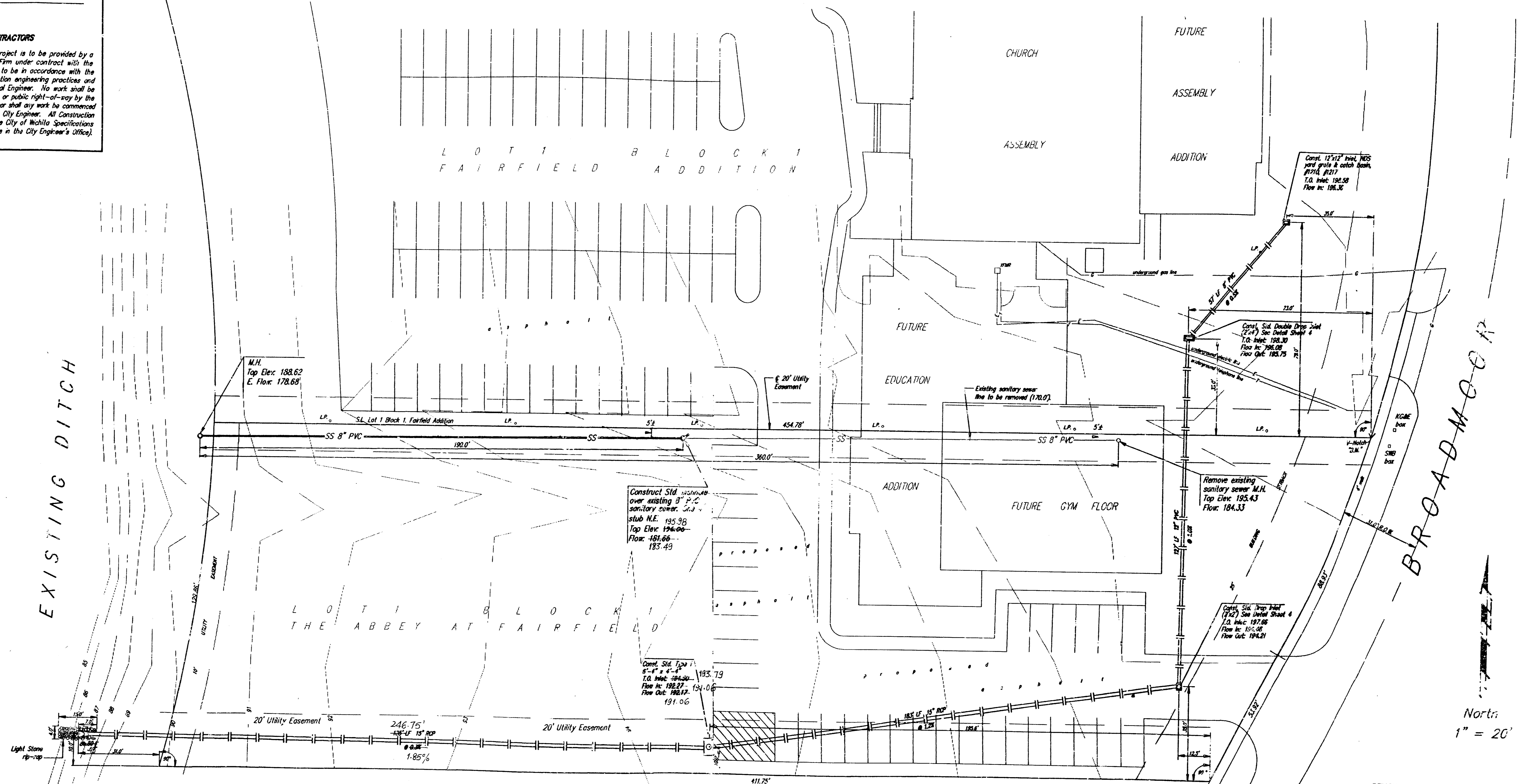


APPROVED AS NOTED
 BY CITY ENGINEER OF MOHITA

Sanitary Sewer: VRH 7/6/94
 Storm Sewer: VRH 7/6/94
 Driveway Approaches _____
 Water Mains _____
 Parking _____

NOTE TO CONTRACTORS

Inspection and testing for this project is to be provided by a Licensed Consulting Engineering Firm under contract with the City of Mohita. Said inspection to be in accordance with the City of Mohita standard construction engineering practices and certified by a Licensed Professional Engineer. No work shall be performed in unexcused absence 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 Mohita Specifications and Standards (on file and available in the City Engineer's Office).



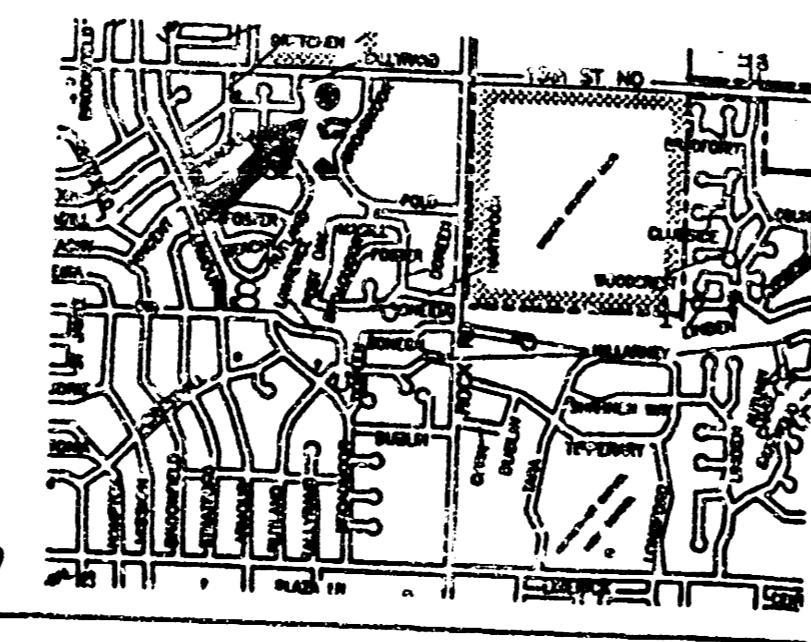
EXISTING DITCH

BROADMOOR

North
 1" = 20'

BENCH MARK:
 V-Notch southeast corner of
 Lot 1, Block 1, Fairfield Club
 Addition Elevation=197.38 City Locum.

As Built 10-12-94 A-Z



LOCATION MAP
 Not to Scale

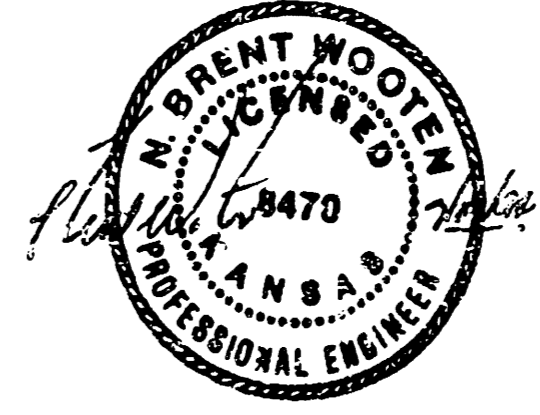
INLET	C	Q _s	Q ₁₀
1	0.9	0.5 cfs	0.8 cfs
2	2.2	1.1 cfs	1.7 cfs
3	2.5	1.3 cfs	2.0 cfs
4	4.0	2.0 cfs	3.0 cfs

Drainage Area: 0.8 acres

CONTRACTOR NOTES:

- All disturbed areas to be seeded with Rebel Fescue at a rate of 10 pounds per 1000 sq. ft. fertilized with a 16-20-6 ratio at a rate of 4 pounds per 1000 sq. ft., and mulched according to city standards.
- Verify and locate all existing utilities before beginning excavation of project.
- Install seven (7) sq. yds. of Light Stone rip-rap

SW/S
 Booked
 D-290
 M4
 Sanitary Sewer
 Booked 2-23-95
 From As Builts



STORM WATER/SEWER IMPROVEMENTS
ST. GEORGE CHURCH

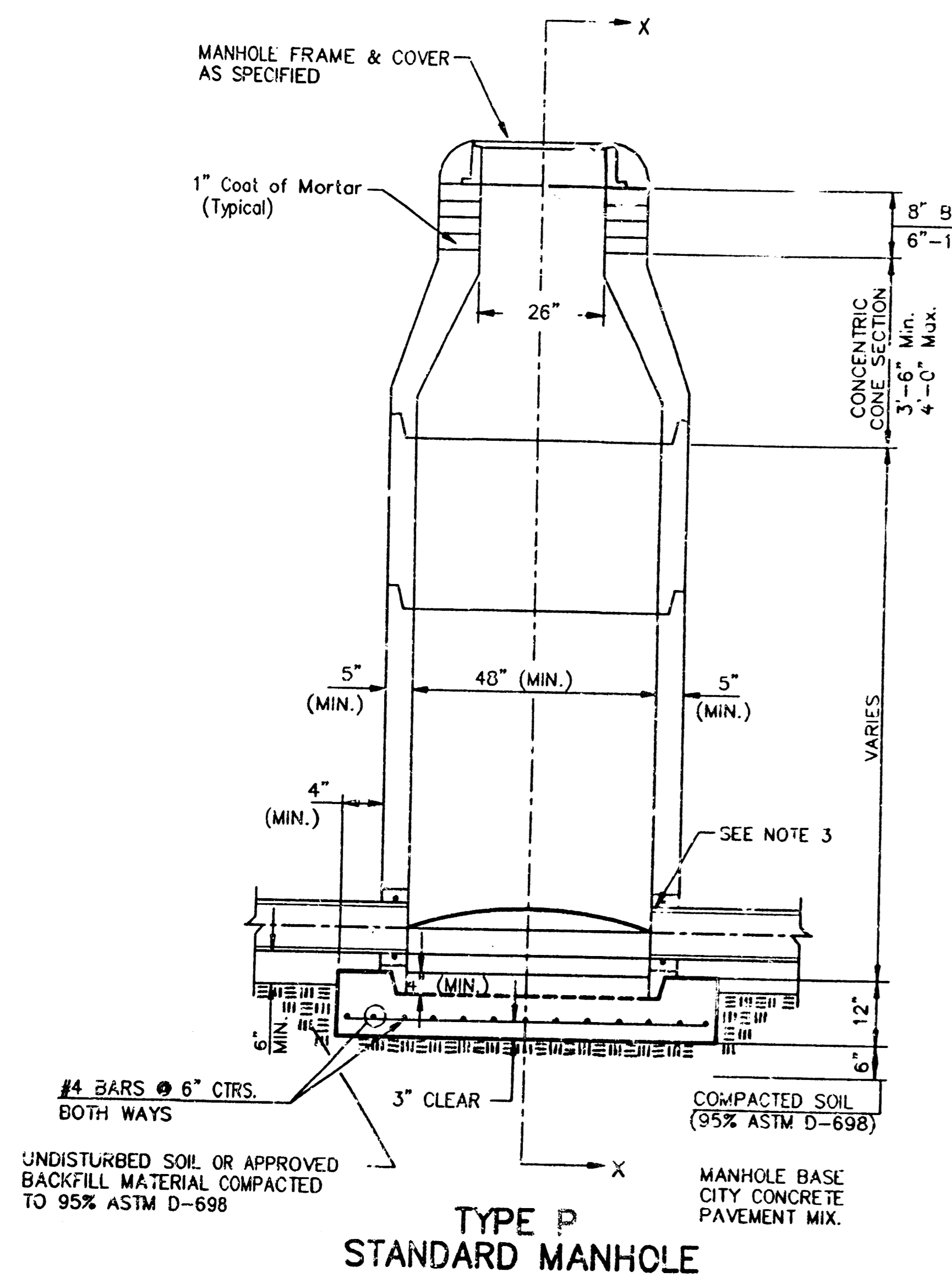
BAUGHMAN COMPANY P. A.
 ENGINEERING, SURVEYING & PLANNING
 316/262-7271 • 315 ELLIS • MOHITA, KANSAS 67211

PROJECT NUMBER
475PPS (607861)

