

STORM WATER SEWER PHASE 2 PLANS FOR PRAIRIE WOODS ADDITION

SWS # 461
PROJECT NO. 468-82468

CITY OF WICHITA, KANSAS
MICHAEL E. LINDEBAK, CITY ENGINEER
INDEX CODE 751123

GENERAL NOTES

1. 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.

2. EXISTING UTILITIES AND THEIR LOCATIONS, AS SHOWN ON THE PLANS REPRESENT THE BEST INFORMATION OBTAINABLE FOR DESIGN. LOCATION INFORMATION HAS BEEN OBTAINED FROM THE VARIOUS UTILITY COMPANIES AND IS EITHER FROM COMPANY RECORD DRAWINGS OR COMPANY PROVIDED FIELD LOCATIONS. THE PLAN LOCATIONS SHOWN ARE NOT GUARANTEED. ADDITIONAL EXISTING UTILITIES MAY ALSO BE ENCOUNTERED.

3. CONTRACTOR WILL BE REQUIRED TO PROVIDE A MINIMUM ADVANCE NOTICE OF FORTY-EIGHT (48) HOURS TO UTILITY COMPANIES PRIOR TO STARTING ANY EXCAVATION AS FOLLOWS:

KANSAS ONE-CALL 1-800-344-7233
or 687-2470 (LOCAL WICHITA)

THE CONTRACTOR MUST NOTIFY THE FOLLOWING IN CASE OF AN EMERGENCY:

SOUTHWESTERN BELL TELEPHONE COMPANY 1-800-734-7590
CABLEVISION 262-0661
KANSAS GAS & ELECTRIC (ELECTRIC) 264-1141
KANSAS GAS & ELECTRIC (GAS) 832-3180 OR 832-3169
CITY OF WICHITA SEWER MAINTENANCE 268-4908
CITY OF WICHITA WATER DEPARTMENT 268-4908

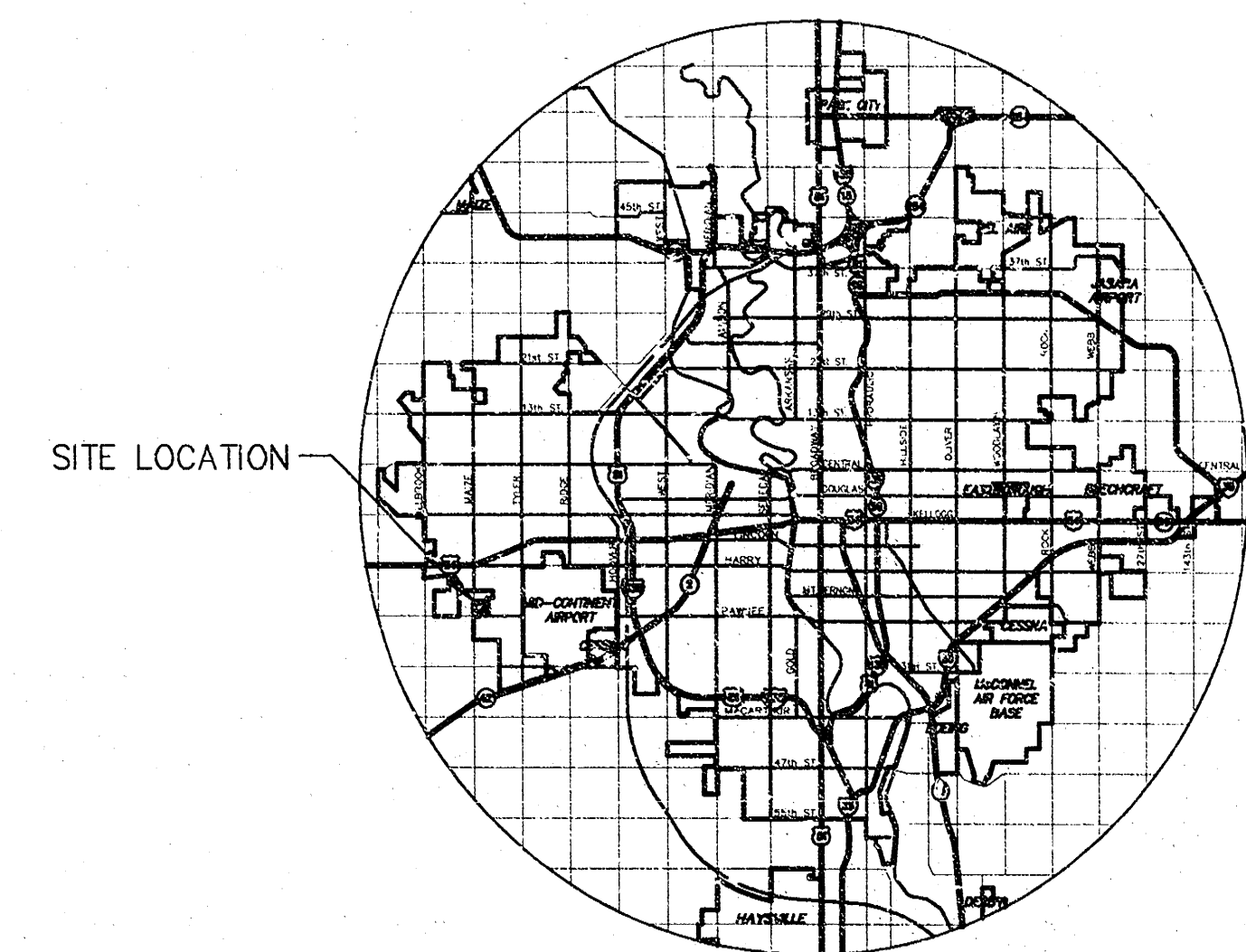
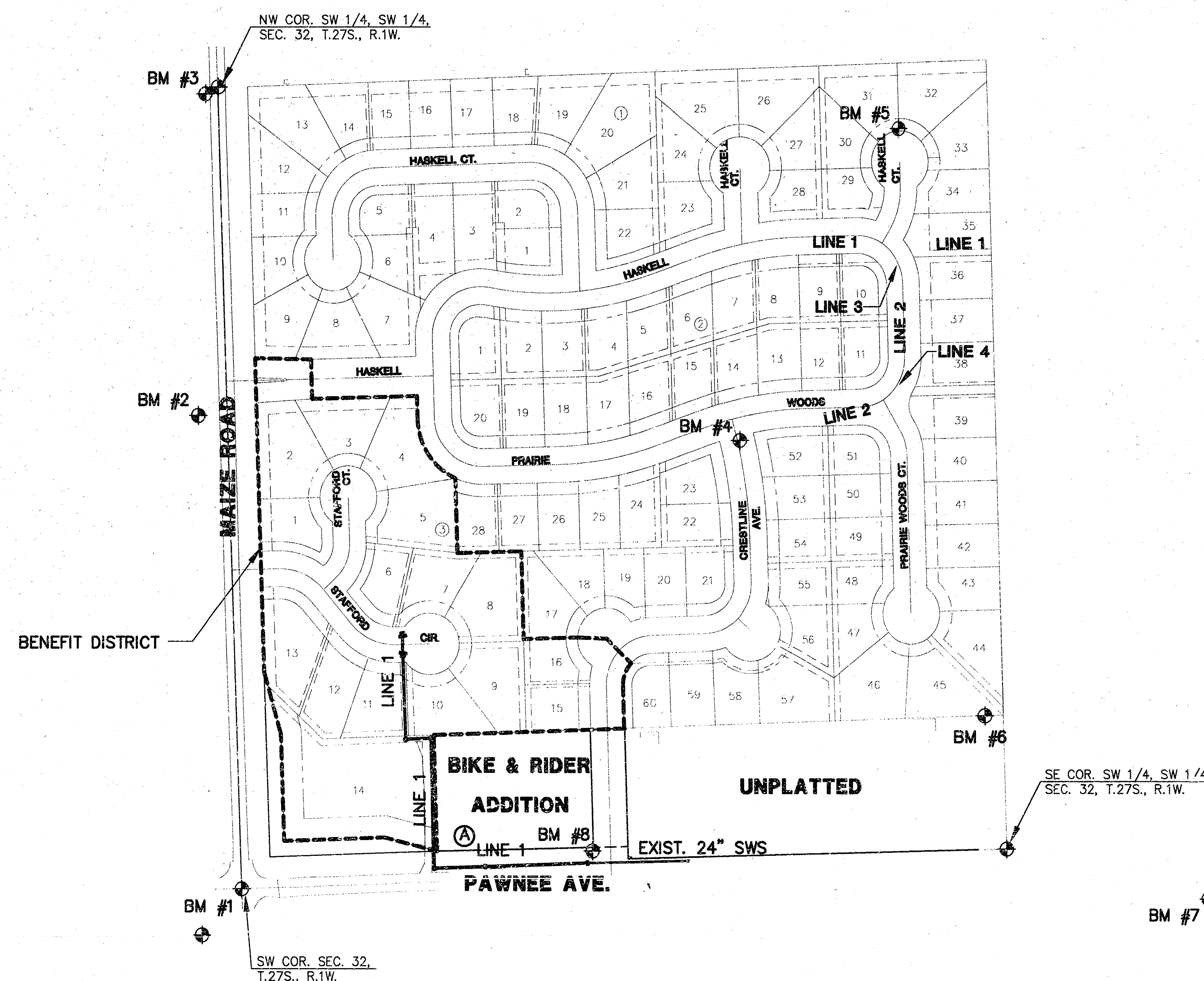
4. RUBBLE FROM THE REMOVAL OF MISCELLANEOUS STRUCTURES AND EXCESS EXCAVATION WHICH IS TO BE WASTED SHALL BE DISPOSED OF ON SITES TO BE PROVIDED BY THE CONTRACTOR. THESE SITES SHALL BE APPROVED BY THE ENGINEER AS TO SUITABILITY, APPEARANCE AND SITE LOCATION. LOCATIONS THAT, IN THE OPINION OF THE ENGINEER, 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.

5. COST OF EXCAVATION, HAULING, AND DUMPING OF EXCESS EXCAVATION SHALL BE SUBSIDIARY TO THE PROJECT.

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. ALL DISTURBED AREAS TO BE SEEDED WITH RYE GRASS AT A RATE OF 200 LBS./ ACRE WITHIN 10 DAYS OF CONSTRUCTION. COST SHALL BE SUBSIDIARY TO PROJECT.

8. REVERSE INLET TOPS ON LINE 1 STATION 6+50.94, & 6+87.17. PAVEMENT IN THIS AREA WILL BE BUILT IN A FUTURE DEVELOPMENT PHASE. COST OF REVERSING INLET TOPS SHALL BE SUBSIDIARY TO THE INLET CONSTRUCTION.



