

to serve

CITY OF WICHITA, KANSAS

Neil D. Cable, P.E. City Engineer

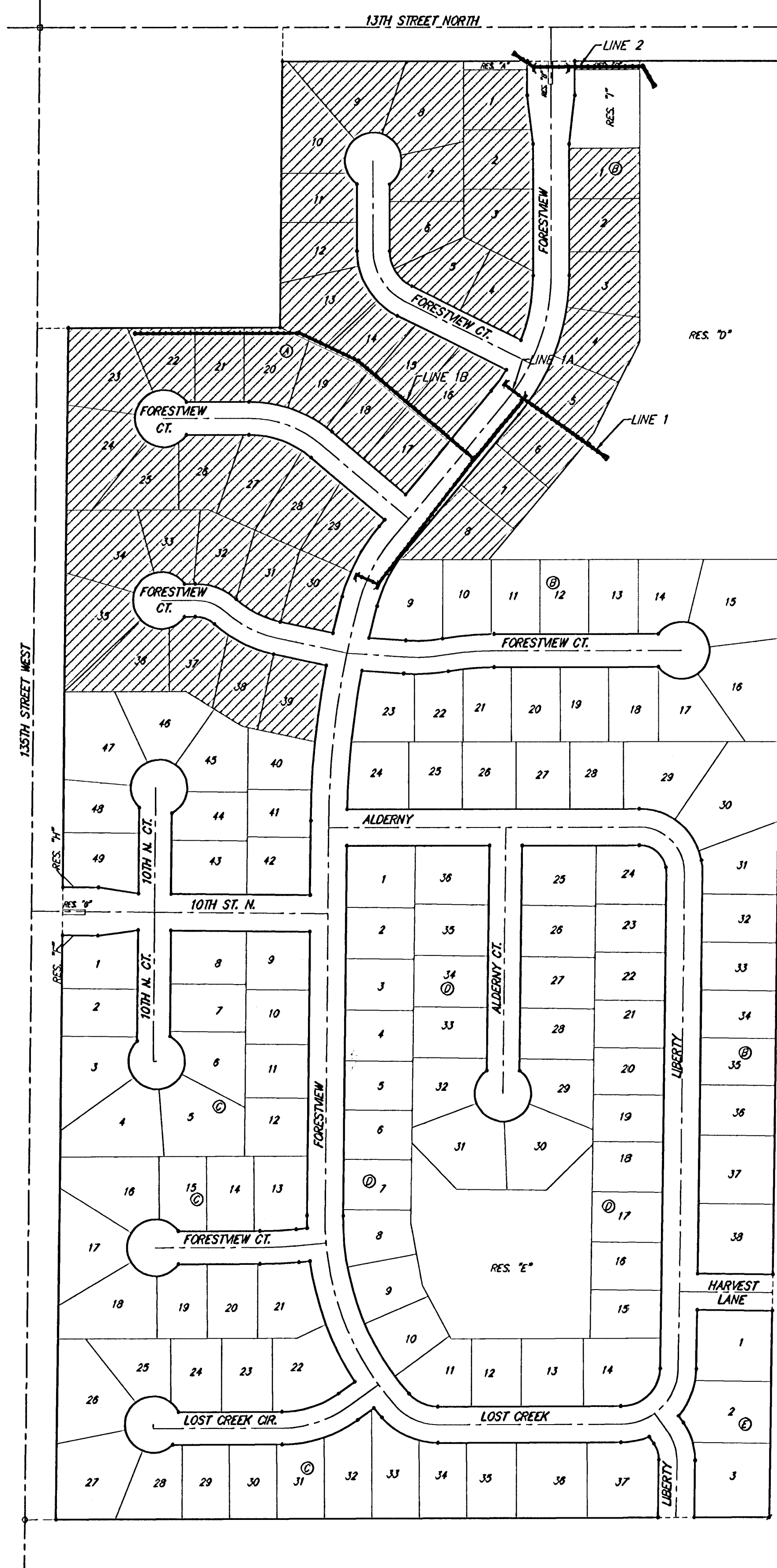
Project Number

468-83544

OCA Number

751326

BOOKED
2-13-04
MCG
C-257



Scale: $1'' = 150'$

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:

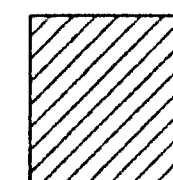
<i>Cox Communications</i>	<i>262-4270</i>
<i>Kansas Gas Service</i>	<i>1-888-482-4950</i>
<i>Wester Energy</i>	<i>383-8650</i>
<i>Aquila Energy</i>	<i>1-888-482-4950</i>
<i>SBC Communication</i>	<i>268-2245</i>
<i>City of Wichita Water Dept.</i>	<i>268-4563</i>
<i>City of Wichita Sewer Maint.</i>	<i>268-4024</i>
<i>City of Wichita Storm Sewer Maint.</i>	<i>268-4090</i>
<i>City of Wichita Traffic Maint.</i>	<i>268-4034</i>

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 information upon which the design is based. 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 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.

5. 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.

Benefit District

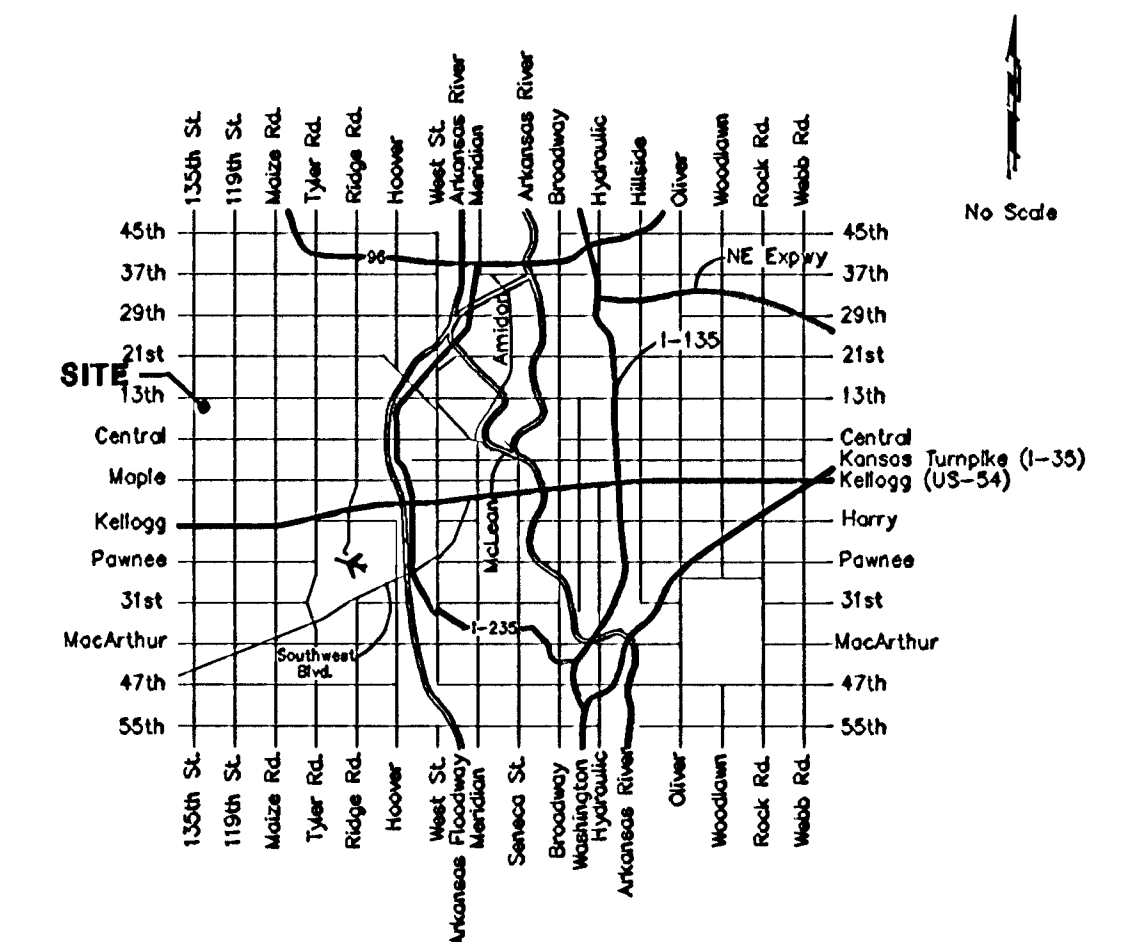
BENCHMARKS

BM #1: C.O.W. benchmark disk. 56'
E and 55' N of CL 135th St. W. &
13th St. N.
Elev. = 167.83 (City Datum)

BM #2: 60D nail in HLP, 800' W &
31' N of the NE cor., NW1/4, Sec.
13, T-27-S, R-2-W.
Elev. = 162.68 (City Datum)

SHEET INDEX

<i>Title Sheet</i>	1
<i>Line 1</i>	2-3
<i>Line 1A</i>	2
<i>Line 1B</i>	4-5
<i>Line 2</i>	6
<i>Std. Type 1A Single Inlet Detail</i>	7
<i>Std. Type 1A Double Inlet Detail</i>	8
<i>Std. Shallow Manhole Detail</i>	9
<i>Special Yard Inlet Detail</i>	10
<i>Standard Drop Inlet Detail</i>	11
<i>Headwall Detail</i>	12
<i>Soil Erosion BMPs</i>	13
<i>Copy of Plat</i>	14



Vicinity Map



As Built Per Plan 9/03 KX



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

316-262-7271 • 315 ELLIS • WICHITA, KANSAS 67211

BENCHMARKS:
BM #1: C.O.W. benchmark disk.
56' E and 55' N of CL 135th
St. W. & 13th St. N.
Elev. = 167.83 (City Datum)

BM #2: 60D nail in HLP, 800'
W & 31' N of the NE cor.,
NW1/4, Sec. 13, T-27-S,
R-2-W.
Elev. = 162.68 (City Datum)

Static WS Elev = 152.0
100-yr Design WS Elev. = 154.9
Bottom Elev. = 142.00

Sta 0+00, Line 1
Begin construction of 30"
SWS with
1 - 30" RC Headwall.
Install 29.3 S.Y. light
stone rip-rap as indicated.

RES. "D"

Proposed
pond
(by others)

CAUTION!
Ex. 10" SS
Crossing

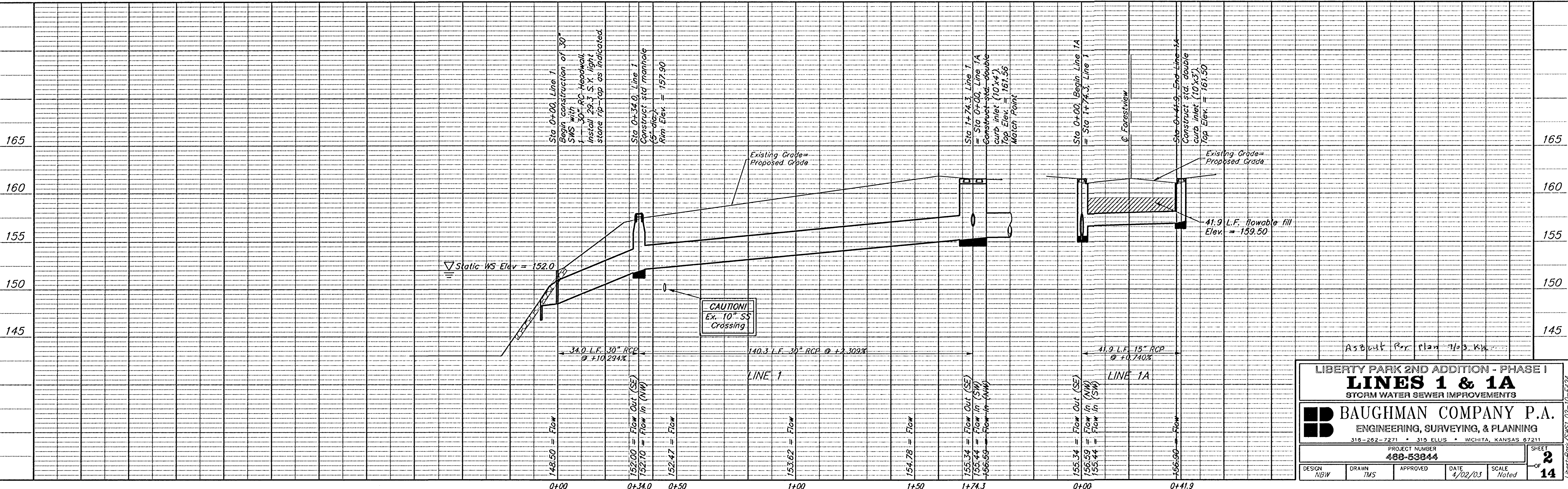
Sta 0+34.0, Line 1
Construct std manhole
(5' dia.).
Rim Elev. = 157.90

Sta 1+74.3, Line 1
= Sta 0+00, Line 1A
Construct std. double
curb inlet (10'x4').
Top Elev. = 161.56
Match Point

Sta 0+41.9, End Line 1A
Construct std. double
curb inlet (10'x3').
Top Elev. = 161.50

Sta 0+00 to Sta 0+41.9
Install 41.9 L.F. flowable
fill per City specs.

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



LIBERTY PARK 2ND ADDITION - PHASE I
LINES 1 & 1A
STORM WATER SEWER IMPROVEMENTS

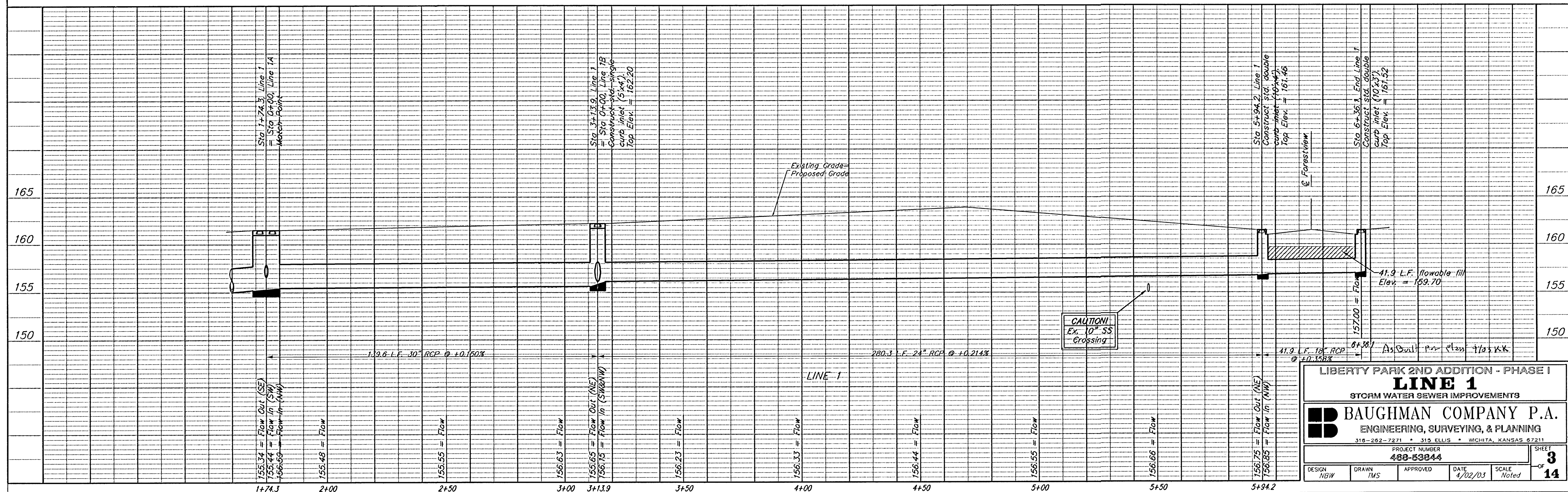
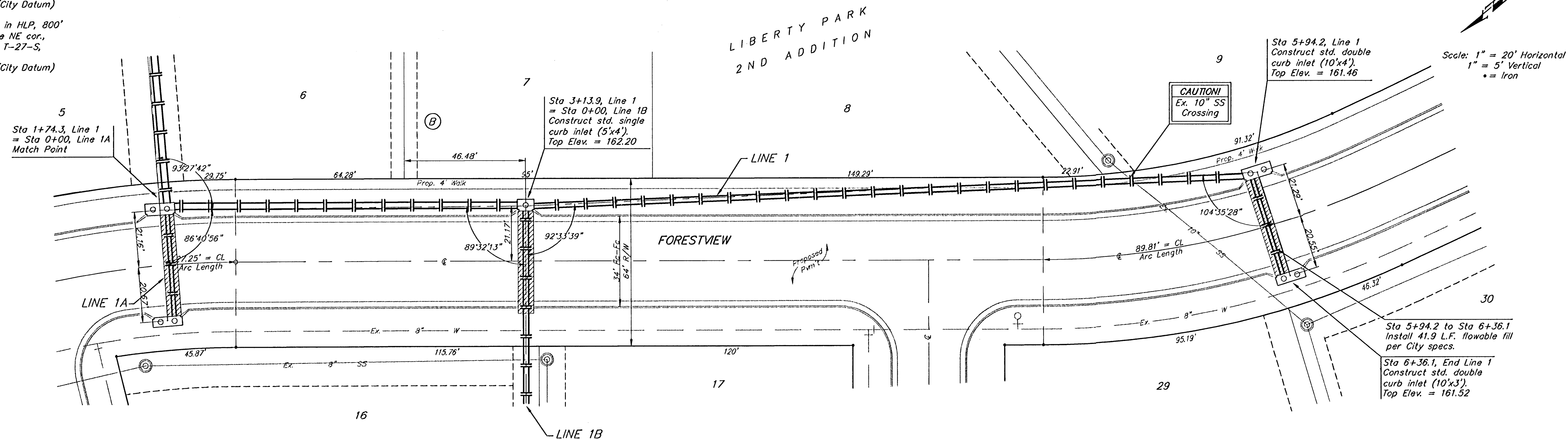
BAUGHMAN COMPANY P.A.
ENGINEERING, SURVEYING, & PLANNING
316-262-7271 • 319 ELLIS • WICHITA, KANSAS 67211

