

STORM WATER SEWER TO SERVE BENCOR 2ND ADDITION

Private Project Number

995 PPS (607861)

CITY OF WICHITA, KANSAS

Michael E. Lindebak, P.E. City Engineer

April 2000

LEGAL DESCRIPTION:

Lot 1, Bencor 2nd Addition, Wichita, Sedgwick County, Kansas.

BENCHMARK:

Chisled Cross Located At The NW Corner Of Subject Property
Adjacent To Existing Curb Inlet.
Elevation: 116.84 City Datum

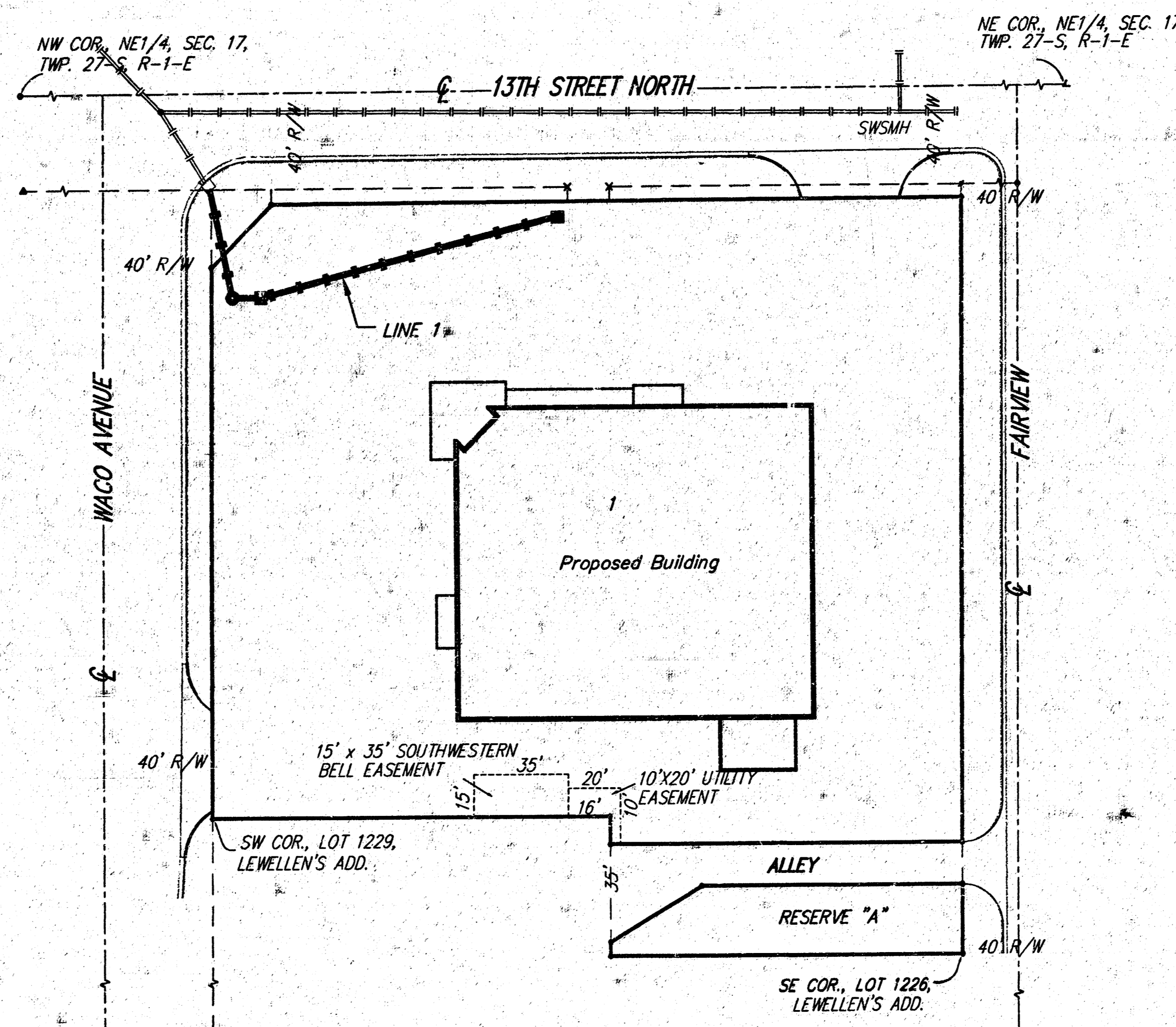
GENERAL NOTES:

- Contractor will be required to provide notice to utility companies a minimum of forty-eight (48) hours prior to any excavation, as follows:

Kansas One-Call	687-2470
The Contractor must notify the following in case of an emergency:	
Cox Communication	262-0661
or	263-2061
Kansas Gas Service	383-8600
KGE	383-8650
Peoples Gas Company	942-8811
Southwestern Bell Telephone Company	800-344-7233
City of Wichita Water Department	268-4908
City of Wichita Sewer Maintenance	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.
- 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.
- Traffic affected by the construction on this project shall be handled in accordance with the latest edition of the Manual on Uniform Traffic Control Devices.
- 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.
- Cuts made to paved surfaces on public property will be repaired by the City's contractor and charged against the owner/applicant. Unit repair prices are available from the City at 268-4418. A surcharge may be applicable; call 268-4418 for details. Repair costs to be paid prior to release of sewer service if sewer service is affected. Contractor shall obtain permit prior to construction.

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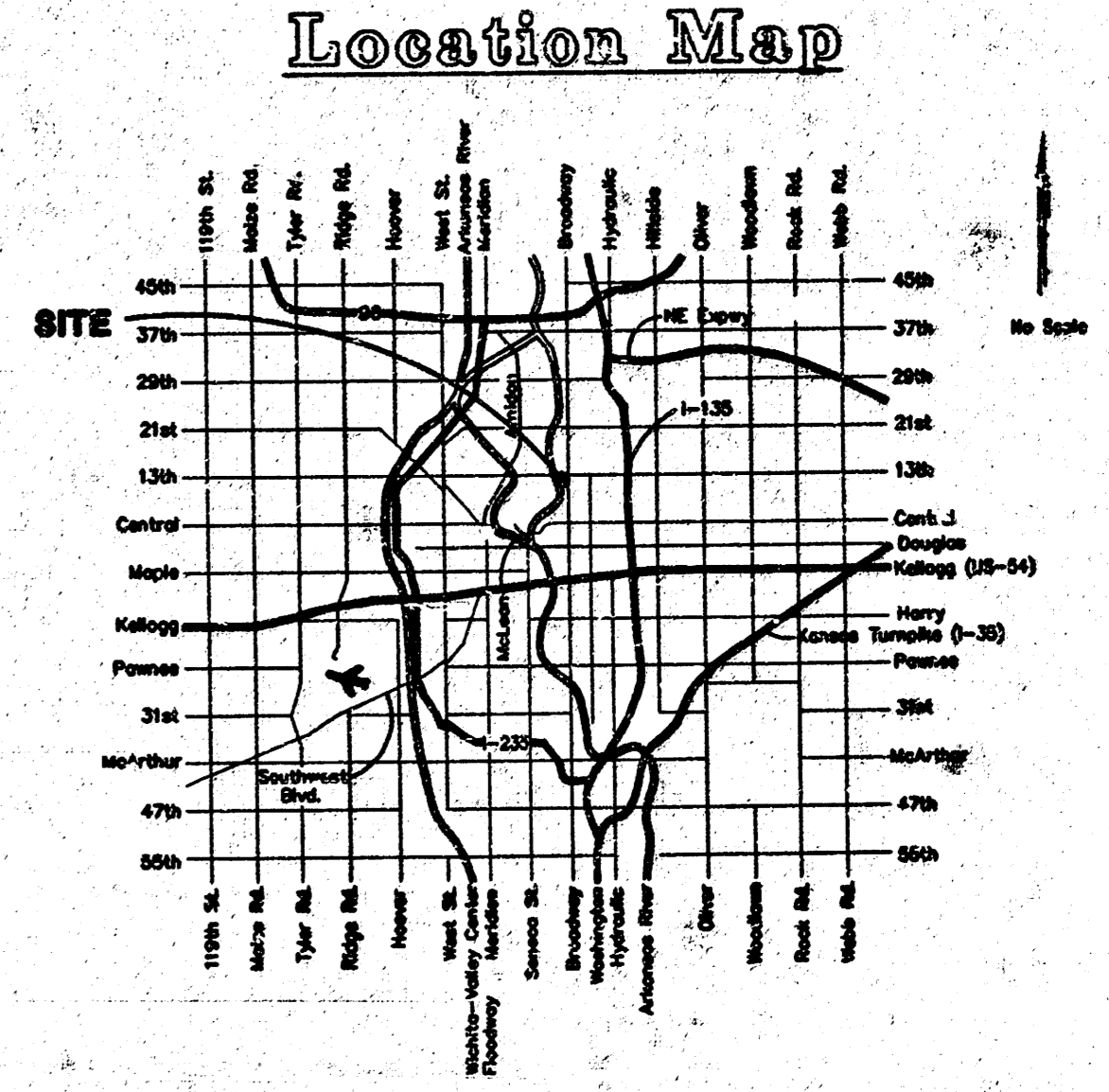
APPROVED AS NOTED
BY CITY ENGINEER OF WICHITA

Storm Sewers VRH 5/2/00

NOTE TO CONTRACTORS

Installation, 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).