LOCATION MAP

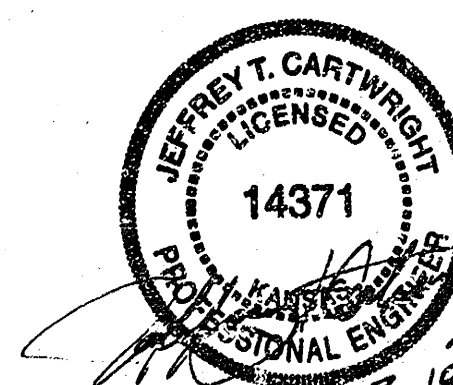
INDEX TO DRAWINGS

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2-3	INLET DETAILS
4	MANHOLE DETAILS
5-6	LINE 1
7	FINAL PLAT

BENCHMARKS

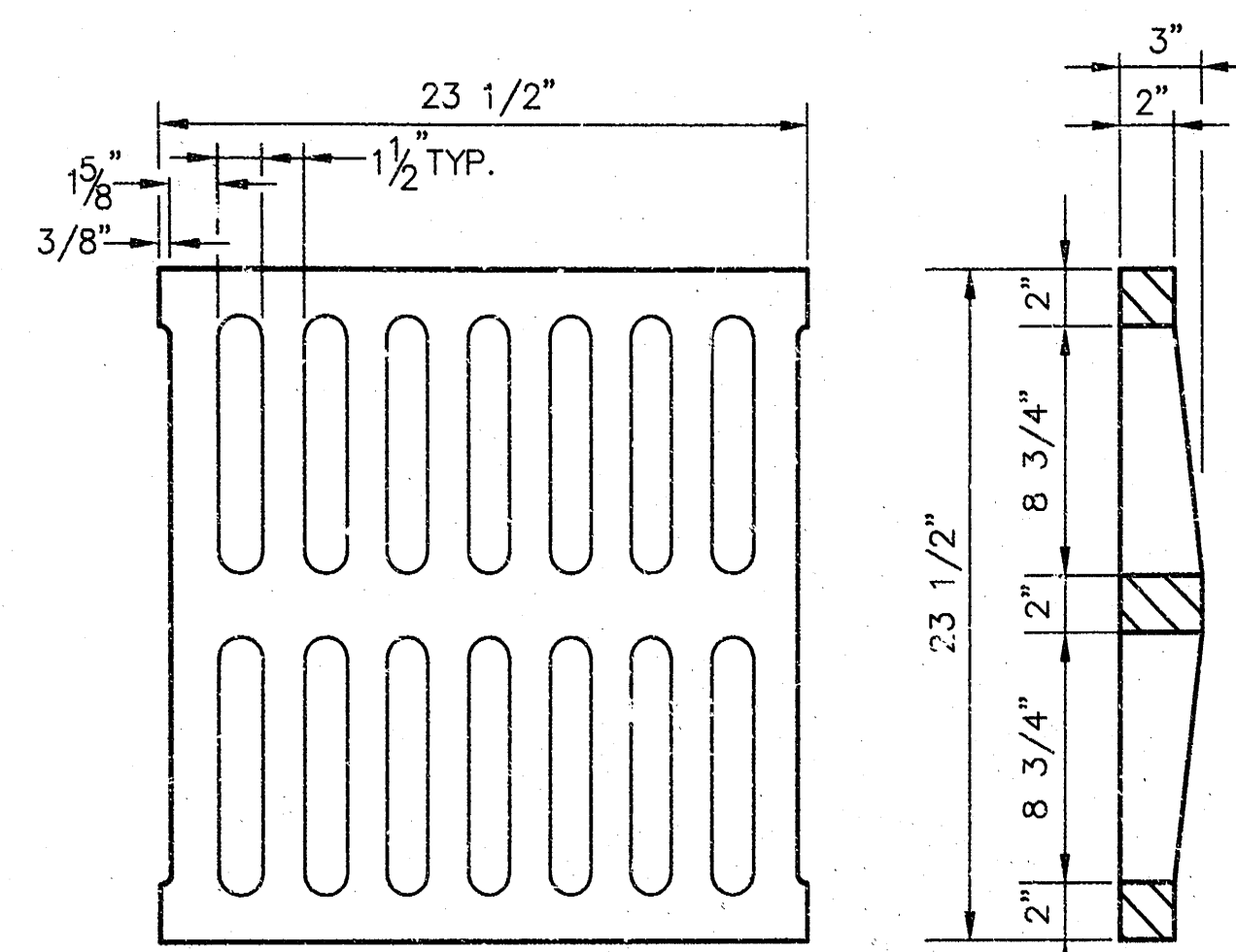
BM #1	COW BENCH MARK. SW CORNER OF INTERSECTION OF MAIZE AND PAWNEE. ELEV. = 135.12
BM #2	TOP OF STEEL "T" POST 5' FROM IP SW COR. HASKELL & MAIZE ROAD. ELEV. = 137.67
BM #3	"C" CUT ON WEST SIDE OF MAIZE ROAD ON SOUTH R.C.P. ELEV. = 138.93
BM #4	TOP OF STEEL "T" POST 5'S. & 5'W. OF SW COR. OF PRAIRIE WOODS & CRESTLINE. ELEV. = 125.69
BM #5	TOP OF STEEL "T" POST 5' N. OF PROP. COR., N. POINT OF HASKELL CT. (EAST). ELEV. = 125.69
BM #6	STEP SPIKE IN 6" HACKBERRY TREE 26' W. OF SE. COR OF PLAT. ELEV. = 128.22
BM #7	"C" CUT ON TOP CURB 15' S. & 4' W. OF FIRE HYD. SE. COR PAWNEE & YELLOWSTONE. ELEV. = 122.67
BM #8	"C" CUT ON TOP OF CURB @ N.W. COR. OF CRESTLINE & PAWNEE. ELEV. = 134.44

BOOKED
7/8/98
MCG
D-392

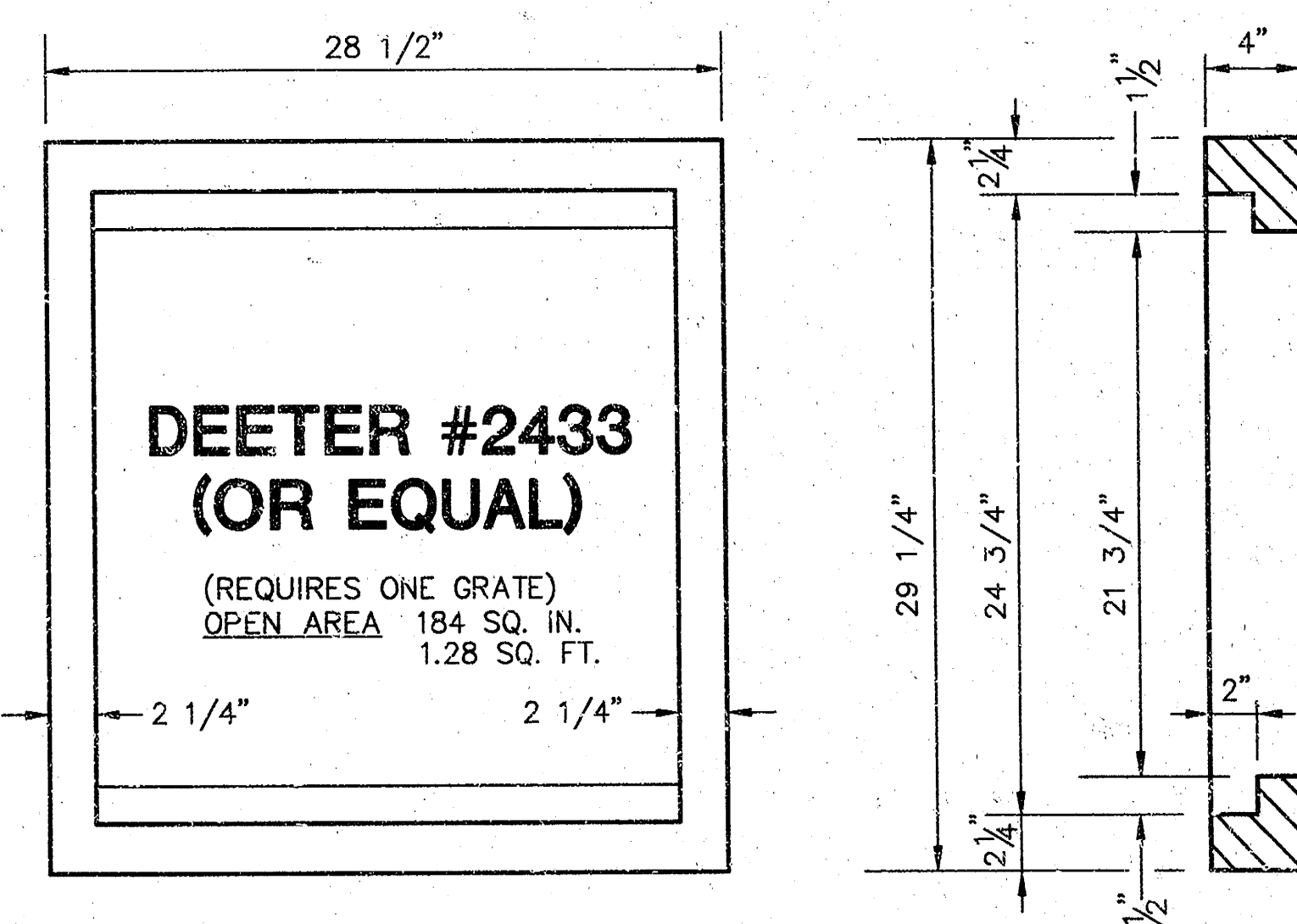


PRAIRIE WOODS ADDITION PROJECT NAME		
STORM WATER SEWER PLANS - PHASE 2 SHEET TITLE		
MID-KANSAS ENGINEERING CONSULTANTS, INC. 411 N. WEBB ROAD WICHITA, KS. 67206 316-684-9600	G.J.A./P.A.F. DESIGN BY: MARCH 1998 DATE	B.D.M. DRAWN BY: 97172DT JOB NO.
	G.J.A./D.D.S. CHECKED BY: 1 SHEET/OF	