PROJECT NUMBER
488-53844

DESIGN NBW	DRAWN TMS	APPROVED	DATE 4/02/03	SCALE Noted
---------------	--------------	----------	-----------------	----------------

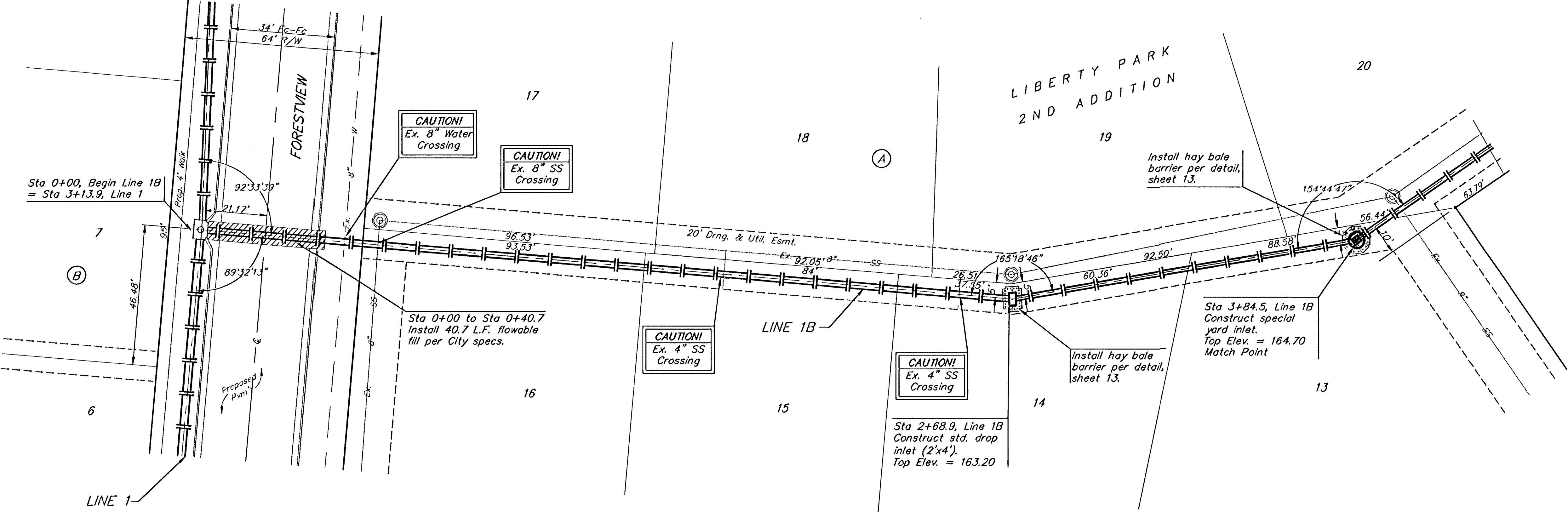
SHEET
2
OF
14

BM #2: 60D nail in HLP, 800'
W & 31' N of the NE cor.,
NW1/4, Sec. 13, T-27-S,
R-2-W.
Elev. = 162.68 (City Datum)

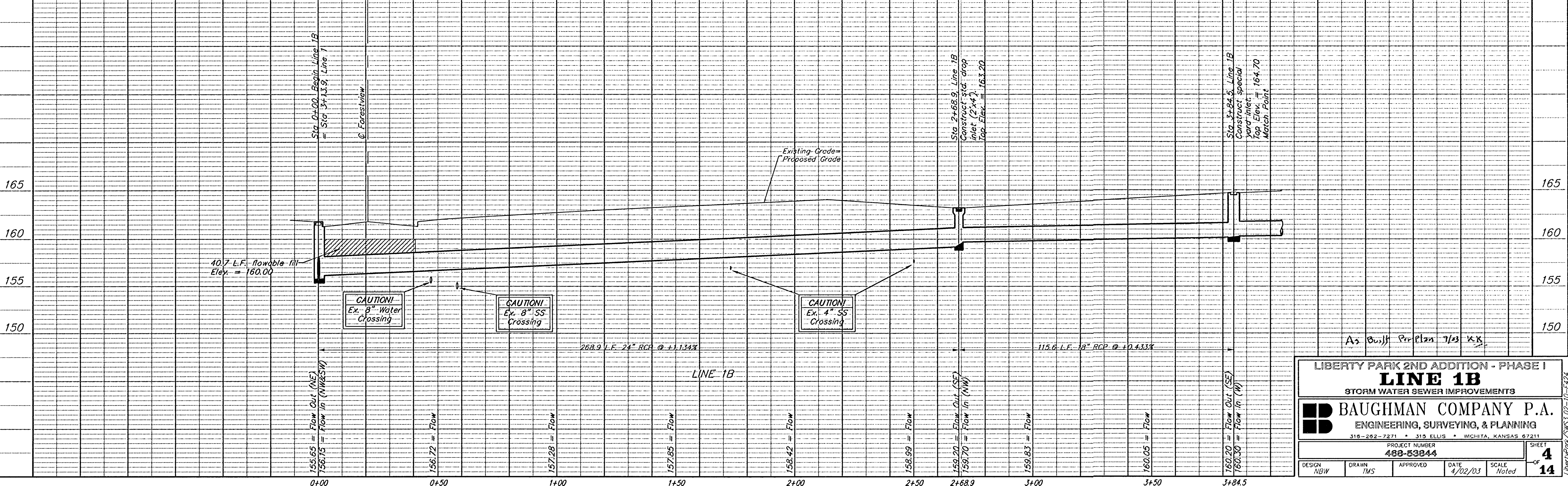


BENCHMARKS:
BM #1: C.O.W. benchmark disk.
56' E and 55' N of CL 135th
St. W. & 131th St. N.
Elev. = 167.83 (City Datum)

BM #2: 60D nail in HLP, 800'
W & 31' N of the NE cor.,
NW1/4, Sec. 13, T-27-S,
R-2-W.
Elev. = 162.68 (City Datum)



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



LIBERTY PARK 2ND ADDITION - PHASE I
LINE 1B
STORM WATER SEWER IMPROVEMENTS

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

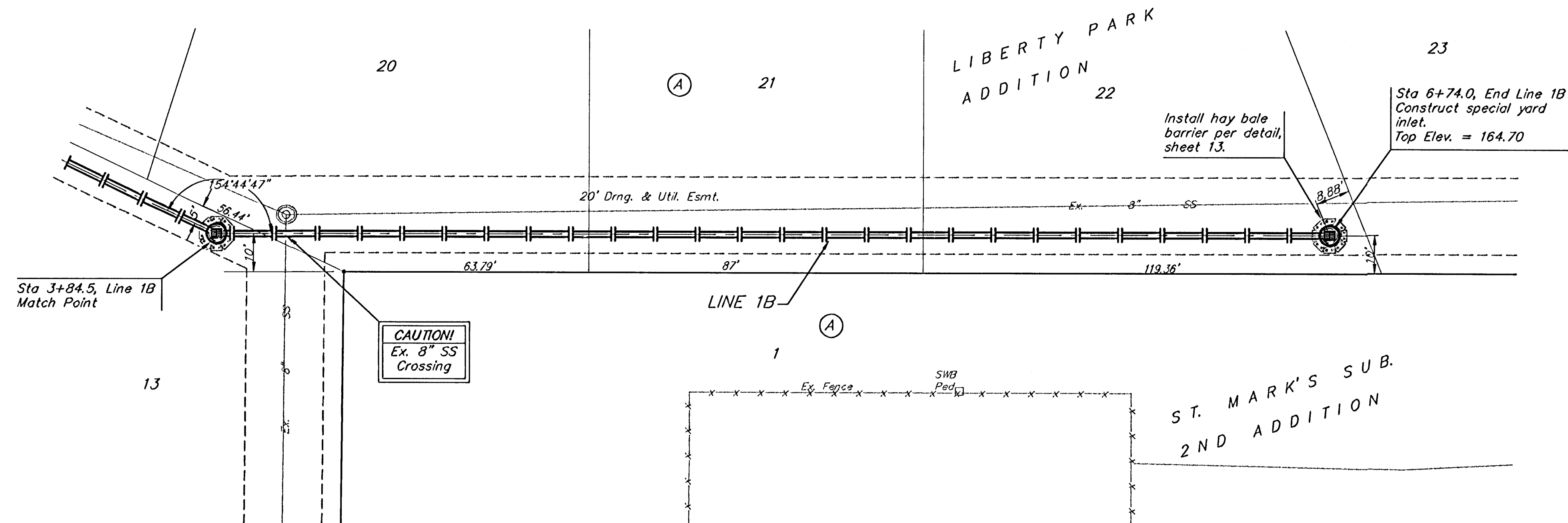
PROJECT NUMBER
468-83844

DESIGN: NBW DRAWN: TMS APPROVED: DATE: 4/02/03 SCALE: Noted

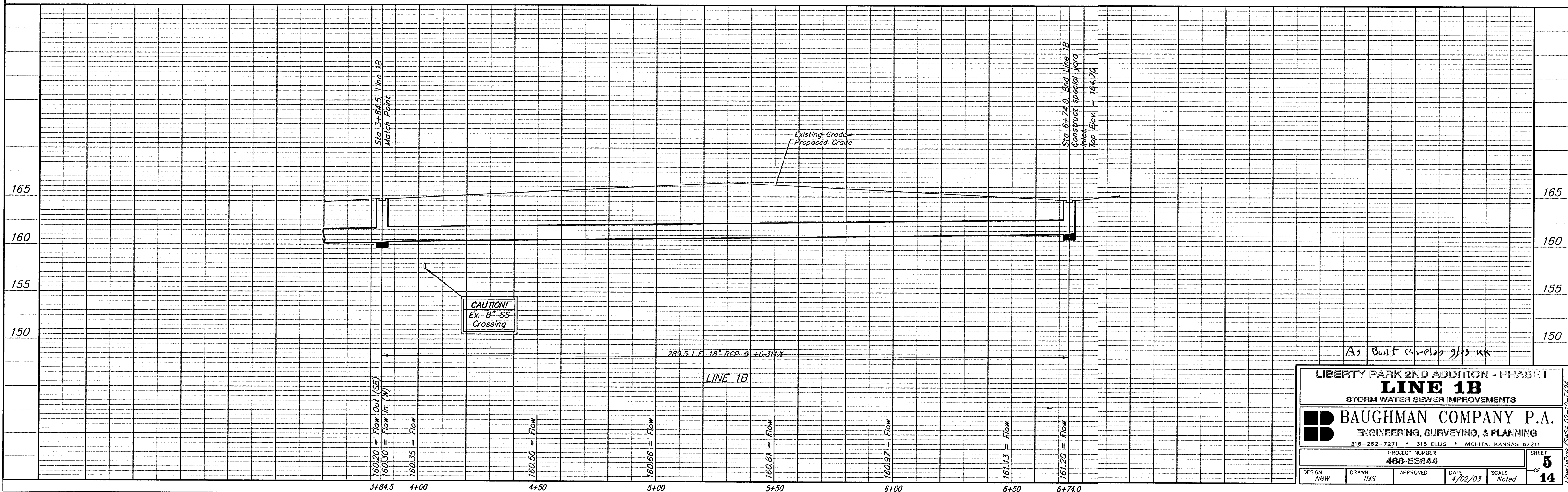
SHEET
4
OF
14

BENCHMARKS:
BM #1: C.O.W. benchmark disk.
56' E and 55' N of CL 135th
St. W. & 13th St. N.
Elev. = 167.83 (City Datum)

BM #2: 60D nail in HLP, 800'
W & 31' N of the NE cor.,
NW1/4, Sec. 13, T-27-S,
R-2-W.
Elev. = 162.68 (City Datum)



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



LIBERTY PARK 2ND ADDITION - PHASE I
LINE 1B
STORM WATER SEWER IMPROVEMENTS

BAUGHMAN COMPANY P.A.
ENGINEERING, SURVEYING, & PLANNING
318-282-7271 • 318 ELLIS • MCHITA, KANSAS 67211

PROJECT NUMBER
488-53844

DESIGN: NBW DRAWN: IMS APPROVED: DATE: 4/02/03 SCALE: Noted

SHEET **5** OF **14**

BENCHMARKS:
BM #1: C.O.W. benchmark disk.
56' E and 55' N of CL 135th
St. W. & 13th St. N.
Elev. = 167.83 (City Datum)

BM #2: 600 nail in HLP, 800'
W & 31' N of the NE cor.,
NW1/4, Sec. 13, T-27-S,
R-2-W.
Elev. = 162.68 (City Datum)

Ditch 500' south to
ensure positive
drainage.

Sta 0+00, Line 2
Begin construction of 36"
RCP W/end section.
Install 40 S.Y. light stone
rip-rap as indicated.

Sta 0+40.9, Line 2
Construct std manhole
(5' dia.).
Rim Elev. = 157.60

Sta 1+70.3, Line 2
Construct std. double
curb inlet (10'x3').
Top Elev. = 159.04

Sta 1+70.3 to Sta 2+31.6
Install 61.3 L.F. flowable fill
per City specs.

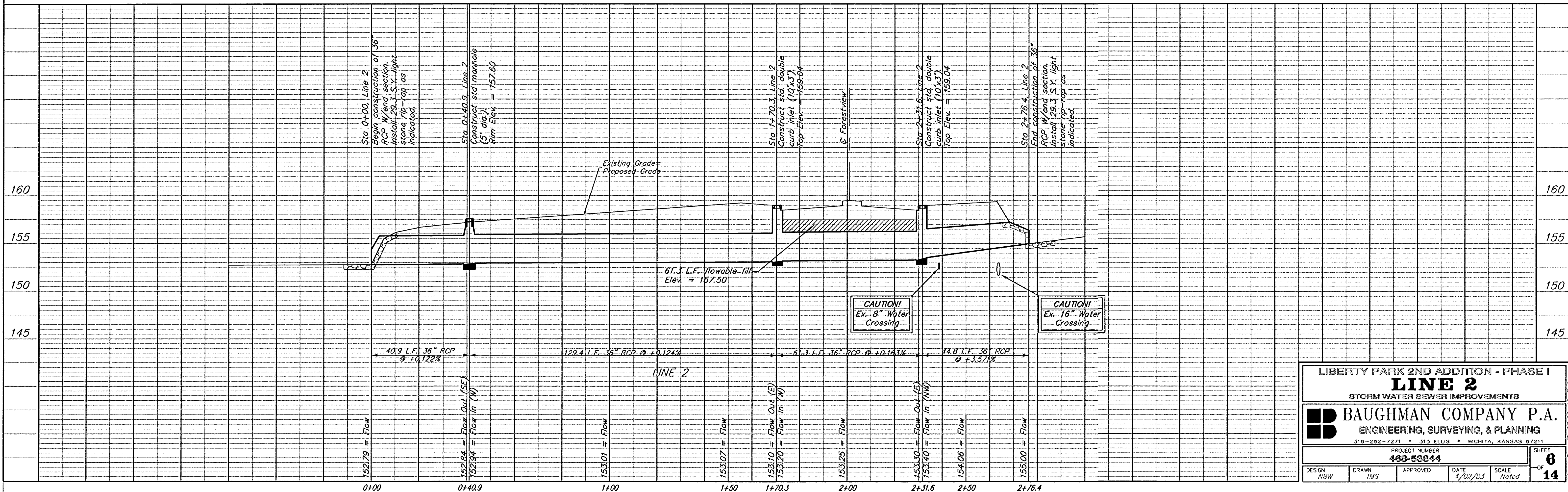
Sta 2+31.6, Line 2
Construct std. double
curb inlet (10'x3').
Top Elev. = 159.04

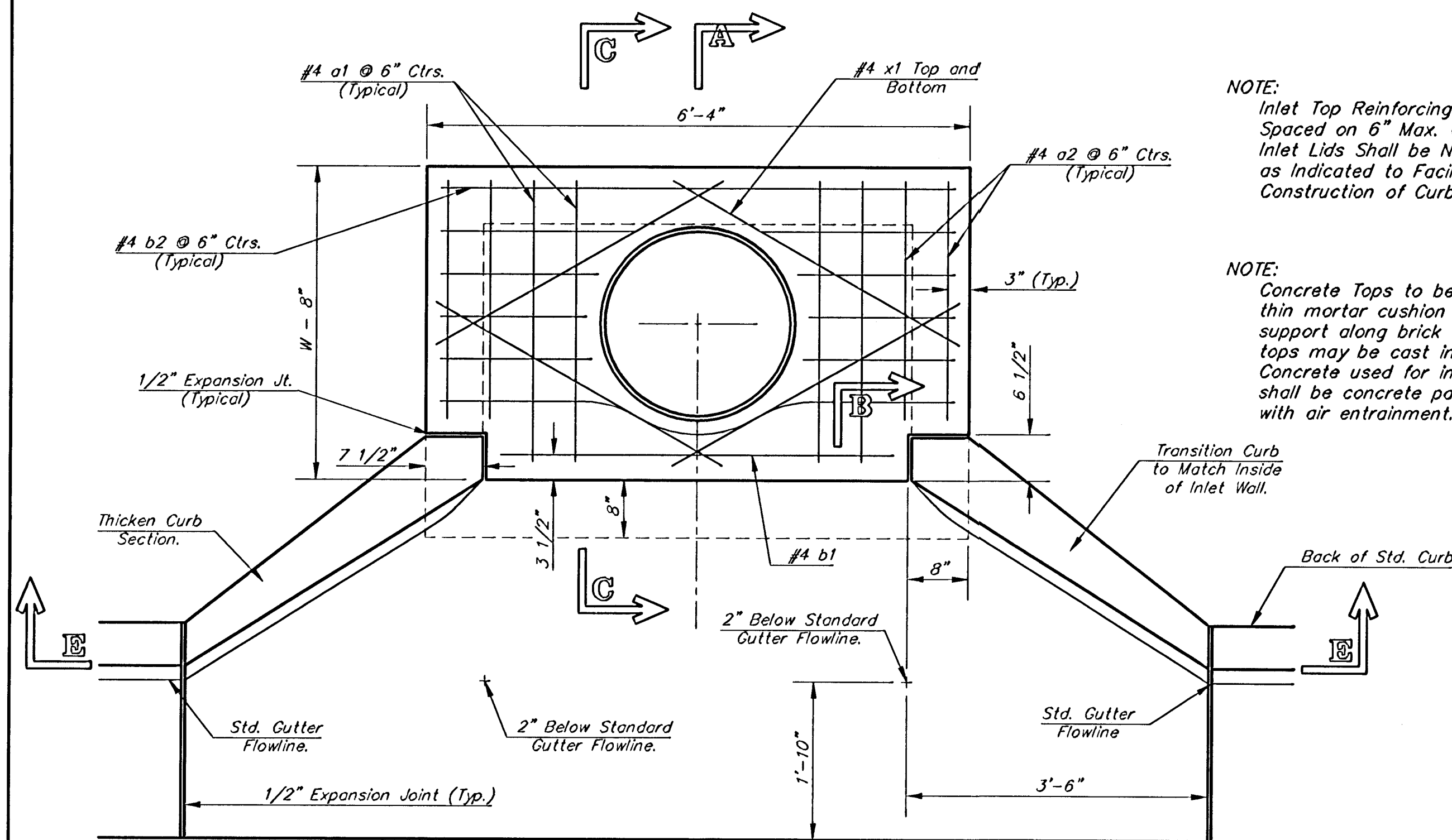
CAUTION!
Ex. 8" Water
Crossing

CAUTION!
Ex. 16" Water
Crossing

Sta 2+76.4, Line 2
End construction of 36"
RCP W/end section.
Install 29.3 S.Y. light
stone rip-rap as
indicated.