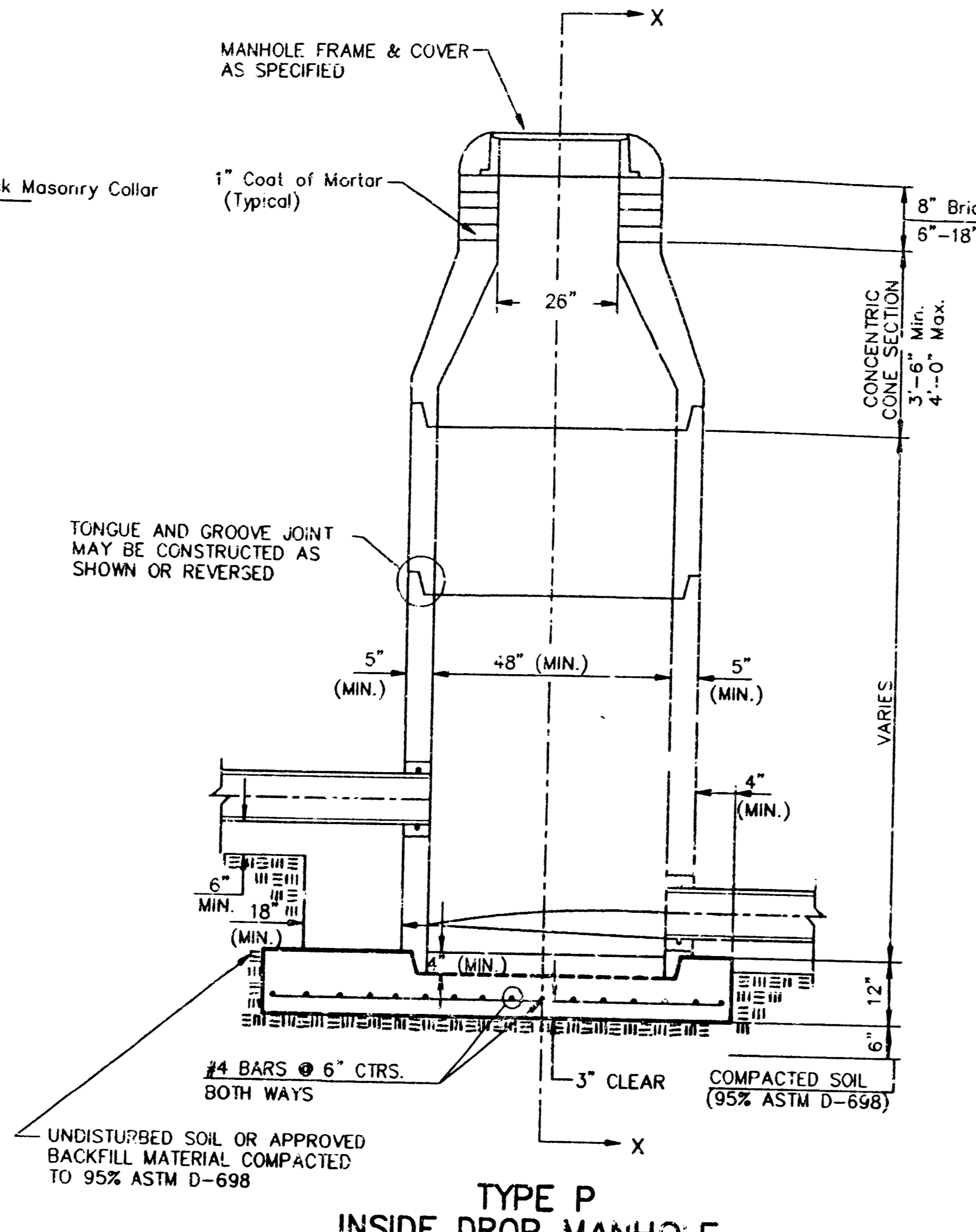
DESIGN PJM/ML	DRAWN JL	UTIL. CHECK'D JL	DATE 7-1-94	SCALE 1"=20'
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SHEET
SP 3
 OF

