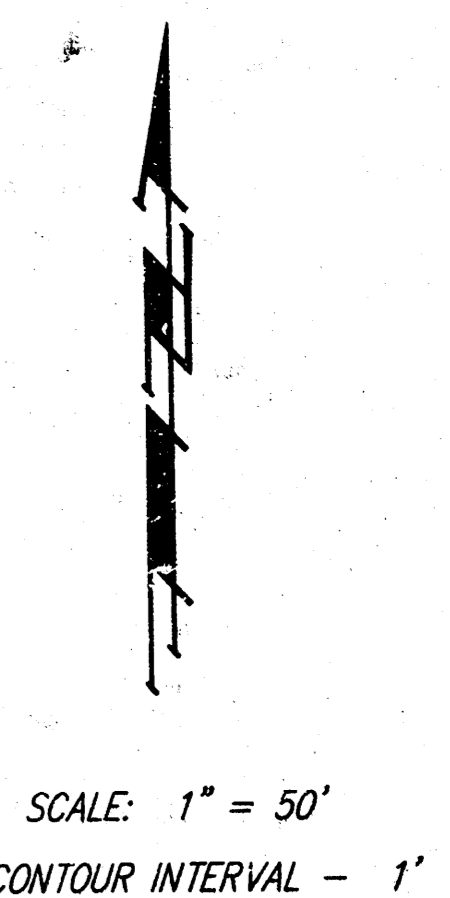
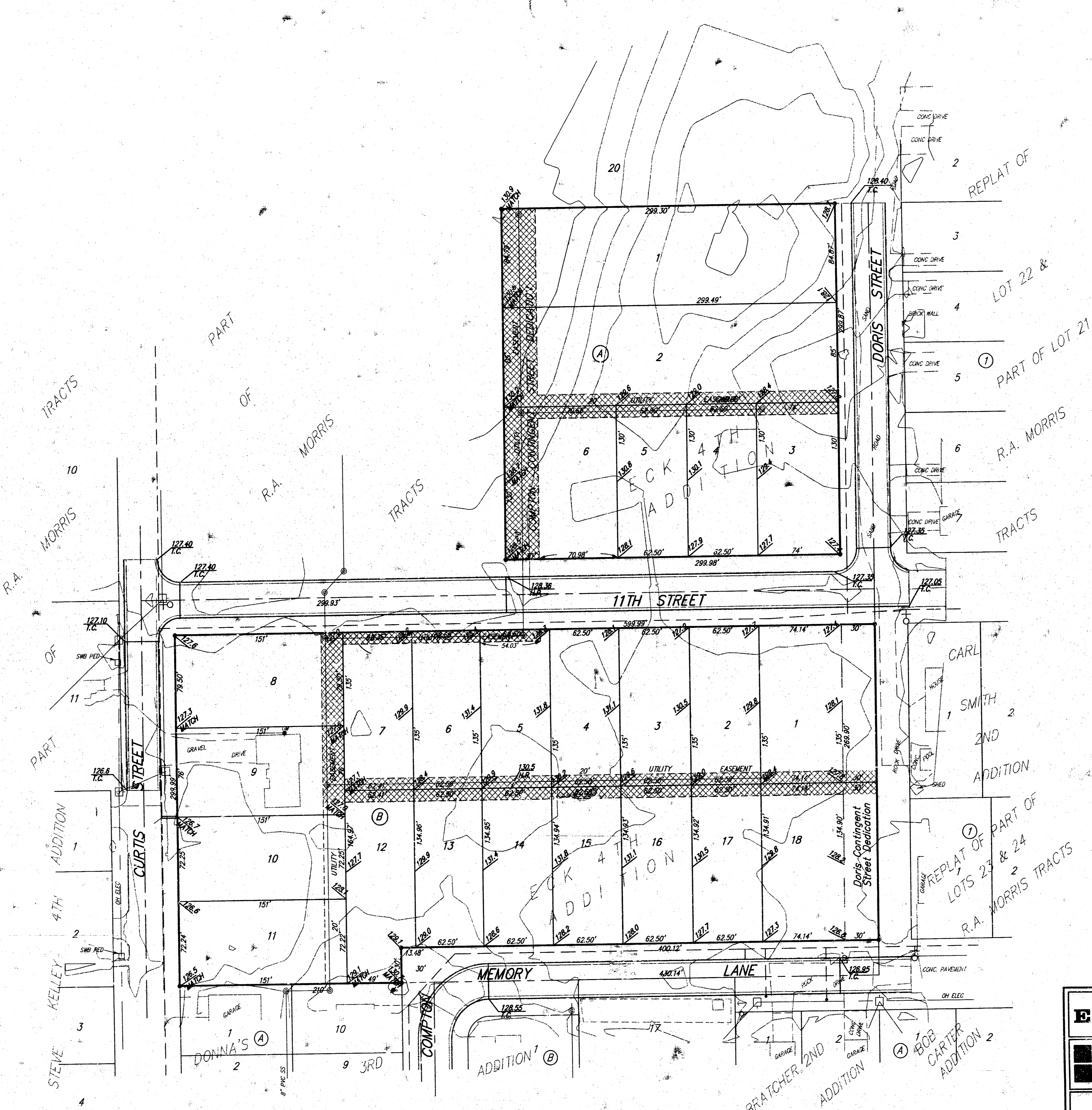
The contractor shall 'straight' grade the easements between the elevations given. Where a callout designates 'Match', the contractor will grade to the existing ground elevation.