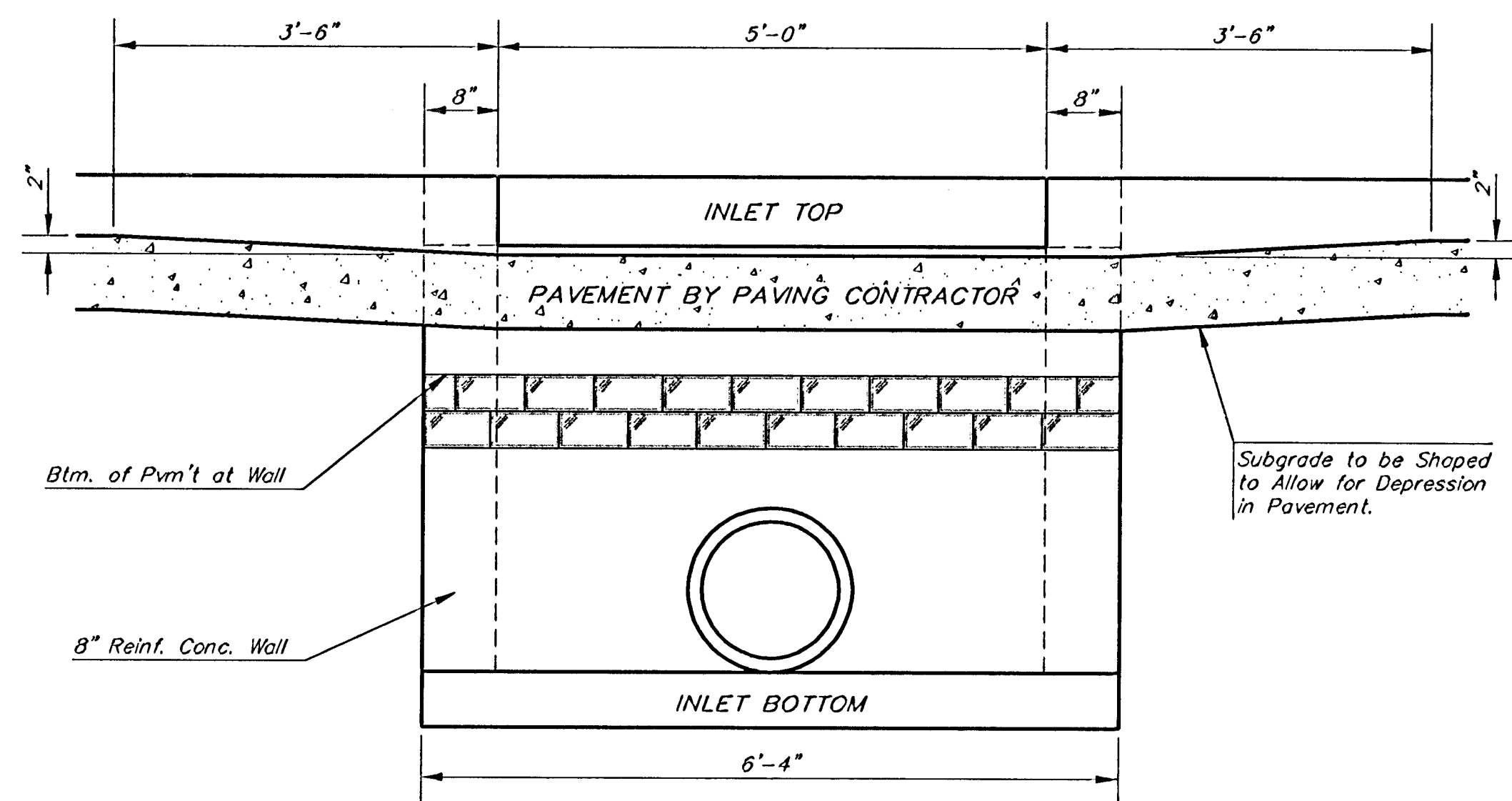
Scale: 1" = 20' Horizontal
1" = 5' Vertical
• = Iron



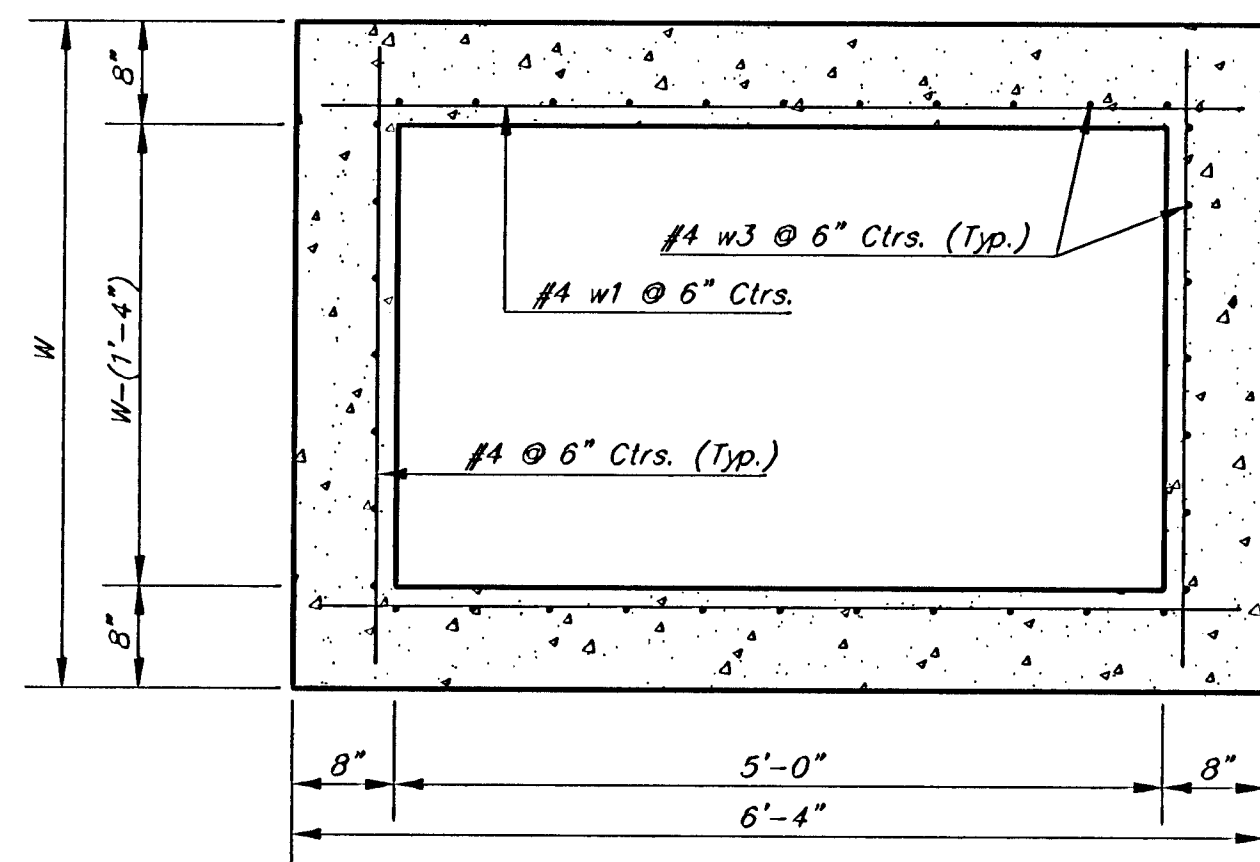


NOTE: Expansion Joint Only in Curb Area With Concrete Pavement.

PLAN



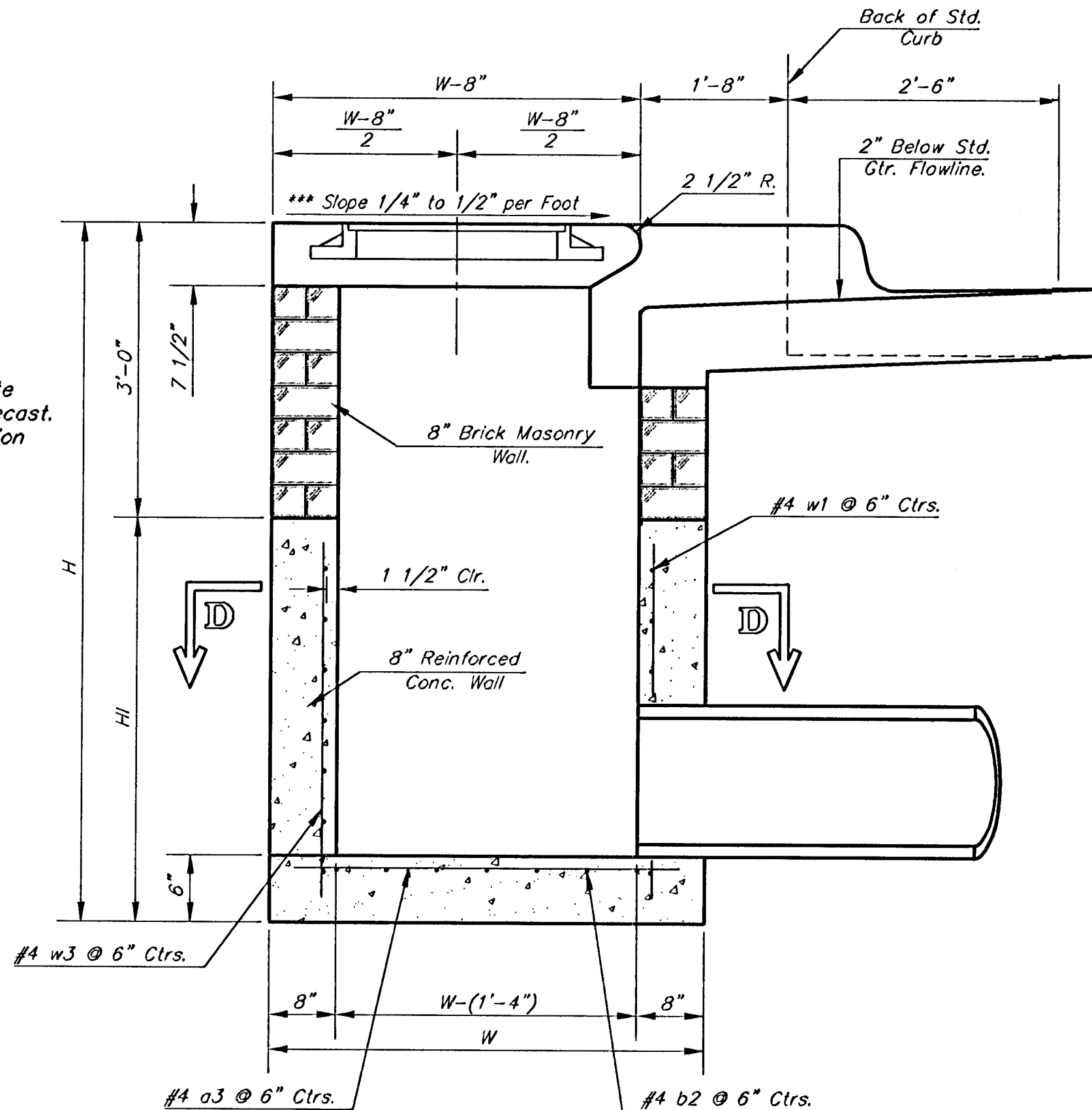
SECTION E-E



SECTION D-D

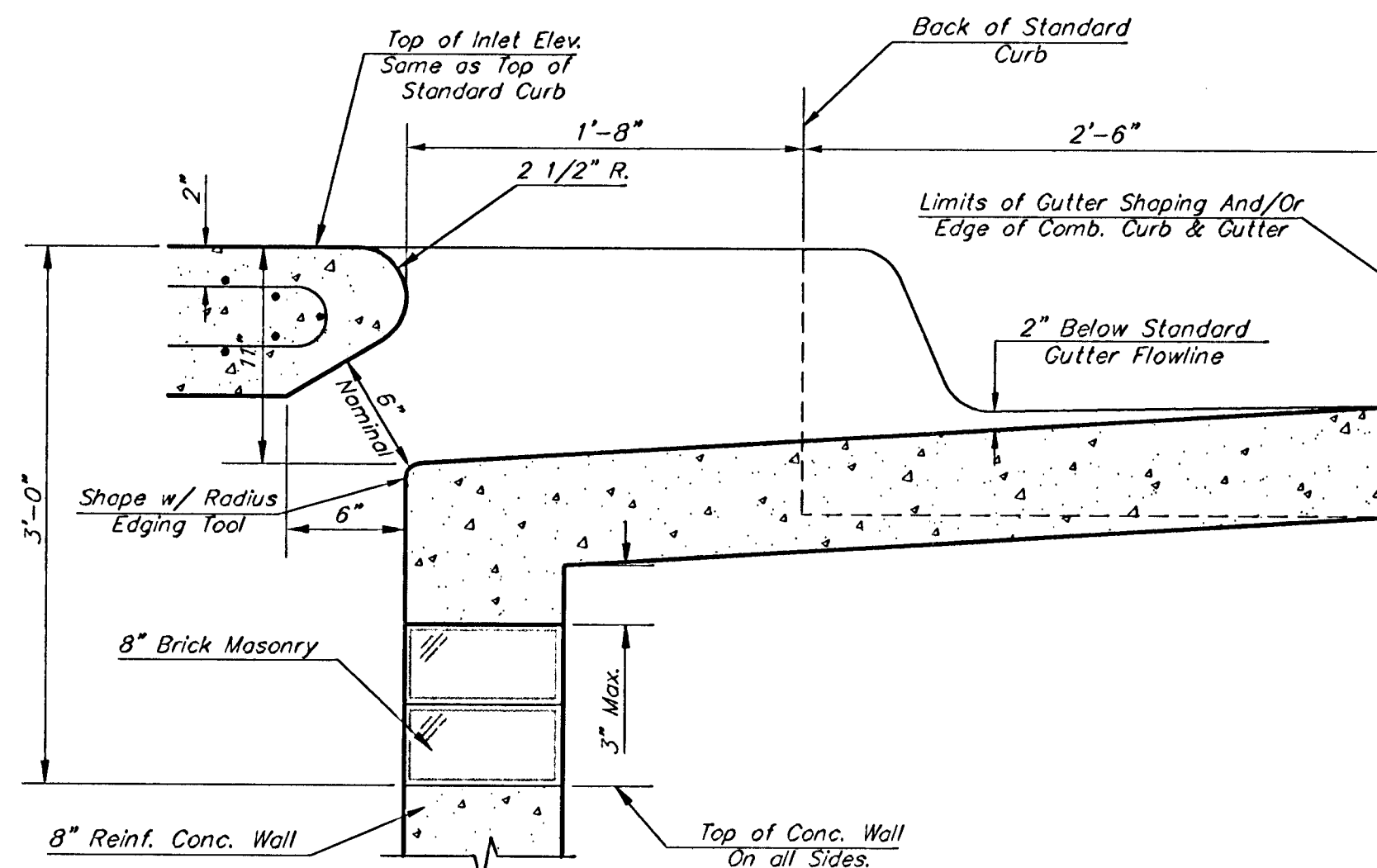
NOTE: Inlet Top Reinforcing shall be Spaced at 6" Max. Centers. Inlet Lids Shall be Notched Out as Indicated to Facilitate Construction of Curb.

NOTE: Concrete Tops to be installed on thin mortar cushion to insure full support along brick walls. Concrete tops may be cast in place or precast. Concrete used for inlet construction shall be concrete pavement mix with air entrainment.