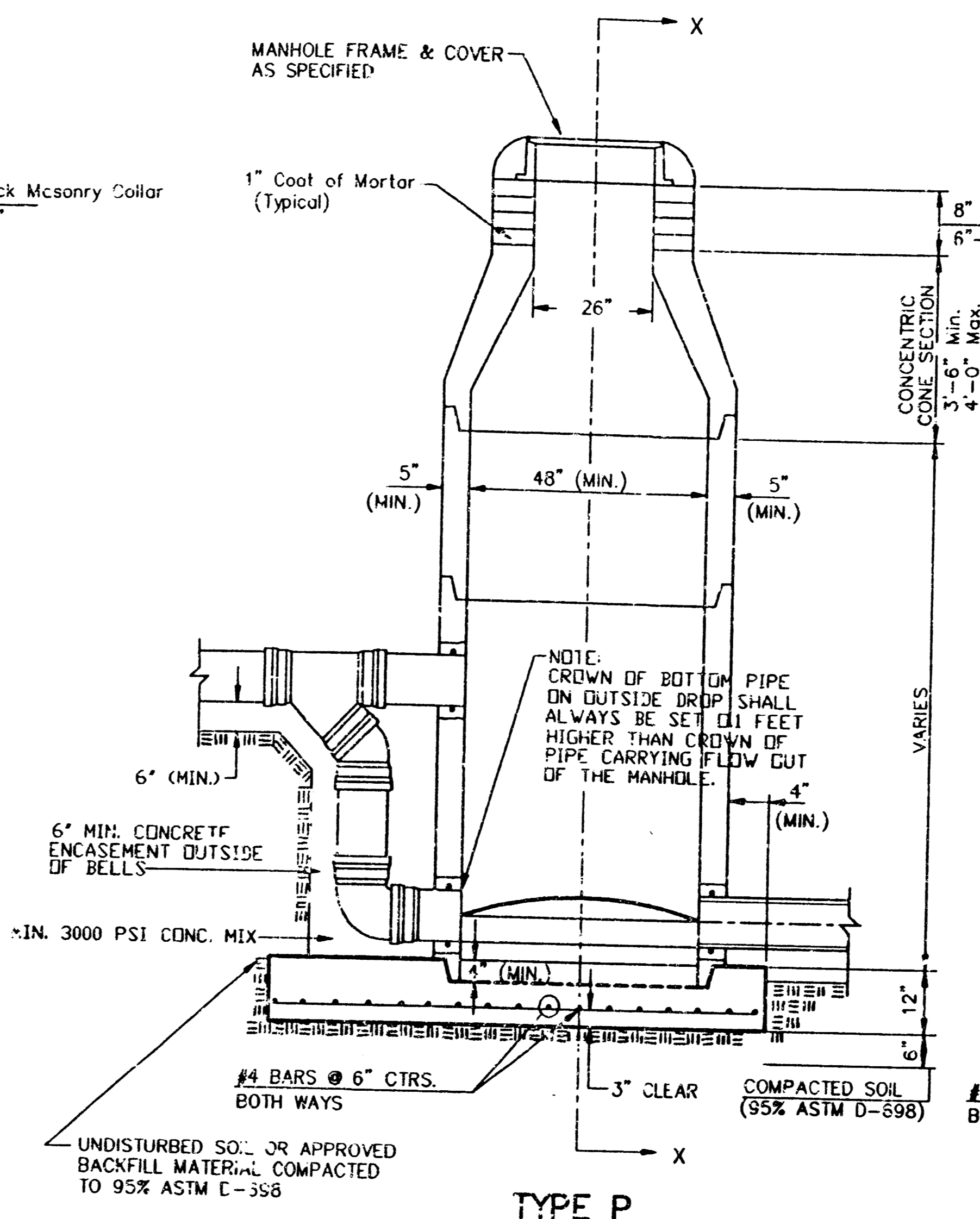
SEWER APPURTENANCES DETAILS



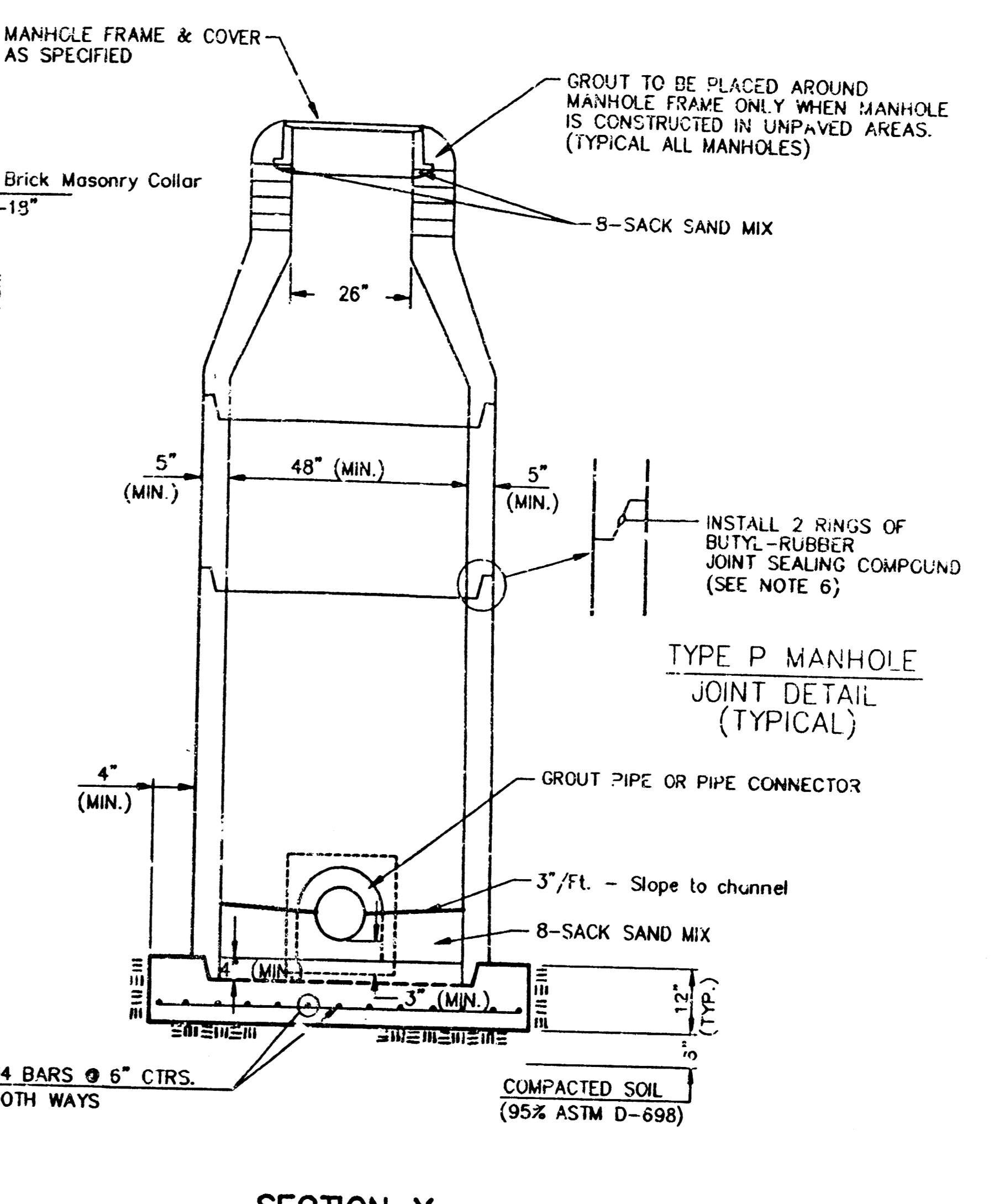
TYPE P STANDARD MANHOLE



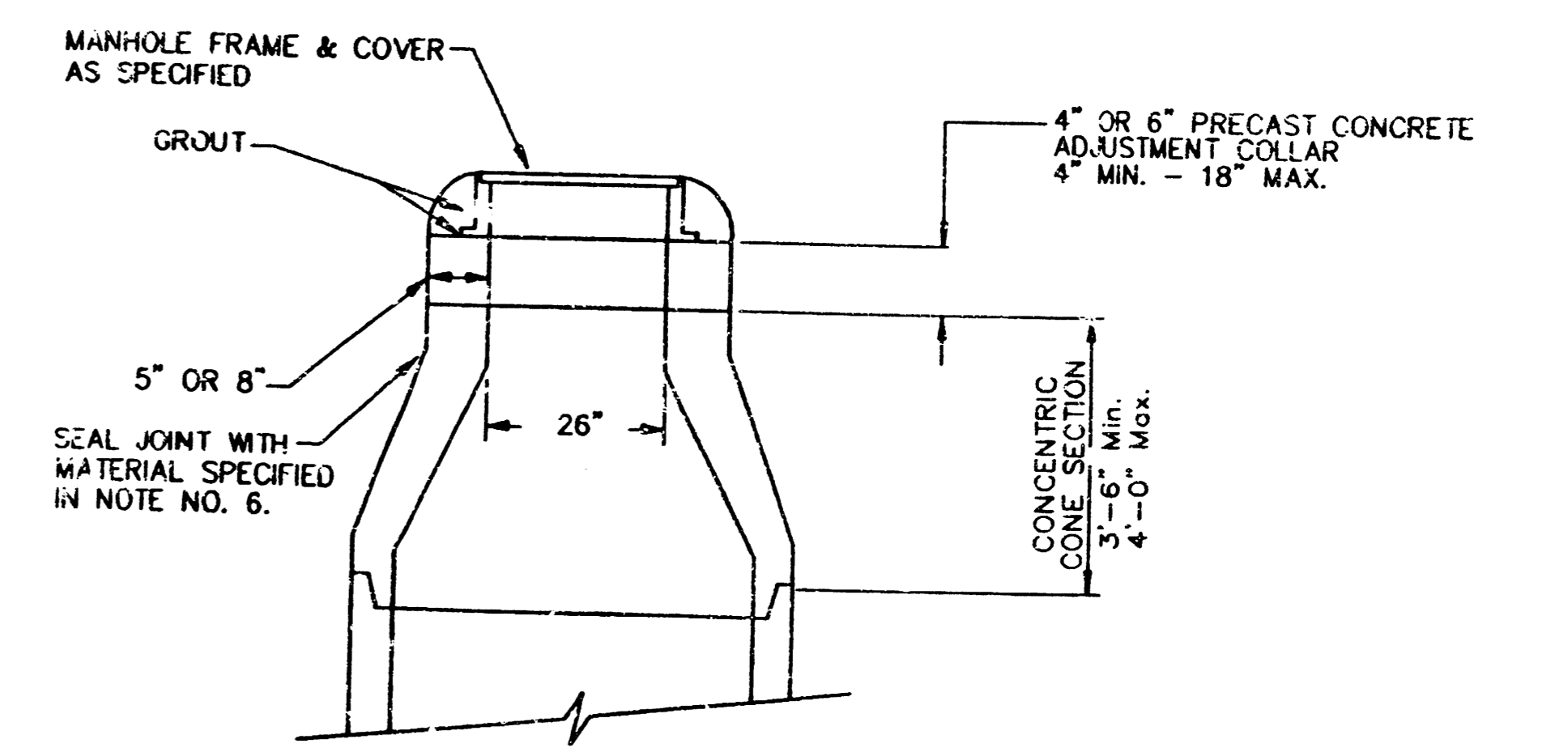
TYPE P INSIDE DROP MANHOLE



TYPE P OUTSIDE DROP MANHOLE



SECTION X (TYPICAL)



ALTERNATE CONSTRUCTION IN UNPAVED AREAS

- 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 TRENEMEC SERIES 66 HI-BUILD EPOXYGLAZE, DRY THICKNESS OF 8 MILS (MP). EXTERIOR MANHOLE WALLS SHALL BE COATED WITH 1 COAT MOBILARMA 633 BITUMINOUS COATING.
 - JOINT SEALING COMPOUND SHALL BE KENT 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 6" CENTERS IN BOTH DIRECTIONS. THE MANHOLE BASE REINFORCEMENT SHALL BE PLACED AT LEAST 3" ABOVE THE BOTTOM OF THE MANHOLE. ALL COSTS FOR FINISHING 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 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 CROWN 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 PIPE 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 9" 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.