BOOKED
4-27-01
MCG
D-508

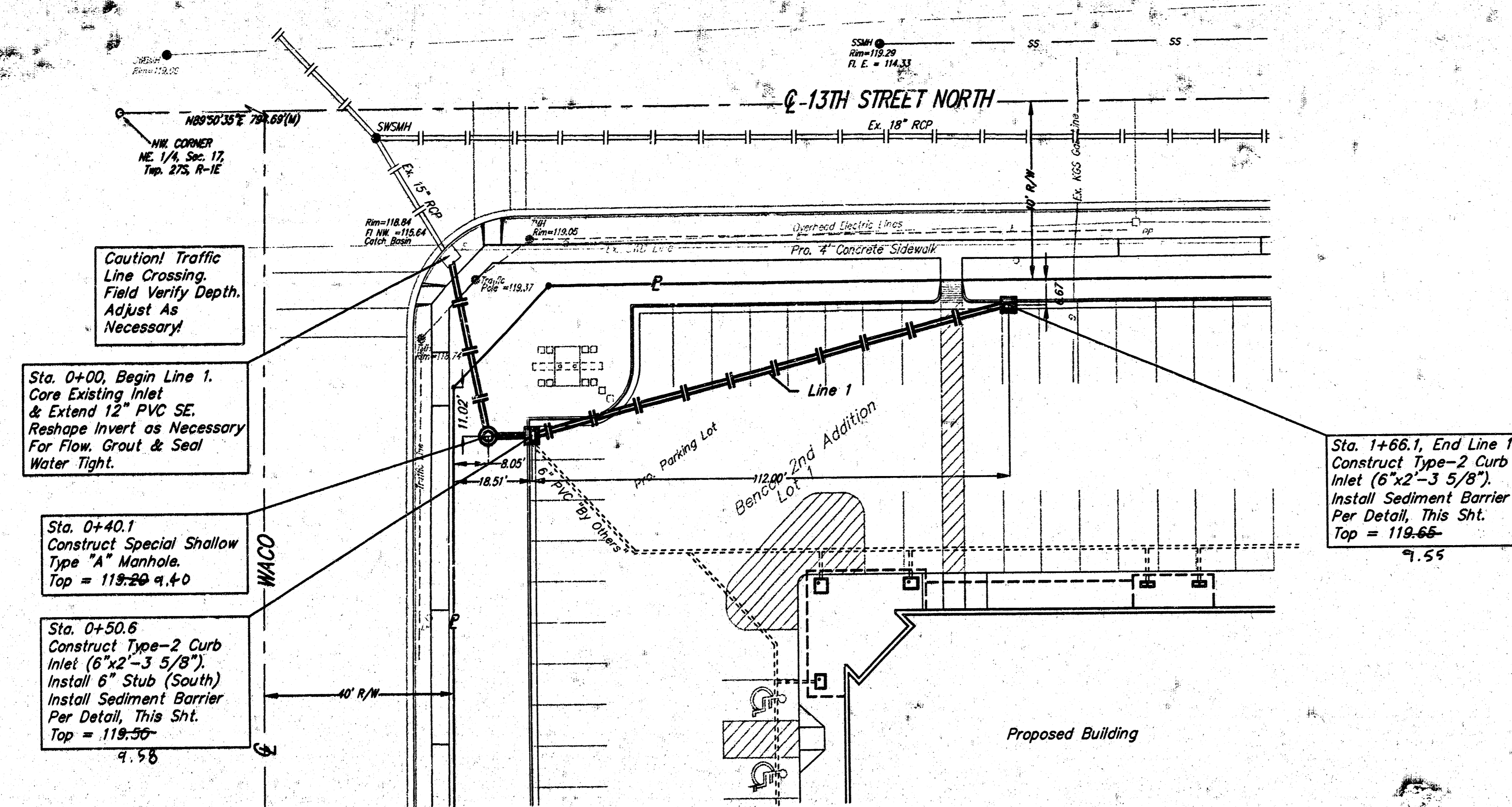


As Built 2/01 KK



BAUGHMAN COMPANY P.A.
ENGINEERING, SURVEYING, & PLANNING
316-262-7271 • 316-ELLIS • WICHITA, KANSAS 67213

BENCHMARK:
 Chisled Cross Located At The NW
 Corner Of Subject Property
 Adjacent To Existing Curb Inlet.
 Elevation: 118.84 City Datum



Caution! Traffic
 Line Crossing.
 Field Verify Depth.
 Adjust As
 Necessary!

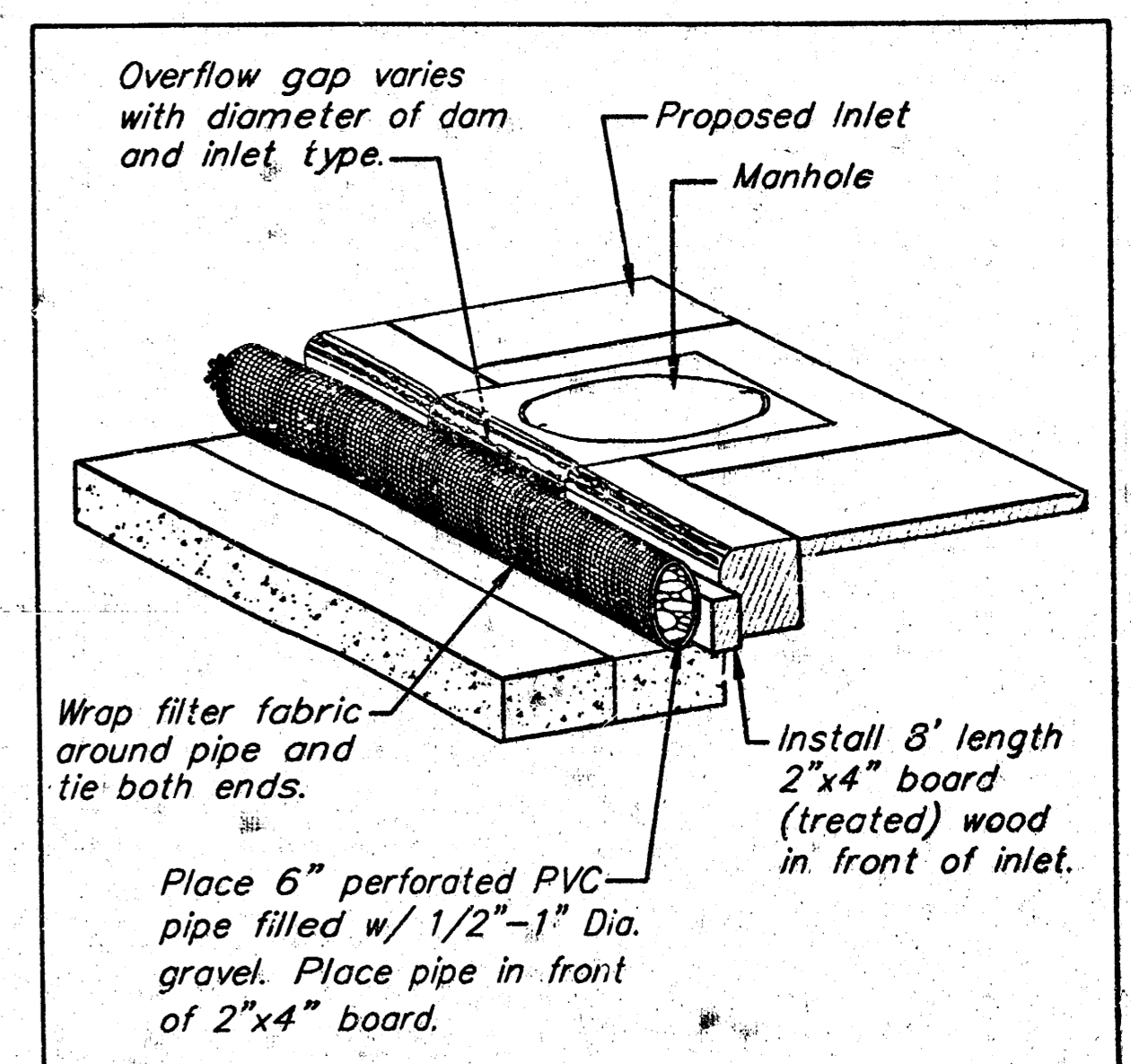
Sta. 0+00, Begin Line 1.
 Core Existing Inlet
 & Extend 12" PVC SE.
 Reshape Invert as Necessary
 For Flow. Grout & Seal
 Water Tight.