TYPICAL FILL SECTION



TYPICAL CUT SECTION



ECK 4TH ADDITION
ESM'T GRADING PLAN
 SANITARY SEWER

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

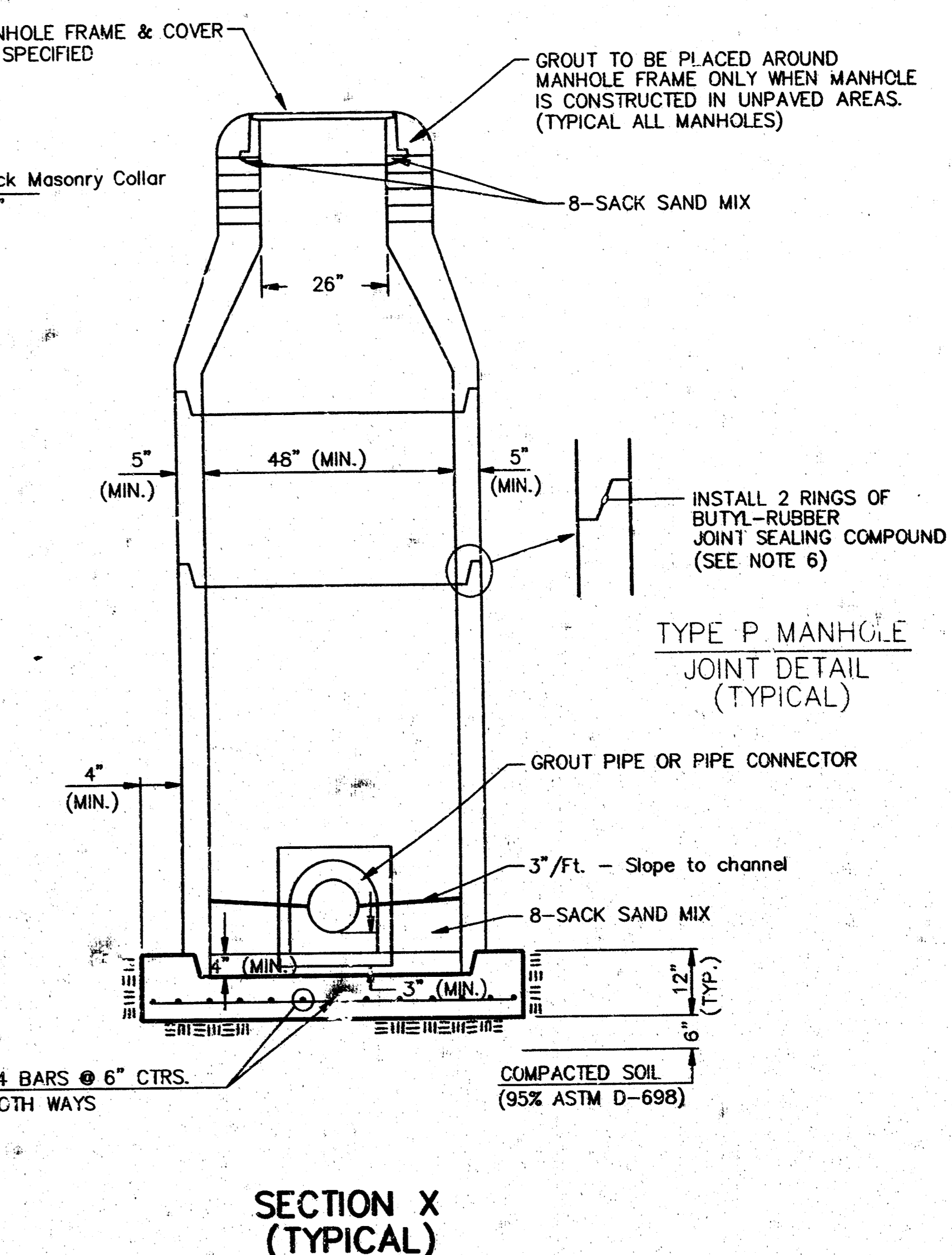
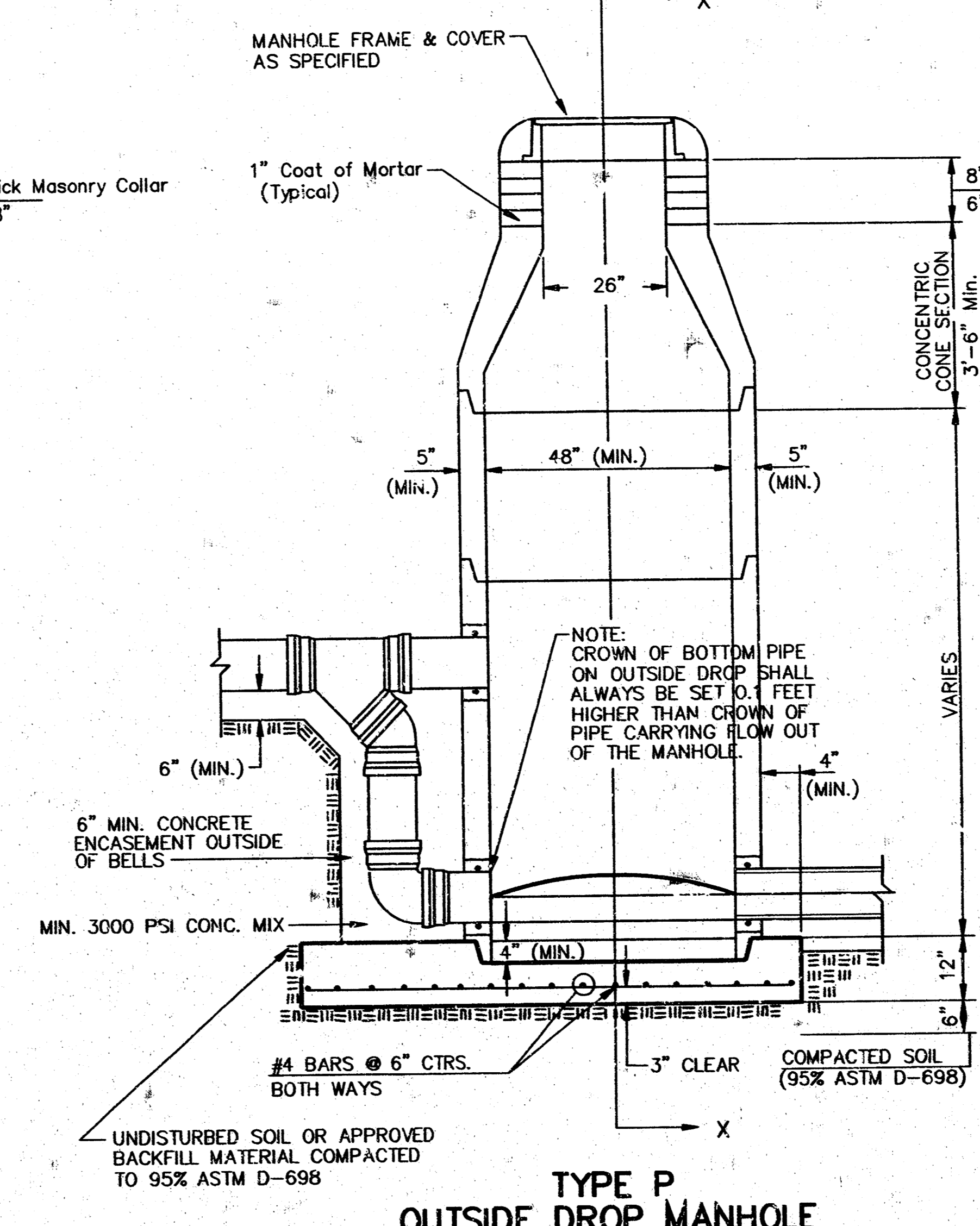
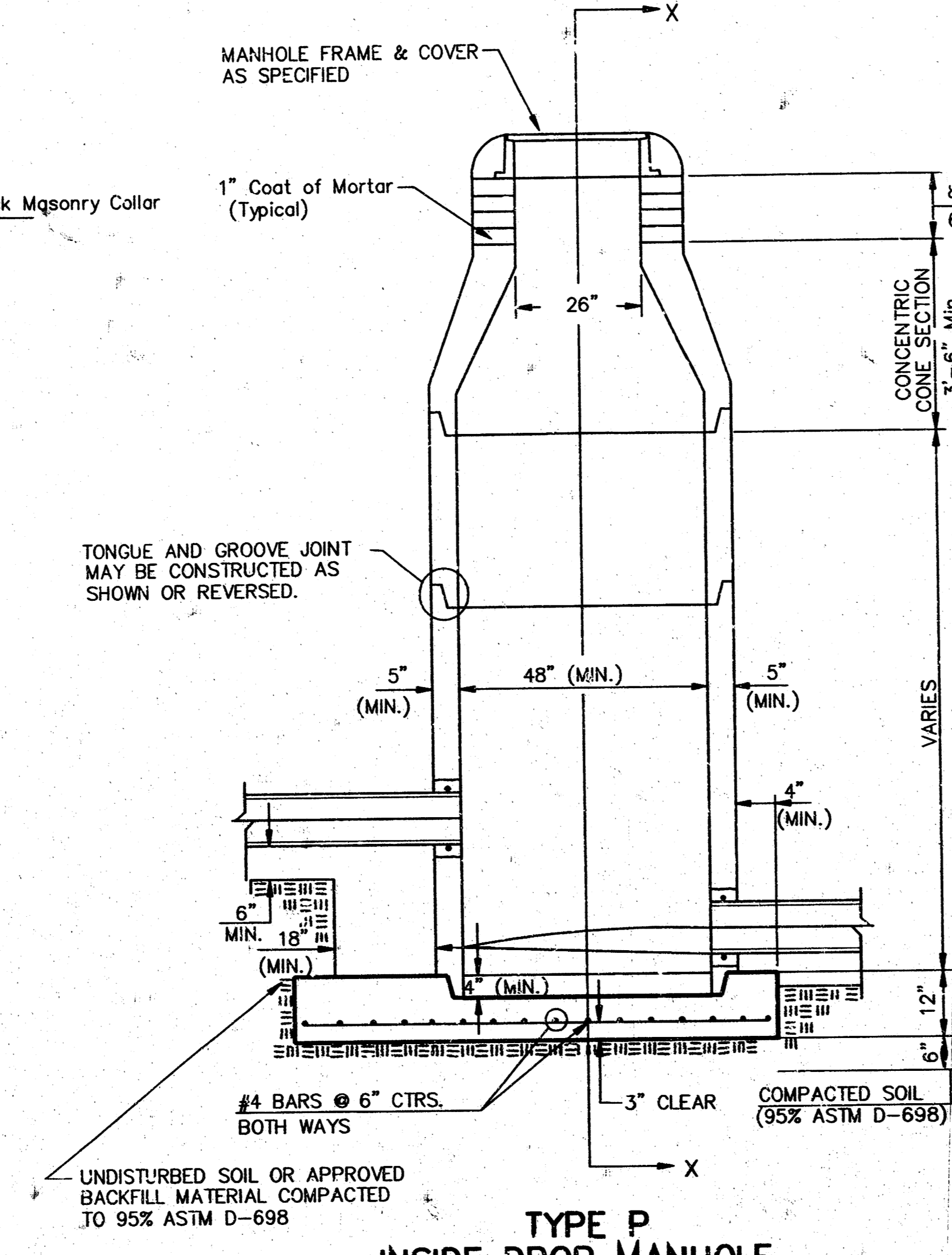
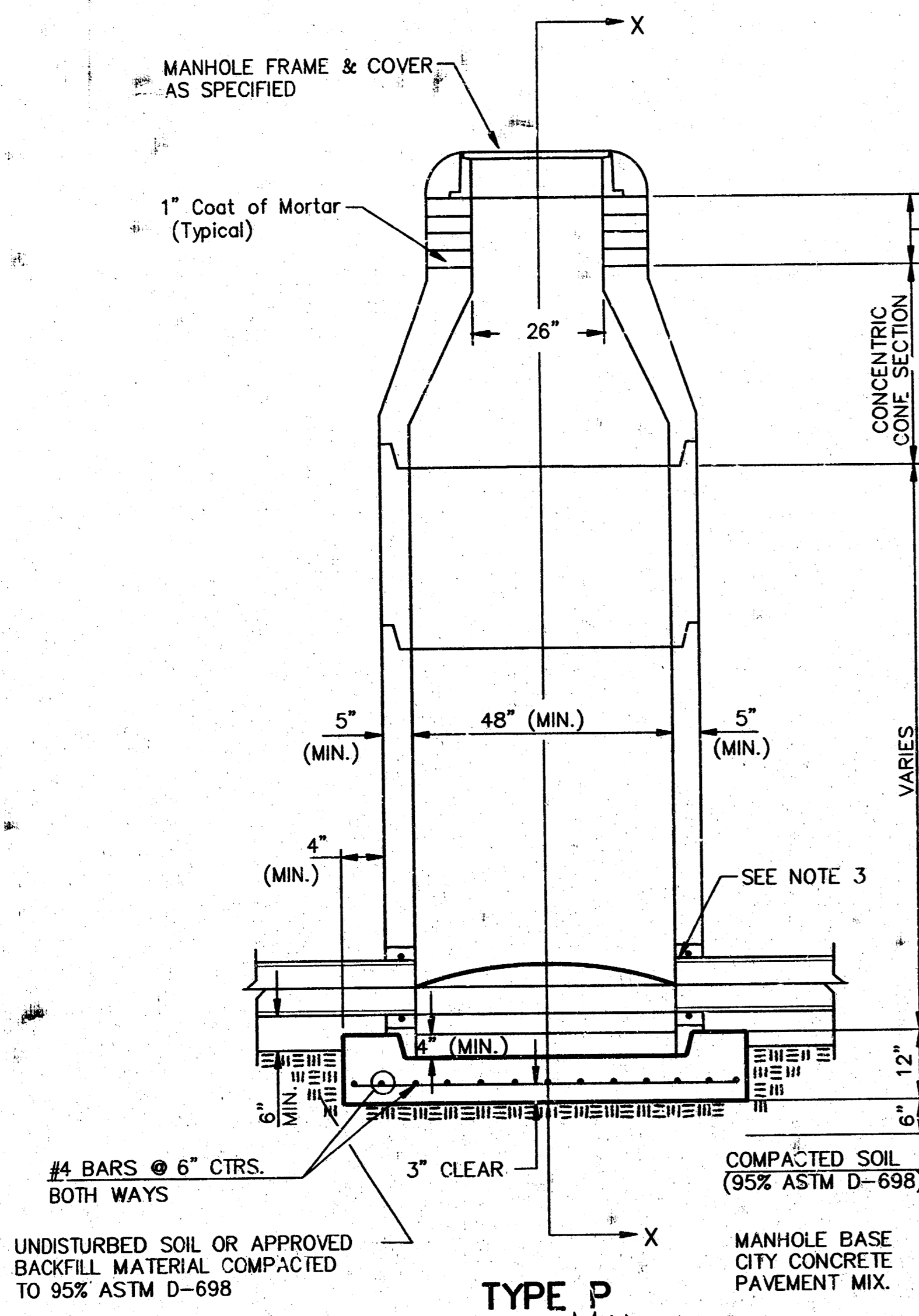
PROJECT NUMBER
488-82635