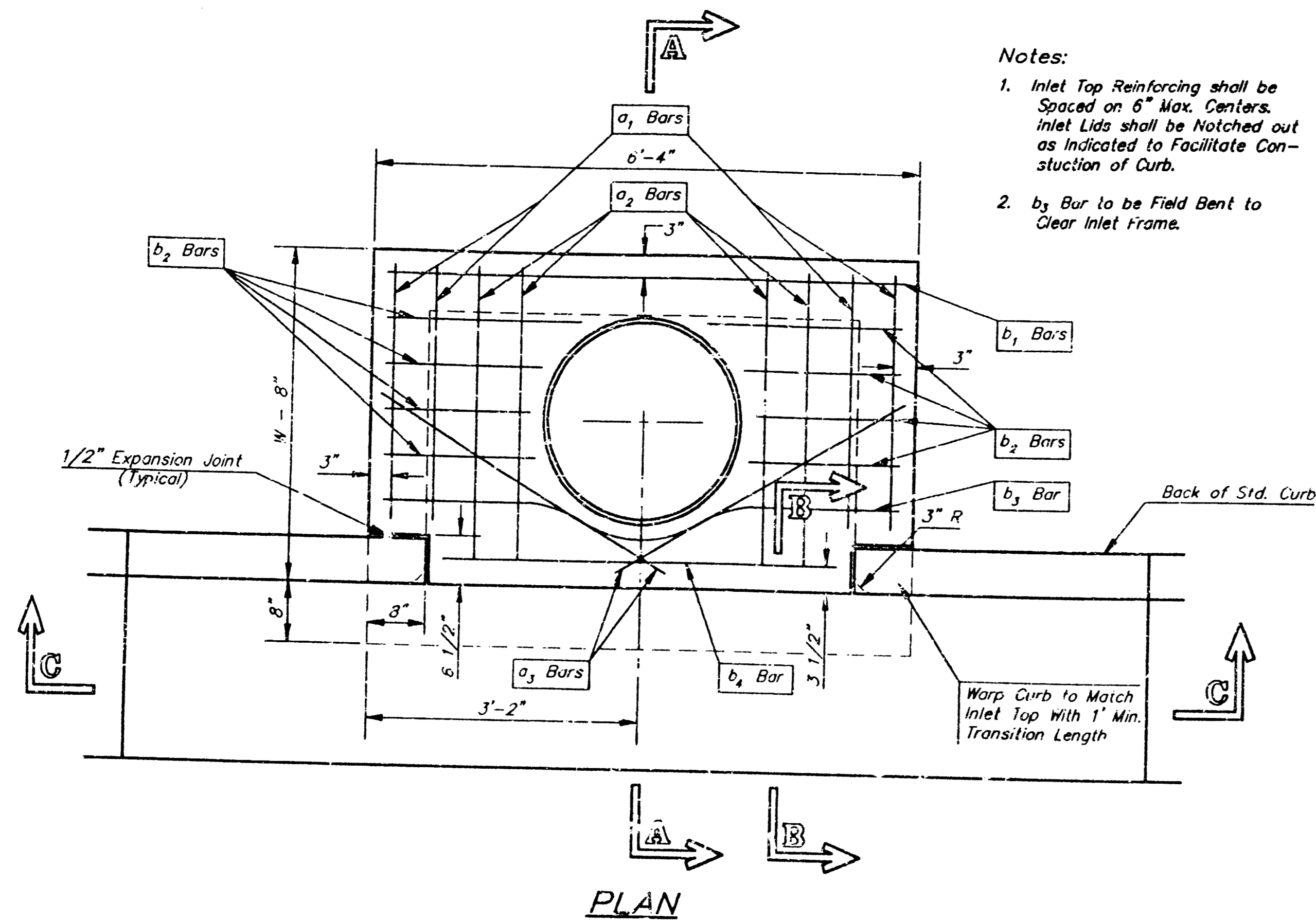
CITY OF WICHITA, KANSAS
STANDARD MANHOLE DETAILS
SEWER APPURTENANCES DETAILS

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

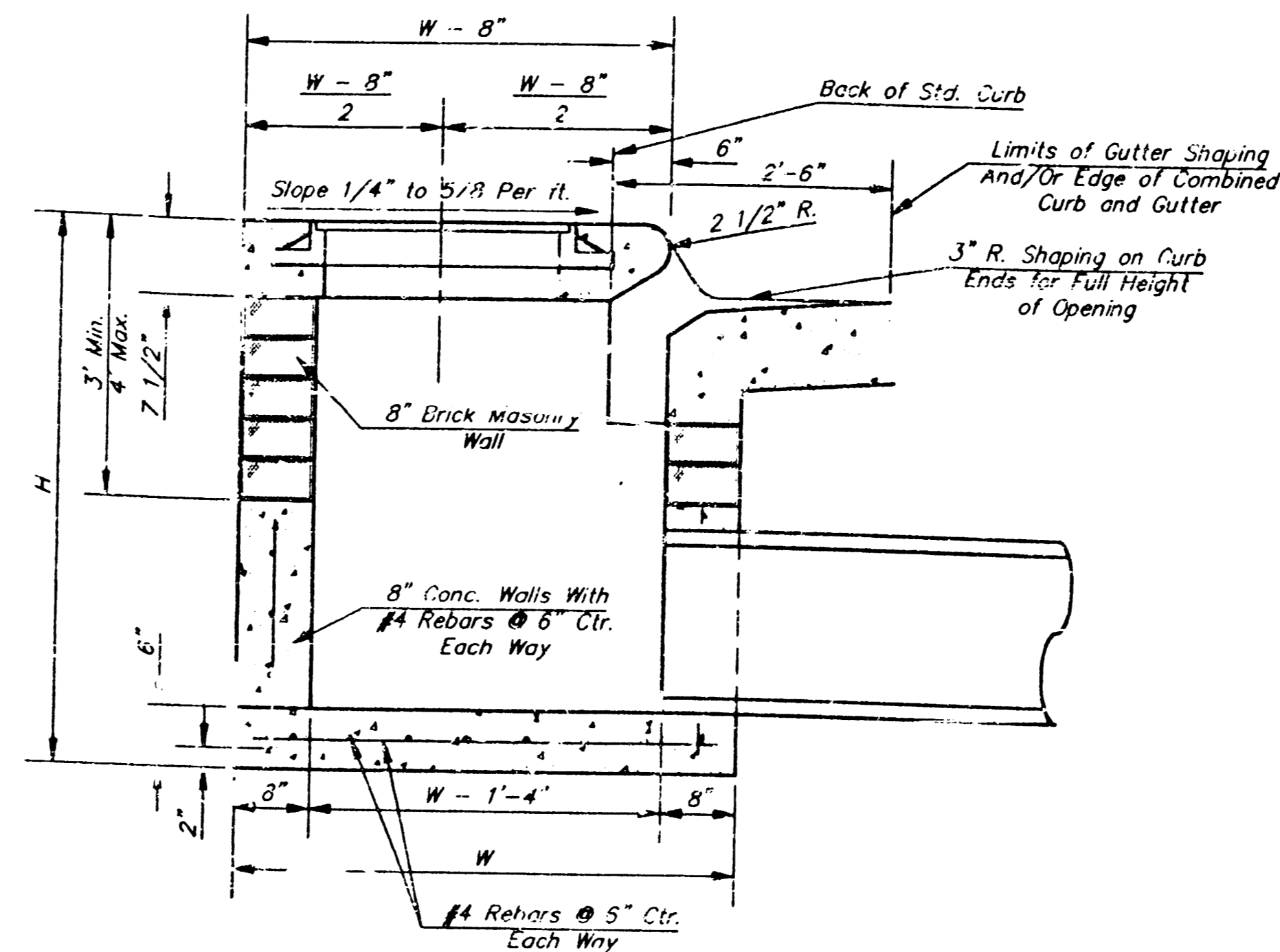
PROJECT NUMBER: _____

DESIGN: _____ DRAWN: _____ APPROVED: _____ DATE: 6-29-94 SCALE: NO SCALE

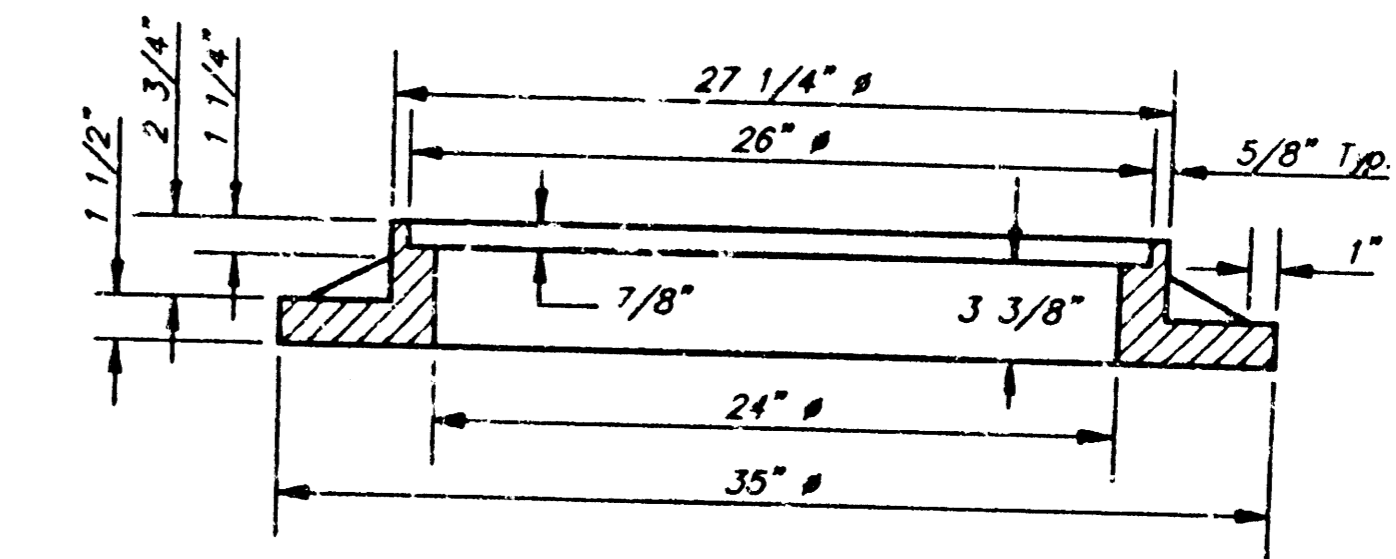
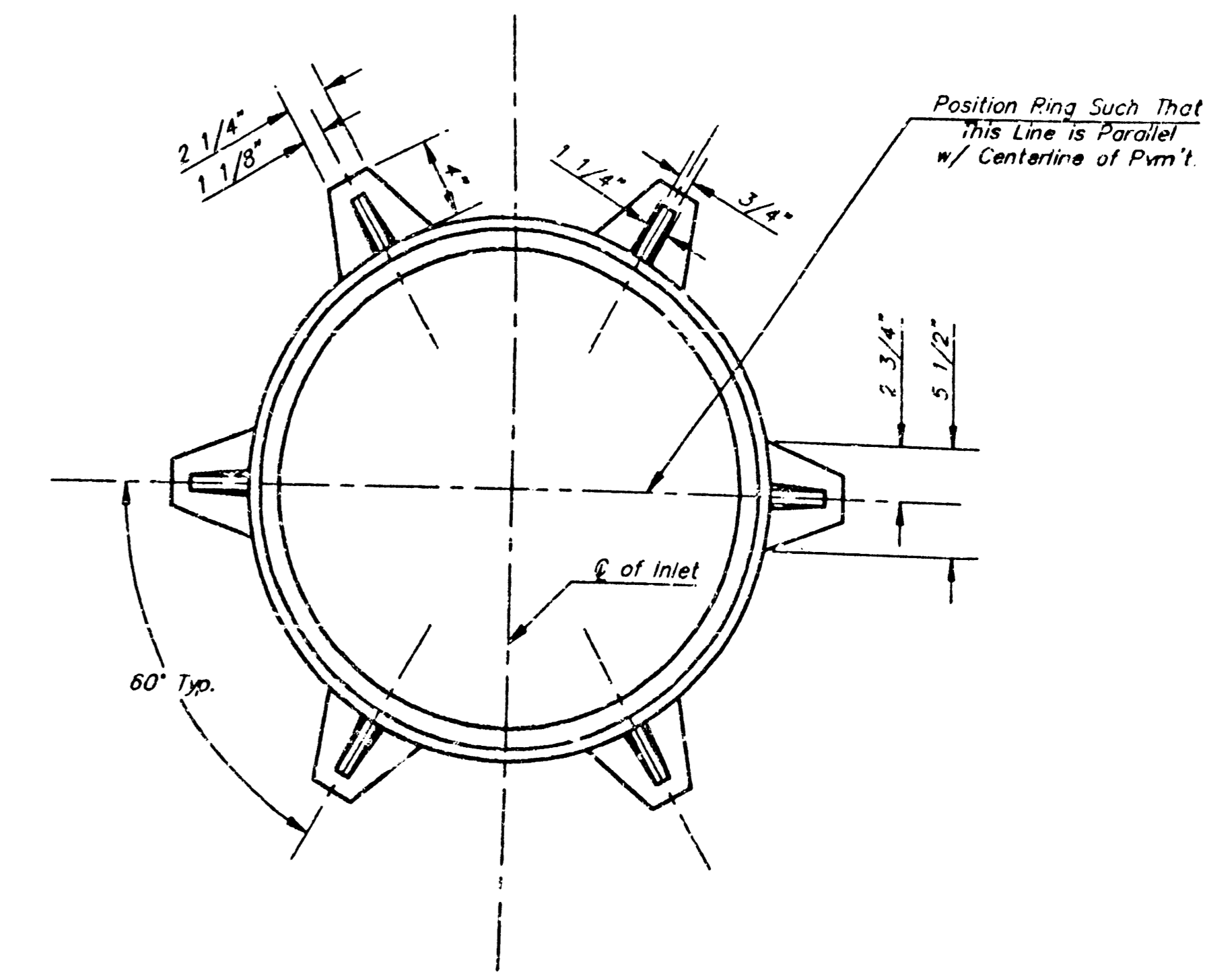
SHEET SP 4 OF 4



- Notes:
- Inlet Top Reinforcing shall be Spaced on 6" Max. Centers. Inlet Lids shall be Notched out as Indicated to Facilitate Construction of Curb.
 - b₂ Bar to be Field Bent to Clear Inlet Frame.



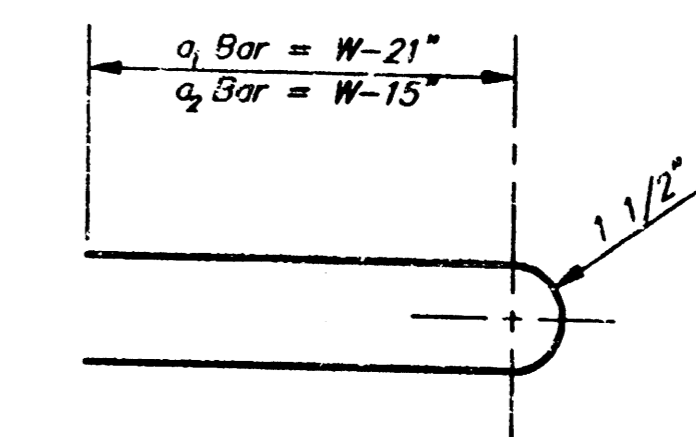
SECTION A-A



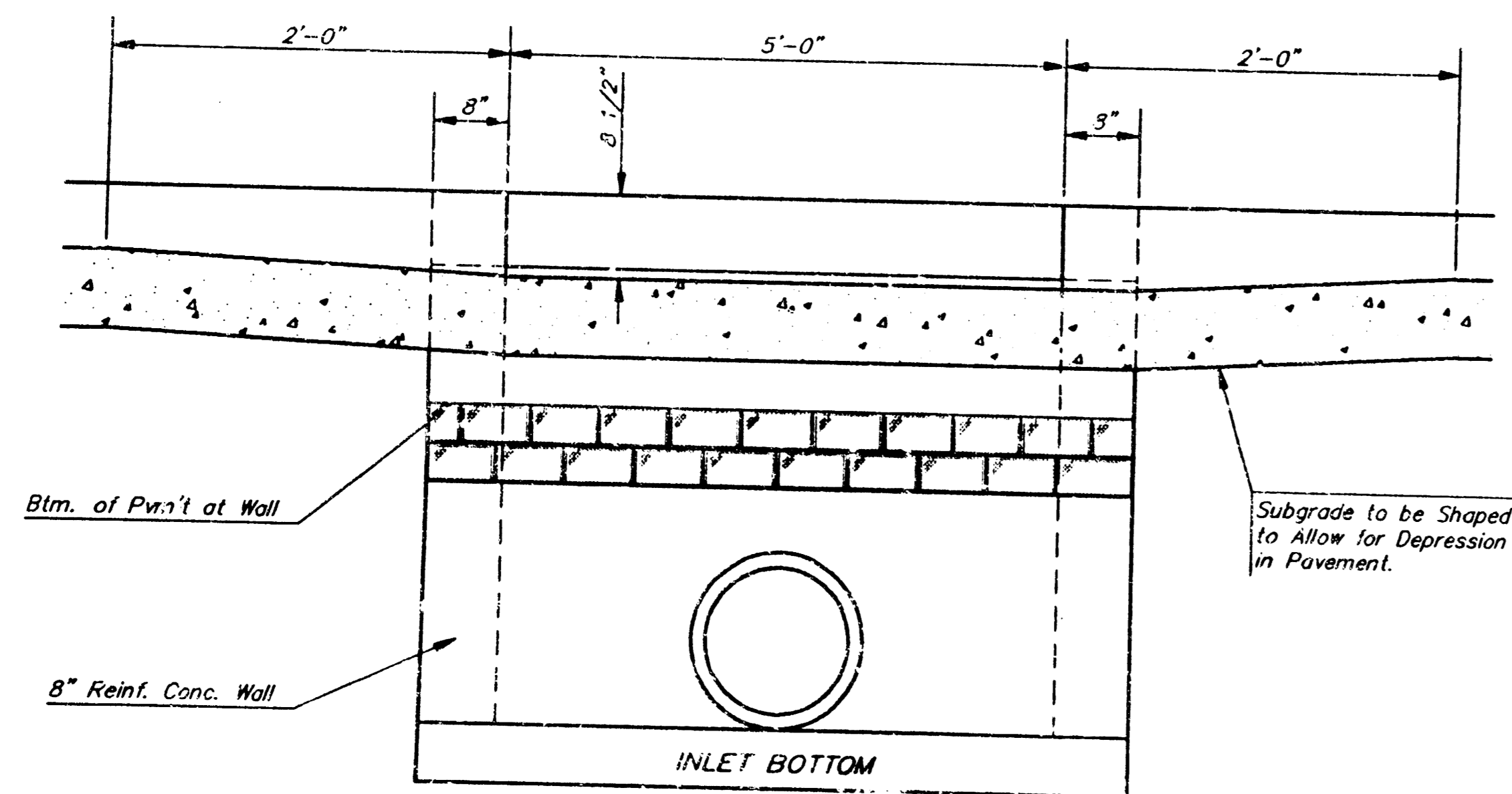
WT. = 180 lbs.

MANHOLE RING AND COVER

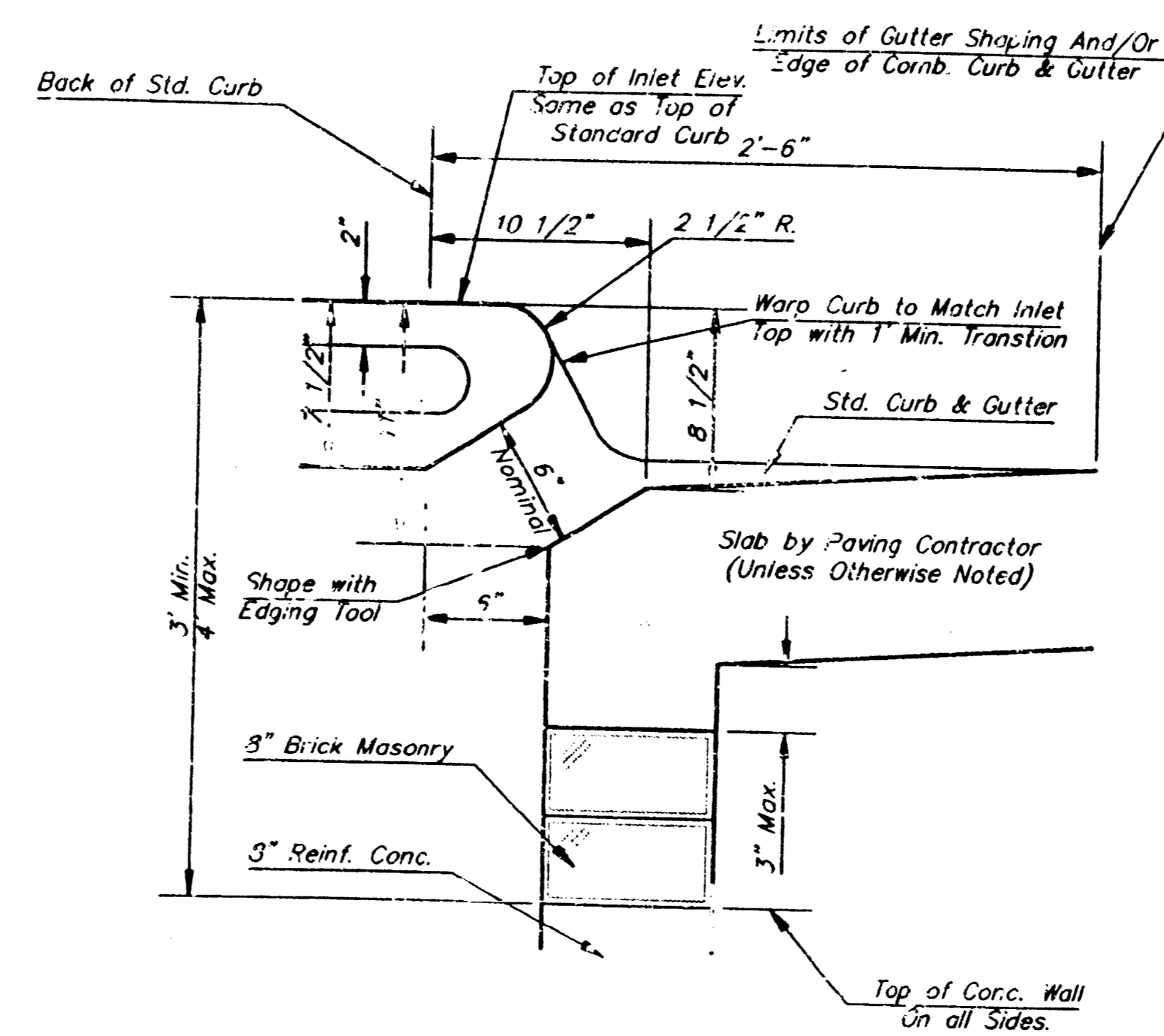
*See City of Wichita Standard Manhole Ring and Cover Detail Sheet for Cover Details to Be Used with Inlet Frame.