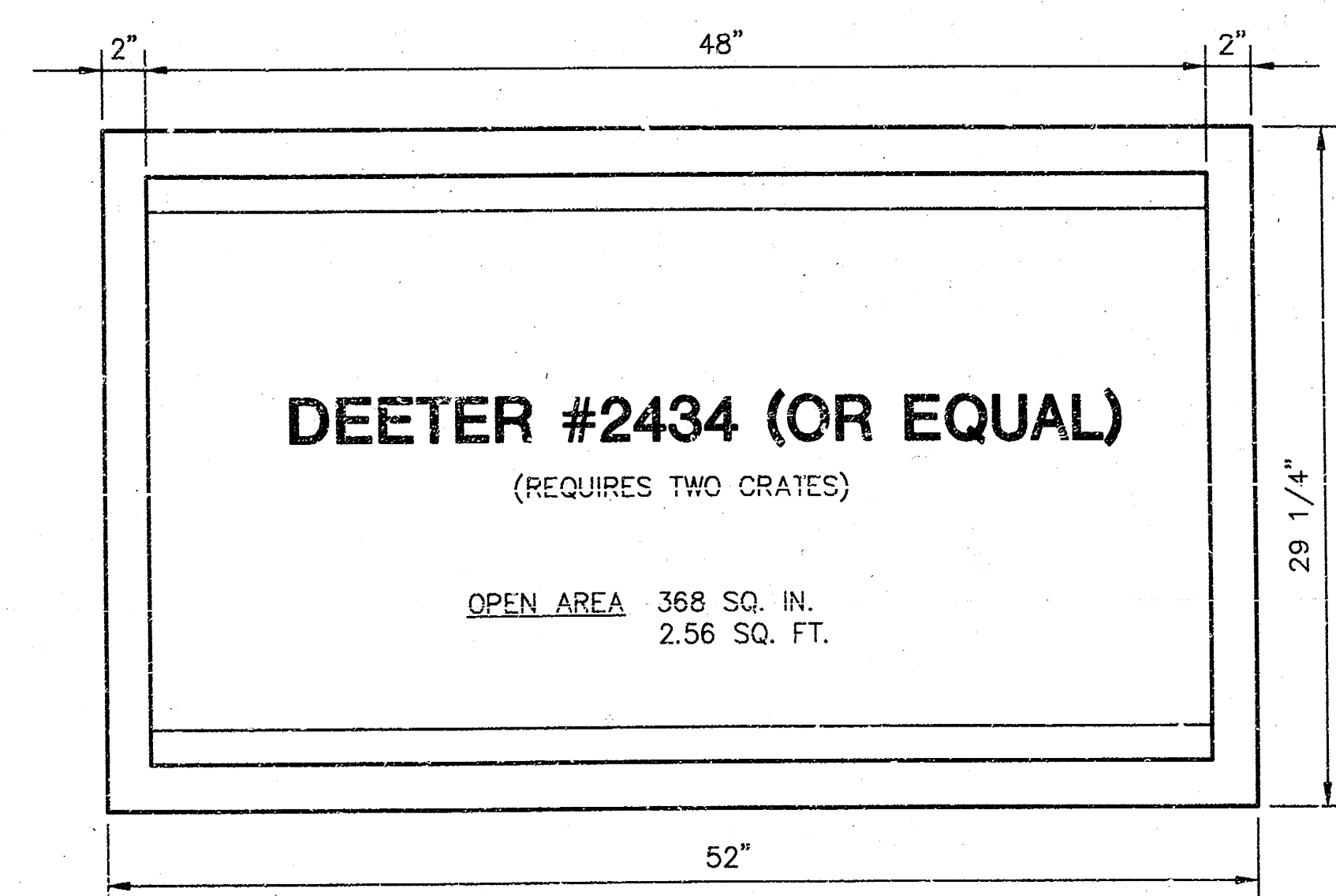
NOTE: GRATES SHALL BE IMPRINTED ON THE TOP SURFACE WITH "CITY OF WICHITA" USING LETTERS AT LEAST 1" IN HEIGHT. OTHER MARKING METHODS MAY BE USED ONLY IF APPROVED BY THE ENGINEER.



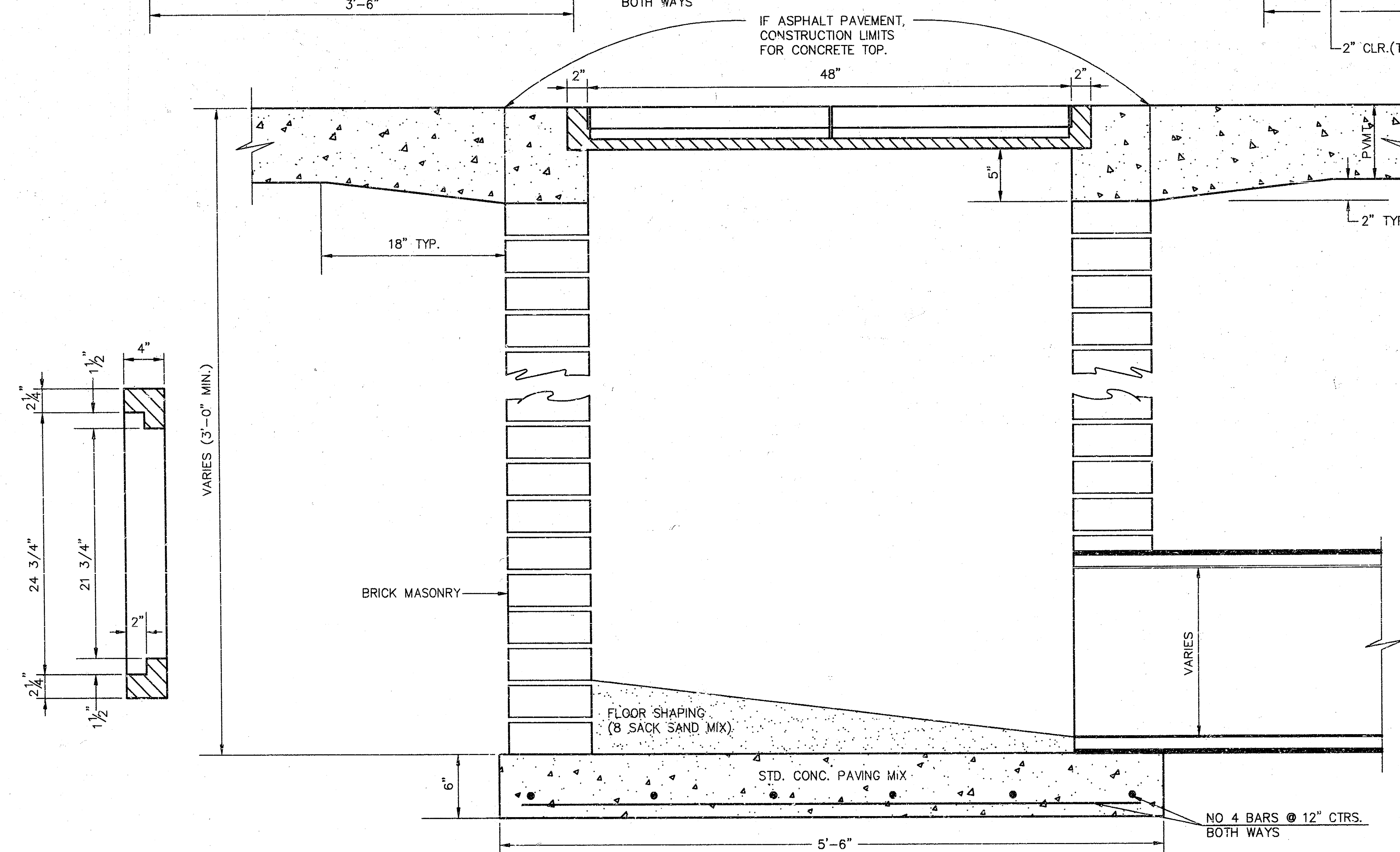
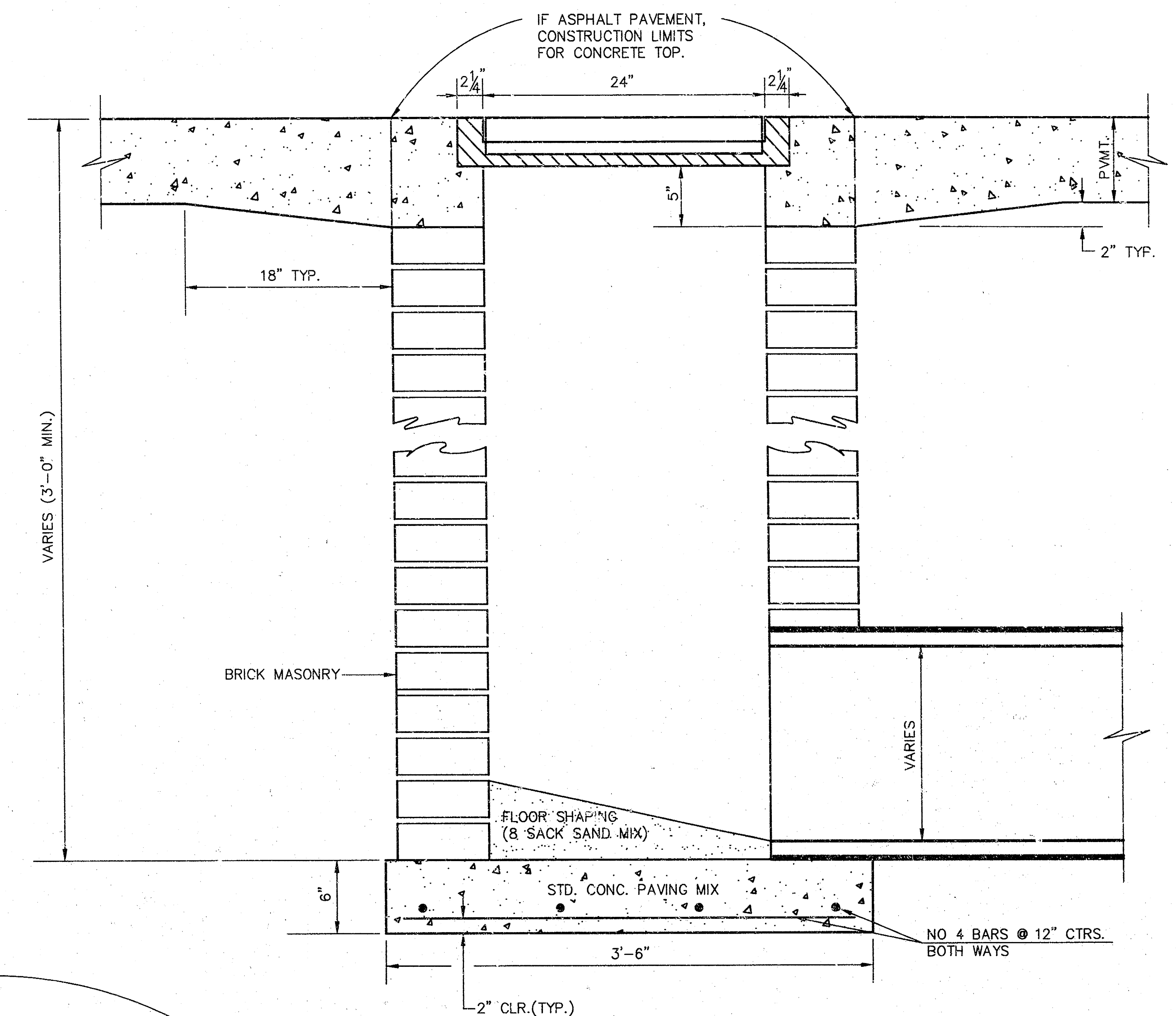
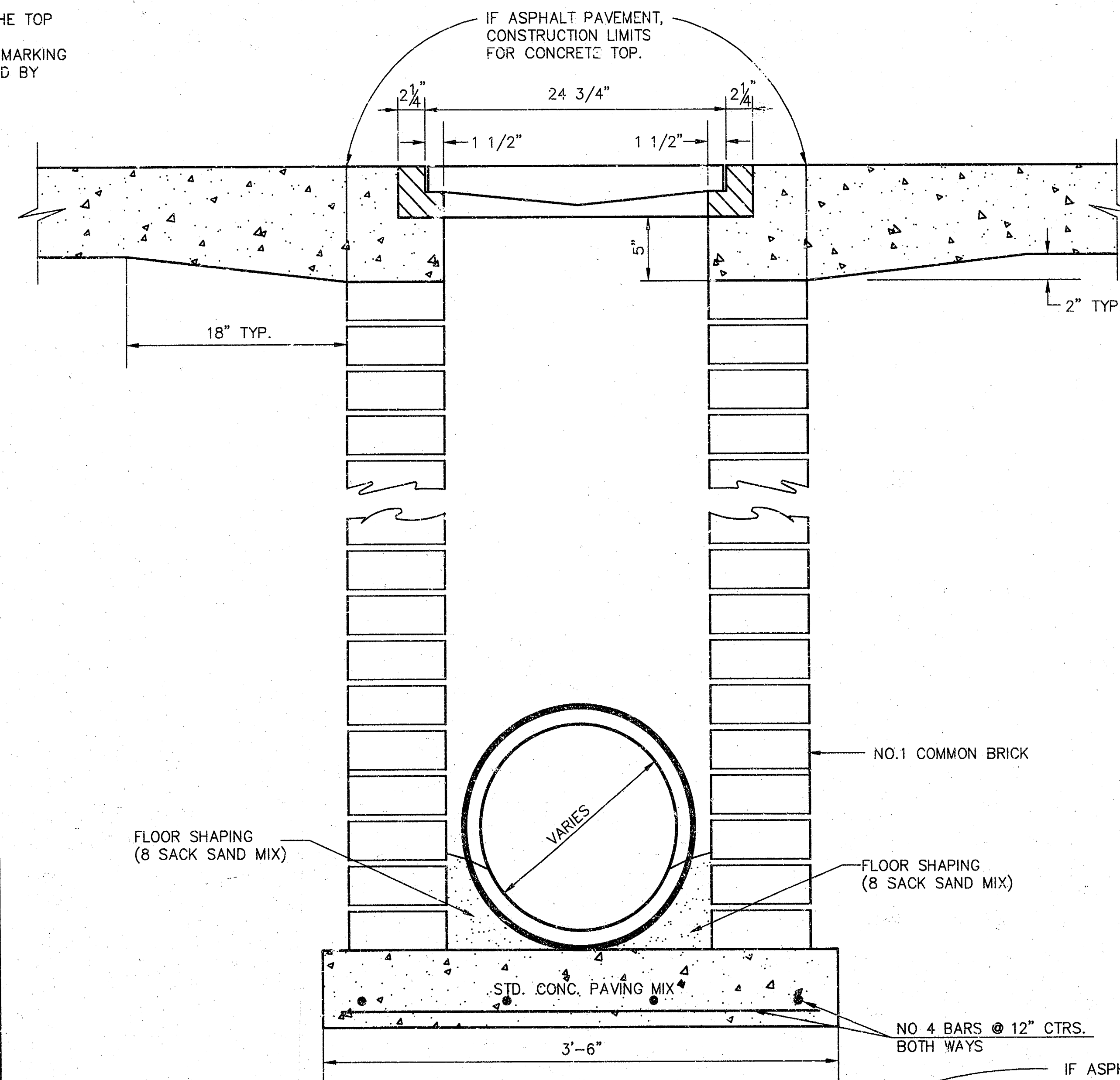
24"x24" GRATE DETAIL