DESIGN	DRAWN	APPROVED	DATE	SCALE
BLP	CK		8-97	NOTED

SHEET **4** OF **7**

ECK4ESM'GRD 96-04-1307

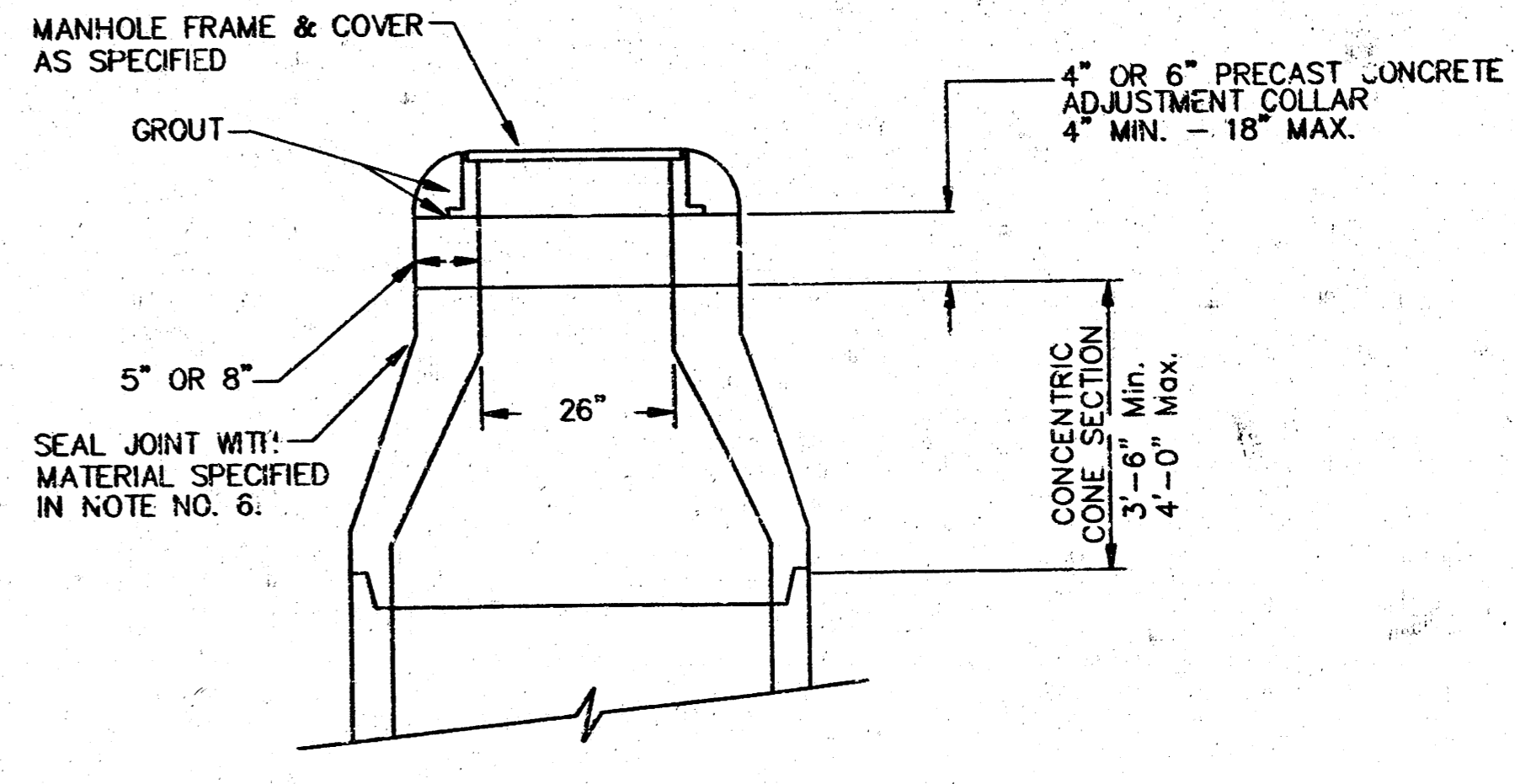
SEWER APPURTENANCES DETAILS



- 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 ENCASUREMENT 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 INEMEC 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 KEHT 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 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 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 5" 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.

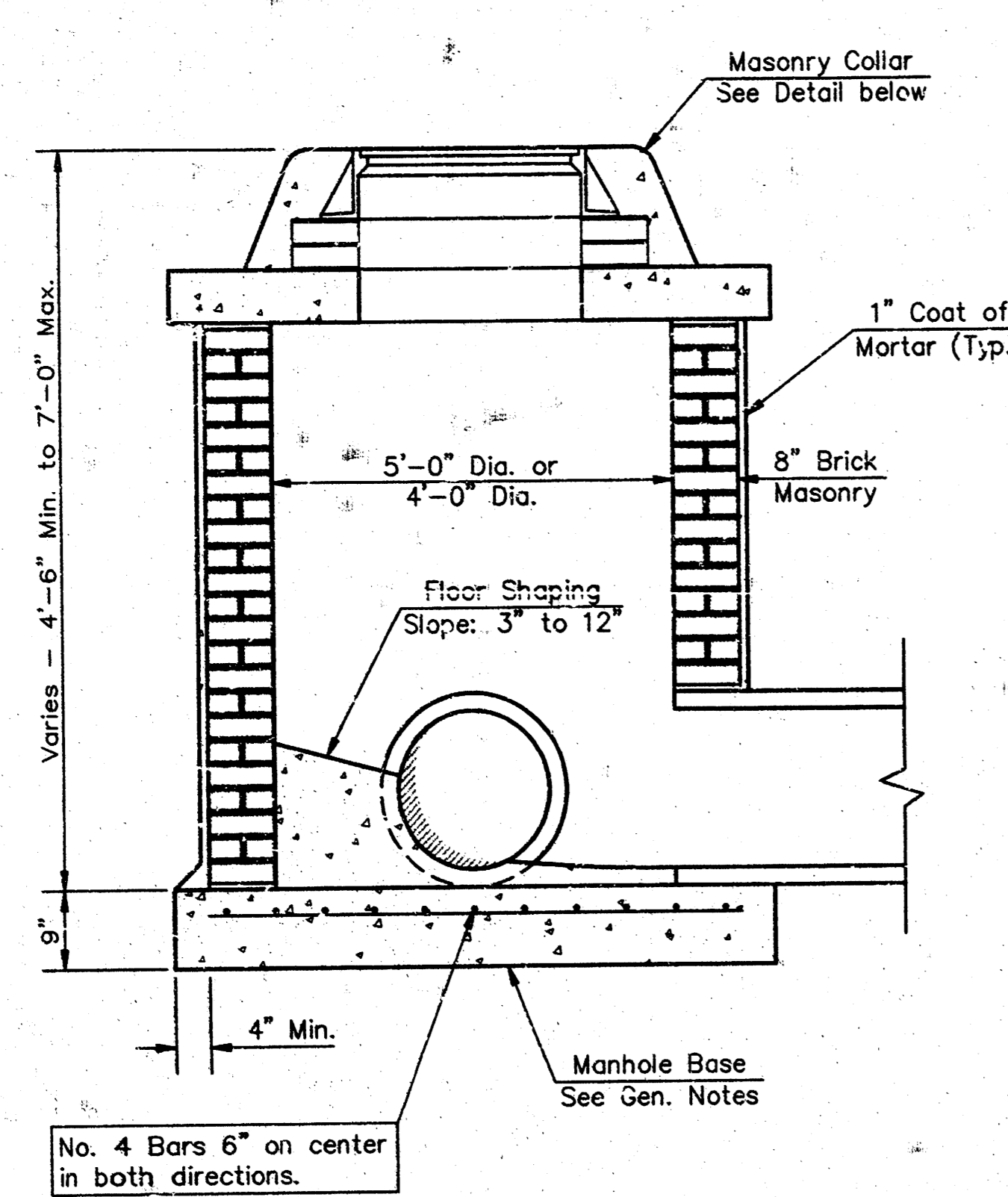


CITY OF WICHITA
STD. MANHOLE DETAILS
& SEWER APPURTENANCES DETAIL

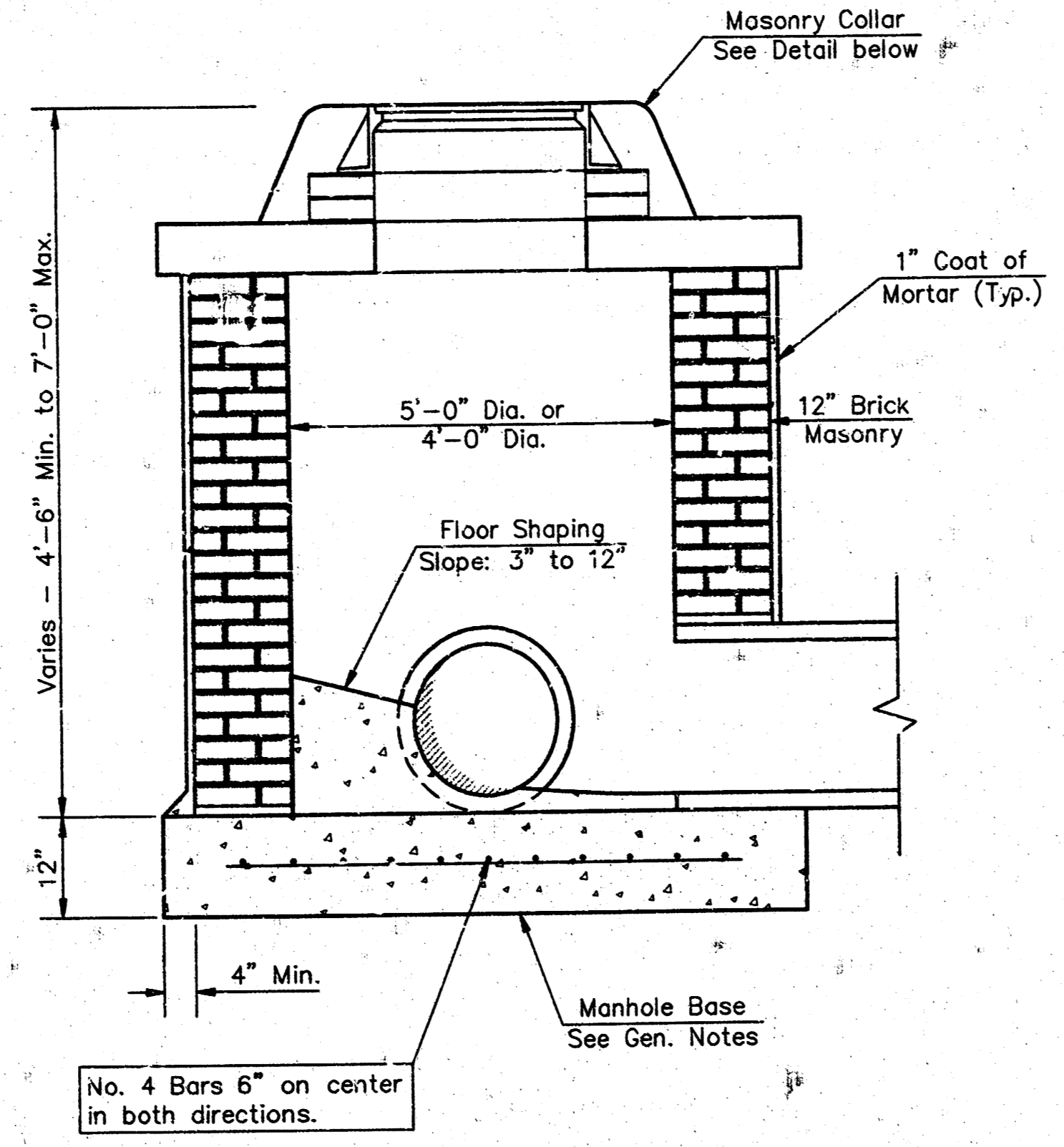
BAUGHMAN COMPANY P.A.
ENGINEERING, SURVEYING, & PLANNING
316-262-7271 • 315 ELLIS • WICHITA, KANSAS 67211