BENDING DIAGM



SECTION C-C



SECTION B-B

STEEL SCHEDULE

BAR NUMBER	a ₁		b ₁							b ₂	b ₃	b ₄	WT. Lbs.
	4	2	1	3	5	7	9	6	1				
SIZE	#4	#4	#4	#4	#4	#4	#4	#4	#4	#4	#6		
W=4'-4"	5'-7"	6'-7"	4'-0"	6'-1"	-	-	-	1'-9"	6'-2"	4'-8"	60±		
W=5'-4"	7'-7"	8'-7"	5'-0"	5'-1"	-	-	-	1'-9"	6'-2"	4'-8"	81±		
W=6'-4"	9'-7"	10'-7"	6'-0"	-	6'-1"	-	-	1'-9"	6'-2"	4'-8"	101±		
W=7'-4"	11'-7"	12'-7"	7'-0"	-	-	6'-1"	-	1'-9"	6'-2"	4'-8"	121±		
W=8'-4"	13'-7"	14'-7"	8'-0"	-	-	-	6'-1"	1'-9"	6'-2"	4'-8"	141±		

Note: a₂ Bars to be Placed Approx. 2" Below Top of Inlet Cover.

STANDARD CURB INLET PRECAST TOPS

W	PRE-CAST TOP SIZE	PIPE SIZE	CUL. YD. CONC.
4'-4"	3'-8" 6'-4" 7 1/2"	21" & SMALLER	0.35±
5'-4"	4'-8" 6'-4" 7 1/2"	24" & 30"	0.51±
6'-4"	5'-8" 6'-4" 7 1/2"	36" & 42"	0.64±
7'-4"	6'-8" 6'-4" 7 1/2"	48" & 54"	0.77±
8'-4"	7'-8" 6'-4" 7 1/2"	60" & 66"	0.90±

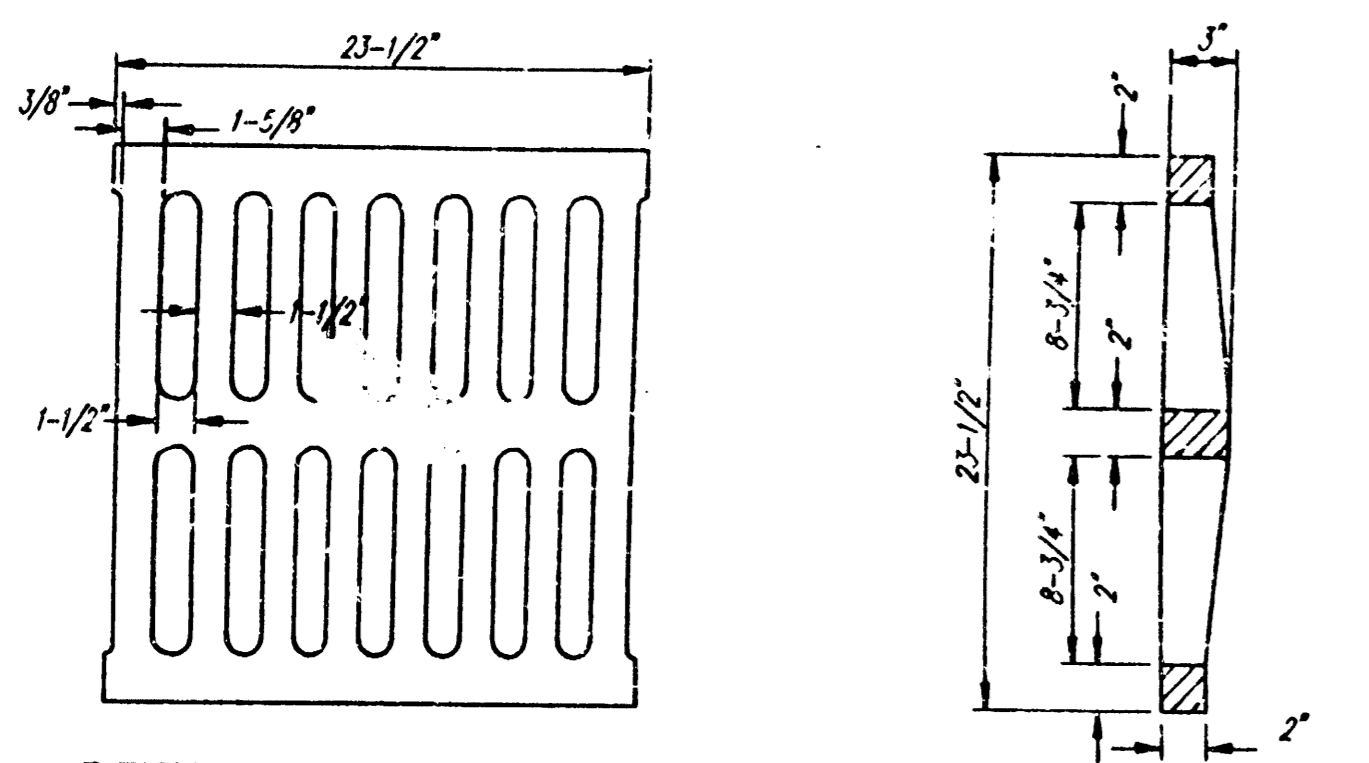
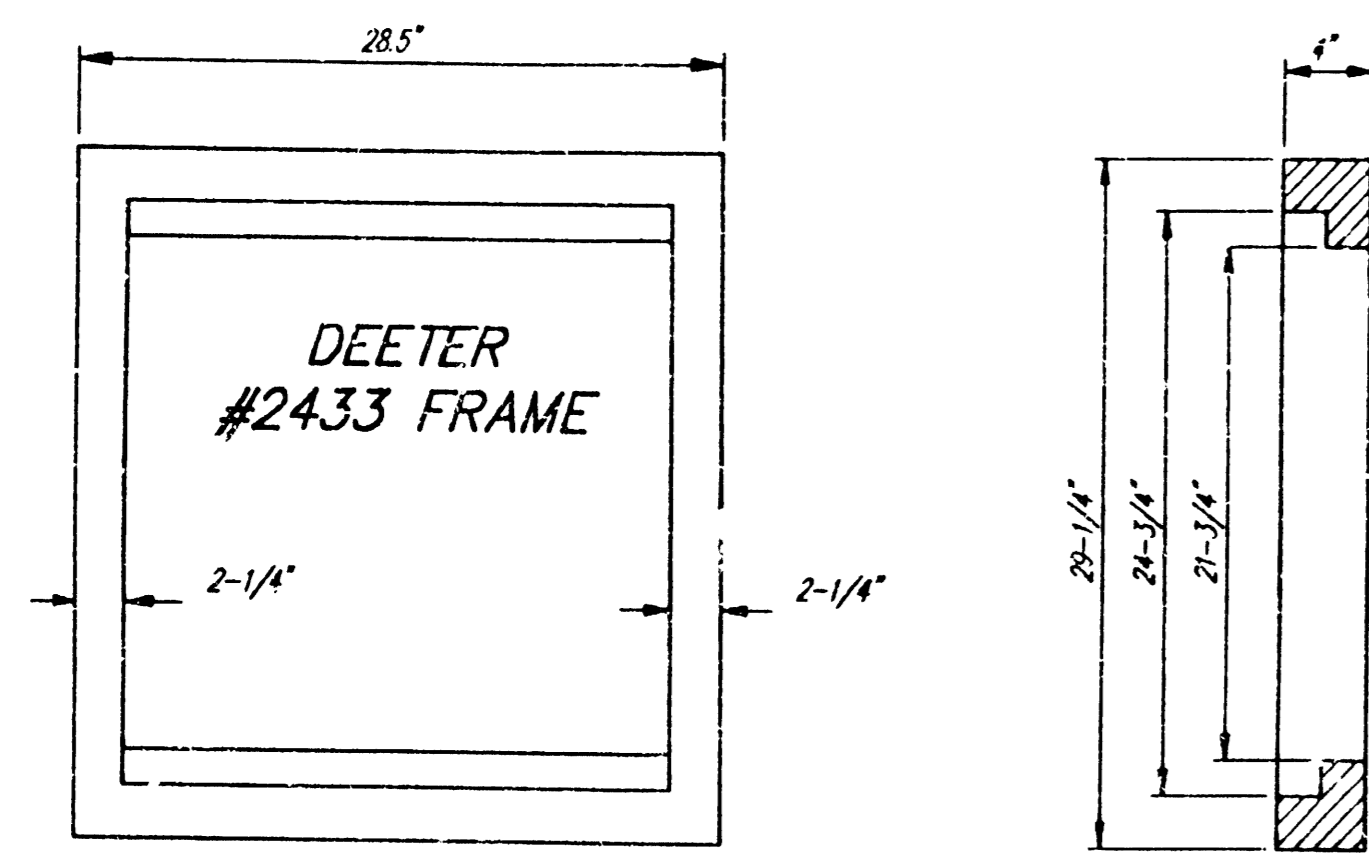
GENERAL NOTES

- 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 in-situ construction shall be concrete pavement mix.
- 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.
- 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 flush with the inside face of the inlet wall.