Sta. 0+40.1
 Construct Special Shallow
 Type "A" Manhole.
 Top = 119.20 @ 4.0

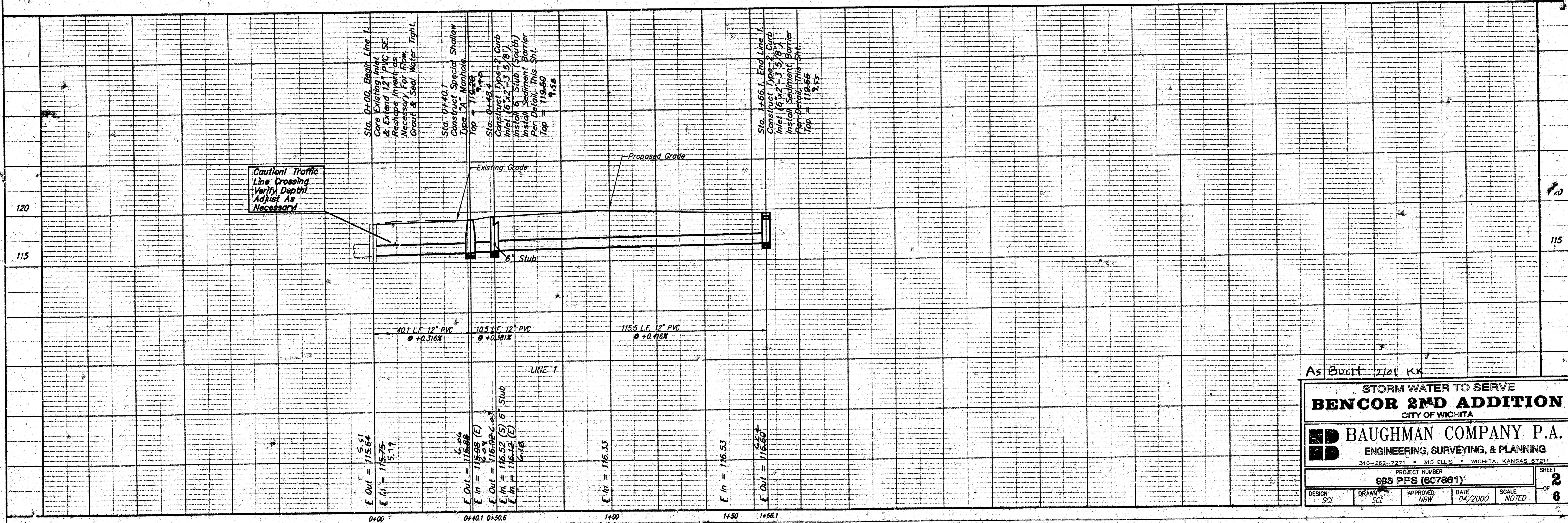
Sta. 0+50.6
 Construct Type-2 Curb
 Inlet (6"x2"-3 5/8").
 Install 6" Stub (South)
 Install Sediment Barrier
 Per Detail, This Sht.
 Top = 119.50
 4.58

Sta. 1+66.1, End Line 1.
 Construct Type-2 Curb
 Inlet (6"x2"-3 5/8").
 Install Sediment Barrier
 Per Detail, This Sht.
 Top = 119.66
 4.55

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



INLET PROTECTION
 Perforated Pipe w/ Gravel



Caution! Traffic
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 Adjust As
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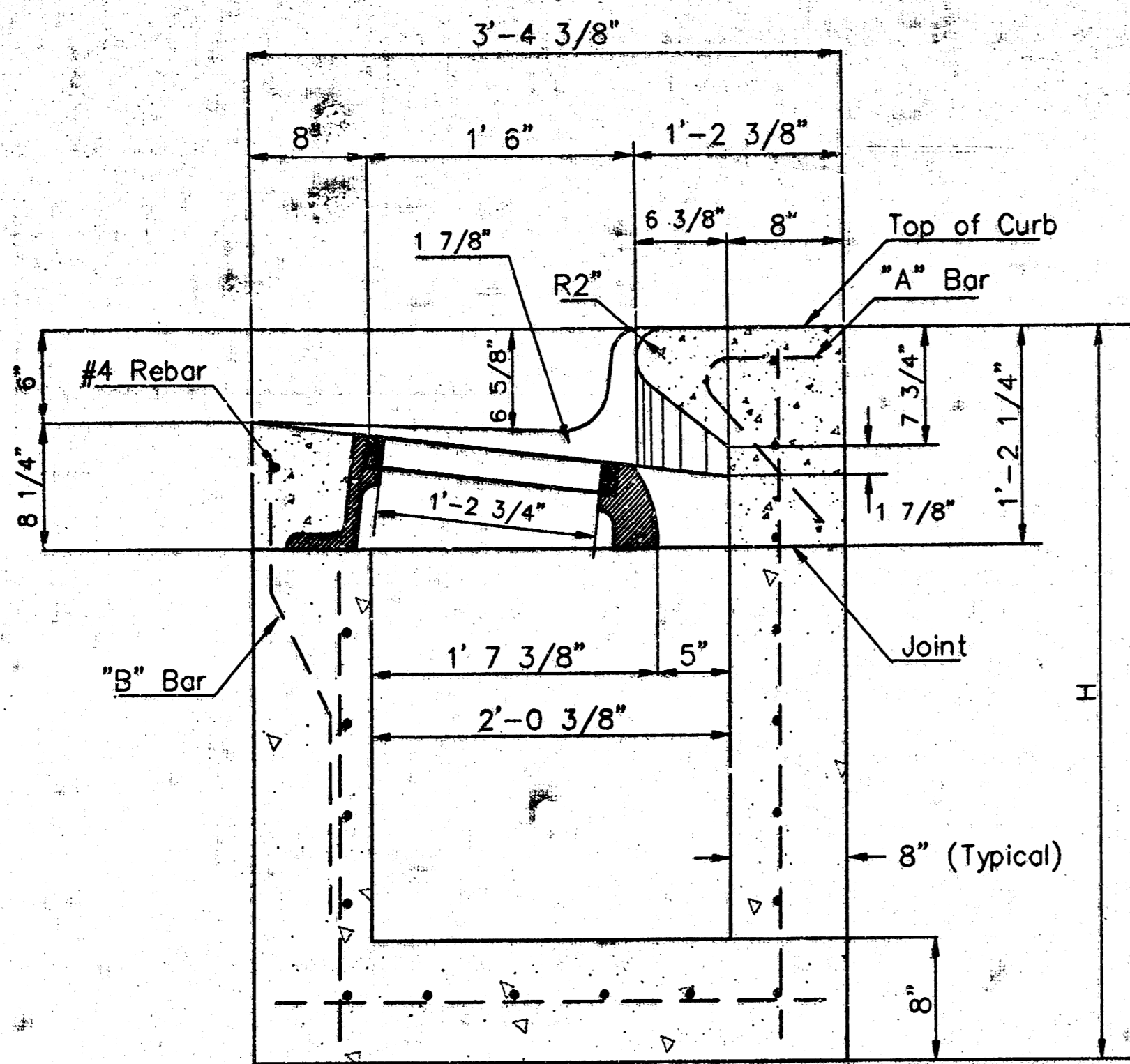
STORM WATER TO SERVE
BENCOR 2ND ADDITION
 CITY OF WICHITA