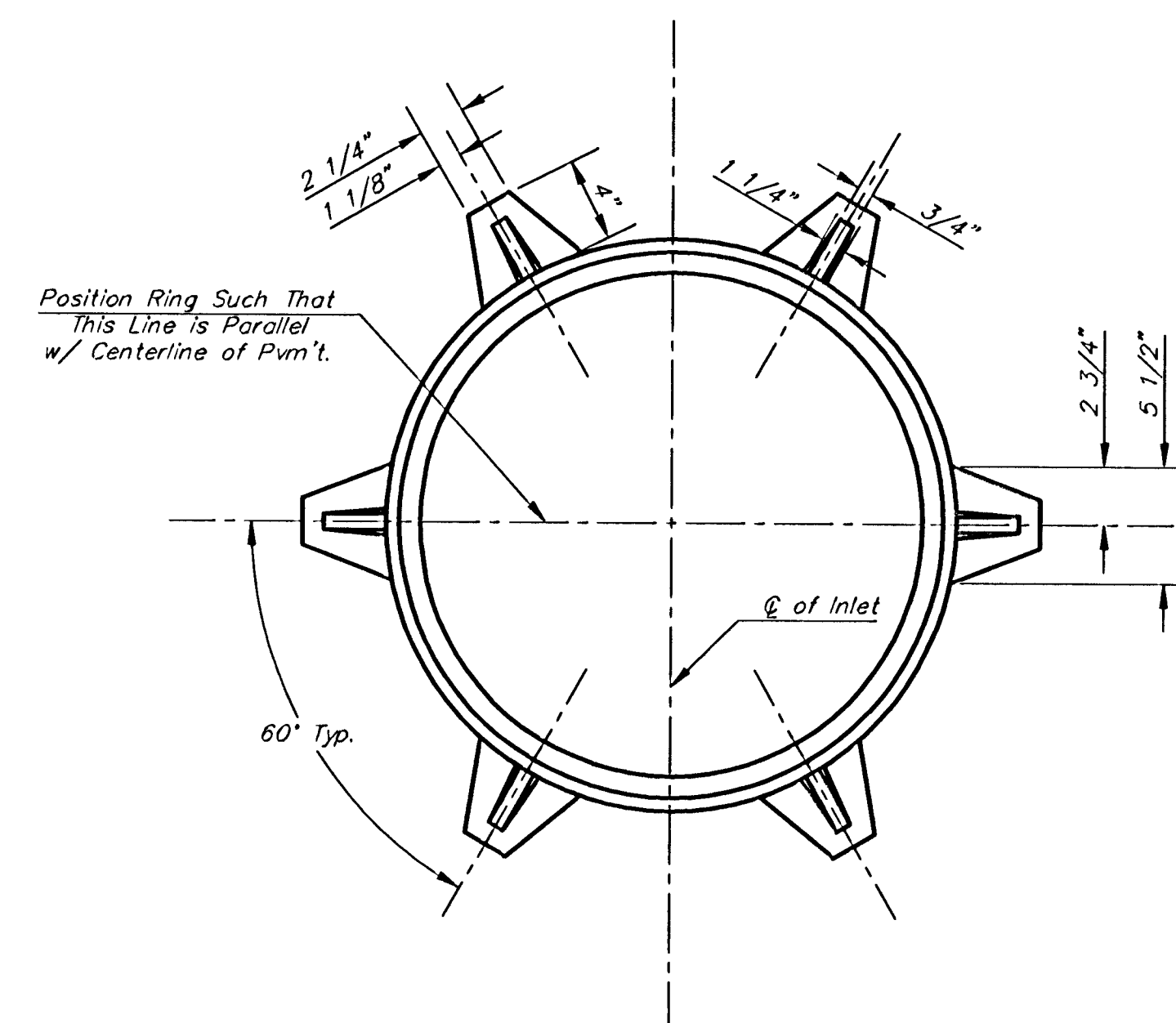


SECTION A-A

***NOTE: Slope of Inlet tops to Match Sidewalk or Parking Slopes within Limits Indicated.



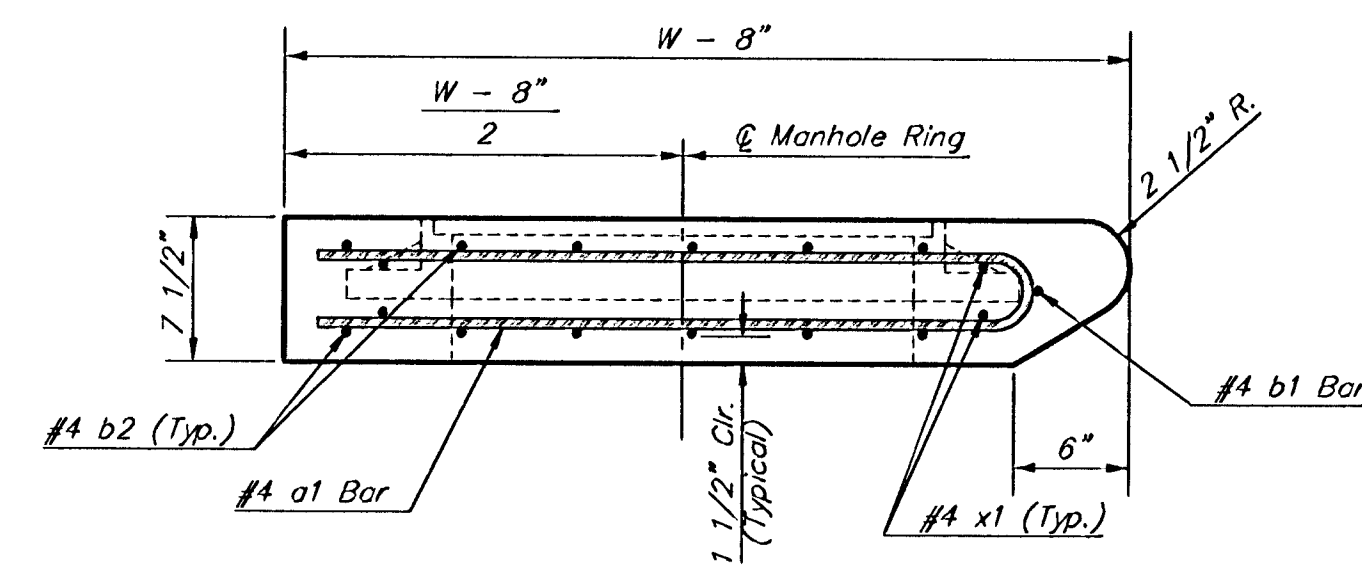
SECTION B-B



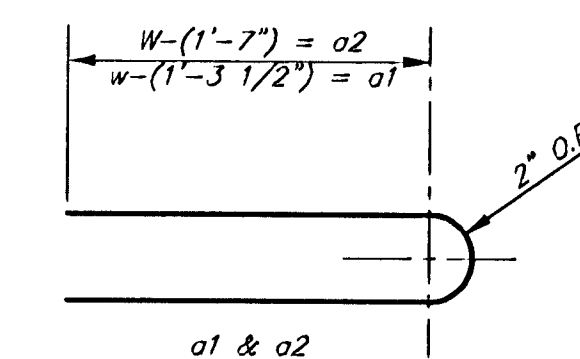
MANHOLE RING AND COVER

Weight = 180 Lbs.

*See City of Wichita Standard Manhole Ring and Cover Detail Sheet for Cover Details to Be Used With Inlet Frame.



SECTION C-C



BENDING DIAGRAM

PRECAST SLAB AND FLOOR REINFORCING											
MARK	SIZE	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH
a1	#4	6	6'-7"	6	8'-7"	6	10'-7"	6	12'-7"	6	14'-7"
a2	#4	4	6'-0"	4	8'-0"	4	10'-0"	4	12'-0"	4	14'-0"
a3	#4	13	4'-1"	13	5'-1"	13	6'-1"	13	7'-1"	13	8'-1"
b1	#4	1	4'-9"	1	4'-9"	1	4'-9"	1	4'-9"	1	4'-9"
b2	#4	23	6'-1"	29	6'-1"	35	6'-1"	41	6'-1"	47	6'-1"
x1	#4	8	3'-10"	8	4'-2"	8	4'-5"	8	4'-10"	8	5'-2"

* Field Bend or Cut Reinforcing as Required for Clearance.
① 4 (Hl - 12") (Hl - 21") Rounded down to nearest 0.5'
② Hl - 3"

STANDARD CURB INLET PRECAST TOPS			
W	PRE-CAST TOP SIZE	PIPE SIZE	CU. YD. CONC.
4'-4"	3'-8" x 6'-4" x 7 1/2"	21" & SMALLER	0.38±
5'-4"	4'-8" x 6'-4" x 7 1/2"	24" & 30"	0.51±
6'-4"	5'-8" x 6'-4" x 7 1/2"	36" & 42"	0.64±
7'-4"	6'-8" x 6'-4" x 7 1/2"	48" & 54"	0.77±
8'-4"	7'-8" x 6'-4" x 7 1/2"	60" & 66"	0.90±

NOTE: Contractor shall have the option of constructing 8" brick masonry walls between the concrete inlet base and top on this inlet when W=6'-4" and H=7'-0" or less.

Additional curb and gutter construction necessary to connect set-back inlet to pavement will be paid for at the unit price bid for each inlet hookup.

Inlet invert shall be shaped with 8 sack sand 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.

The ends of all pipes installed in inlets shall be cut off flush with the inside face of the inlet wall

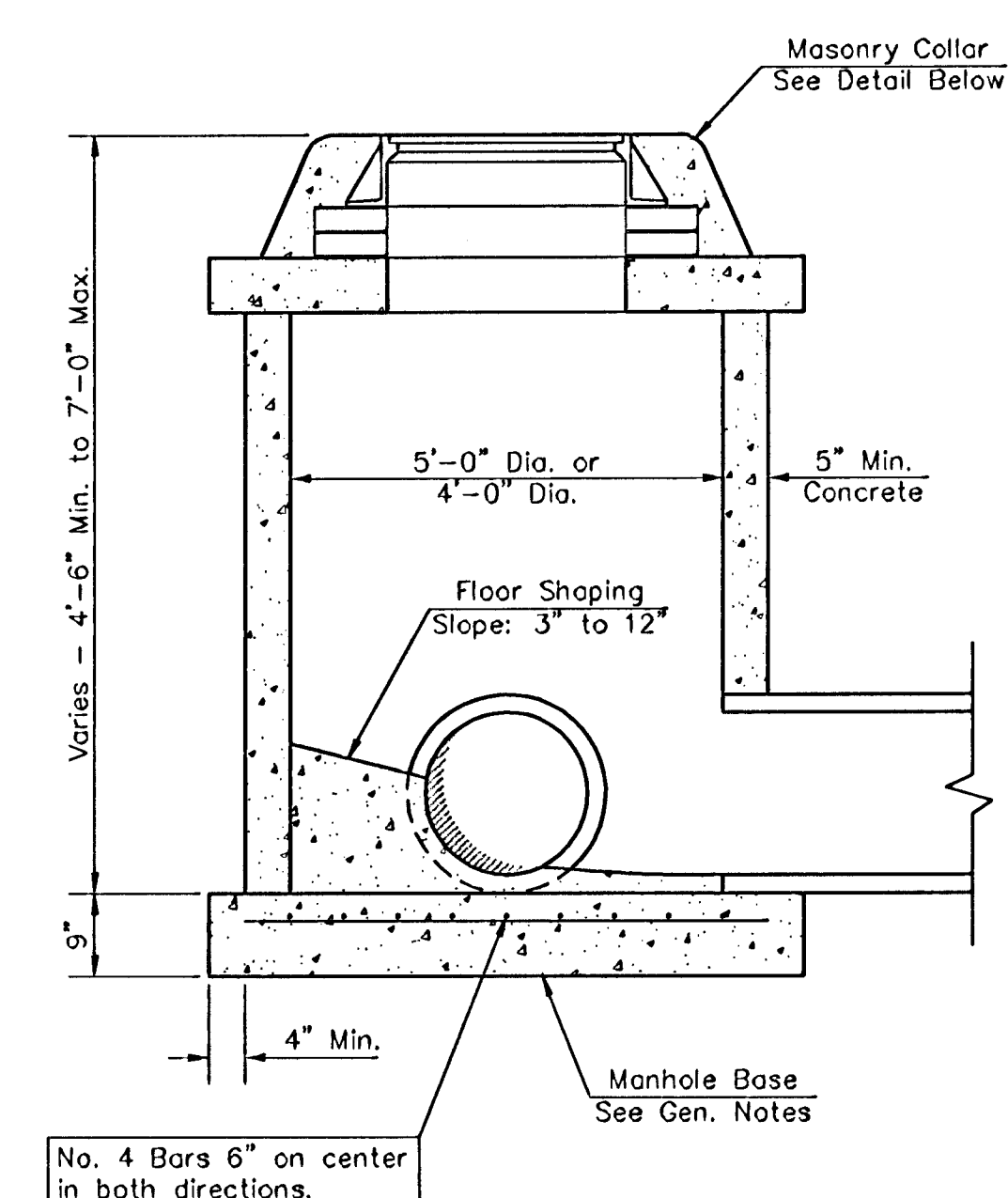
Revised - Feb. 16, 1989

CITY OF WICHITA STANDARD TYPE 1A
Curb Inlet Details
INLET OPENING = 6" X 5'-0"

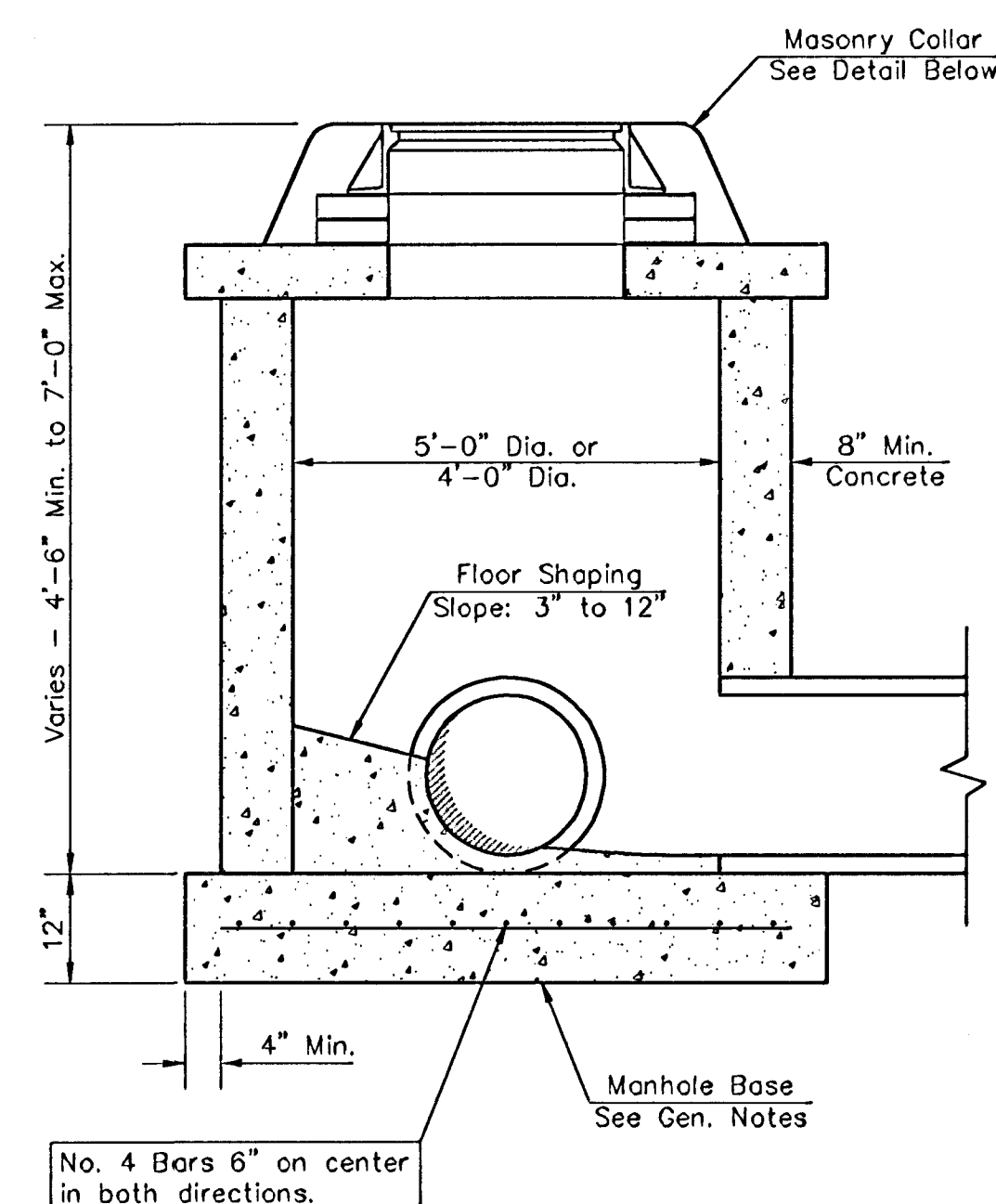
BAUGHMAN COMPANY P.A.
ENGINEERING, SURVEYING, & PLANNING
316-262-7271 • 315 ELLIS • WICHITA, KANSAS 67211