CITY OF WICHITA STANDARD TYPE 1
CURB INLET DETAILS
INLET OPENING = 6" x 10'-0"

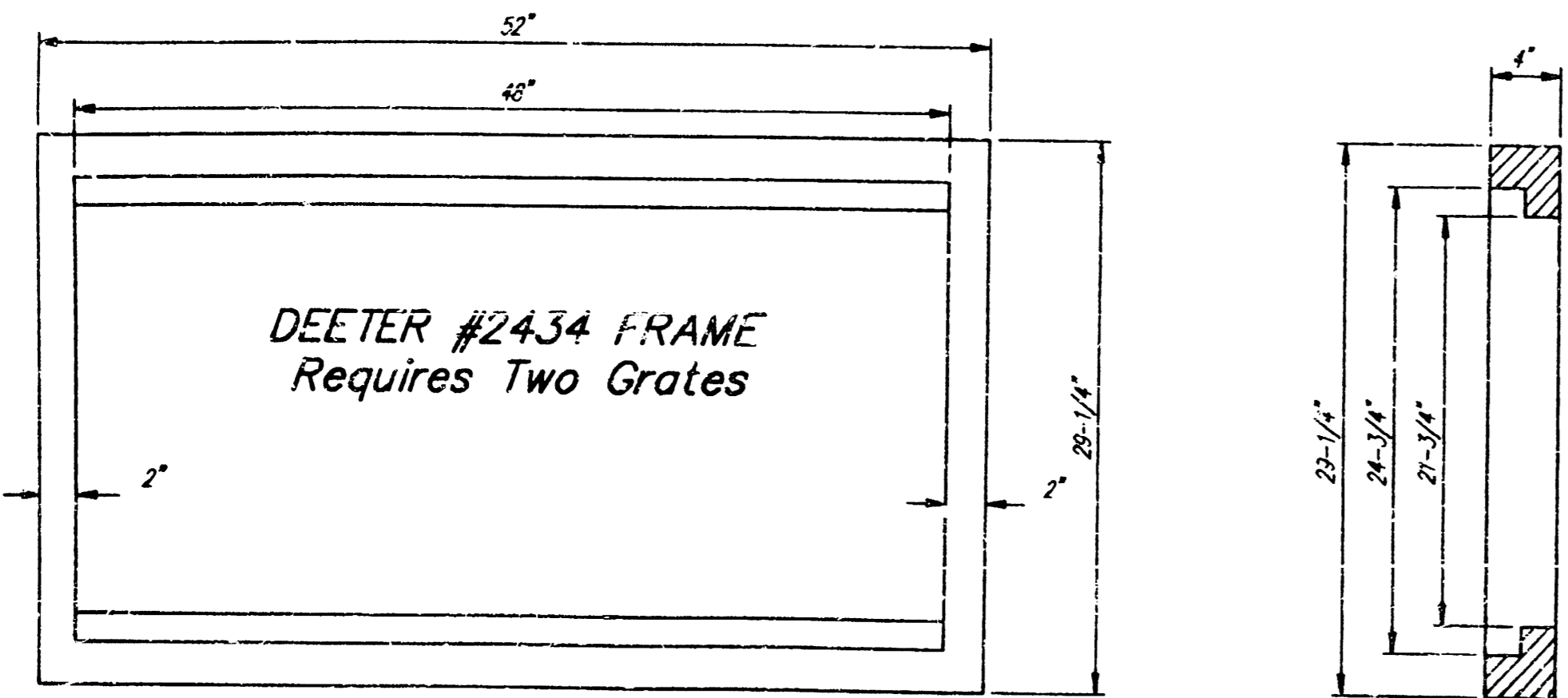
PROJECT NUMBER _____ SHEET _____ OF _____
SF. 6

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



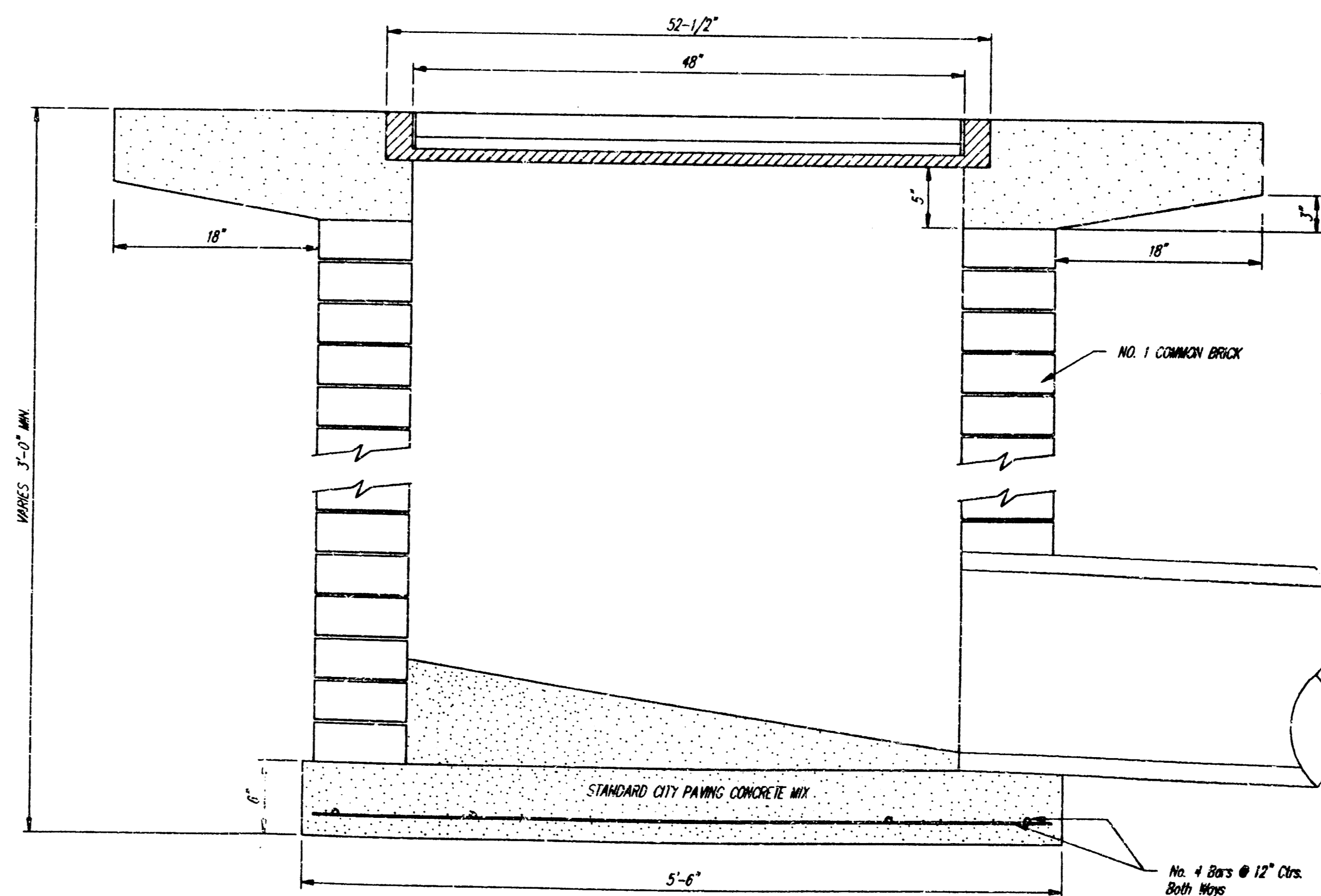
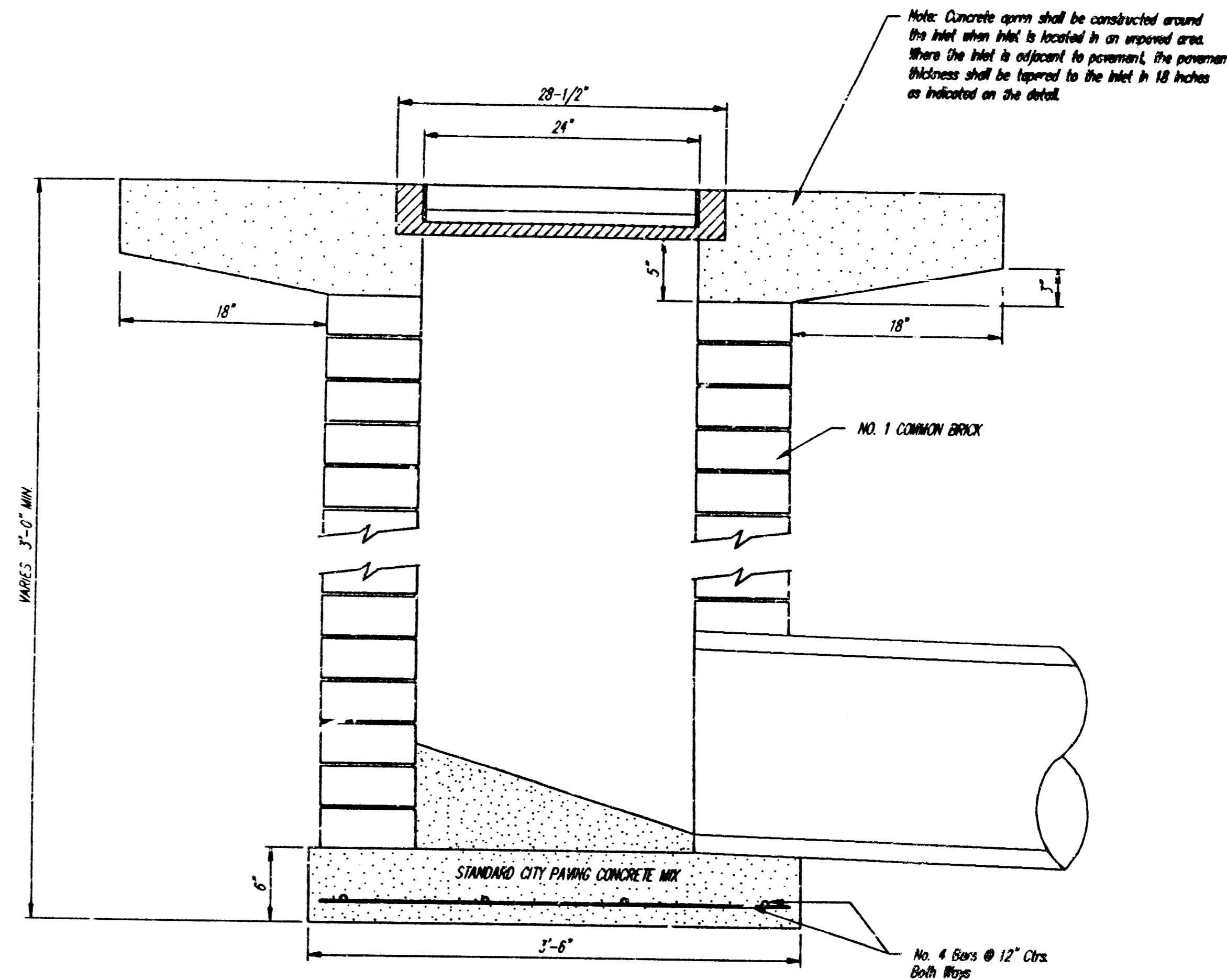
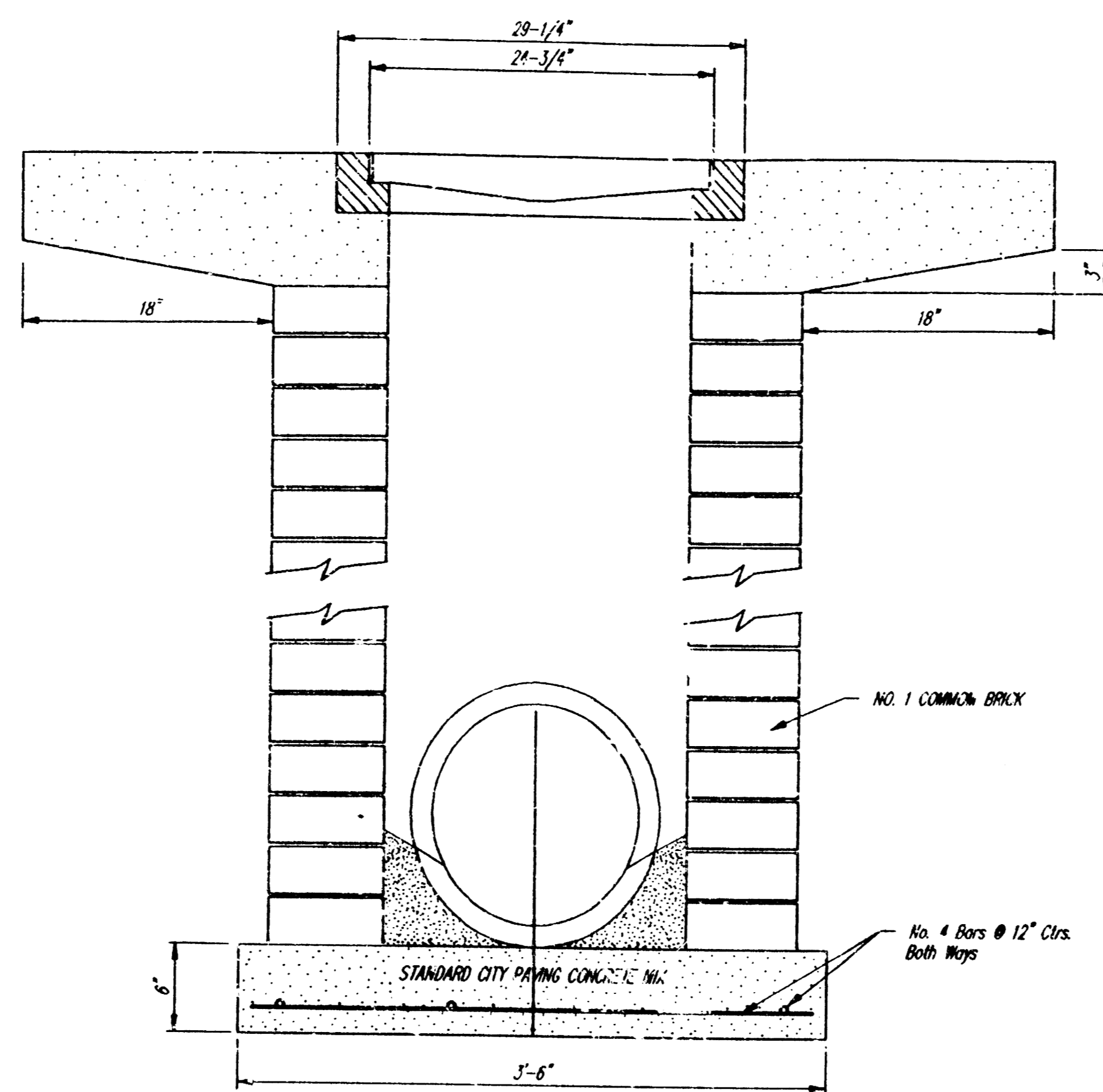
DEETER #2433 GRATE

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 of least 1" in height. Other marking methods may be approved by the engineer.