SINGLE 24"x24" FRAME DETAIL



DOUBLE 24"x24" FRAME DETAIL



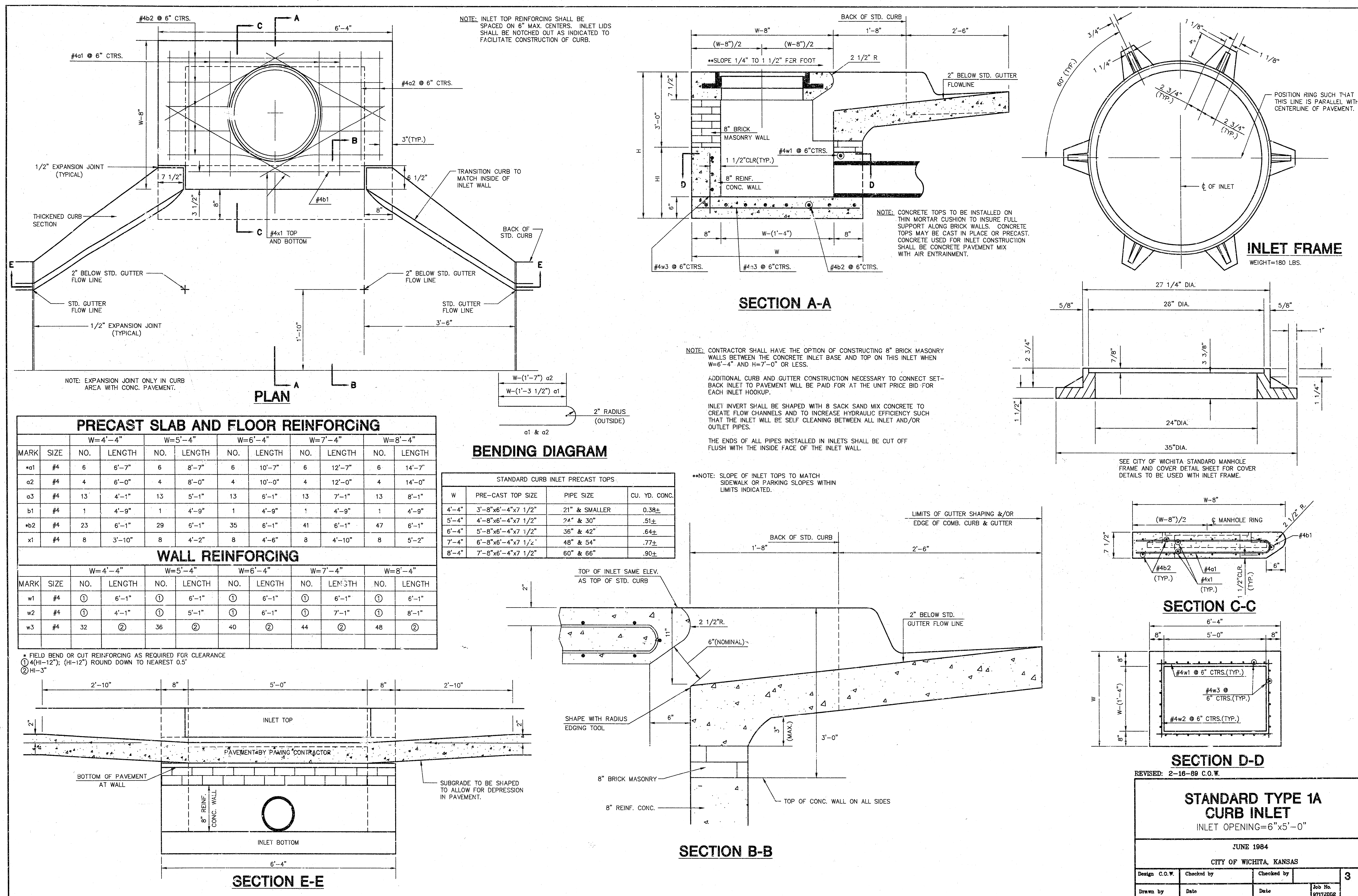
ORIFICE EQUATION		
$Q = C \cdot A \cdot \sqrt{2gh}$ $C = 0.60$		
h (DEPTH)	#2433 (SINGLE)	#2434 (DOUBLE)
0.1	1.95 cfs	3.89 cfs
0.2	2.75 cfs	5.50 cfs
0.3	3.37 cfs	6.74 cfs
0.4	3.89 cfs	7.78 cfs
0.5	4.35 cfs	8.70 cfs
0.6	4.77 cfs	9.53 cfs
0.7	5.15 cfs	10.30 cfs
0.8	5.50 cfs	11.01 cfs
0.9	5.84 cfs	11.67 cfs
1.0	6.15 cfs	12.30 cfs