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

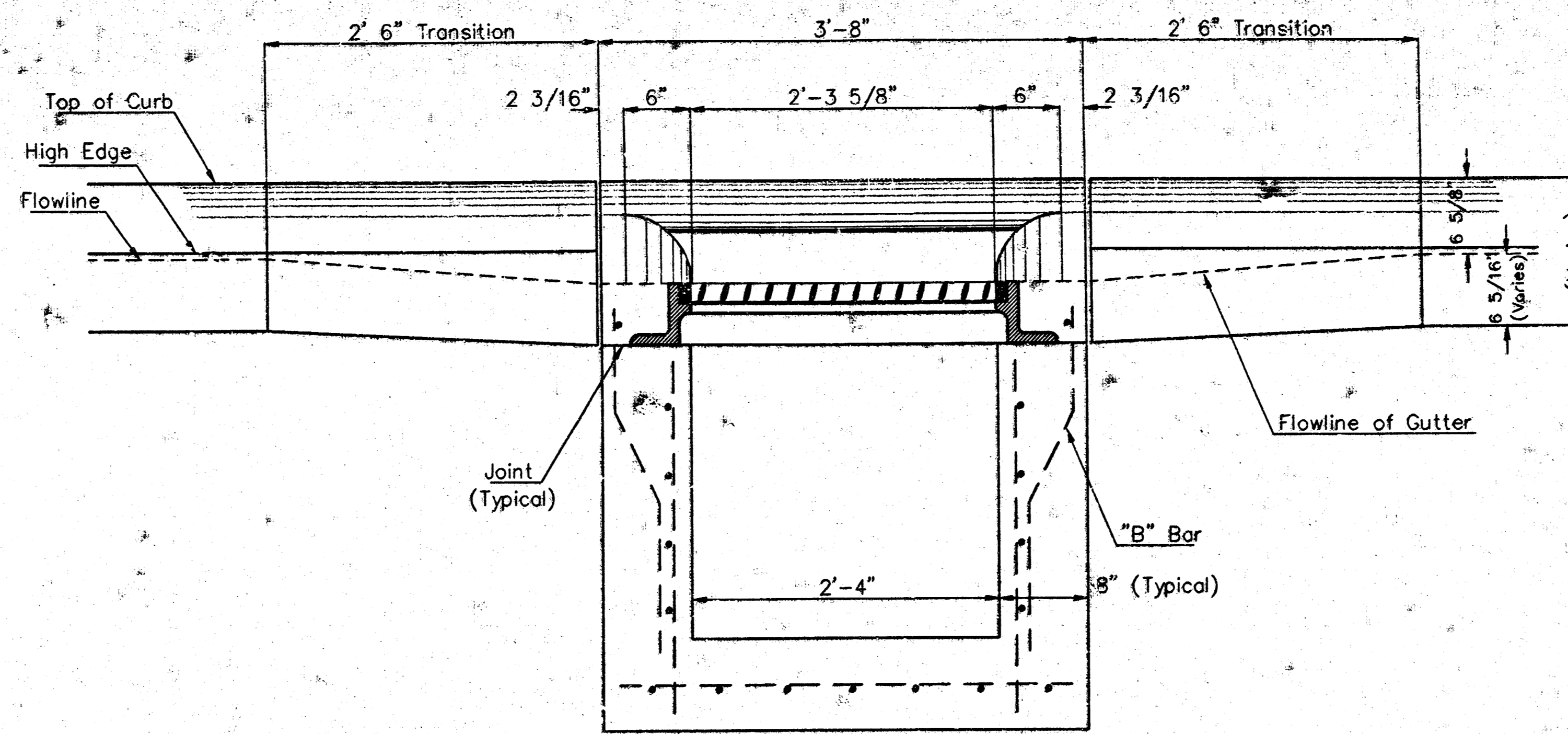
PROJECT NUMBER
985 PPS (607851)