DROP INLET DETAILS
M.E. Lindebak, City Engineer
City of Wichita, Kansas

PROJECT
ST. GEORGE CHURCH IMPROVEMENTS

6-29-94

SP. 6

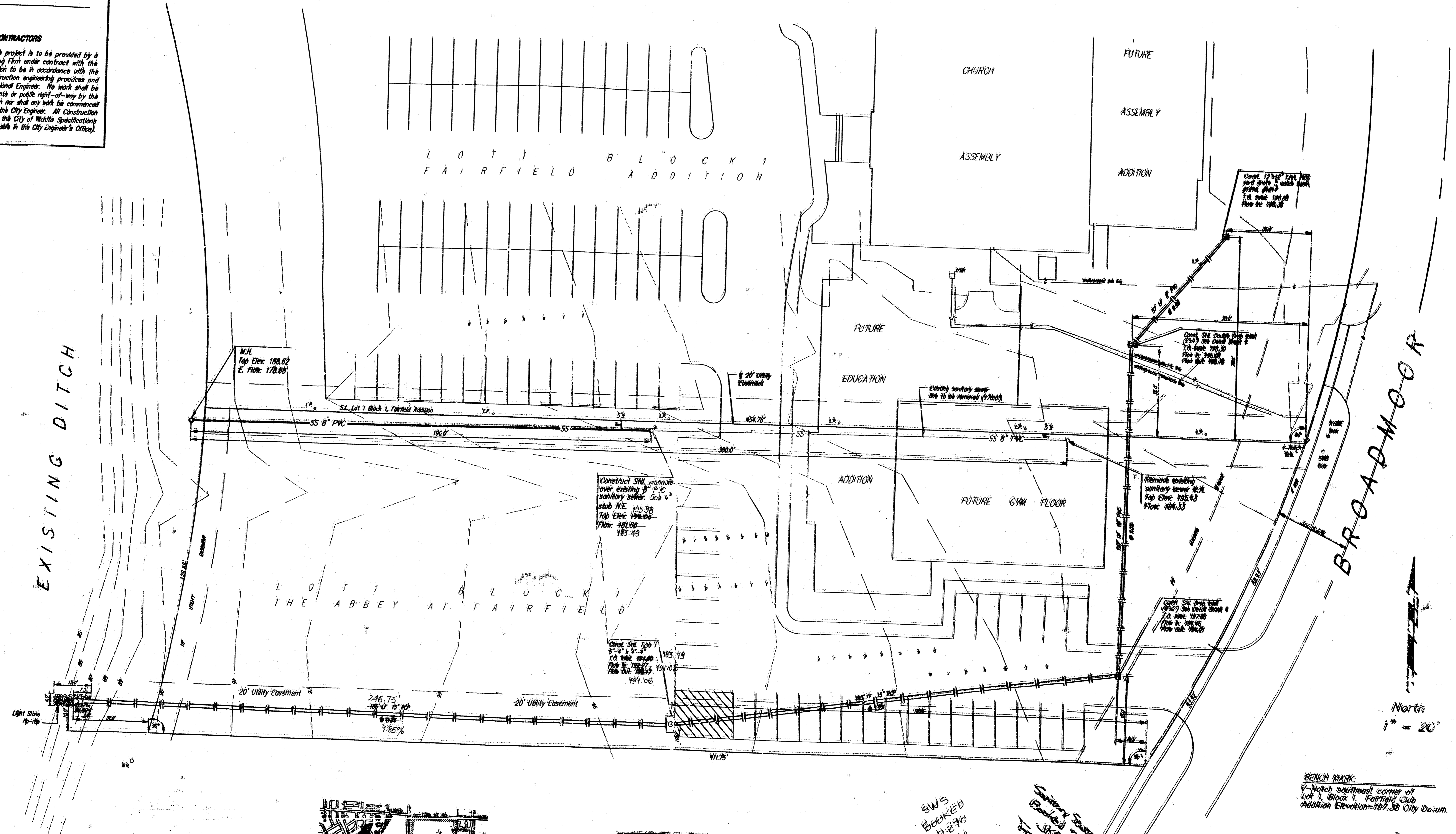
18-3-5

APPROVED AS NOTED
 BY CITY ENGINEER OF MOBILE

Sanitary Sewer VRH 716194
 Storm Sewer VRH 716194
 Driveway Approaches _____
 Water Mains _____
 Paving _____

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 Mobile standard construction engineering practices and certified by a Licensed Professional Engineer. No work shall be performed in indicated 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 Mobile Specifications and Standards (as they are available in the City Engineer's Office).



EXISTING DITCH

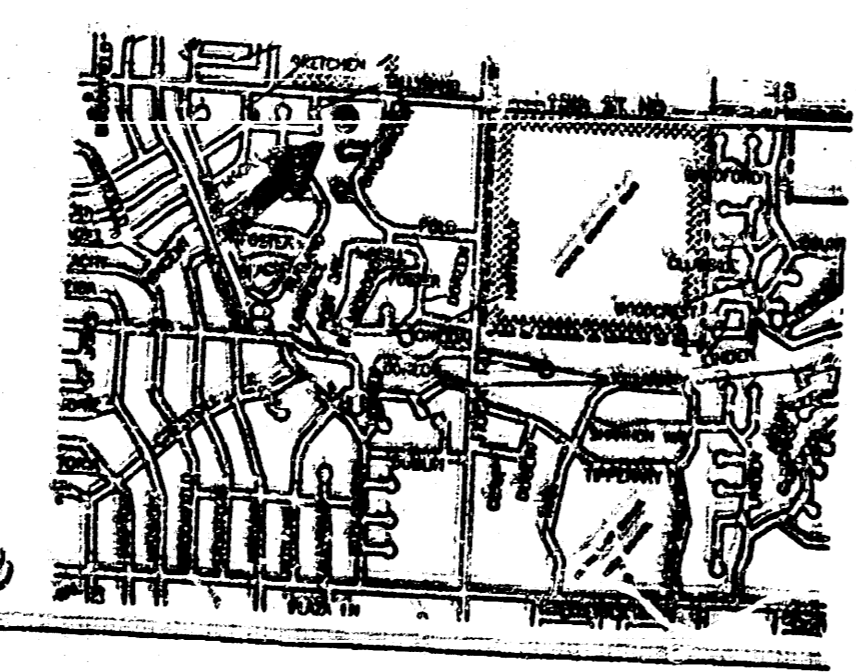
BROADMOOR

North
 1" = 20'

BENCH MARK:
 V-Notch southwest corner of
 Lot 1, Block 1, Fairfield Club
 Addition Elevation=197.38 City Datum.

As Built 10-18-94 RZ

LOCATION MAP
 Not to Scale



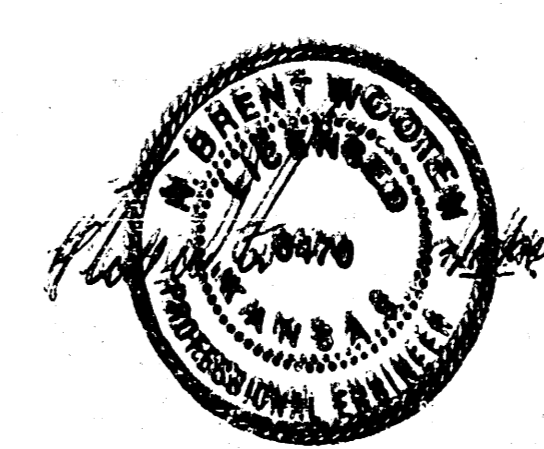
AREA	C	Q ₁	Q ₂
1	0.9	0.5	0.8
2	2.8	1.1	1.7
3	2.2	1.3	0.5
4	2.6	2.0	2.0

IRRAWADDI WASH: 0.8 acres

- CONTRACTOR NOTES:**
- All disturbed areas to be seeded with Rebel Fescue at a rate of 10 pounds per 1000 sq. ft. Fertilized with a 16-20-0 ratio at a rate of 4 pounds per 1000 sq. ft., and mulched according to city standards.
 - Verify and locate all existing utilities before beginning excavation of project.
 - Install seven (7) sq. yds. of Light Stone rip-rap.