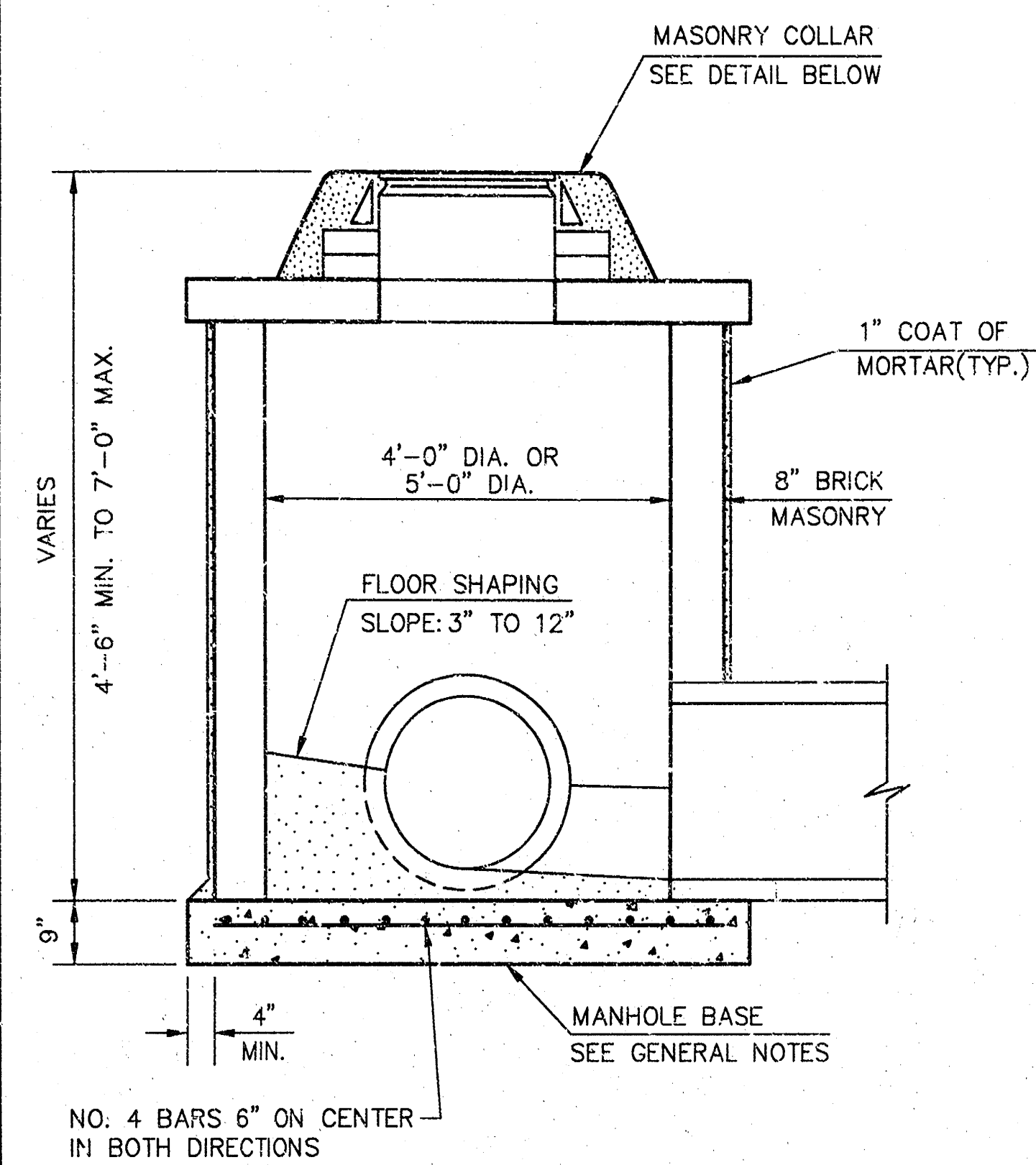
REVISED: 5-8-90 JN2

DROP INLET DETAILS

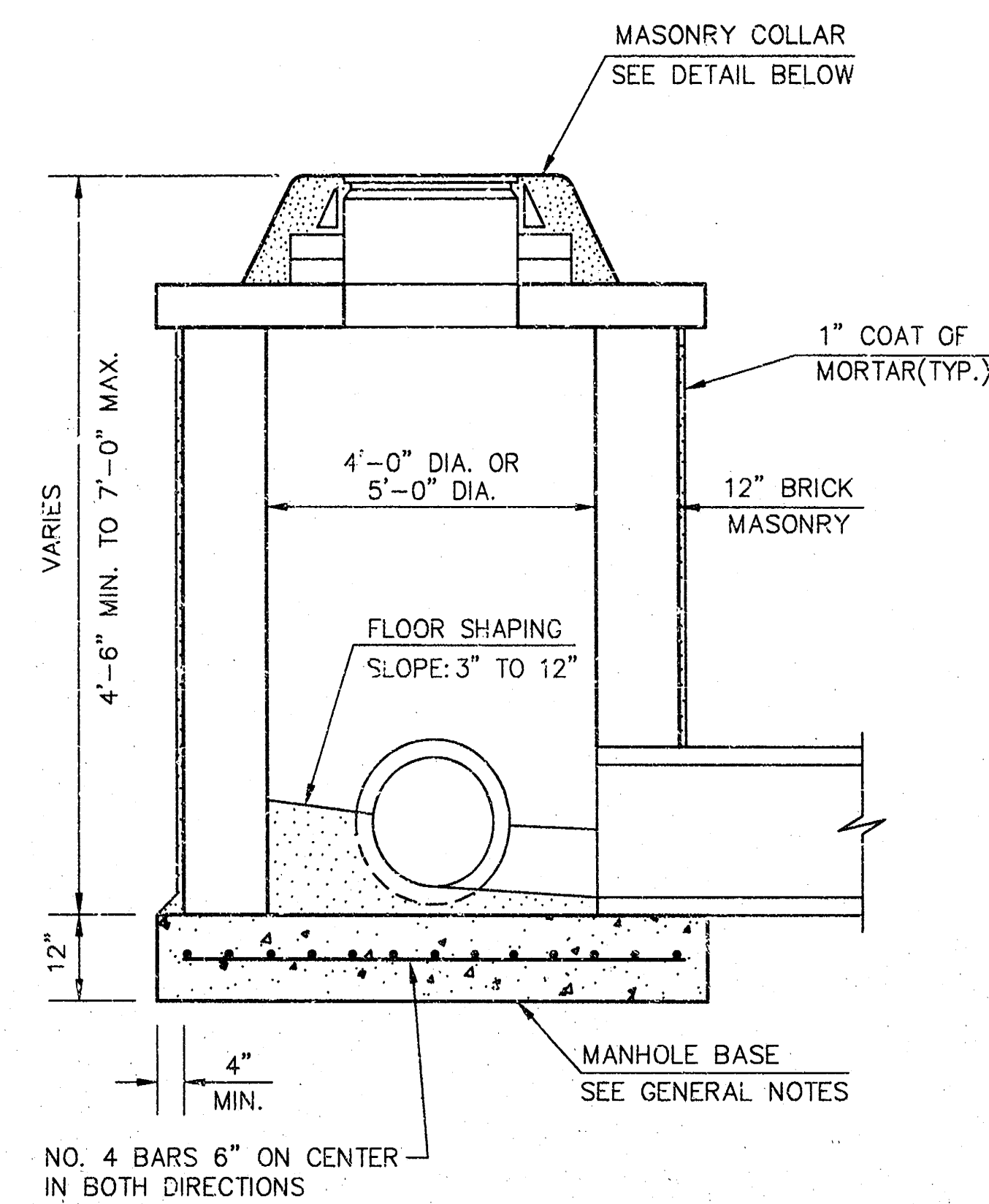
CITY OF WICHITA, KANSAS

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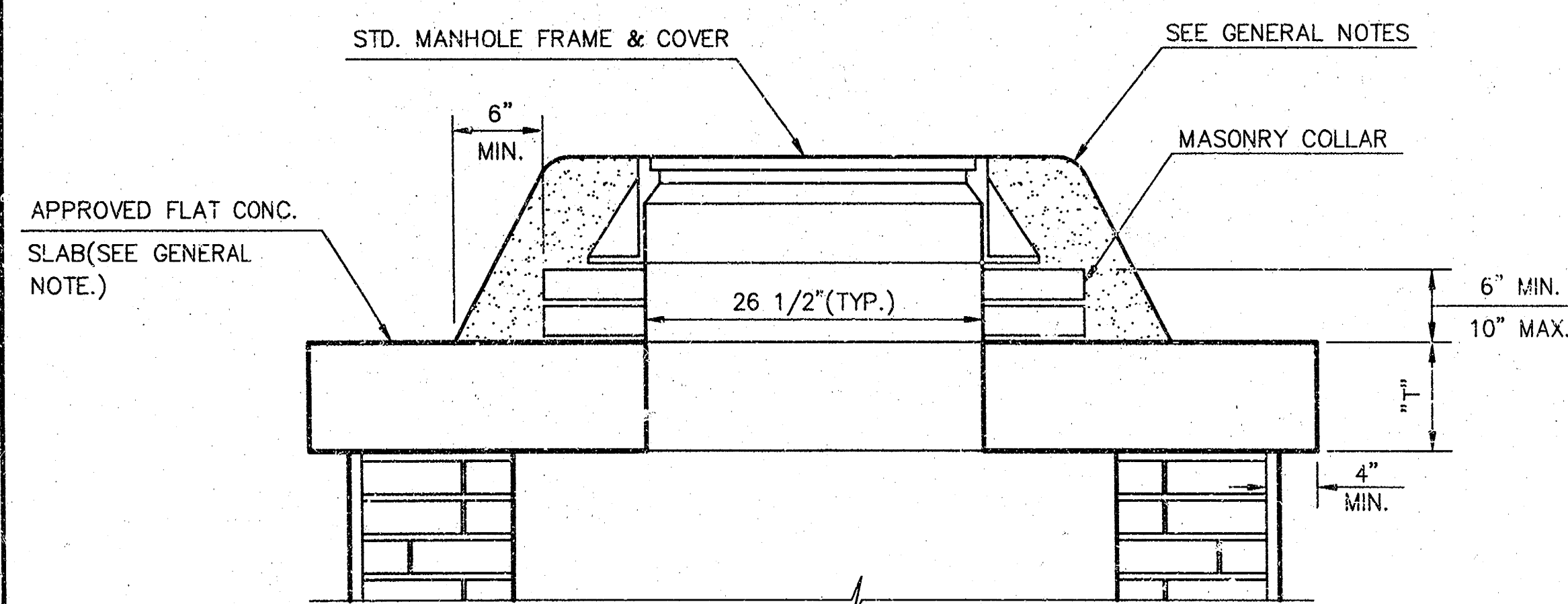