PROJECT NUMBER
488-83544

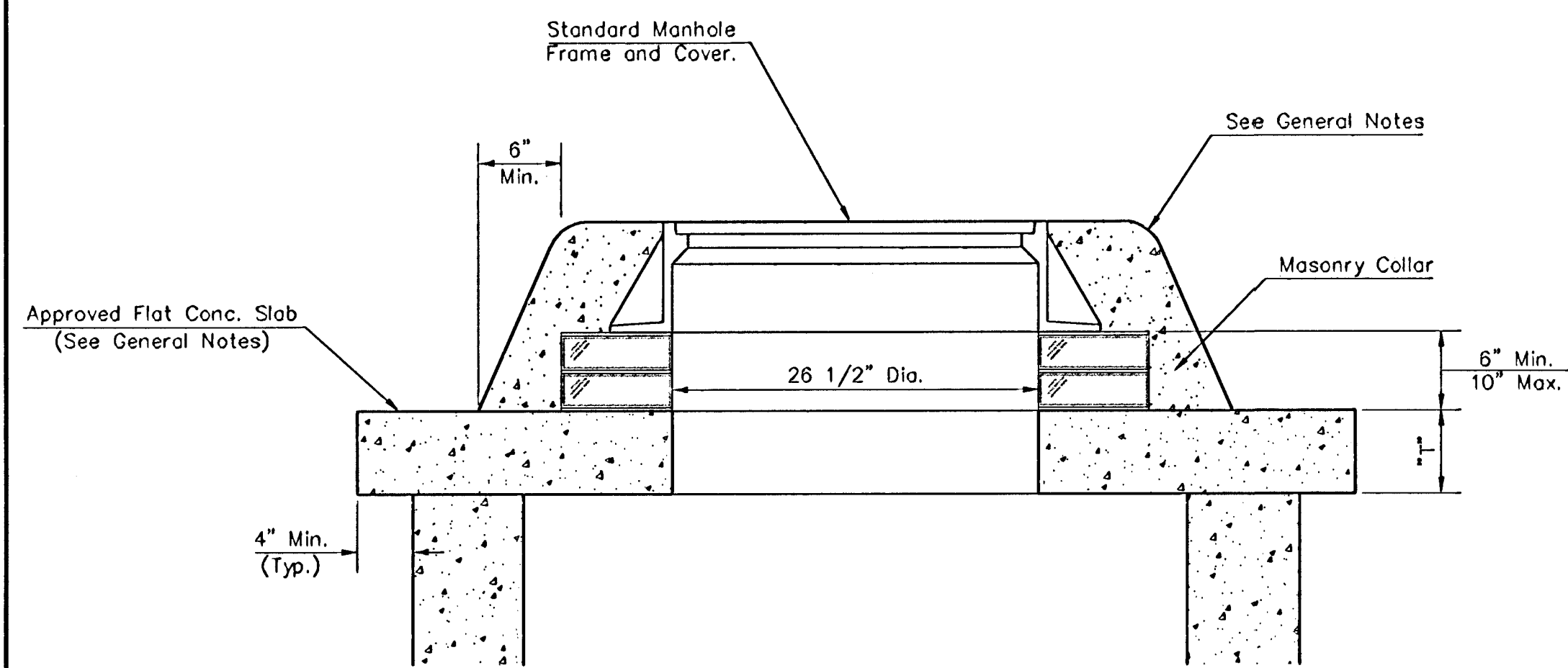
DESIGN: C.O.W. DRAWN: Staff APPROVED: DATE: 4/02/03 SCALE: None SHEET: 7 OF 14



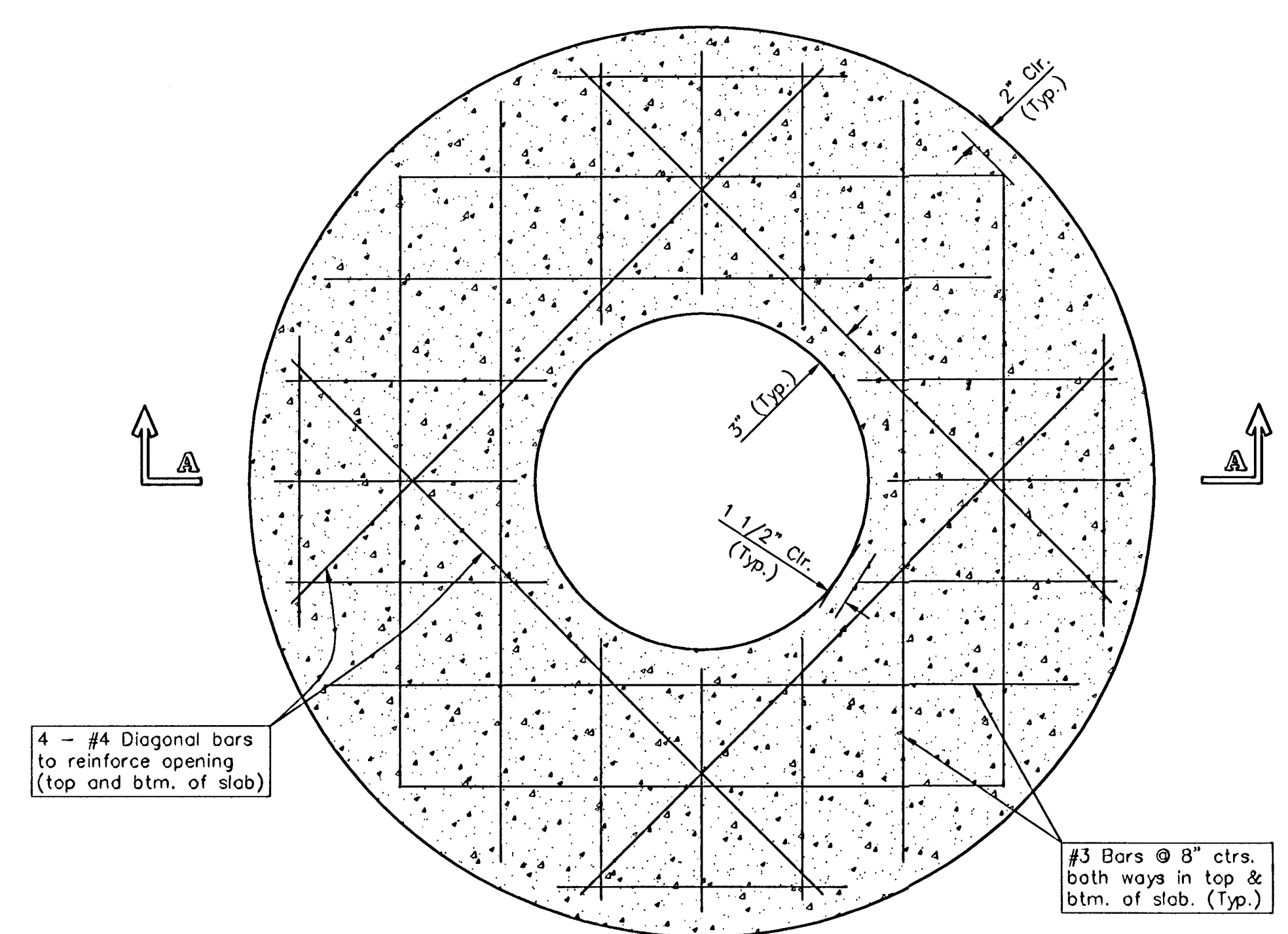
SHALLOW TYPE "P" MANHOLE



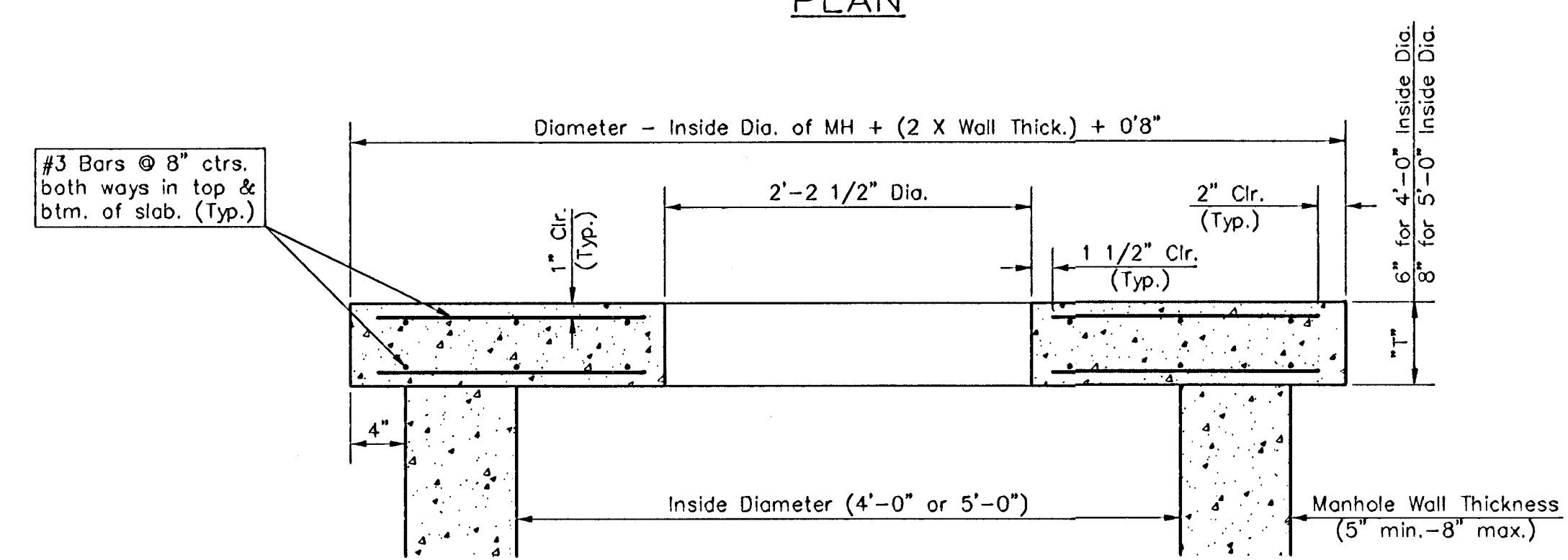
SHALLOW TYPE "C" MANHOLE



MASONRY COLLAR DETAIL



PLAN



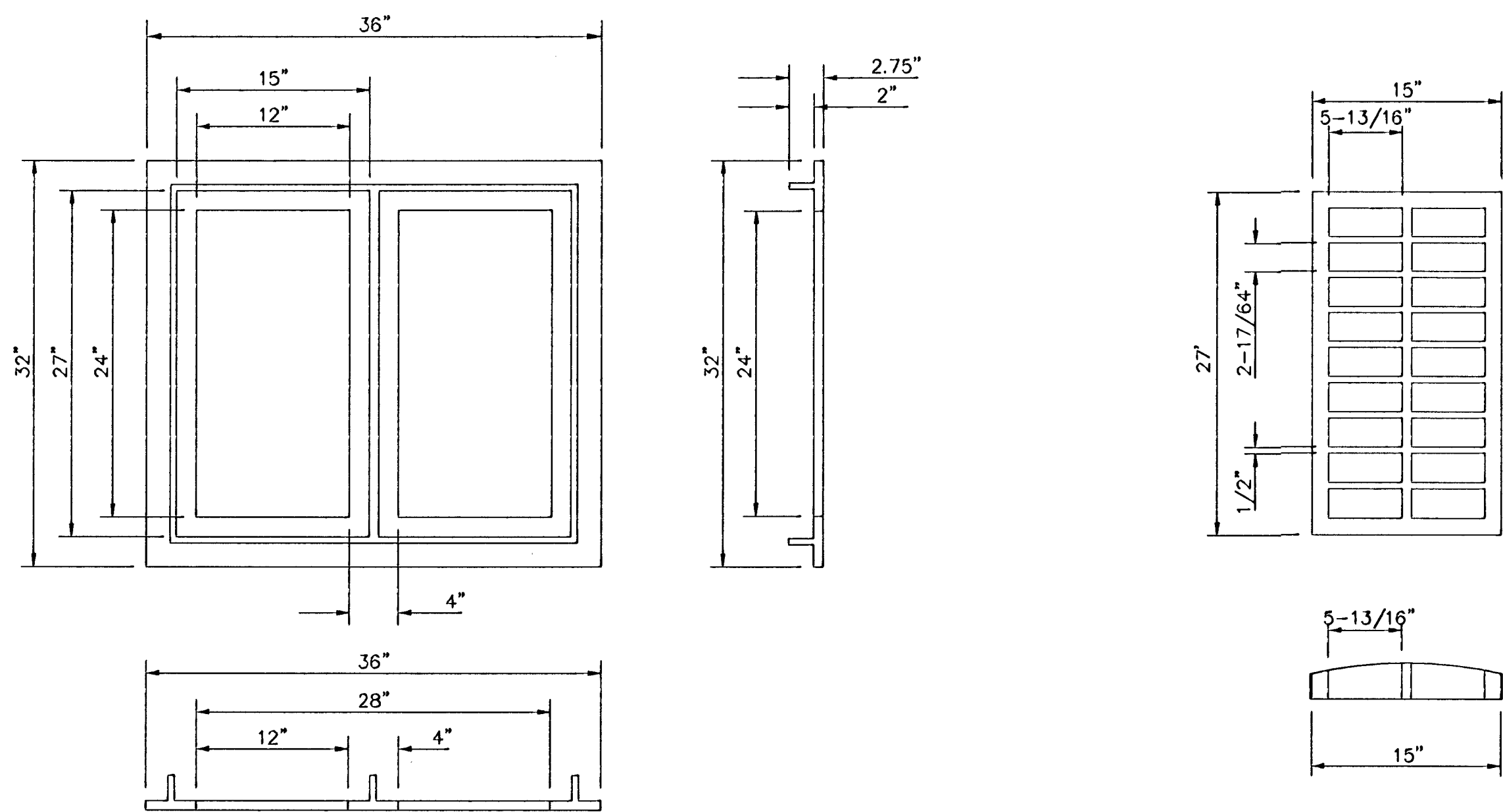
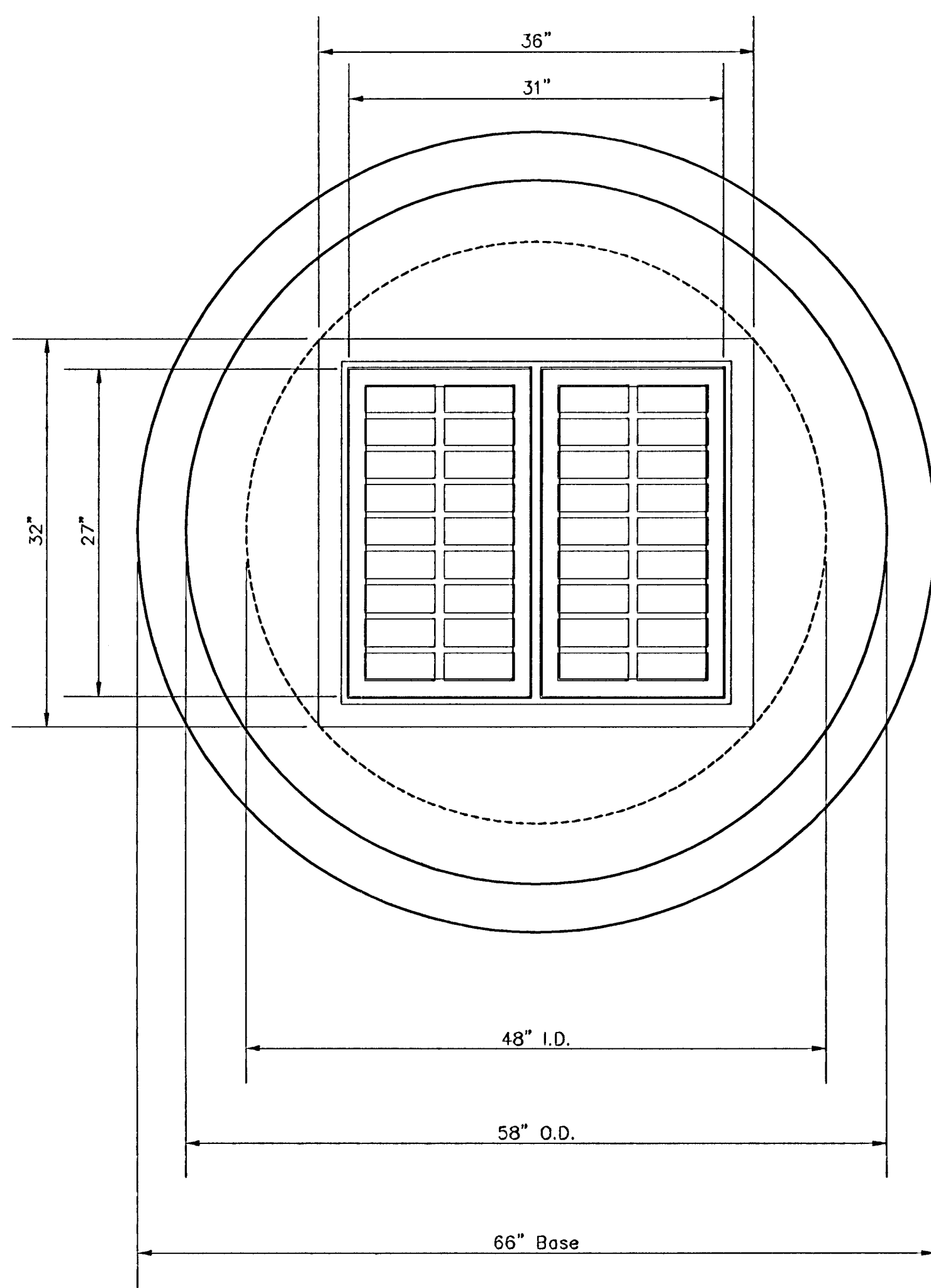
SECTION A-A