DESIGN: SCL DRAWN: SCL APPROVED: NBW DATE: 04/2000 SCALE: NOTED

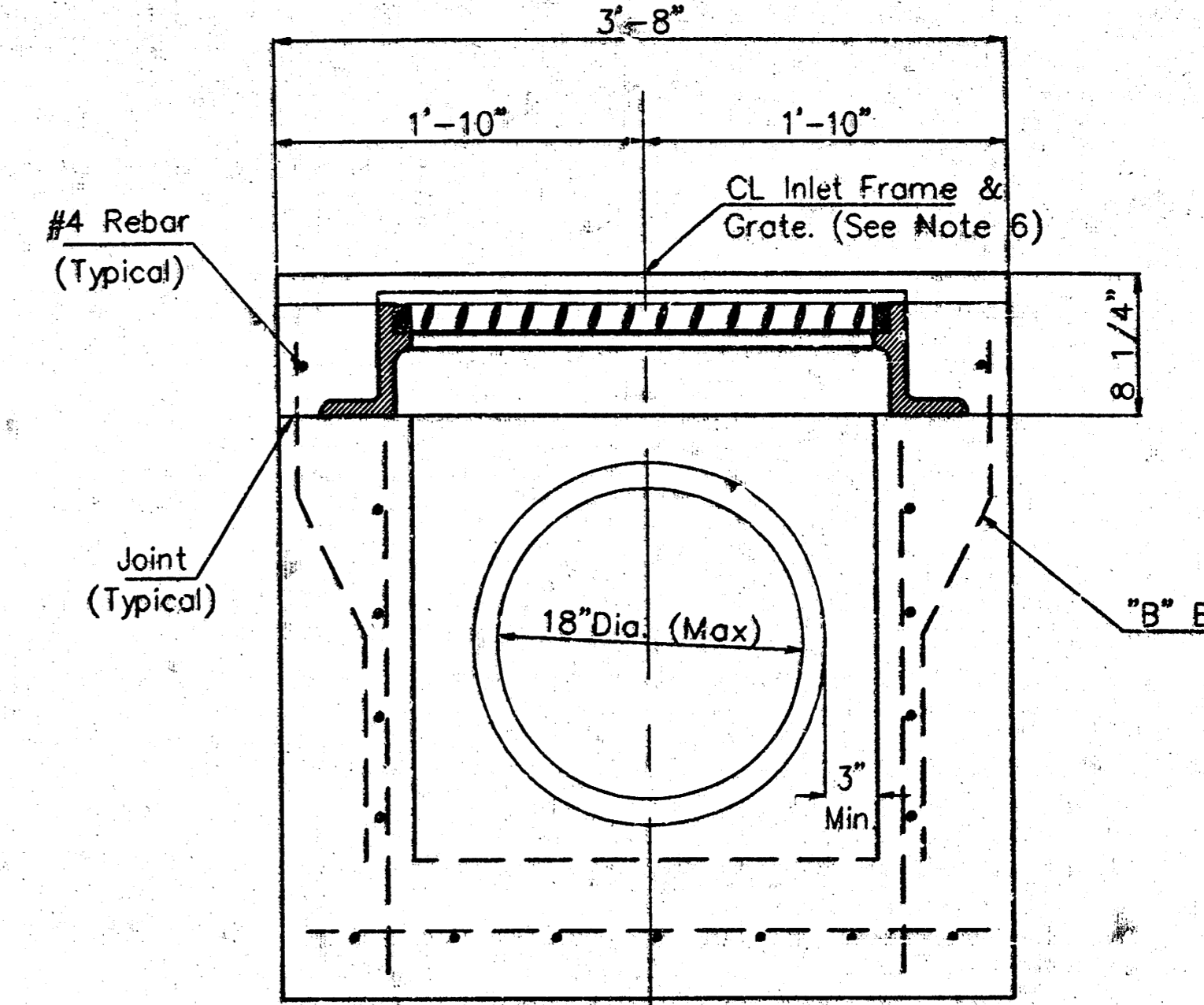
SHEET
2
 OF
6



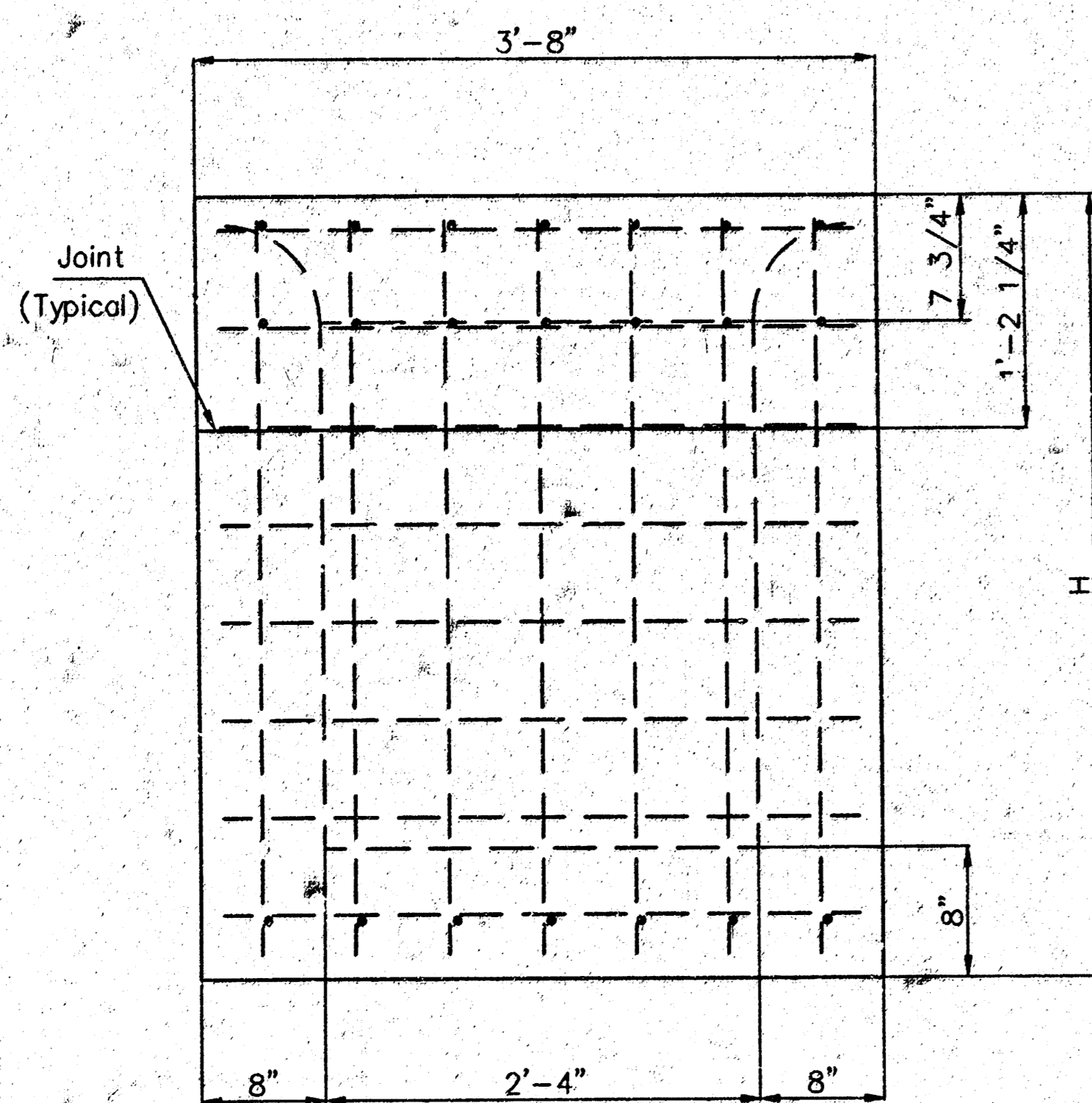
SECTION A-A



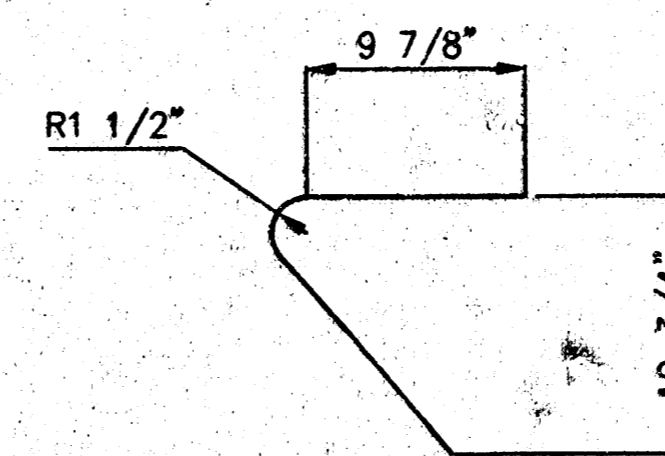
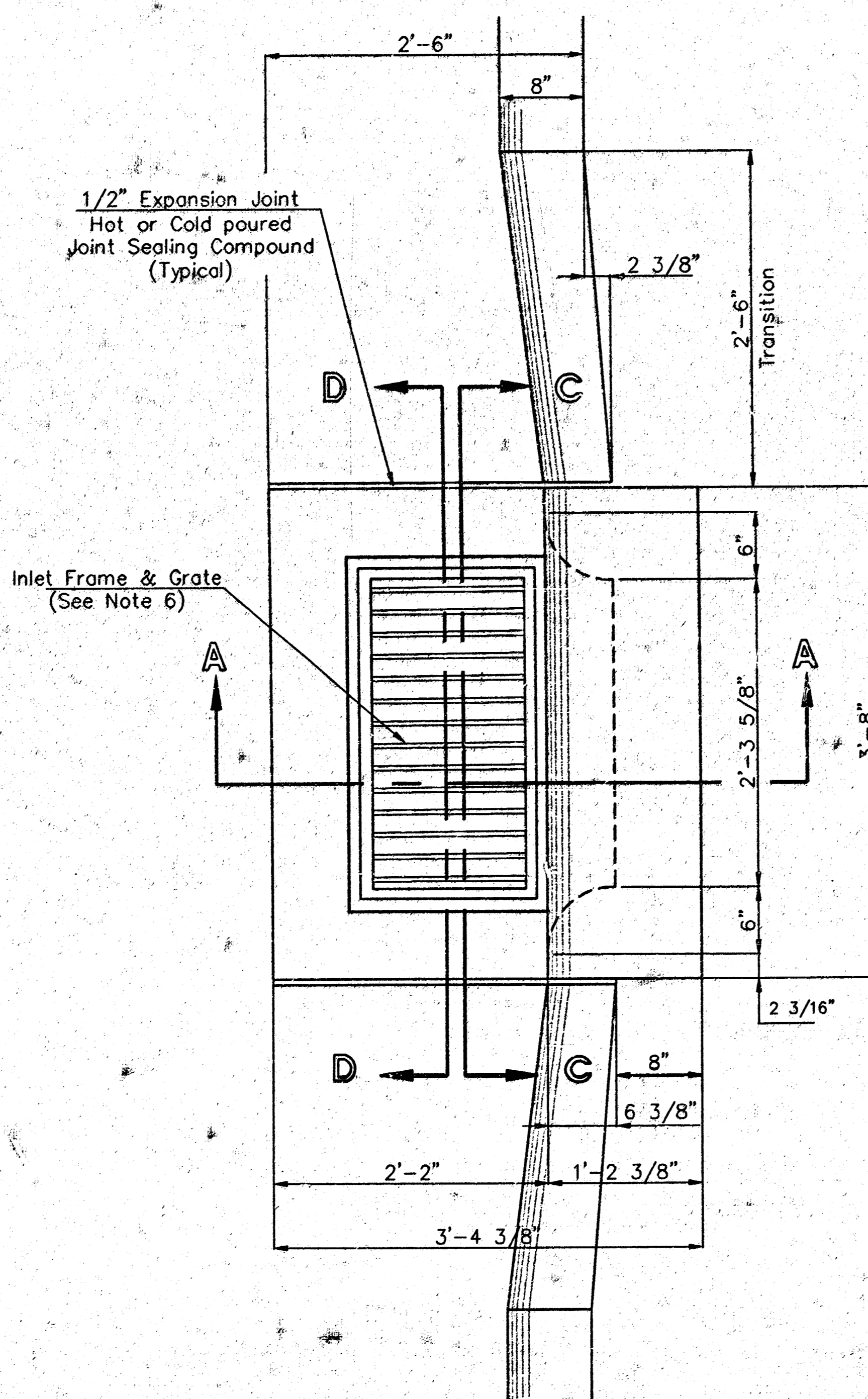
SECTION C-C