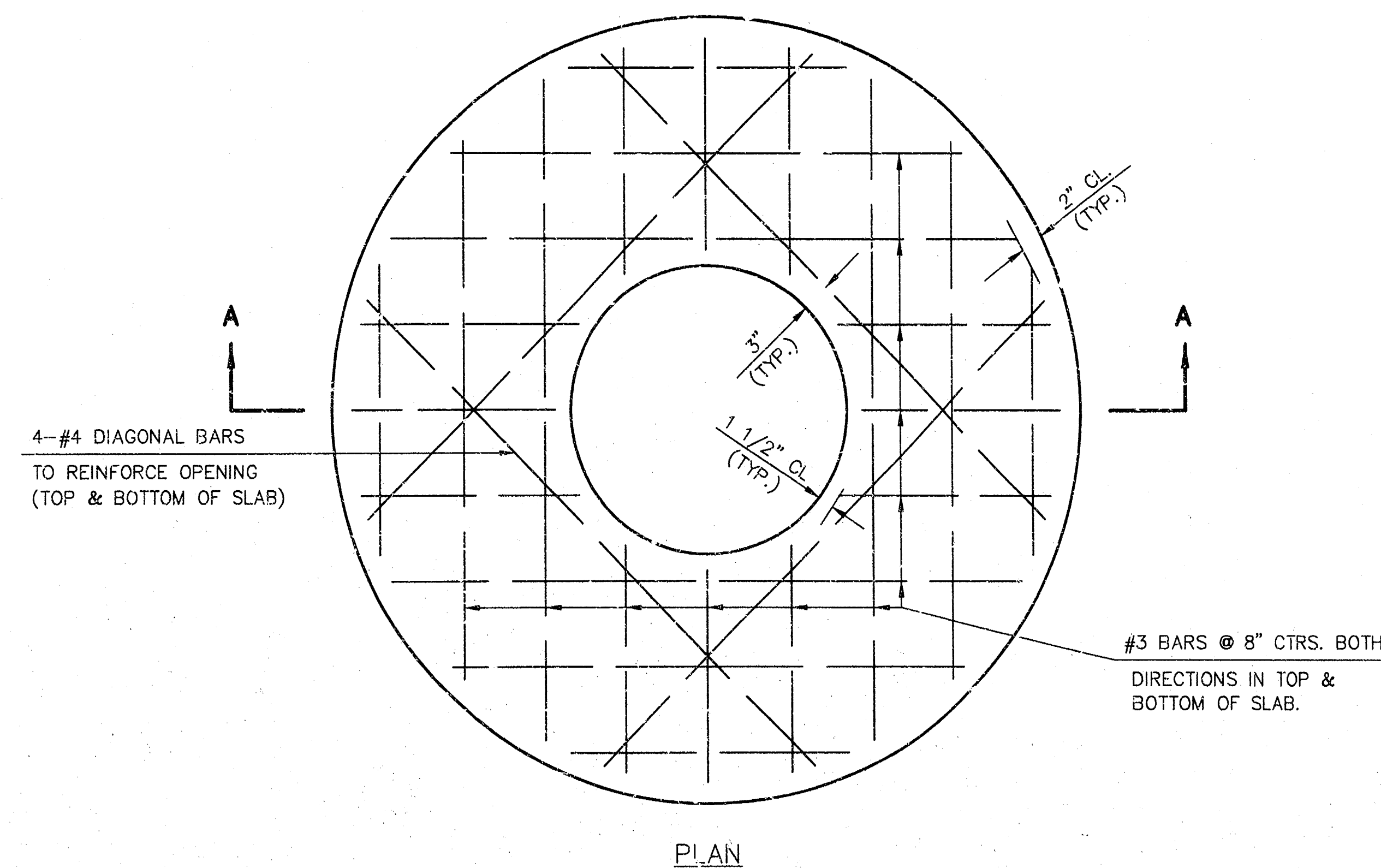
SHALLOW TYPE "A" MANHOLE



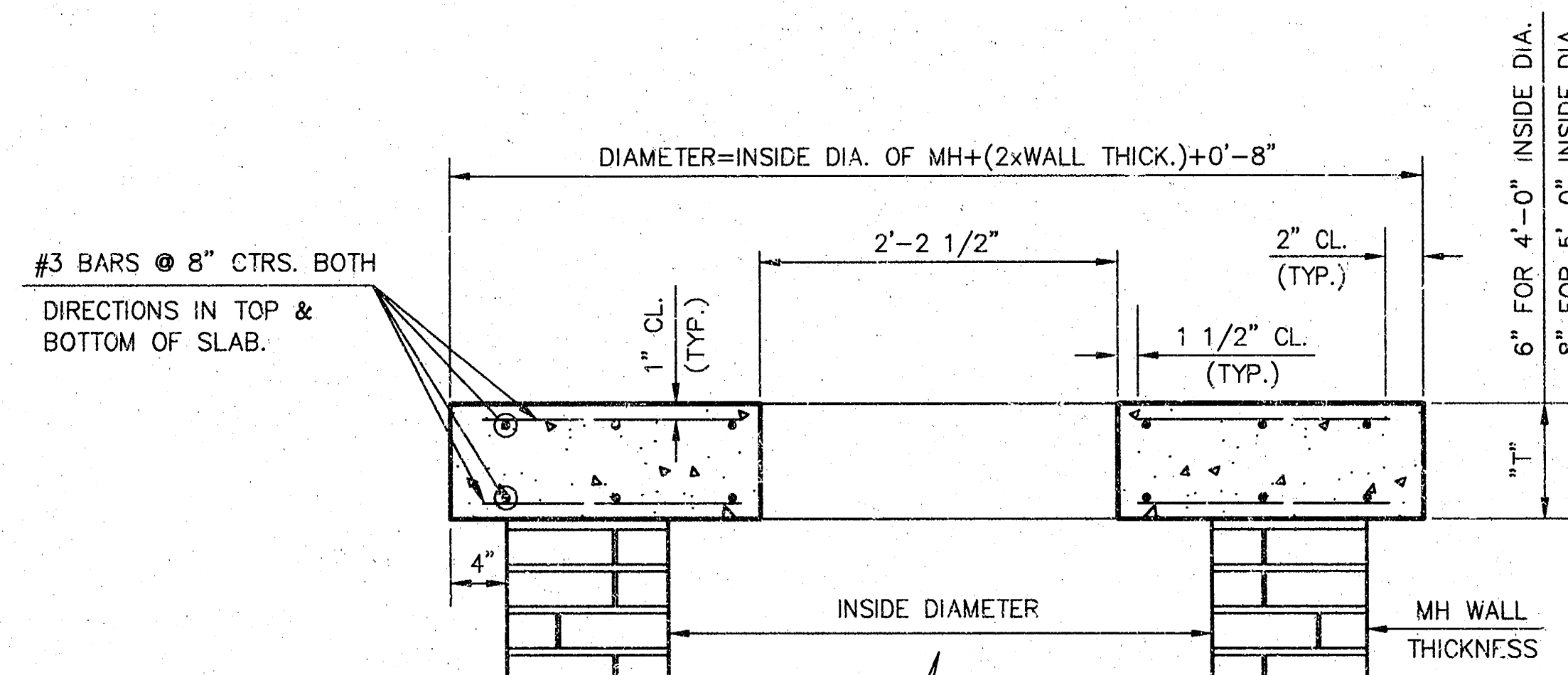
SHALLOW TYPE "B" MANHOLE



MASONRY COLLAR DETAIL

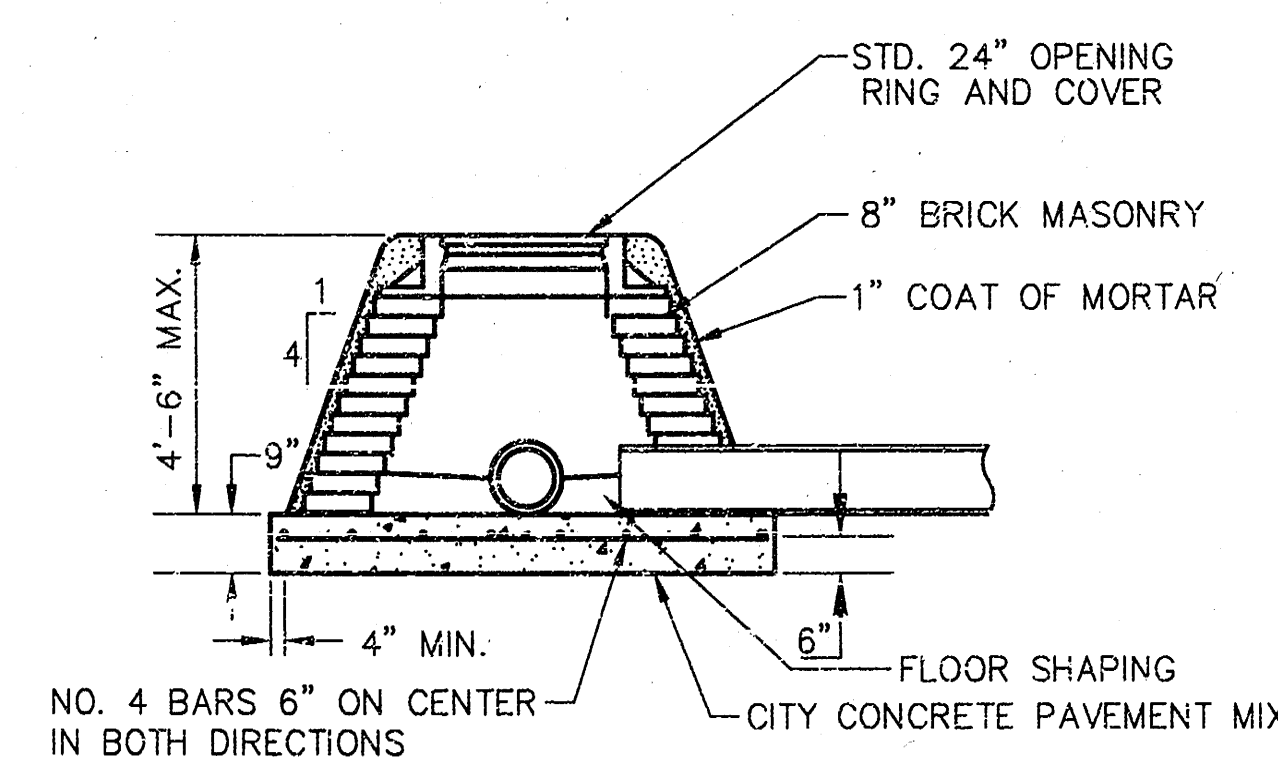


PLAN

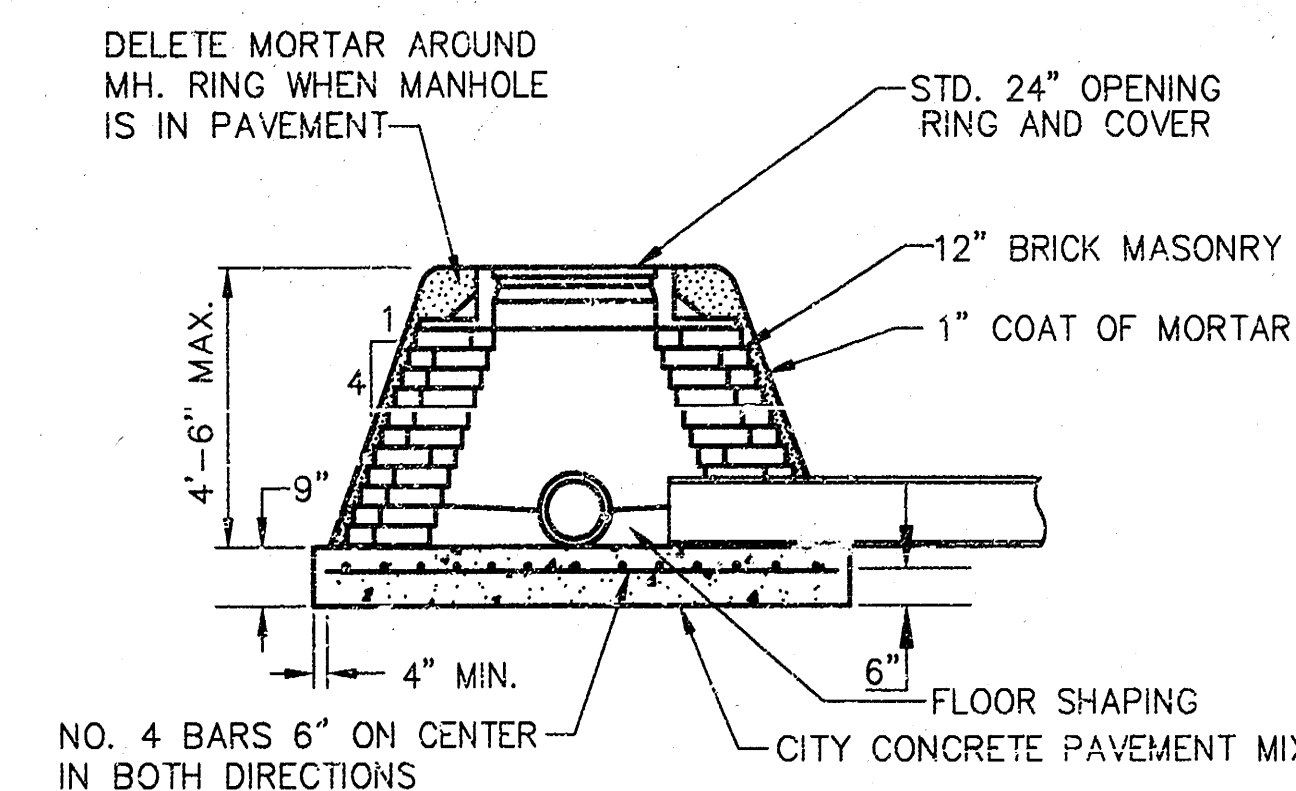


SECTION A-A

FLAT CONCRETE SLAB DETAILS