PROJECT NUMBER:
468-82665

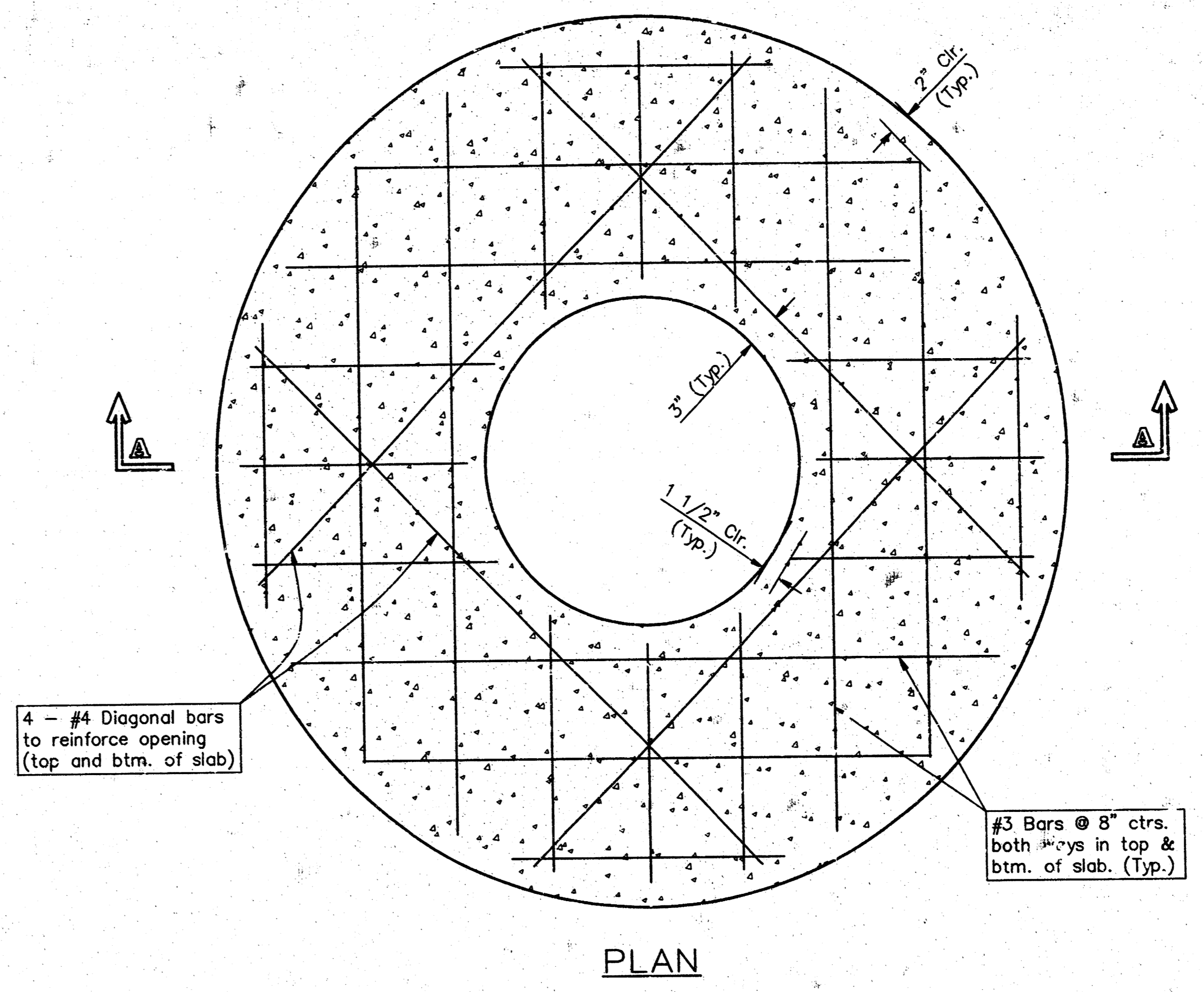
DESIGN C.O.W.	DRAWN Staff	APPROVED	DATE 8-97	SCALE NONE	SHEET 5 OF 7
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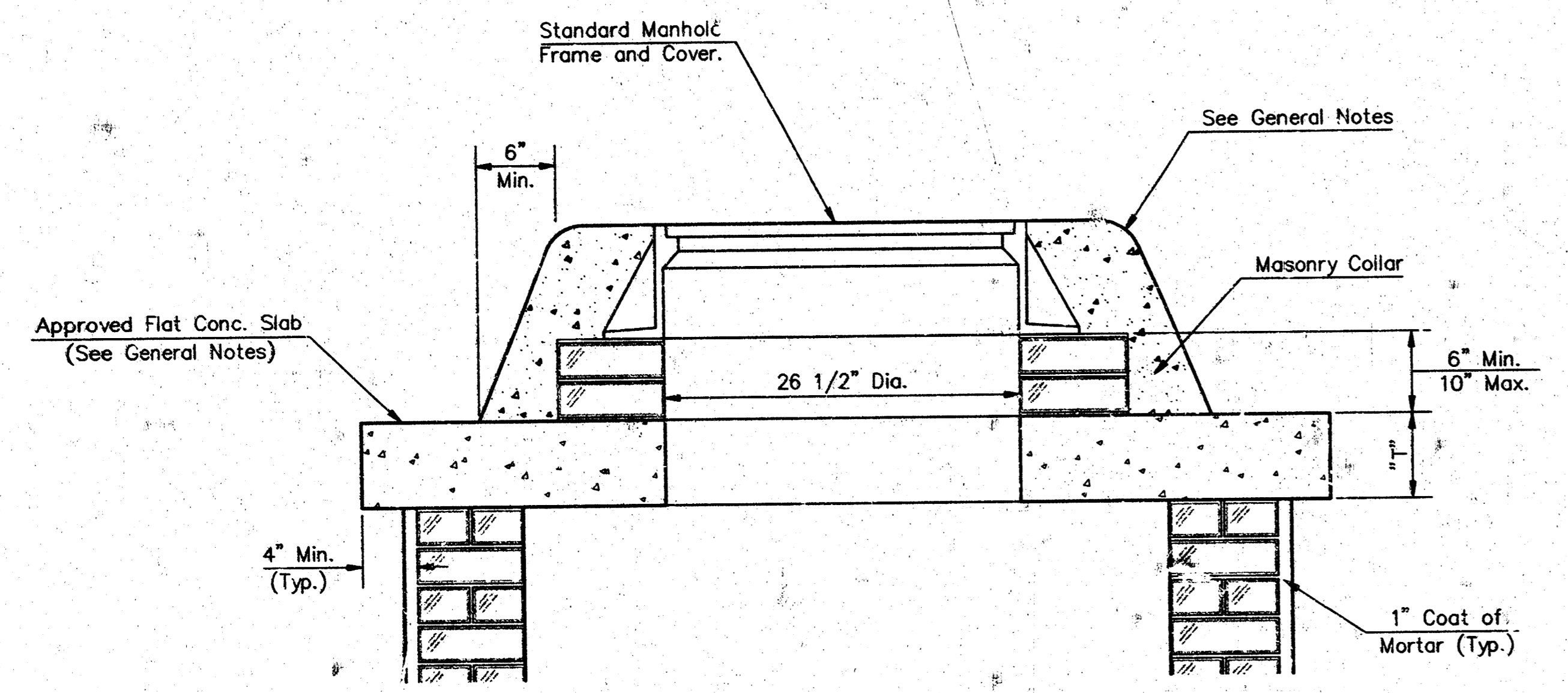
SHALLOW TYPE "A" MANHOLE