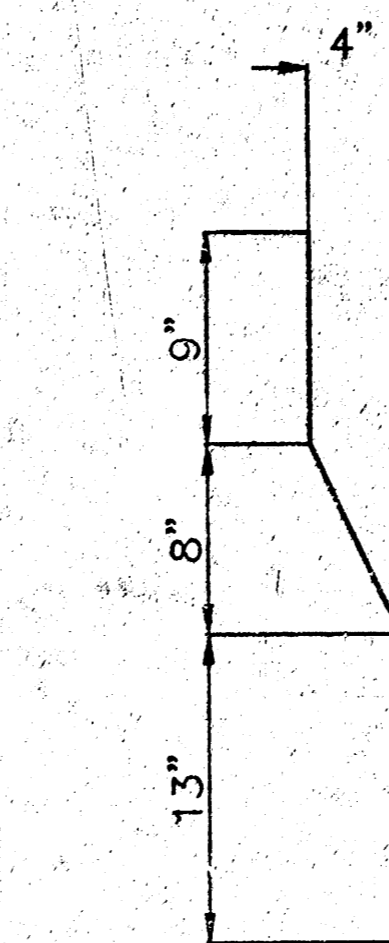
SECTION D-D



REAR WALL



"A" Bar



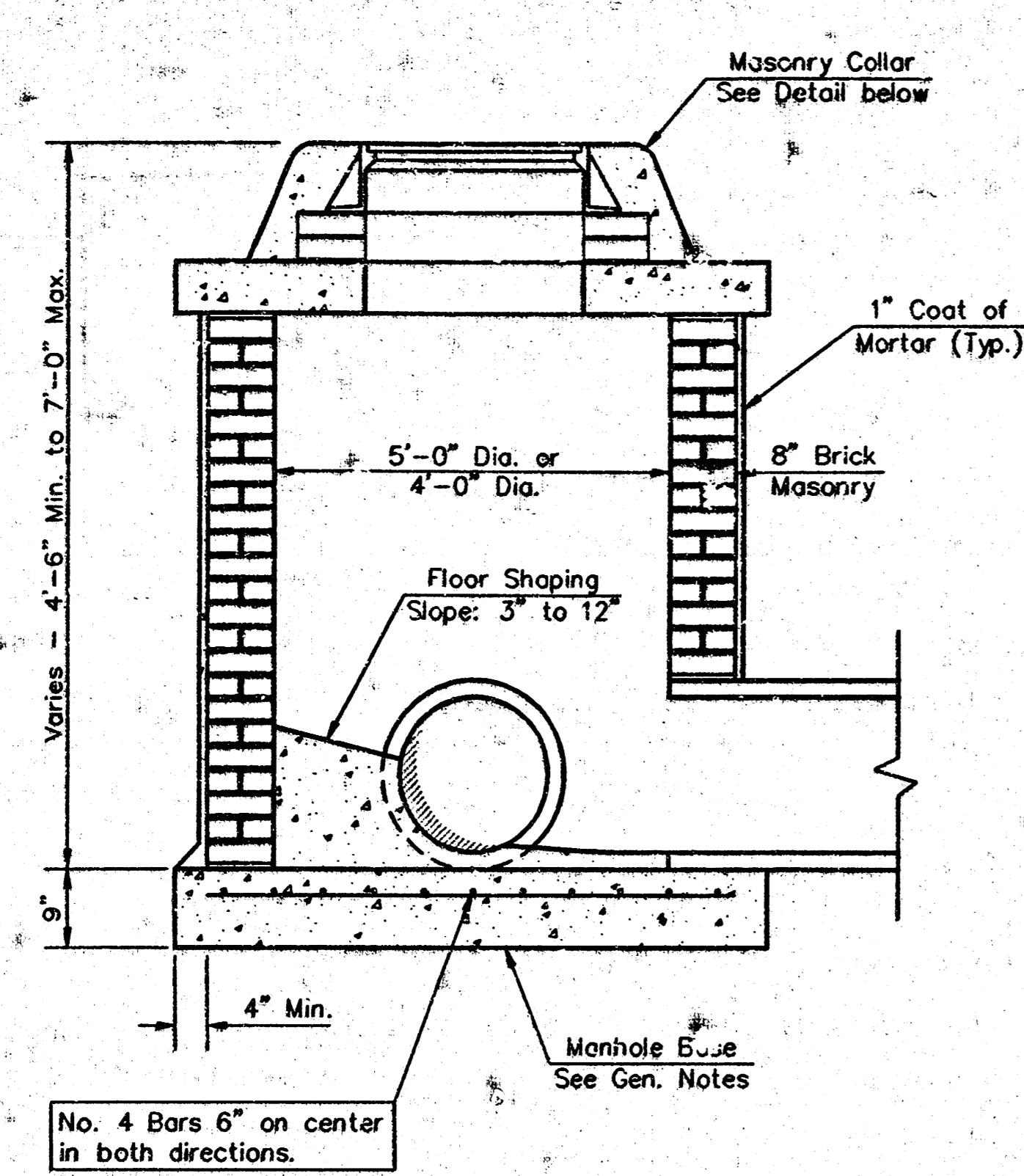
"B" Bar

General Notes

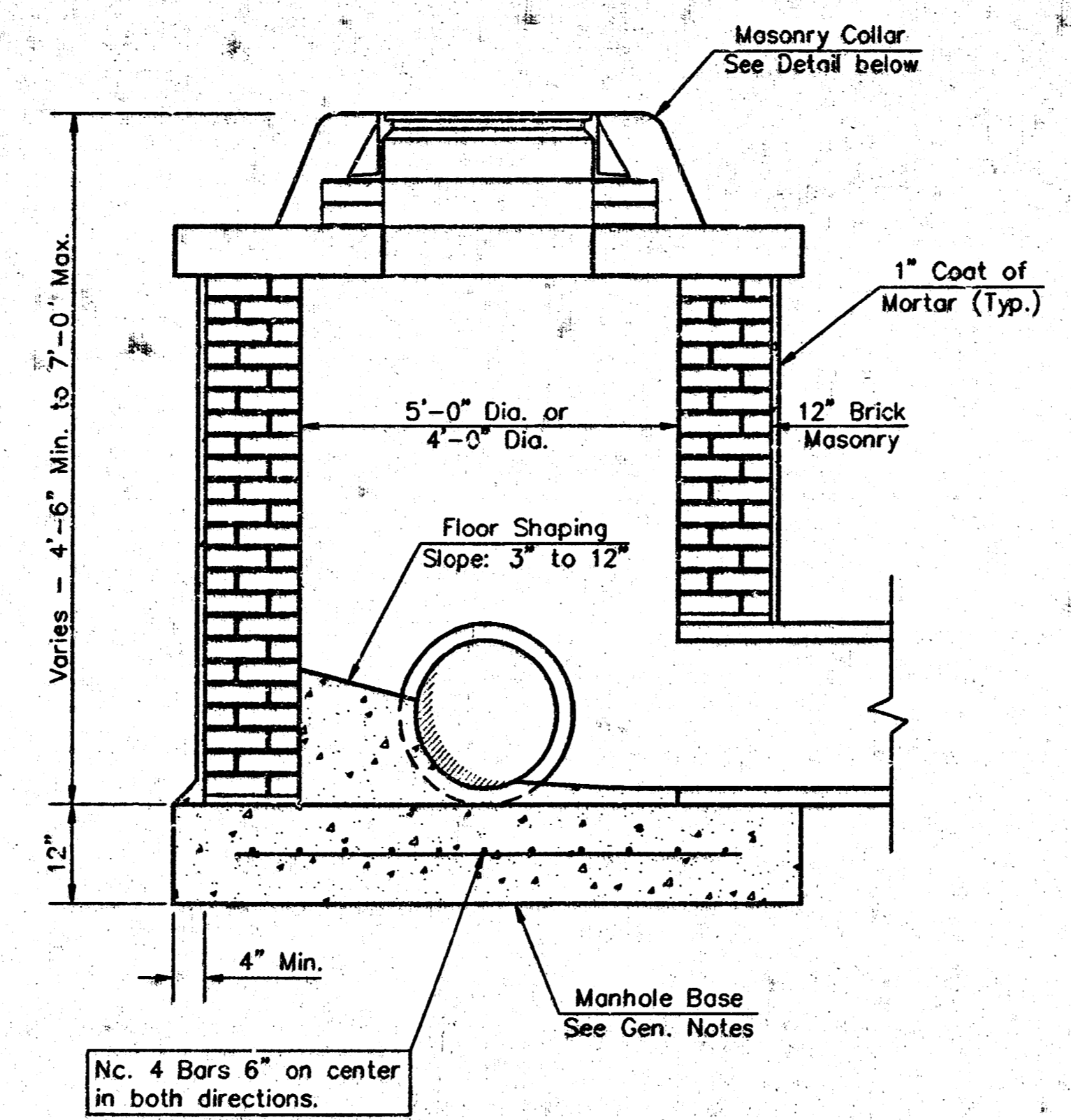
1. Use the concrete mix specified for the City of Wichita concrete pavement throughout. All exposed edges shall be finished with an edging tool. Reinforcing bars shall be bent around pipe.
2. Inlet invert shall be shaped with 8 sack mix concrete to create flow channels and to increase hydraulic efficiency 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