SPECIAL SHALLOW TYPE "A" MANHOLE



SPECIAL SHALLOW TYPE "B" MANHOLE

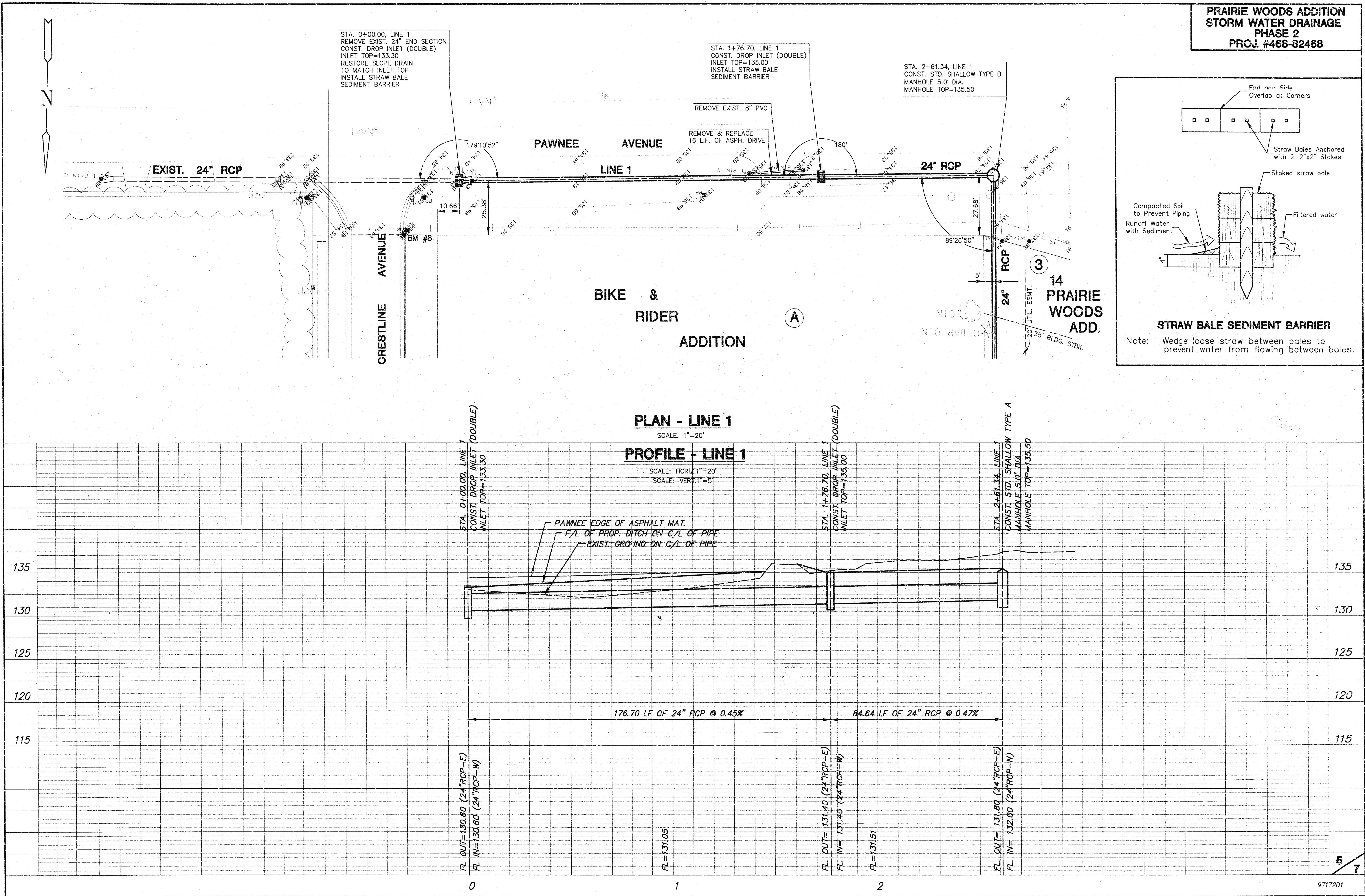
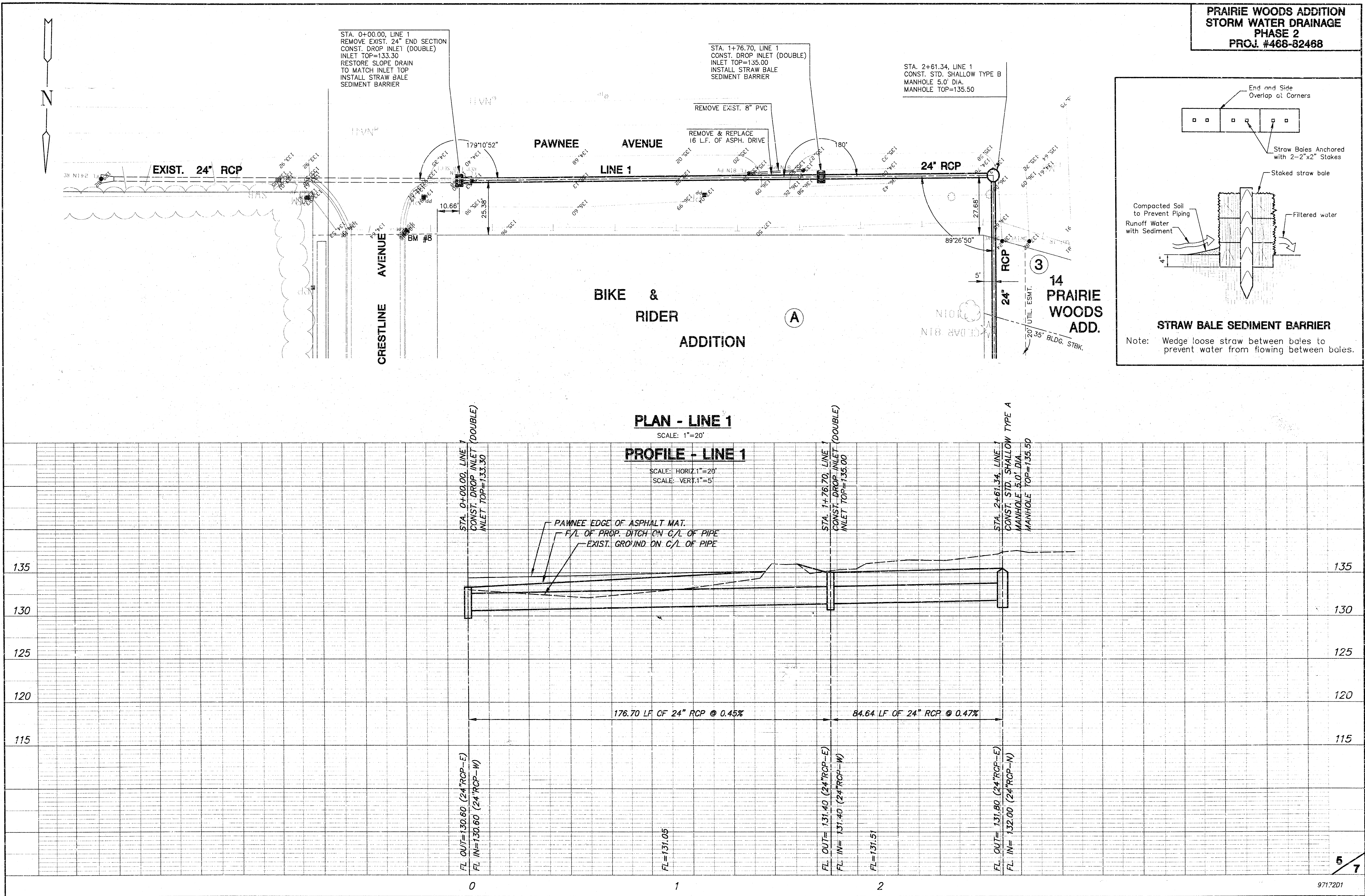
GENERAL NOTES

- 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.

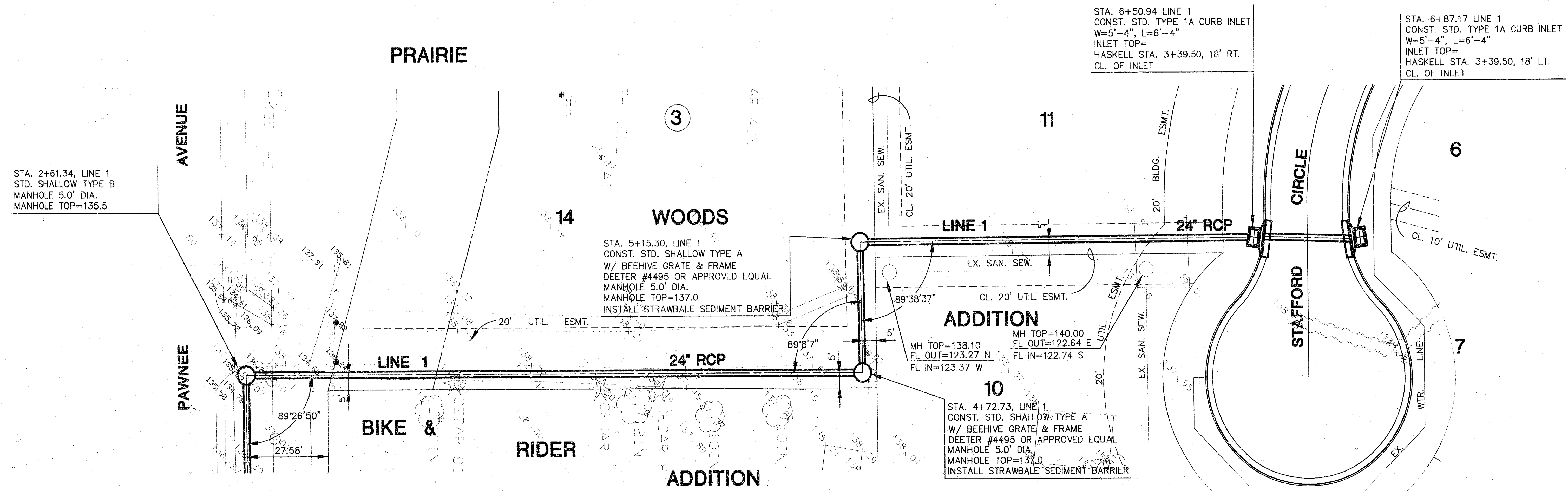
STANDARD SHALLOW MANHOLES TYPE "A" AND TYPE "B"