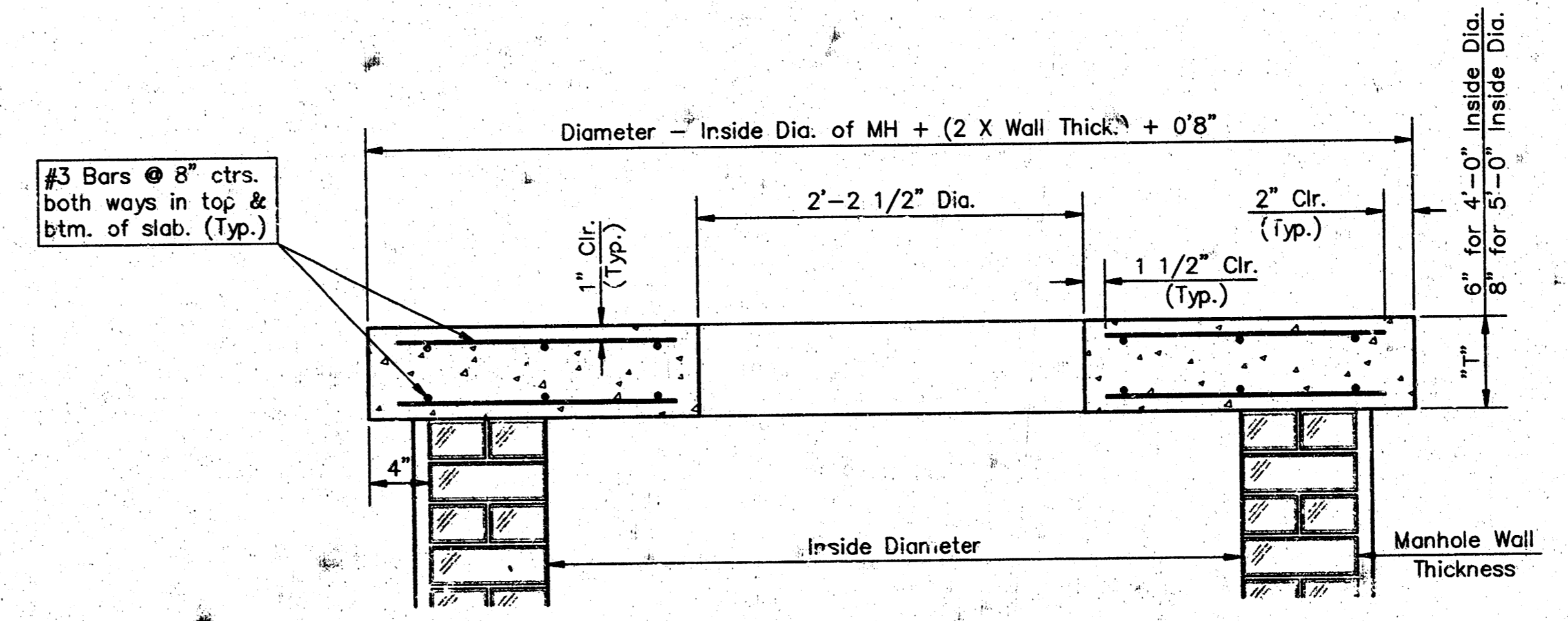
SHALLOW TYPE "B" MANHOLE



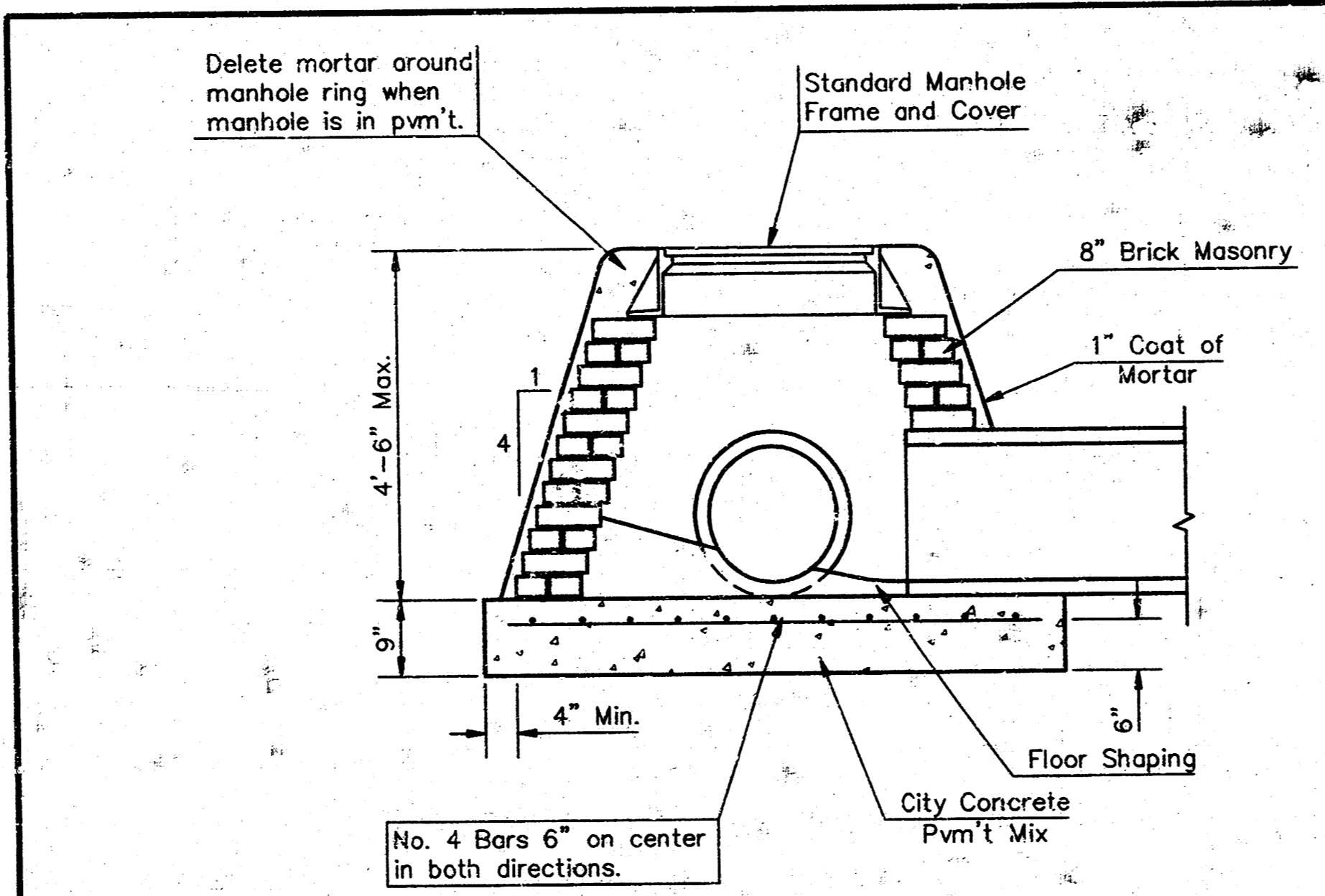
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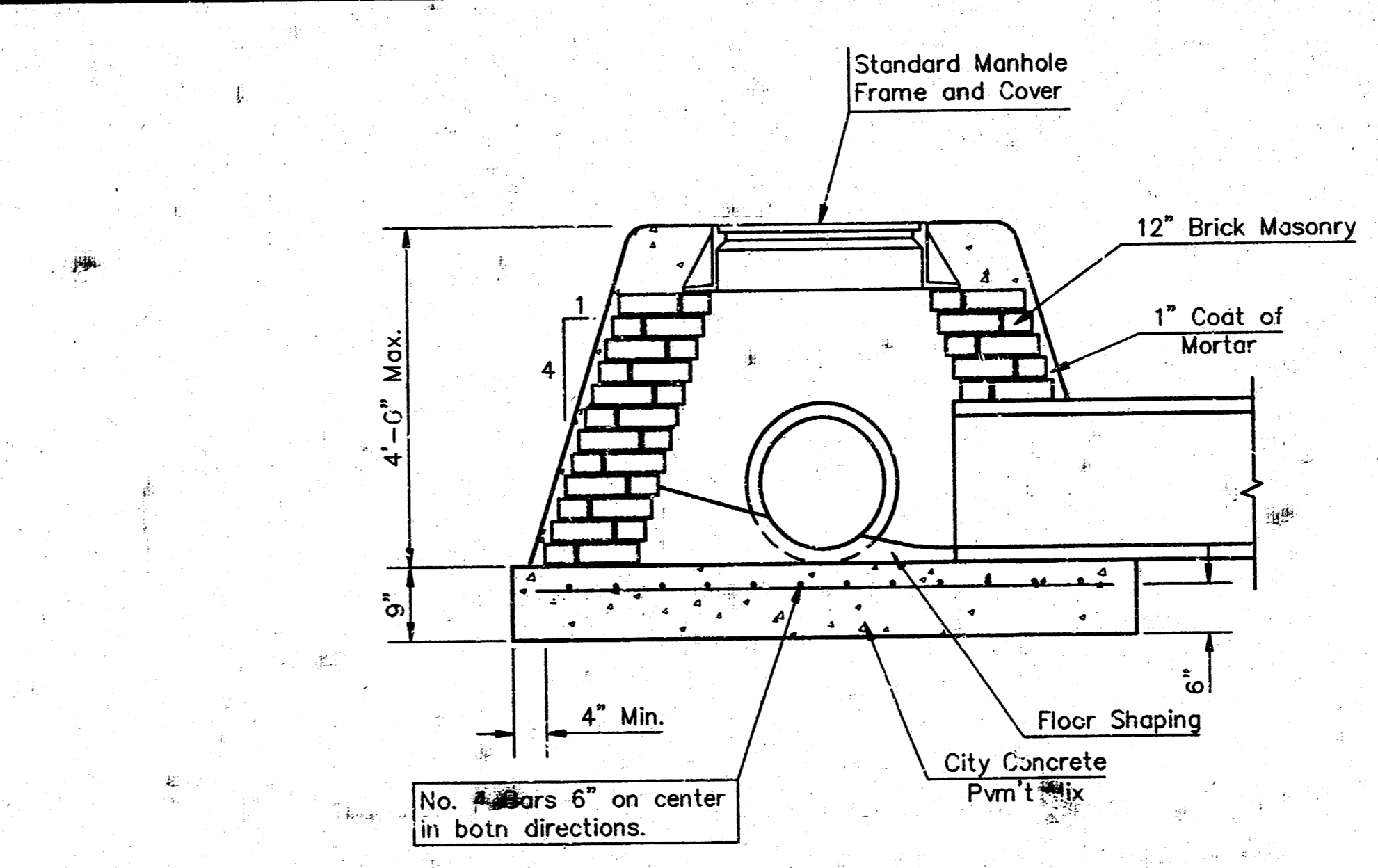
MASONRY COLLAR DETAIL



**SECTION A-A
FLAT CONCRETE SLAB DETAILS**



SPECIAL SHALLOW TYPE "A" MANHOLE



SPECIAL SHALLOW TYPE "B" MANHOLE

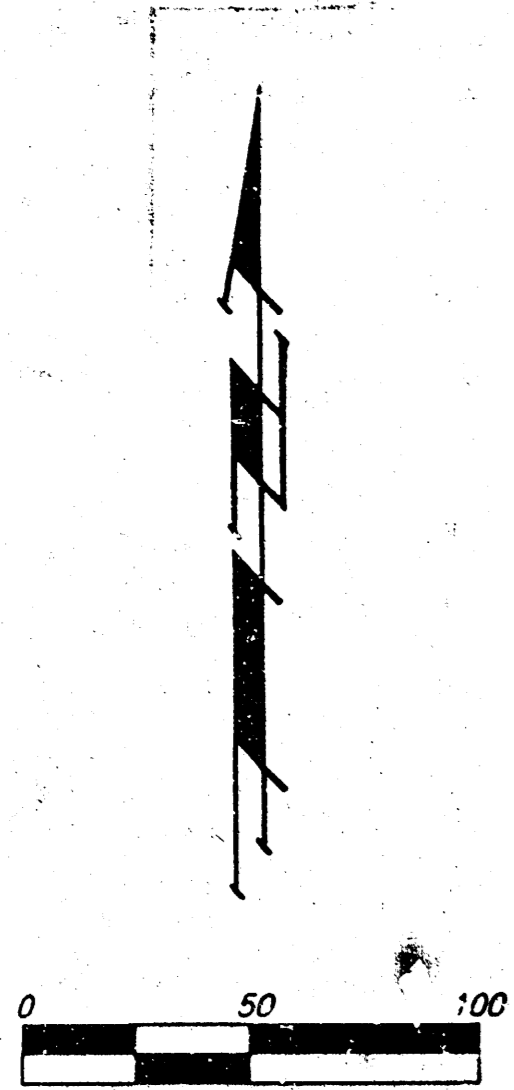
GENERAL NOTES

- 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 with 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 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.
- 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 tie 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 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 drawings.
- The crowns of inflowing pipes shall never be set lower than the crown of the outflowing pipe.
- 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.
- All brick used in manhole construction shall meet Grade SW of ASTM C652 or C62-87.