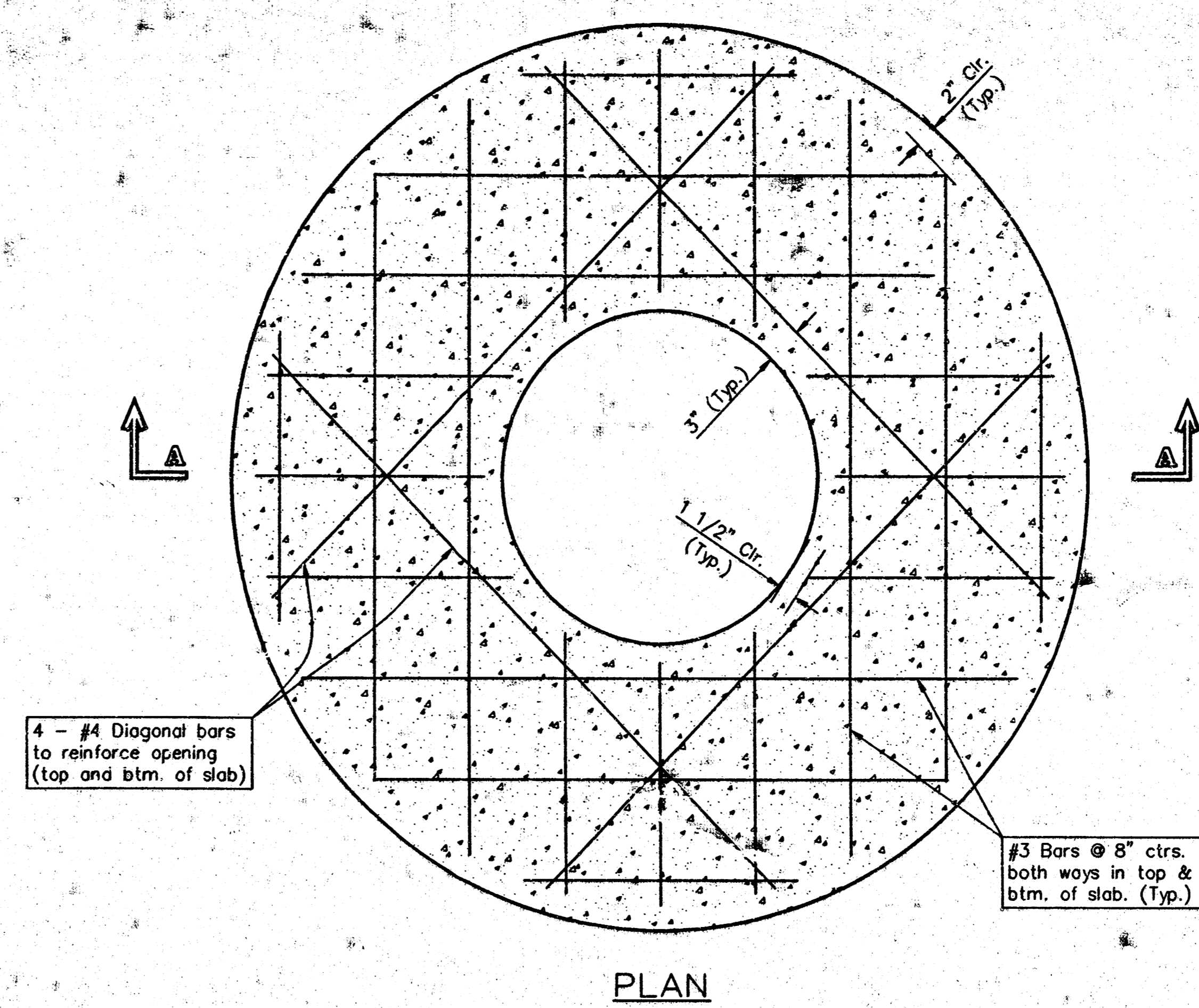
CITY OF WICHITA	
STD. TYPE II CURB INLET	
6" x 2'-3 5/8" OPENINGS - 6" x 2'-3 5/8"	
BAUGHMAN COMPANY P.A.	
ENGINEERING, SURVEYING, & PLANNING	
316-262-7271 • 315 ELLIS • WICHITA, KAN. 67211	
PROJECT NUMBER	SHEET
995 PPS (807851)	3
DESIGN	SCALE
DRAWN 1/1987	NONE
APPROVED	DATE