FLAT CONCRETE SLAB DETAILS

GENERAL NOTES

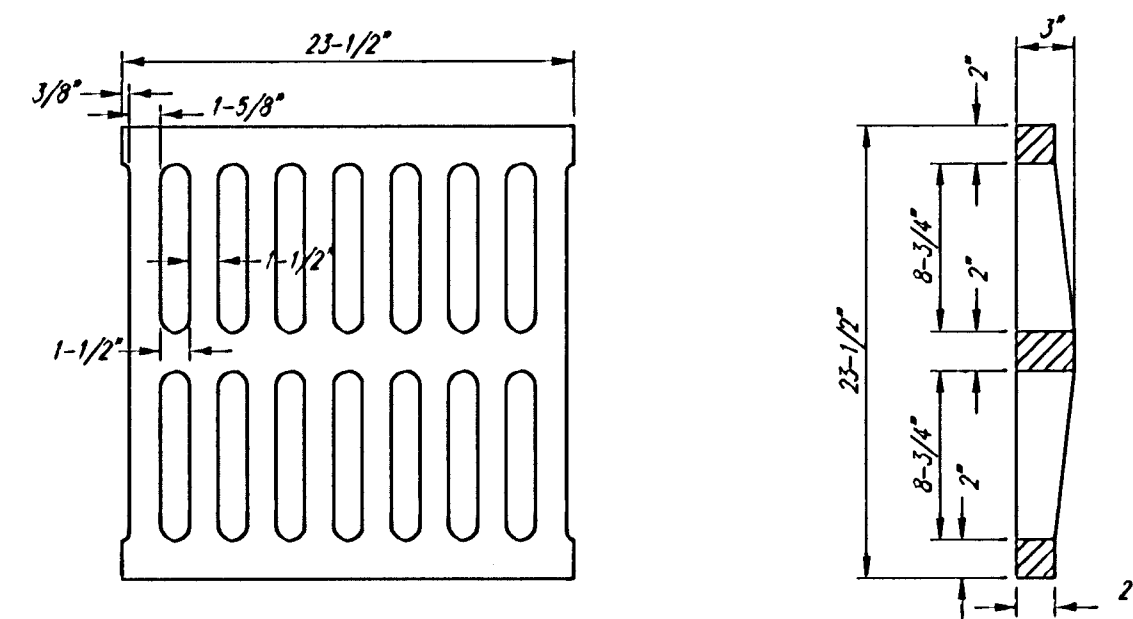
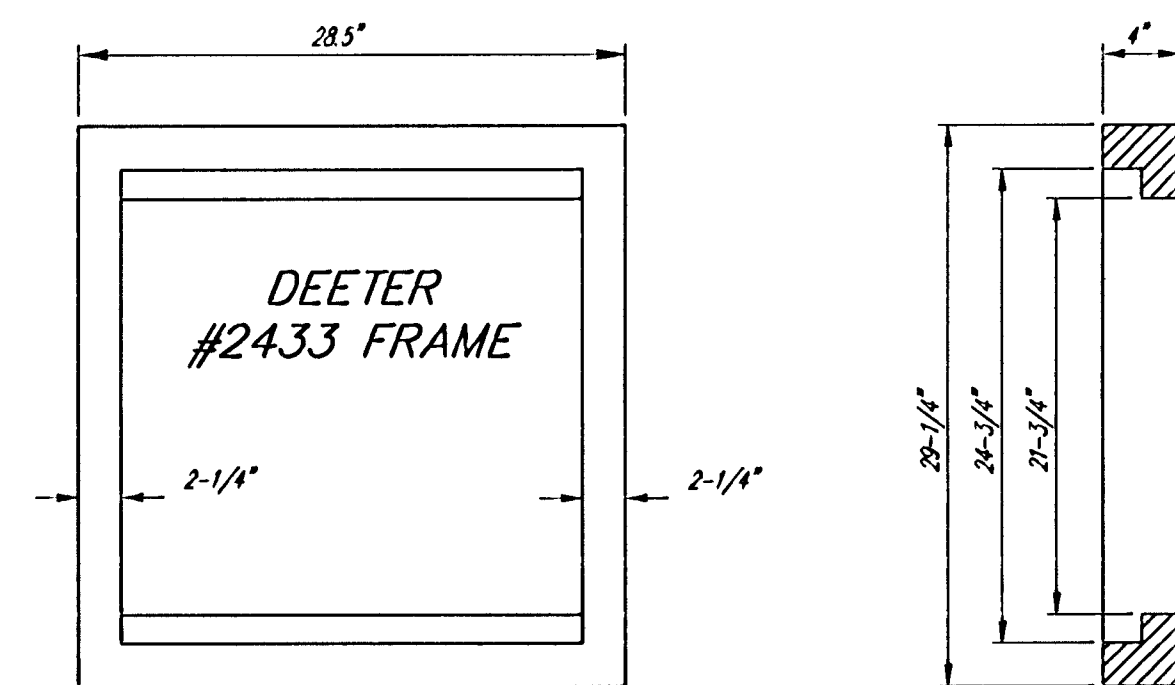
1. Mortar used in masonry construction shall contain 8 sacks of cement per cubic yard. Concrete used in manhole bases shall conform to the requirements of concrete for concrete pavement construction as specified in the city standard paving specifications using city concrete cement mix without air entraining admixture. Mortar shall be placed around the manhole ring as shown on the drawings when manholes are constructed in unpaved areas. 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.
2. 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.
3. 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.
4. 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.
5. 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.
6. The crowns of inflowing pipes shall never be set lower than the crown of the outflowing pipe.
7. Standard shallow manholes type "P" and "C" shall be paid for at the unit price bid per each for the type and diameter indicated. All standard shallow manhole diameters will be 4' unless indicated otherwise.
8. All brick used in manhole construction shall meet Grade SW of ASTM C652 or C62-87.

CITY OF WICHITA, KANSAS					
STD. SHALLOW MANHOLES					
TYPE 'P' AND TYPE 'C'					
BAUGHMAN COMPANY P.A.					
ENGINEERING, SURVEYING, & PLANNING					
316-262-7271 • 315 ELLIS • WICHITA, KANSAS 67211					
PROJECT NUMBER					
488-83844					
DESIGN	DRAWN	APPROVED	DATE	SCALE	SHEET
STAFF	STAFF	STAFF	4/02/03	NONE	9 OF 14

[illegible]

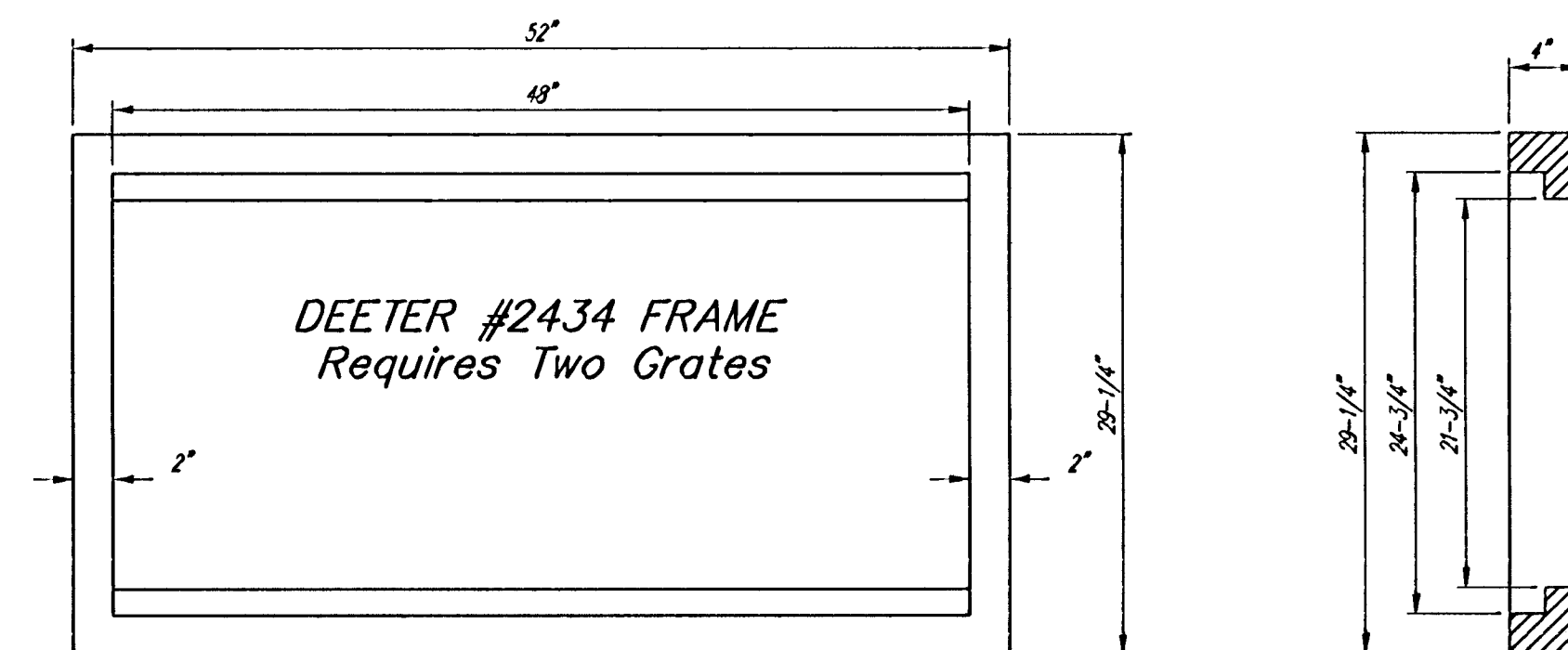
GENERAL NOTES

1. Mortar used in masonry construction shall contain 8 sacks of cement per cubic yard. Concrete used in yard inlet 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.
2. Reinforcing steel shall be installed in the yard inlet bases and shall consist of no. 4 bars placed on 6" centers in both directions. The yard inlet base reinforcement shall be placed 6" above the bottom of the yard inlet base. All costs for furnishing and installing reinforcing steel shall be included in the unit price bid for the yard inlet.
3. The floors of all yard inlet shall be shaped with flow channels such that the inlets will be self cleaning and free of areas where solids could be deposited. Flow channels shall be formed to match the bottom halves of the inflowing pipes and the outflowing pipe as shown by the drawings. Inlet 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 inlets shall have the top half removed to neat lines for the full inside diameter of the inlet. Inlet floors shall then be shaped around the bottom half of the pipe which forms the flow channel.
4. Pipes installed within the excavation made for the inlet shall be cradled with concrete to the limits of the inlet excavation. When clay pipe is used, the cradle shall extend to the first joint outside the inlet. 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 inlet excavation or to clay pipe joints adjacent to inlet shall be included in the unit price bid for the inlet.
5. Inlet grate castings and inlet frame castings shall conform to the requirements as indicated in the standard specifications and as shown in the standard detail drawing.
6. The crowns of inflowing pipes shall never be set lower than the crown of the outflowing pipe.
7. Joints between inlet sections to be sealed with two wraps of extruded butyl rubber joint mastic meeting City of Wichita Type "P" Manhole Specifications.
8. Special yard inlet shall be paid for at the unit price bid per each. All standard yard inlet diameters will be 4'.



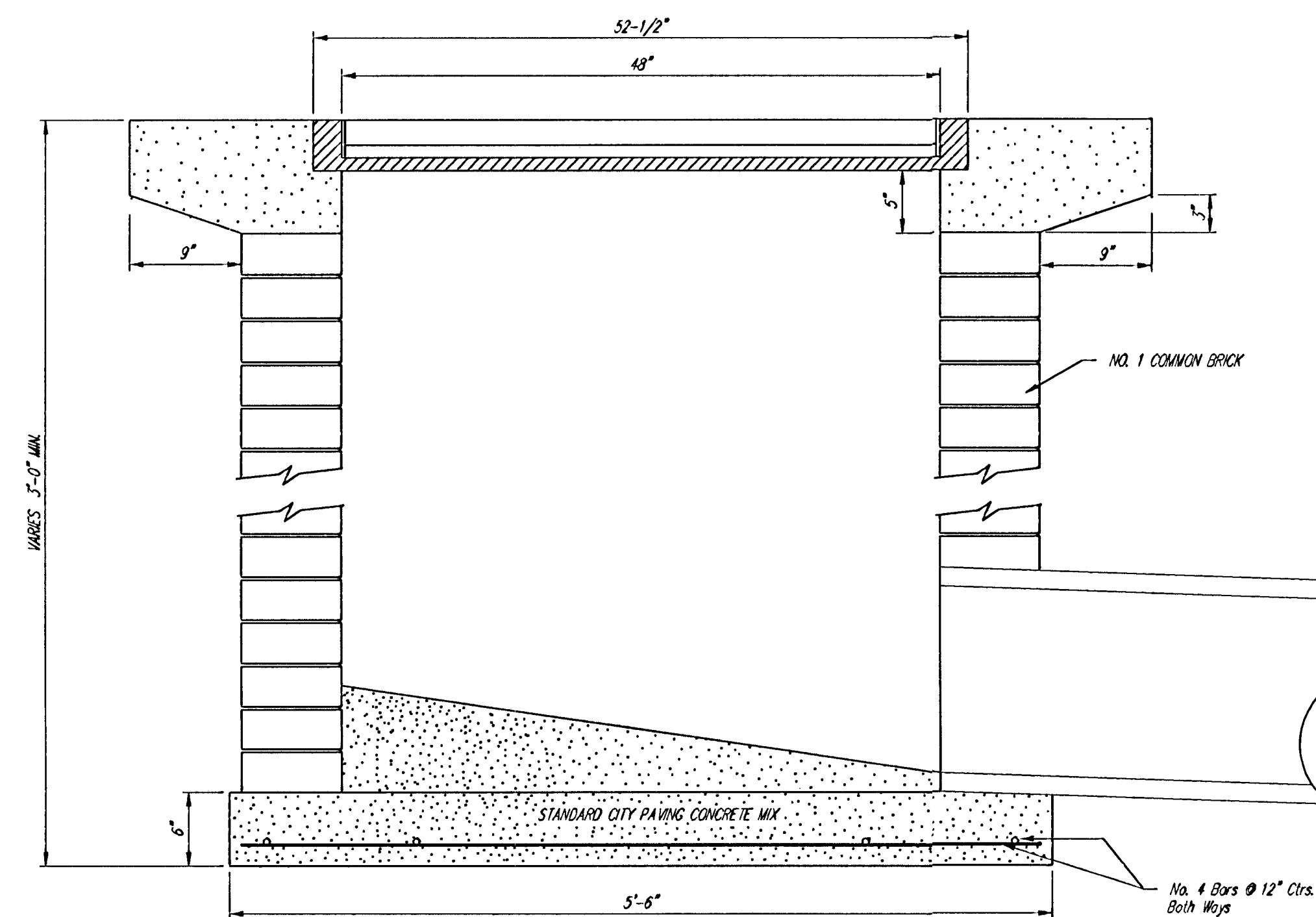
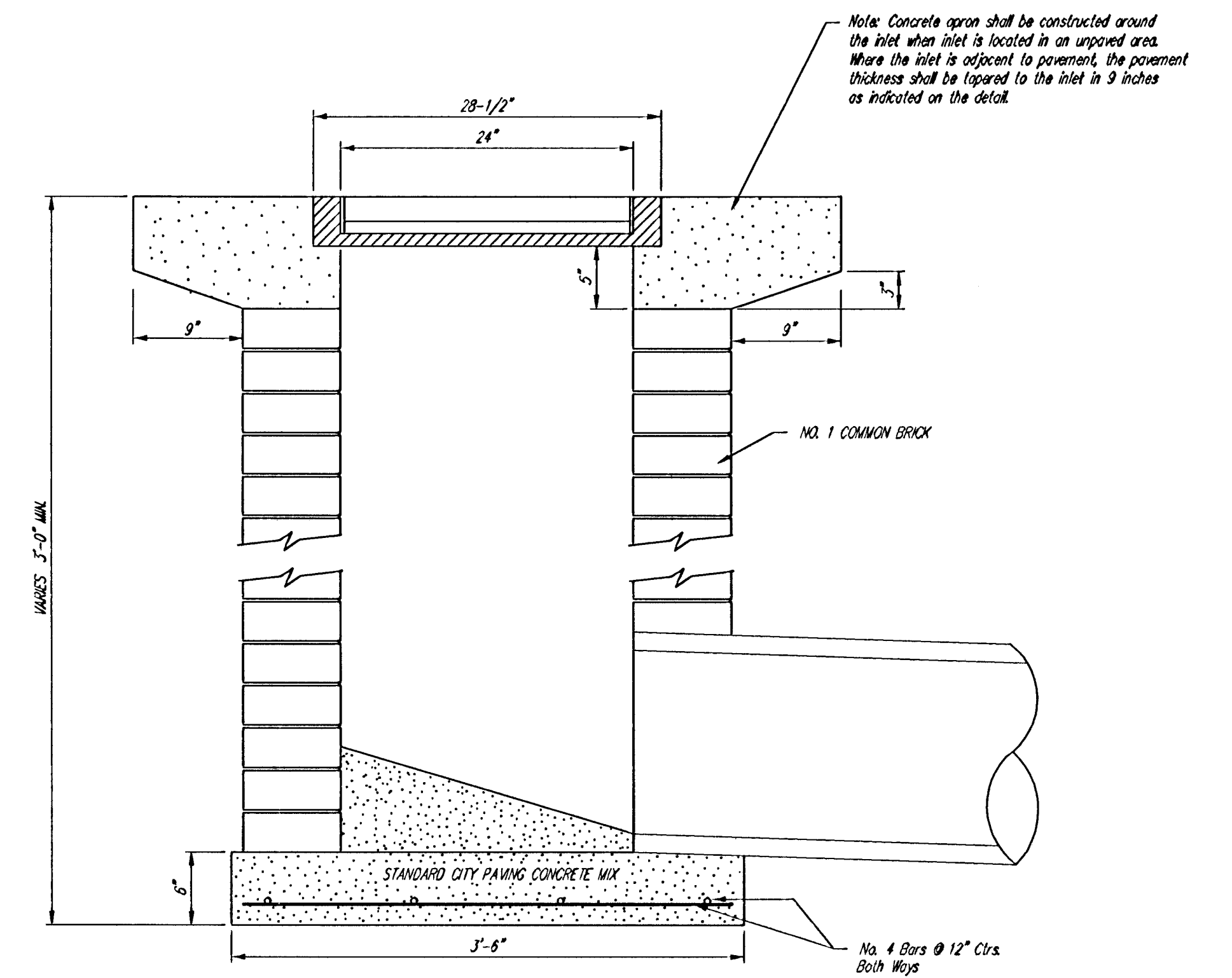
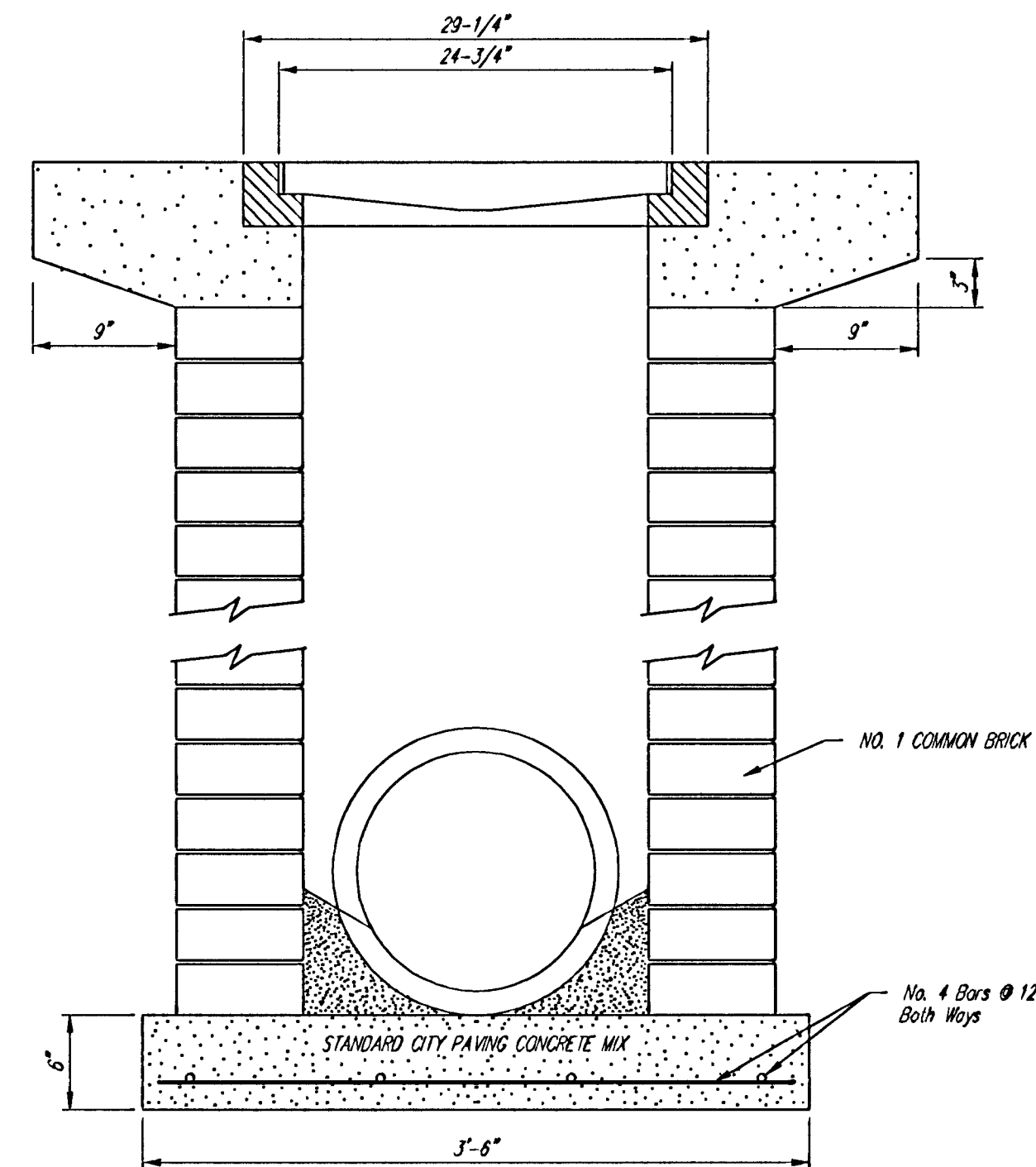
DEETER #2433 GRATE