CITY OF WICHITA, KANSAS
Std. Manhole Detail
 TYPE "A" AND TYPE "B"
BAUGHMAN COMPANY P. A.
 ENGINEERING, SURVEYING, & PLANNING
 316-262-7271 • 315 ELLIS • WICHITA, KANSAS 67211
 PROJECT NUMBER
488-82665
 DESIGN C.O.#: Staff DRAWN Staff APPROVED DATE 8-97 SCALE NONE
 SHEET **6** OF **7**

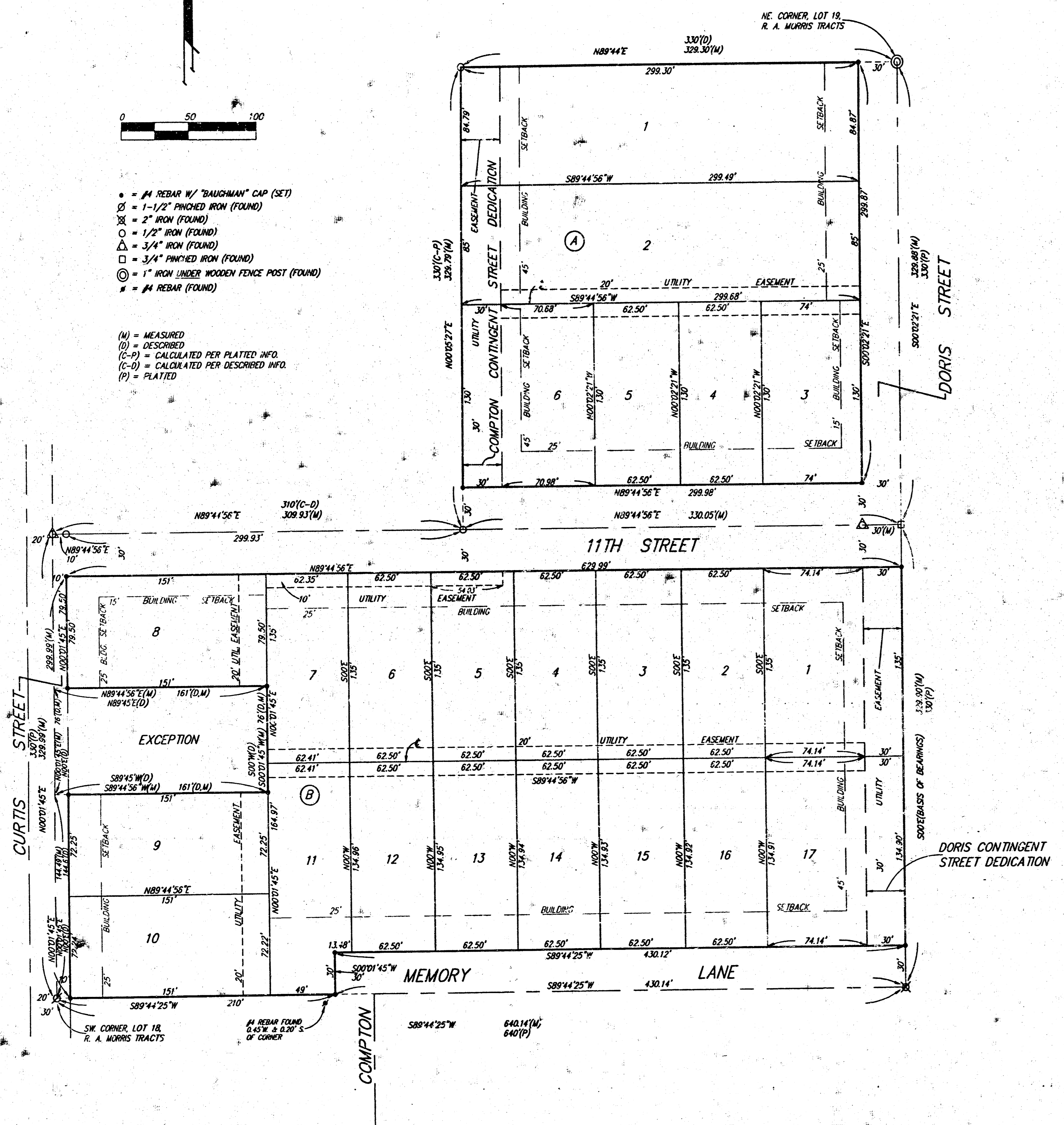
ECK 4TH ADDITION

WICHITA, SEDGWICK COUNTY, KANSAS



- = #4 REBAR W/ "BAUGHMAN" CAP (SET)
- SS = 1-1/2" FINCHED IRON (FOUND)
- X = 2" IRON (FOUND)
- = 1/2" IRON (FOUND)
- △ = 3/4" IRON (FOUND)
- = 3/4" FINCHED IRON (FOUND)
- ⊙ = 1" IRON UNDER WOODEN FENCE POST (FOUND)
- = #4 REBAR (FOUND)

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



State of Kansas) SS We, Baughman Company, P.A., Surveyors in aforesaid
 Sedgwick County) do hereby certify that we have surveyed and platted "ECK 4TH
 ADDITION", Wichita, Sedgwick County, Kansas and that the accompanying plat is
 a true and correct exhibit of the property surveyed, described as follows: A replat
 of Lot 18 and the east 330 feet of Lot 19, R. A. Morris Tracts, Sedgwick
 County, Kansas, EXCEPT that part of said Lot 18 described as commencing
 at the SW Corner of said Lot 18; thence N00°E along the west line of
 said Lot 18, 144.60 feet for a place of beginning; thence continuing N00°E
 along the west line of said Lot 18, 76 feet; thence N89°45'E, 161 feet;
 thence S00°E, 76 feet; thence S89°45'W, 161 feet to the point of beginning.

All being situated in the NW1/4 of Sec. 14, Twp. 27-S, R-1-W of
 the 6th P.M., Sedgwick County, Kansas.

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

Michael G. Conrey
 Michael G. Conrey
 Surveyor

This plat of "ECK 4TH ADDITION", Wichita,
 Sedgwick County, Kansas, has been submitted to and approved by
 the Wichita-Sedgwick County Metropolitan Area Planning Commission,
 Wichita, Kansas.
 Dated this _____ day of _____, 199____
 Wichita-Sedgwick County Metropolitan Area Planning Commission.

 John C. Frye Chairman

 Marvin S. Krout Secretary

Know all men by these presents that
 we, the undersigned, have caused the land in the surveyors certificate to be
 platted into Lots, Blocks, and Streets, to be known as "ECK 4TH ADDITION", Wichita,
 Sedgwick County, Kansas. The utility easements are hereby granted as indicated
 for the construction and maintenance of all public utilities. The streets are
 hereby dedicated to and for the use of the public. Compton contingent street
 dedication shall become effective in the event that the City of Wichita determines
 a need for the right-of-way for any street related purposes. This contingent
 dedication shall be a covenant running with the land and shall be binding on all
 heirs and subsequent owners of all parts of said property covered by said dedication.
 Doris contingent street dedication shall become effective in the event that the
 City of Wichita determines a need for the right-of-way for any street related
 purposes. This contingent dedication shall be a covenant running with the land
 and shall be binding on all heirs and subsequent owners of all parts of said
 property covered by said dedication.

KCE, Inc.
Mathias F. Eck
 Mathias F. Eck, President

This plat approved and all dedications
 shown hereon accepted by the City Council of the City of Wichita,
 Kansas, this _____ day of _____, 199____

 Bob Knight Mayor

 Pat Burnett City Clerk

State of Kansas) SS The foregoing instrument acknowledged before me
 Sedgwick County) this 30 day of June, 1992, by Mathias F. Eck, President of KCE, Inc.,
 on behalf of the corporation.

Lyneisa M. Cocking
 Lyneisa M. Cocking, Notary Public
 My App't. Exp. 7-1-99

Entered on transfer record this _____ day
 of _____, 199____

 James Allford County Clerk

We, the undersigned, holders of a mortgage on the
 above described property, do hereby consent to this plat of "ECK 4TH ADDITION",
 Wichita, Sedgwick County, Kansas.

First National Bank of Anthony
Richard Kennedy V.P.
 Richard Kennedy, V.P.

State of Kansas) SS This is to certify that this plat
 Sedgwick County) was filed for record in the office of the Register of Deeds
 of _____, 199____, at _____ o'clock
 recorded.

 Larry Consover Regis.

State of Kansas) SS The foregoing instrument, acknowledged before me,
 Sedgwick County) this 12th day of June, 1991, by Richard Kennedy,
 Vice President, of First National Bank of Anthony, on behalf of the bank.

Doris M. McGinnis
 Doris M. McGinnis, Notary Public
 My App't. Exp. 12-12-99

 Michael D. Hurtt Deputy