CITY OF WICHITA, KANSAS

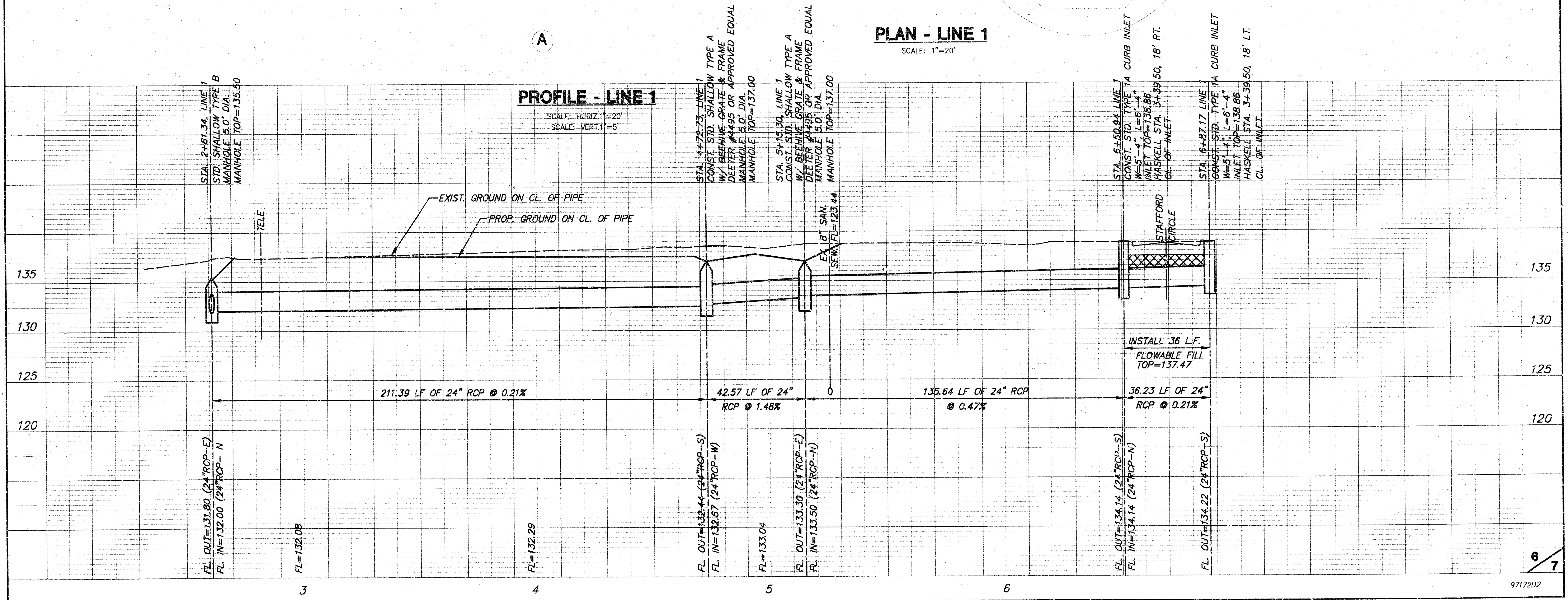
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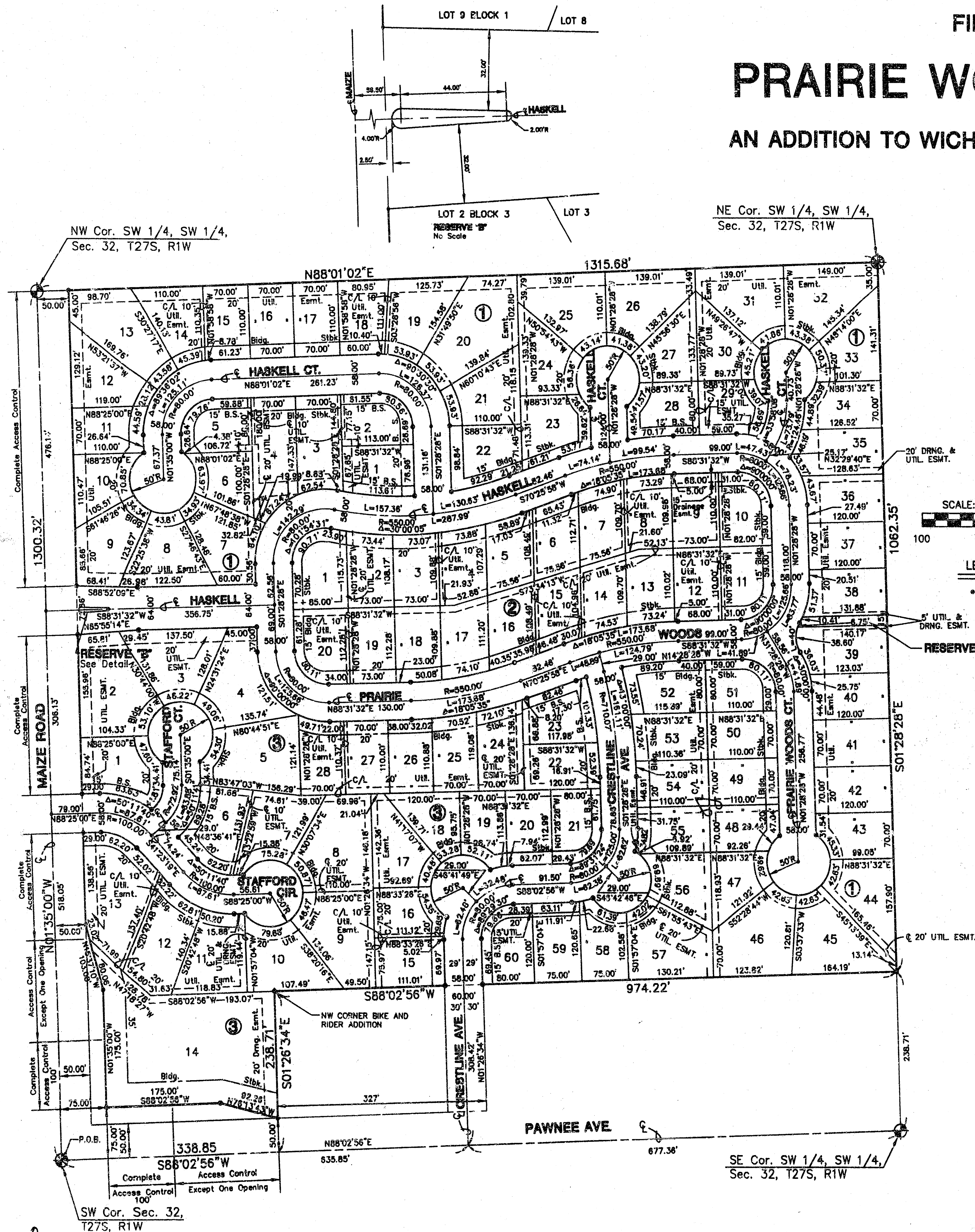
**PRAIRIE WOODS ADDITION
STORM WATER DRAINAGE
PHASE 2
PROJ. #468-82468**



PLAN - LINE 1
SCALE: 1"=20'



FINAL PLAT OF PRAIRIE WOODS ADDITION AN ADDITION TO WICHITA, SEDGWICK COUNTY, KANSAS



I, Kenneth H. Bengtson, a Civil Engineer and Registered Land Surveyor in Kansas, do hereby certify that I have been in responsible charge of surveying and platting of "PRAIRIE WOODS ADDITION", an addition to Wichita, Sedgwick County, Kansas, into lots, blocks, streets, and reserves the same being accurately set forth in the accompanying plat and described herein:

The Southwest Quarter of the Southwest Quarter of Section 32 Township 27 South, Range 1 West, except the South 238.71 feet thereof, but including the West 338.5 feet of the South 238.71 feet thereof, more particularly described as follows:

Beginning at the Southwest corner of said Southwest Quarter; thence N 01° 35' 00" W, 1300.32 feet along the West line to the Northwest corner of said Southwest Quarter; thence N 88° 01' 02" E, 1315.68 feet along the North line to the Northeast corner of said Southwest Quarter; thence S 01° 28' 28" E, 1062.35 feet along the East line of said Southwest Quarter to a point lying 238.71 feet North of the South line of said Southwest Quarter; thence S 88° 02' 56" W, 974.22 feet parallel with the South line of said Southwest Quarter to the Northwest corner of BIKE AND RIDER ADDITION, addition to Sedgwick County, Kansas; thence S 01° 26' 34" E, 238.71 feet along the West line of said addition to a point lying on the South line of said Southwest Quarter; thence S 88° 02' 56" W, 338.85 feet along said South line to the point of beginning, except that which is dedicated as street right of way.

I hereby certify that the details of this plat are correct to the best of my knowledge and belief this 16 day of February, 1994.

Kenneth H. Bengtson, P.E., R.L.S. #922
Mid-Kansas Engineering Consultants, Inc.
411 North Webb Road
Wichita, KS 67206

Know all men by these presents that we the undersigned property owners of the land as above set forth in the Civil Engineer's and Registered Land Surveyor's Certificate, have caused the same to be surveyed and platted into a lot, block, street and reserves the same to be known as "PRAIRIE WOODS ADDITION", an addition to Wichita, Sedgwick County, Kansas. Easements for the construction and maintenance of drainage and utilities, are hereby granted to the city. The streets are hereby dedicated to and for the use of the public. Reserve A is platted for drainage and utilities, landscaping, sidewalks, and public access to the Pawnee Prairie Park. Reserve B is platted for entry monuments and landscaping. The reserves shall be owned and maintained by the homeowners association. All abutters right of access to or from Maize Road over and across the West line of PRAIRIE WOODS ADDITION are hereby granted to the City of Wichita, provided however that Lot 14, Block 3 shall have access to Maize Road at one location. All abutters right of access to or from Pawnee Avenue over and across the South line of Lot 14, Block 3 are hereby granted to the City of Wichita, provided however that Lot 14, Block 3 shall have access to Pawnee Avenue at one location.

Bradley K. Smisor, Executive Vice President
STATE OF KANSAS
ss:
SEDGWICK COUNTY)

BE IT REMEMBERED, that on this 16th day of February, 1994, before me the undersigned, a Notary Public in and for the County and State aforesaid, came Bradley K. Smisor, Executive Vice President, Builders, Inc., to me personally known to be the same person who executed the foregoing instrument of writing and duly acknowledged the execution of the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal, the day and year last above written.

Beth A. Butler
Notary Public
BETH A. BUTLER
My appointment expires: February 5, 1999



This plat of "PRAIRIE WOODS ADDITION", has been submitted to and approved by the Wichita-Sedgwick County Metropolitan Area Planning Commission, Wichita, Kansas.

Dated this 29th day of December, 1994.

WICHITA-SEDGWICK COUNTY METROPOLITAN PLANNING COMMISSION

John W. McKay, Jr., Chairman

Marvin S. Krout, Secretary

This plat approved and all dedications shown thereon, if any, accepted by the City Council of the City of Wichita, Kansas, this 21st day of March, 1994.

Elmo Broadfoot, Mayor

Pat Burnett, Deputy City Clerk

Entered on transfer record this 17 day of April, 1994.

Susan E. Crockett-Spoon, County Clerk

STATE OF KANSAS
ss:
SEDGWICK COUNTY)

This is to certify that this instrument was filed for record in the Register of Deeds office this 17th day of April, 1994, at 11:30 A.M.

Pat Kettler, Register of Deeds

Ed Reso, Deputy