24" x 24" Frame and Grate Detail



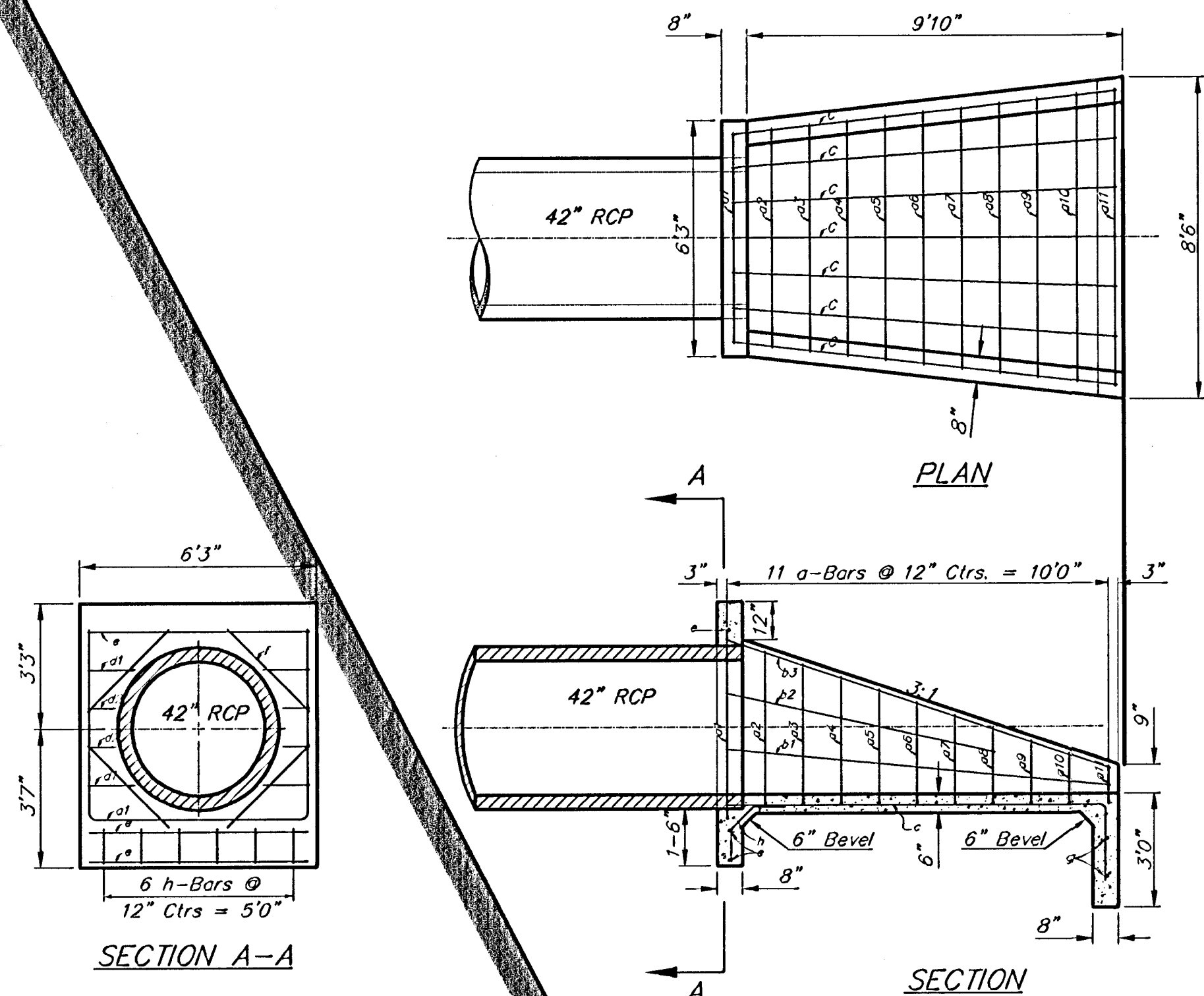
Double 24" x 24" Frame Detail

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 approved by the engineer.



City of Wichita Standard				
Drop Inlet				
BAUGHMAN COMPANY P.A.				
ENGINEERING, SURVEYING, & PLANNING				
316-262-7271 • 315 ELLIS • WICHITA, KANSAS 67211				
PROJECT NUMBER 488-83544				SHEET 11
DESIGN C.O.W.	DRAWN Staff	APPROVED	DATE 4/02/03	SCALE NONE
				OF 14

Dropin12



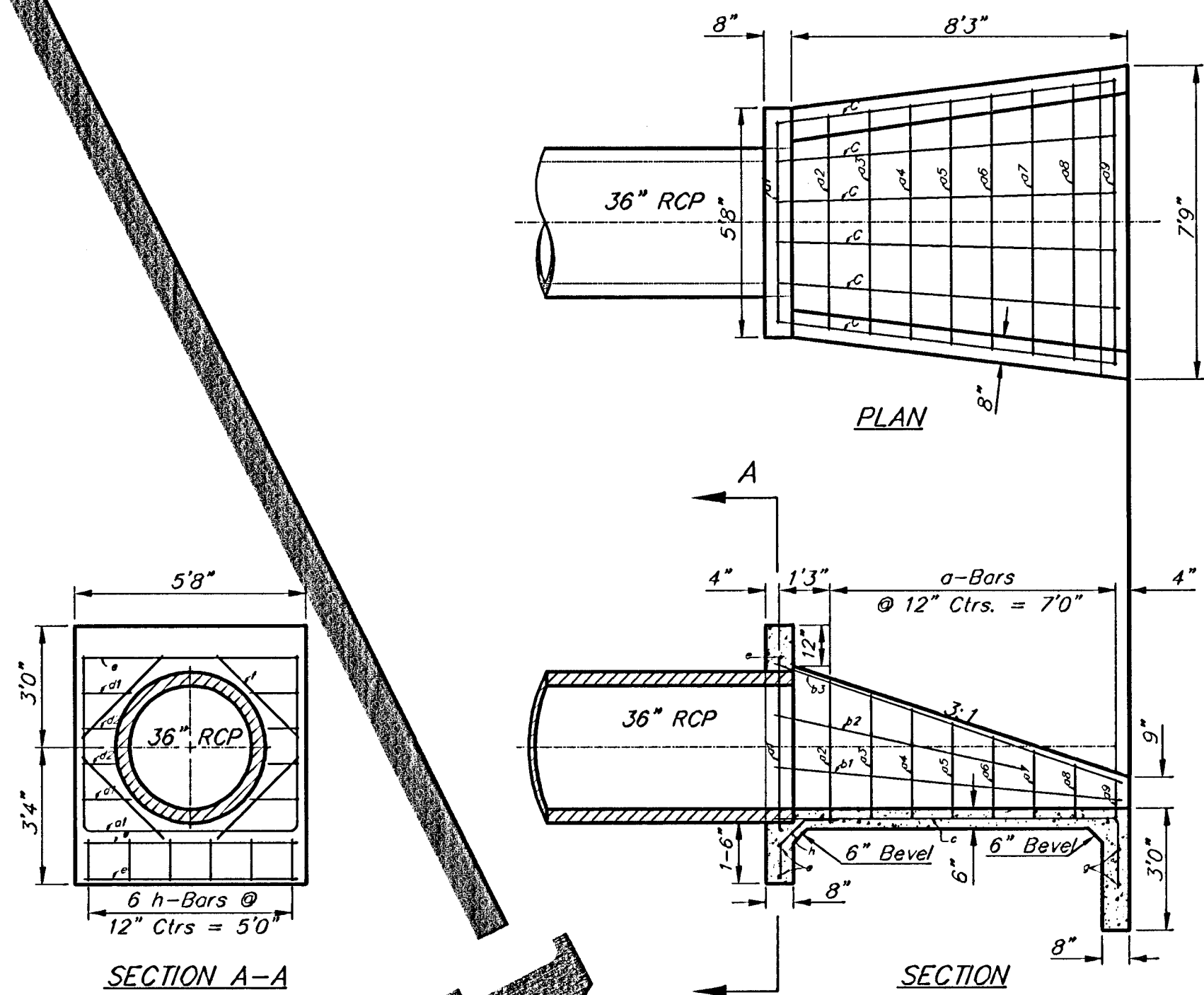
a-Bars	
a1 5'0"	
a2 4'0"	
a3 3'8"	
a4 3'4"	
a5 3'0"	
a6 2'8"	
a7 2'4"	
a8 2'0"	
a9 1'8"	
a10 1'4"	
a11 1'0"	

c-Bars	
c1 10'0"	
c2 2'0"	

Bar	Shape	No.	Length	Weight
a1		1	15'7"	10.41
a2		1	13'10"	9.24
a3		1	13'5"	8.96
a4		1	13'0"	8.68
a5		1	12'6"	8.35
a6		1	12'1"	8.07
a7		1	11'8"	7.79
a8		1	11'3"	7.52
a9		1	10'9"	7.18
a10		1	10'5"	6.96
a11		1	10'0"	6.68
b1		2	10'2"	13.58
b2		2	9'3"	9.69
b3		2	10'3"	14.25
c		7	12'0"	56.11
d1		4	3'34"	3.34
d2		4	3'	2.00
e		3	5'10"	11.69
f		4	3'0"	30.06
g		2	8'0"	10.69
h		6	2'6"	6.68
Total Rebar			247.93 Lbs.	
Concrete			10.12 C.Y.	

A Deduction in Concrete Quantities Has Been Made for Pipe Openings Through the Headwall.
 * Field Bend or Cut Reinforcing as Required for Clearance.
 All Concrete Reinforcement to be #4 Rebar.
 All Rebar to Have Min. of 1 1/2" Conc. Cover

HEADWALL FOR 42" RCP



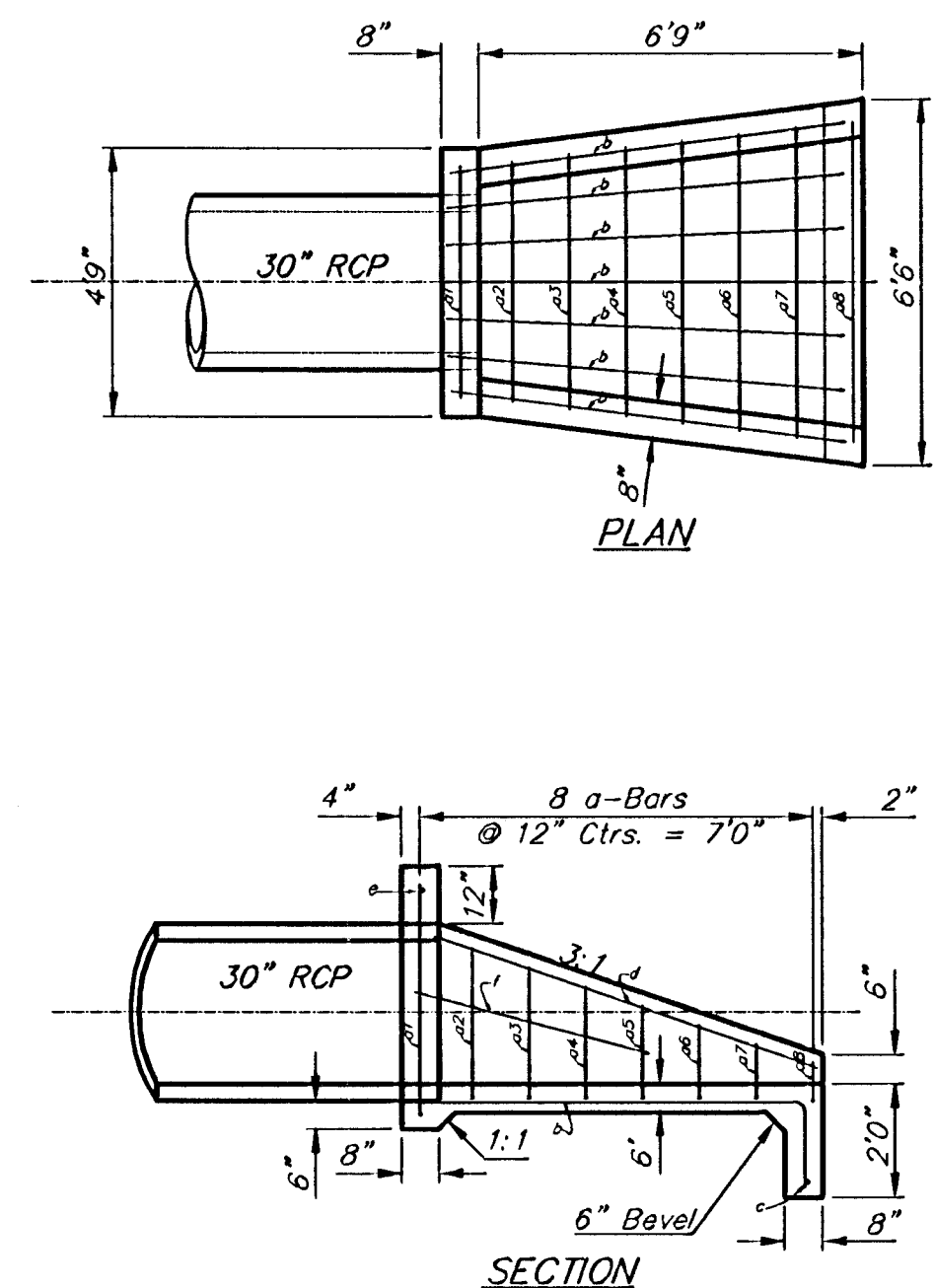
a-Bars	
a1 5'2"	
a2 5'2"	
a3 5'5"	
a4 5'8"	
a5 5'11"	
a6 6'2"	
a7 6'5"	
a8 6'8"	
a9 6'11"	

c-Bars	
c1 8'4"	
c2 2'0"	

Bar	Shape	No.	Length	Weight
a1		1	14'0"	9.35
a2		1	11'10"	7.90
a3		1	11'3"	7.52
a4		1	10'10"	7.24
a5		1	10'5"	6.96
a6		1	10'0"	6.68
a7		1	9'7"	6.40
a8		1	9'0"	6.01
a9		1	8'7"	5.73
b1		2	10'0"	11.24
b2		2	9'0"	6.12
b3		2	9'0"	12.02
c		6	10'1"	41.42
d1		4	1'6"	4.01
d2		4	1'0"	2.23
e		3	5'4"	10.69
f		4	3'0"	30.02
g		2	7'0"	9.35
h		6	2'6"	10.02
Total Rebar			178.91 Lbs.	
Concrete			3.20 C.Y.	