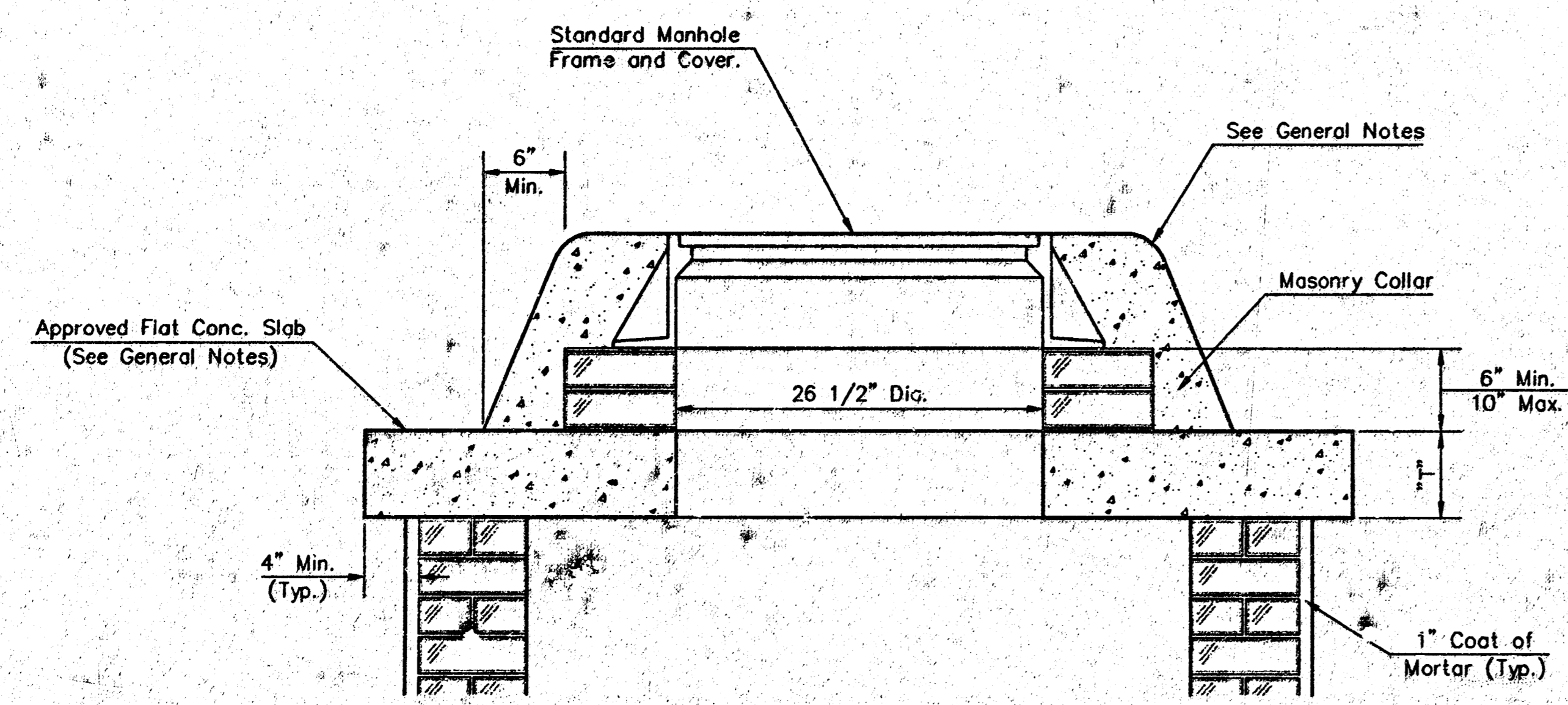
SHALLOW TYPE "A" MANHOLE



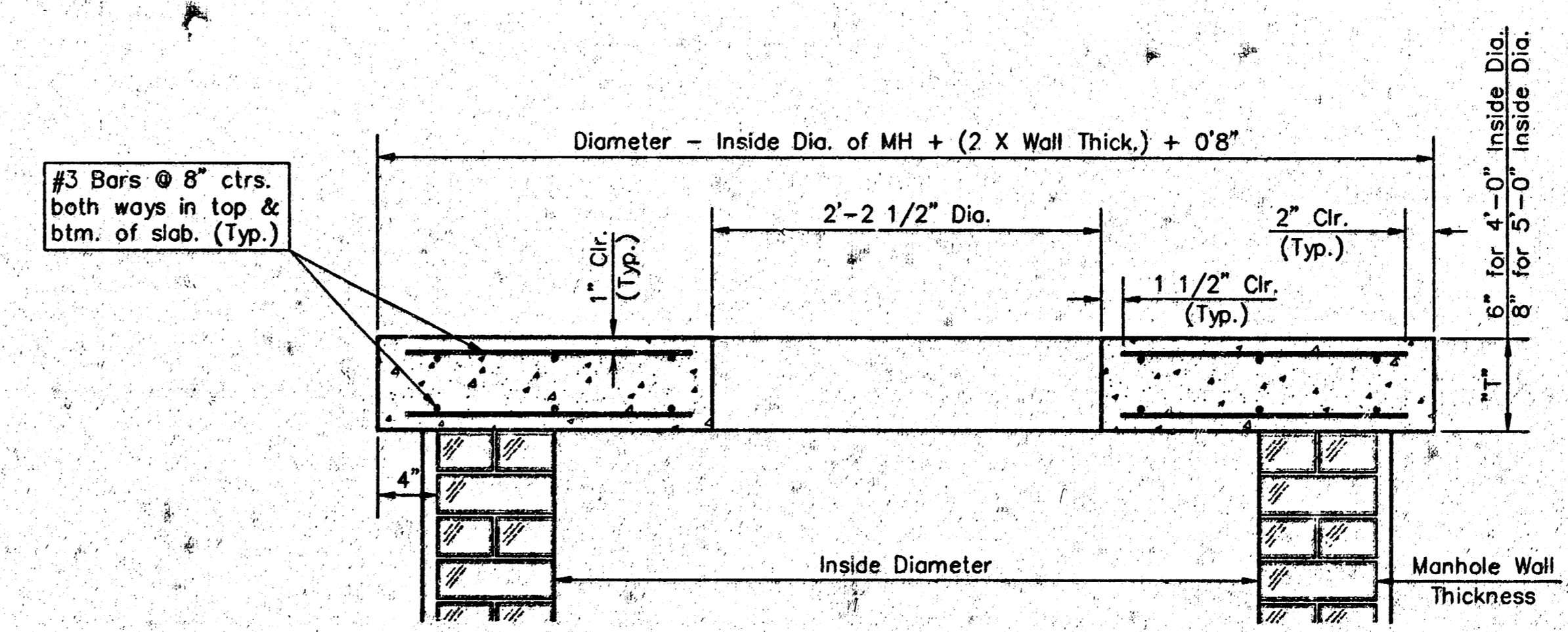
SHALLOW TYPE "B" MANHOLE



PLAN

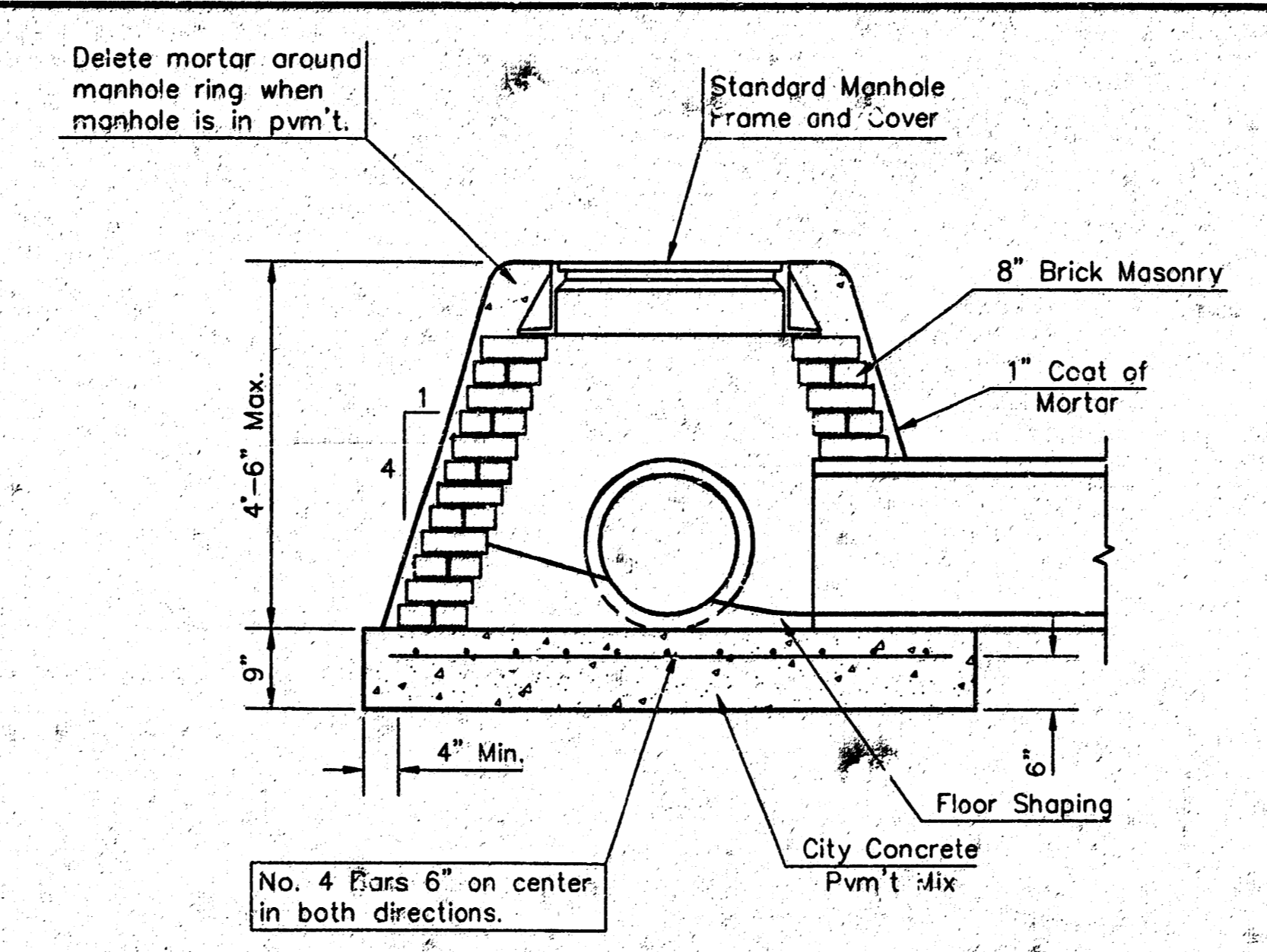


MASONRY COLLAR DETAIL

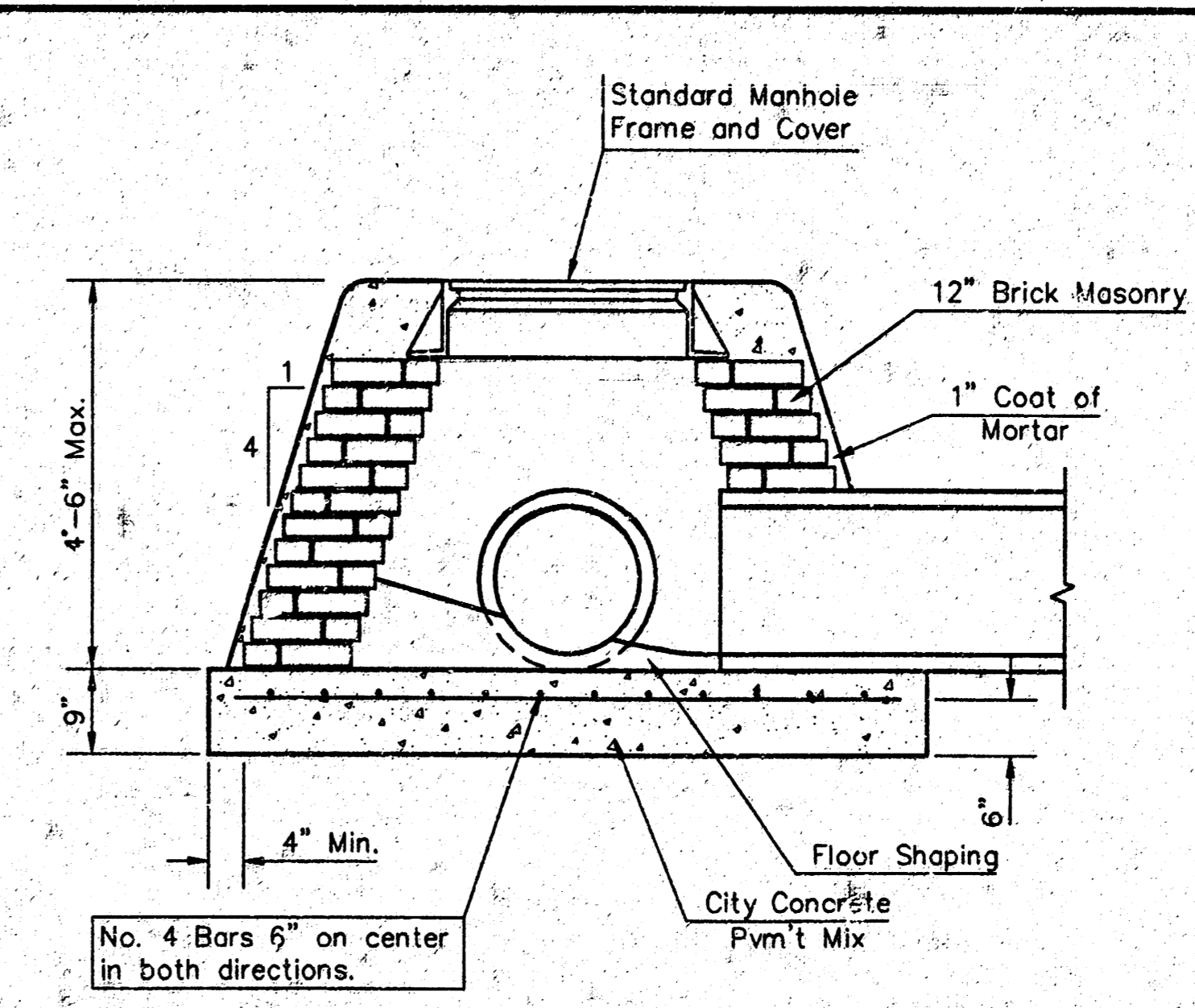


SECTION A-A

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 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 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 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 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 C552 or C62-87.

CITY OF WICHITA, KANSAS
Std. Manhole Detail
 TYPE "A" AND TYPE "B"

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

PROJECT NUMBER: **995 PPS (607831)**

DESIGN: C.O.W. DRAWN: Staff APPROVED: DATE: SCALE: NONE

SHEET **4** OF **6**