A Deduction in Concrete Quantities Has Been Made for Pipe Openings Through the Headwall.
 * Field Bend or Cut Reinforcing as Required for Clearance.
 All Concrete Reinforcement to be #4 Rebar.
 All Rebar to Have Min. of 1 1/2" Conc. Cover

HEADWALL FOR 36" RCP



a-Bars	
a1 4'1"	
a2 4'3"	
a3 4'6"	
a4 4'8"	
a5 5'0"	
a6 5'3"	
a7 5'6"	
a8 5'8"	

Bar	Shape	No.	Length	Weight
a1		1	12'1"	8.07
a2		1	9'5"	6.29
a3		1	9'0"	6.01
a4		1	8'6"	5.68
a5		1	8'2"	5.46
a6		1	7'9"	5.18
a7		1	7'4"	4.90
a8		1	7'0"	4.68
b		7	8'6"	35.07
c		1	6'0"	4.01
d		2	7'6"	10.02
e		1	4'5"	2.95
f		2	4'3"	5.68
Total Rebar			104.00 Lbs.	
Concrete			2.19 C.Y.	

A Deduction in Concrete Quantities Has Been Made for Pipe Openings Through the Headwall.
 * Field Bend or Cut Reinforcing as Required for Clearance.
 All Concrete Reinforcement to be #4 Rebar.
 All Rebar to Have Min. of 1 1/2" Conc. Cover

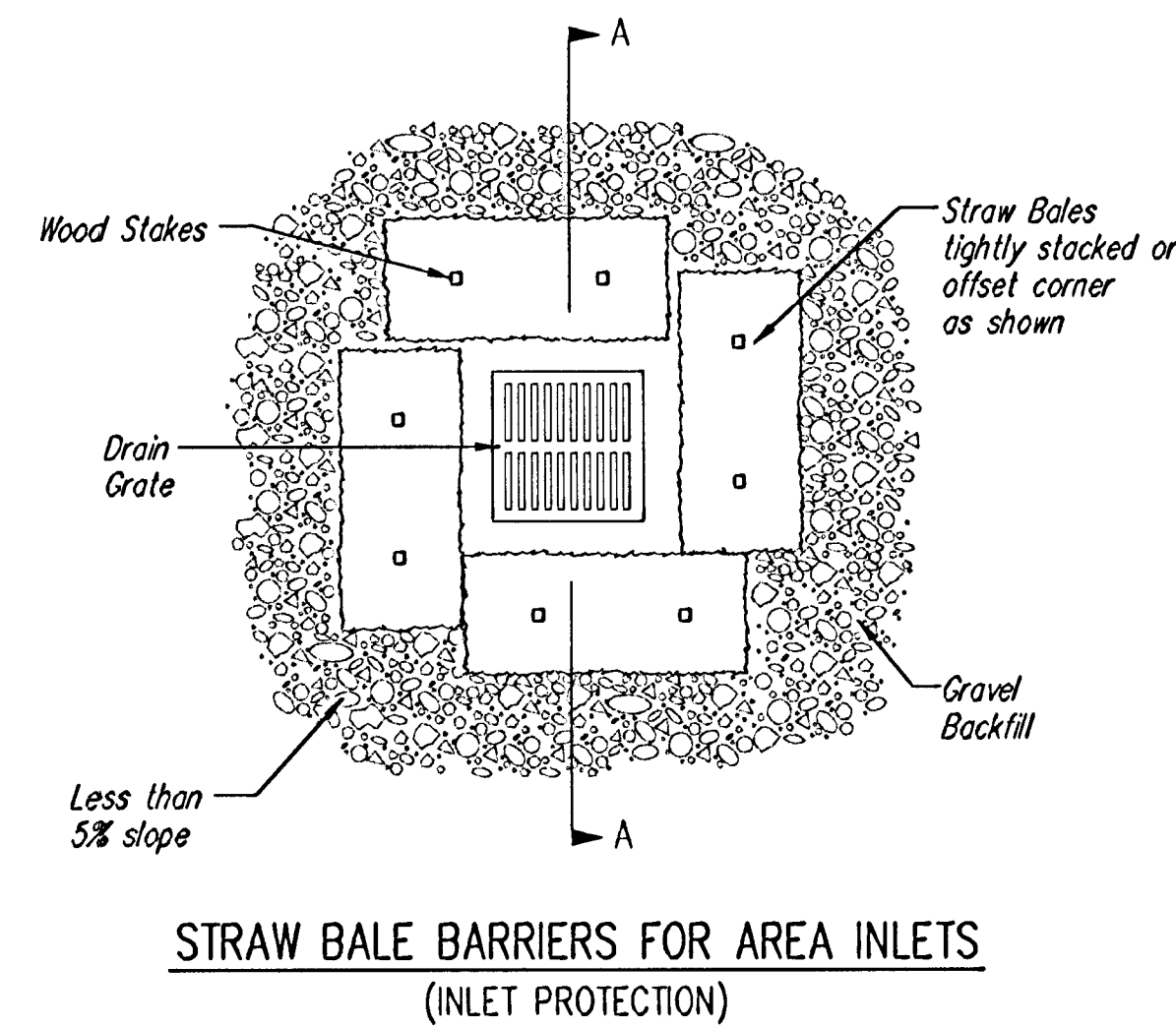
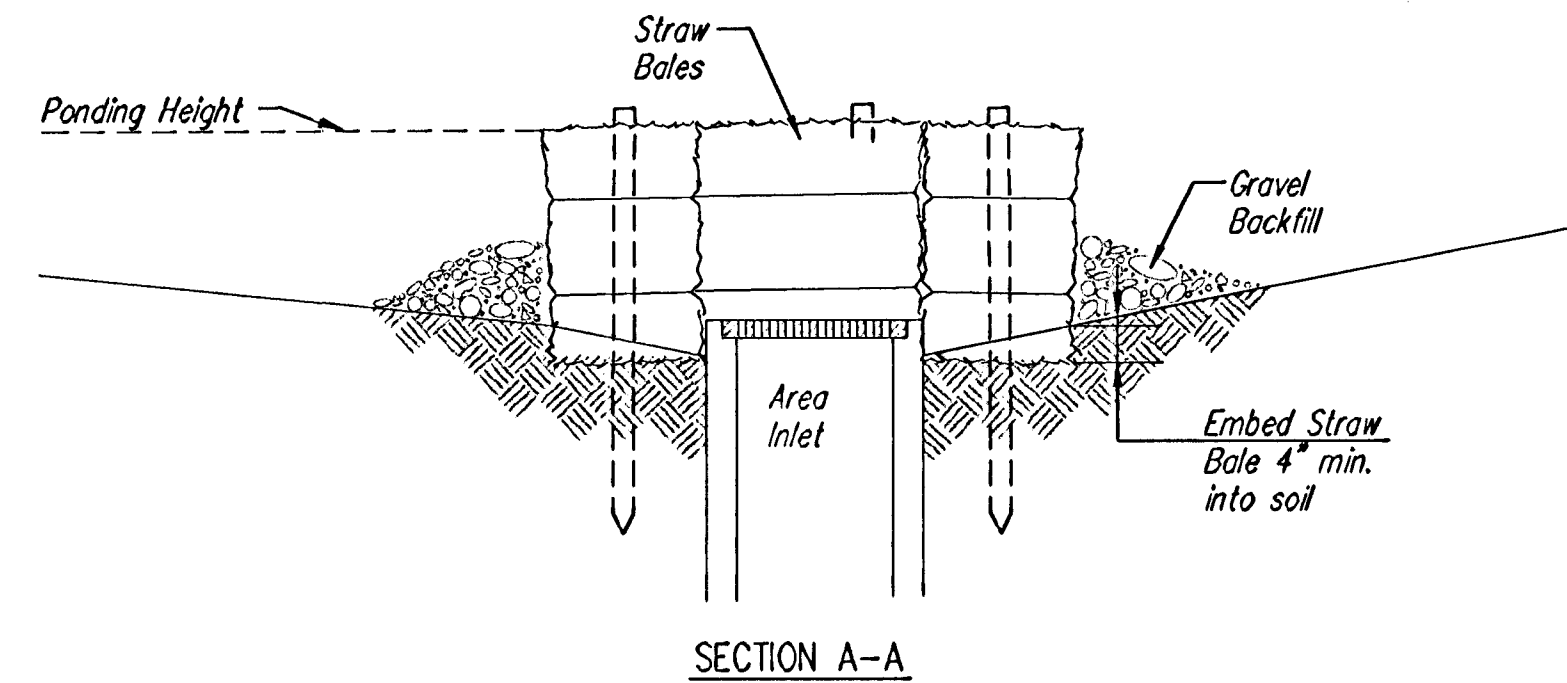
HEADWALL FOR 30" RCP

- GENERAL NOTES**
- ALL PIPES SHALL BE FLUSH CUT PRIOR TO BEING CAST INTO CONCRETE HEADWALL.
 - CONCRETE USED IN HEADWALL CONSTRUCTION SHALL BE SAME AS PER CITY STANDARD PAVING MIX EXCEPT THAT IT SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 4000 PSI.
 - ALL EXPOSED EDGES SHALL BE BEVELED 1/2".
 - REINFORCING STEEL SHALL COMPLY TO A.S.T.M. DESIGNATION A615 GRADE 60. ALL DIMENSIONS RELATIVE TO REINFORCING STEEL ARE TO CENTERLINE OF BAR UNLESS OTHERWISE NOTED.
 - THE "REIN. CONC. HEADWALL" SHALL BE PAID FOR AT THE UNIT PRICE BID PER EACH IN PLACE WHICH SHALL INCLUDE ALL LABOR, MATERIALS, EXCAVATION, CONCRETE, REINFORCING STEEL AND ALL OTHER INCIDENTAL ITEMS NECESSARY TO COMPLETE THE WORK. MATERIAL QUANTITIES SHOWN ARE FOR INFORMATION ONLY.

HEADWALL DETAIL

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

PROJECT NUMBER	488-83544	SHEET	12
DESIGN	BLP	DRAWN	JAK
APPROVED		DATE	4/02/03
SCALE	NONE	OF	14



Material Specification:

Bale area inlet barriers should be constructed of wheat straw, oat straw, prairie hay, or bromegrass hay that is free of weeds declared noxious by the Kansas State Board of Agriculture. The stakes used to anchor the bales should be a hardwood material with the following minimum dimensions: 2" square (nominal) by 4' long.

Placement:

Bale area inlet barriers should be placed directly around the perimeter of a drop inlet. When a bale area inlet barrier is located near an inlet that has steep approach slopes, the storage capacity behind the barrier is drastically reduced. Timely removal of sediment must occur for a barrier to operate properly in this location.

Proper Installation Method:

Excavate a trench around the perimeter of the area inlet that is at least 4" deep by a bale's width wide. Place the bales in the trench, making sure that they are butted tightly. Some bales may need to be shortened to fit into the trench around the area inlet. Two stakes should be driven through each bale, approximately 6" to 8" in from the bale ends. Stakes should be driven at least 12" into the ground. Once all the bales have been installed and anchored, place the excavated soil against the receiving side of the barrier and compact it. The compacted soil should be no more than 3" to 4" deep. Note: When a bale area inlet barrier is placed in a shallow median ditch, make sure that the top of the barrier is not higher than the paved road. In this configuration, water may spread onto the roadway causing a hazardous condition.

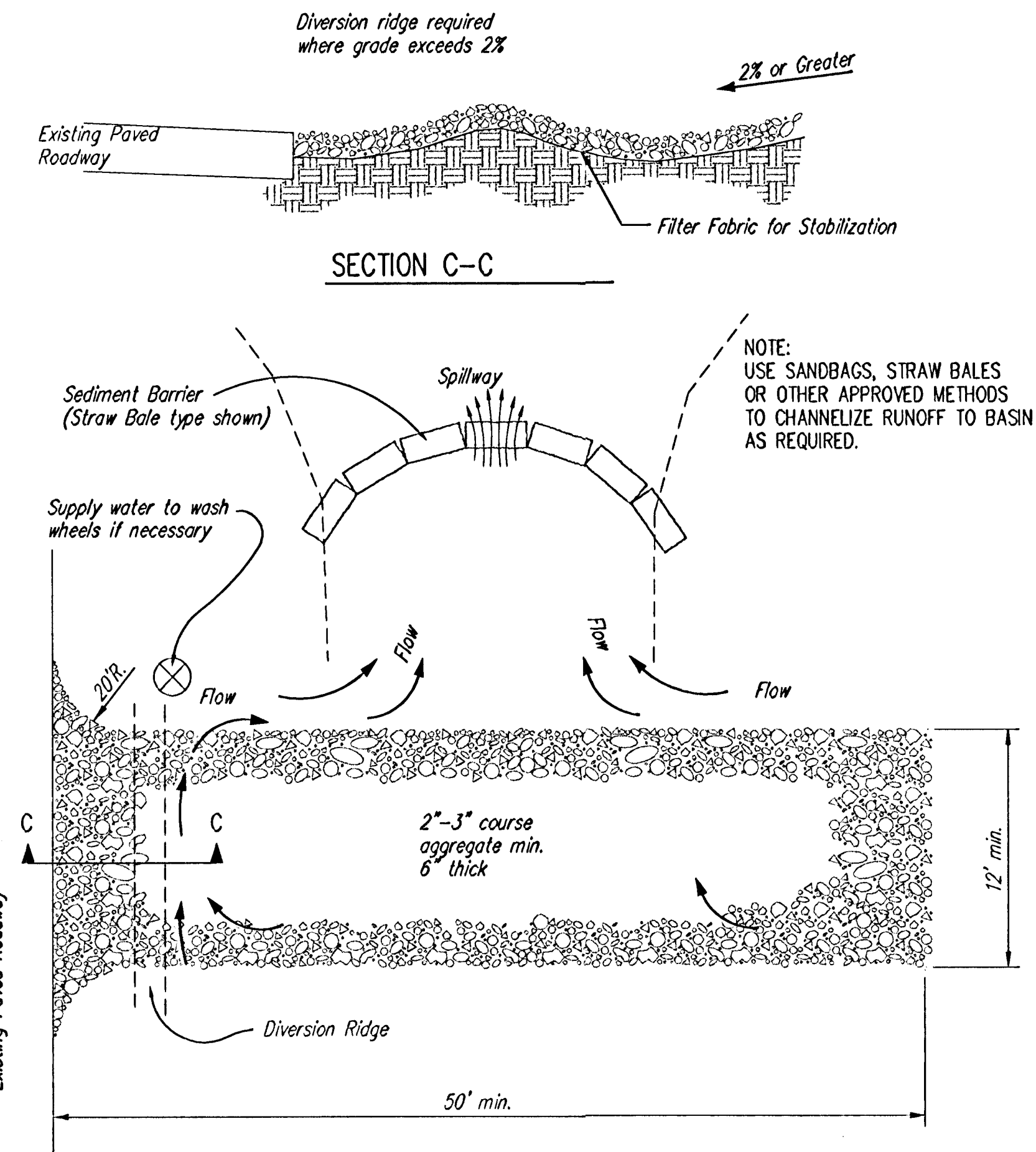
List of common placement installation mistakes to avoid:

Bales should be placed directly against the perimeter of the area inlet. This allows overtopping water to flow directly into the inlet instead of onto nearby soil causing scour. Bale area inlet barriers must be dug into the ground. Bales at ground level do not work because they allow water to flow under the barrier.

Inspection and Maintenance:

Bale area inlet barriers should be inspected every 7 days and within 24 hours of a rainfall 1/2" or more. The following is a list of questions that should be addressed during each inspection:

Does water flow under the area inlet barrier?
Does water flow through spaces between abutting bales?
Are any bales dislodged?
Are bales decomposing due to age and/or water damage?
Does sediment need to be removed from behind the area inlet barrier?

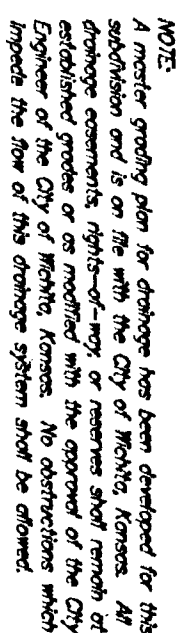


STABILIZED CONSTRUCTION ENTRANCE

NOTES:

1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
2. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.
3. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN, AS SHOWN ABOVE.
4. DRIVE ENTRANCES ONTO RESIDENTIAL LOTS WILL NOT BE REQUIRED TO HAVE THE SEDIMENT BARRIER SHOWN, BUT WHEEL WASHING MAY BE REQUIRED IF STABILIZED ENTRANCE IS NOT SUFFICIENT TO KEEP MUD FROM BEING TRACKED ONTO ADJACENT STREET. ENTRANCE SHALL EXTEND FROM BACK OF CURB TO DWELLING.

		SOIL EROSION BMP DETAILS	
		CHRISTOPHER M. CARRIER, P.E. STORM WATER ENGINEER	
		PROJECT NUMBER 468-83544	OCA NO. 751326
		DATE APR 2003	SHEET 13 OF 14



MINIMUM BUILDING PAD ELEVATIONS FOR LOWEST OPENING TO THE STRUCTURES		
LOT	BLOCK	ELEVATION
		QTY DATING
1-19	B	156.5
6-22, 33-36	D	163.5



Michael A. Carney
Michael G. Carney

DAWN M. DECKER
NOTARY PUBLIC
STATE OF IOWA
My Appl. Exp. 11/1/14

Paul E. Kelsey,
President

My App't. Exp. 11/14/04

Dana M. Decker, Notary Public
DANA M. DECKER

State of Oregon
Supt. (Time)
Brad E. Yeager

My App^t: Exp. 11/14/04
DANA M. DECKER, Notary Public

dated this 22nd day of May, 1964.
Michila-Sedgwick County Metropolitan Area Planning Commission

This plot approved and all dedications shown hereon accepted by the City Council of the City of Wichita.

 Pat Weaver, City Clerk
Pat Weaver

CLERK OF
SANDHURST COUNTY
AND SURVEYOR
Francis L. Robello, L.S. #7246
Deputy County Surveyor

_____, wearing the

Don Bruce

Bill Meek, Register of Deeds
Grinda Thorne, Deputy

ENGINEERING, SURVEYING, & PLANNING
316-263-7271 • 315 RUS • WORTH, KANSAS
A PLANNED BY PLANNING

PC143-N