BWS
 BECKENB
 D-2195
 MA

Sanitary Sewer
 Checked 2-22-95
 From His Files



STORM WATER/SEWER IMPROVEMENTS
ST. GEORGE CHURCH

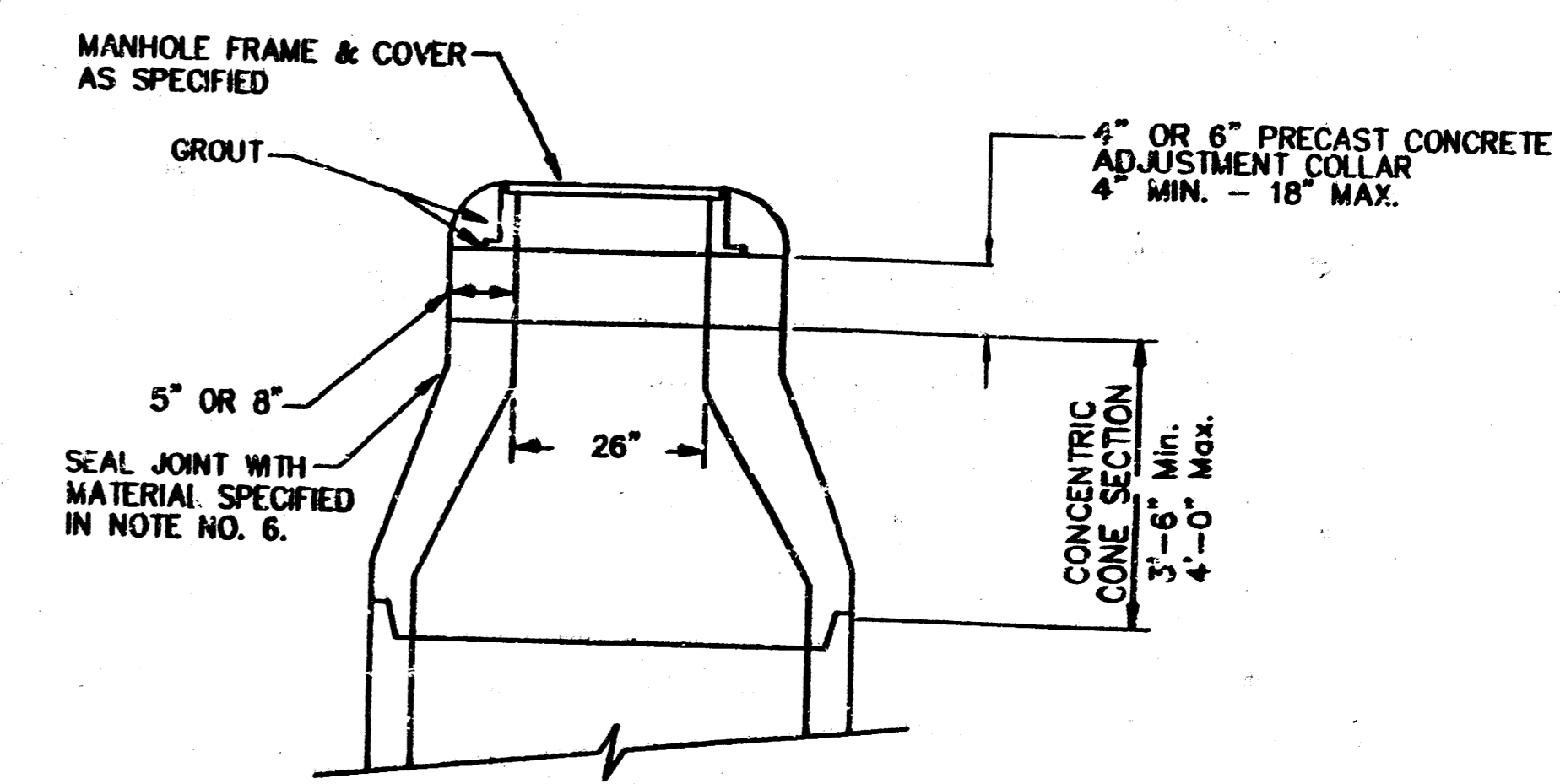
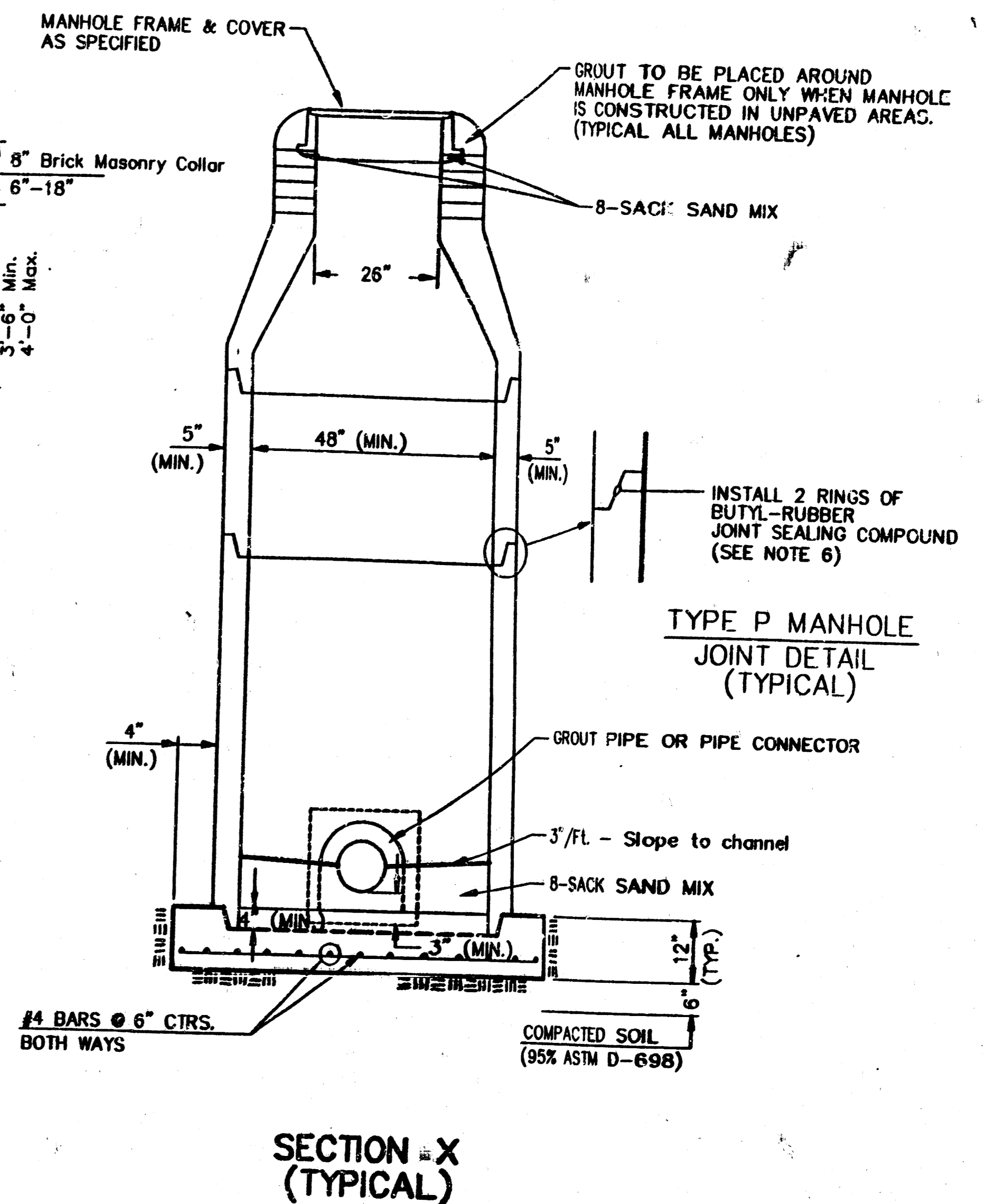
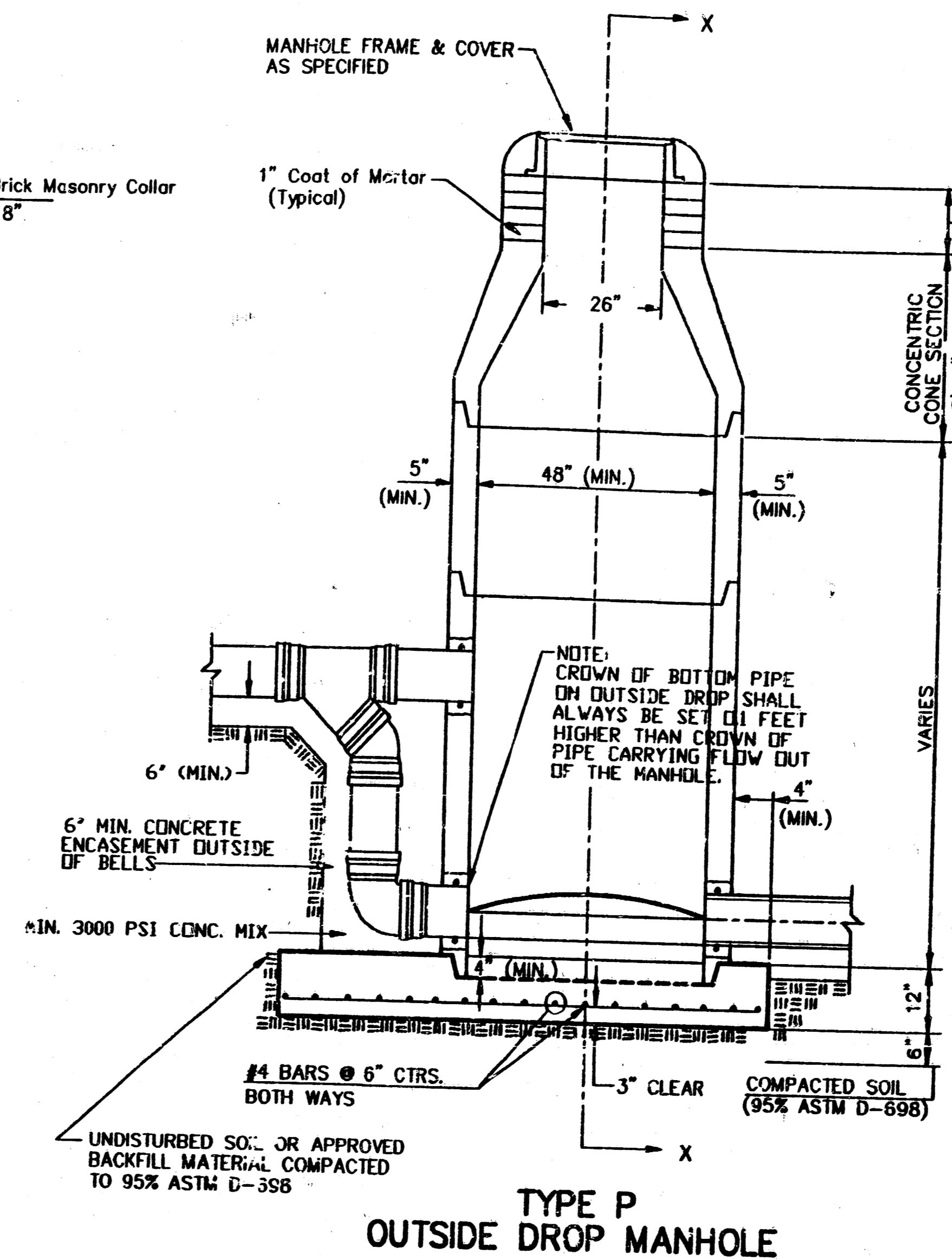
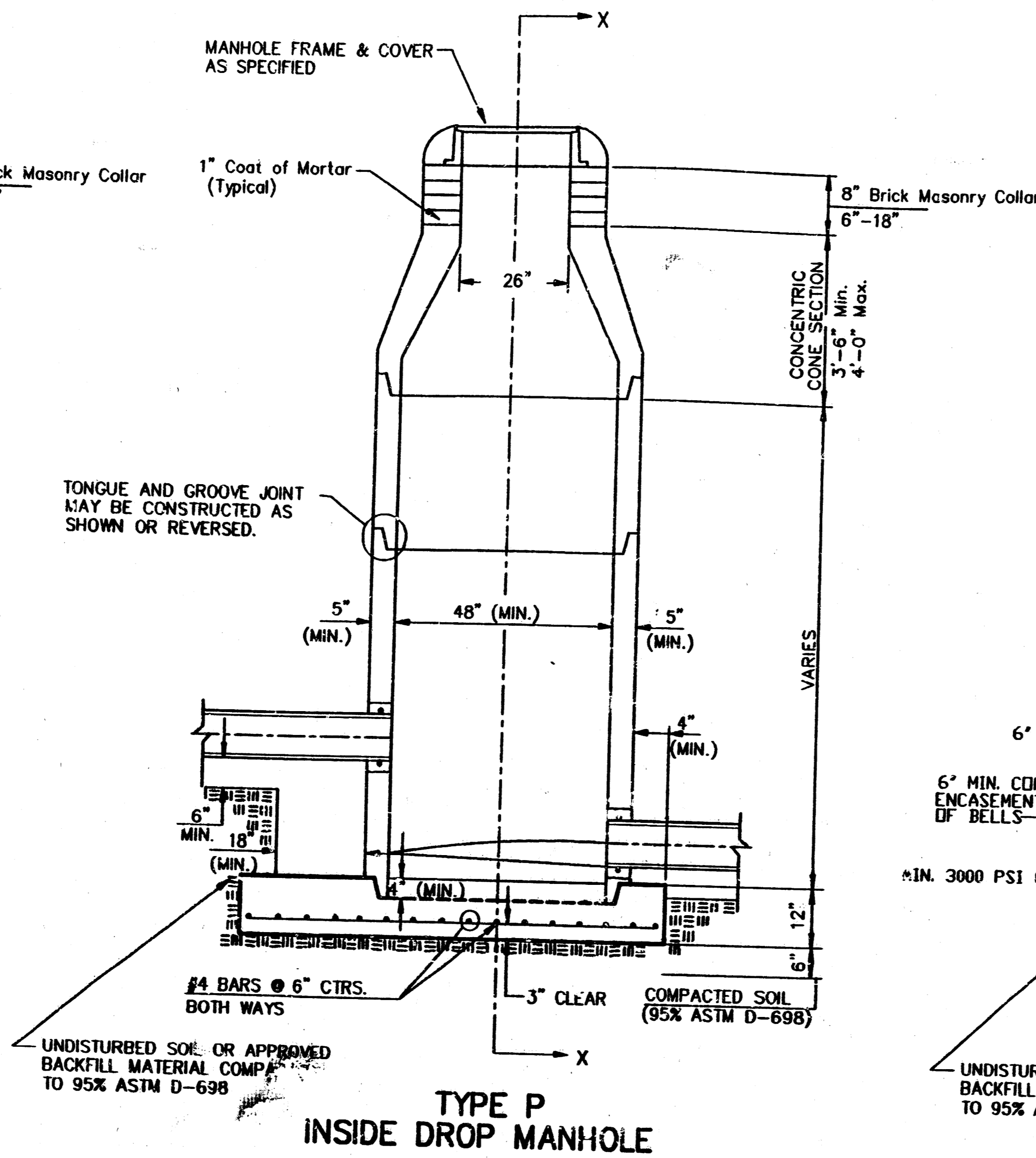
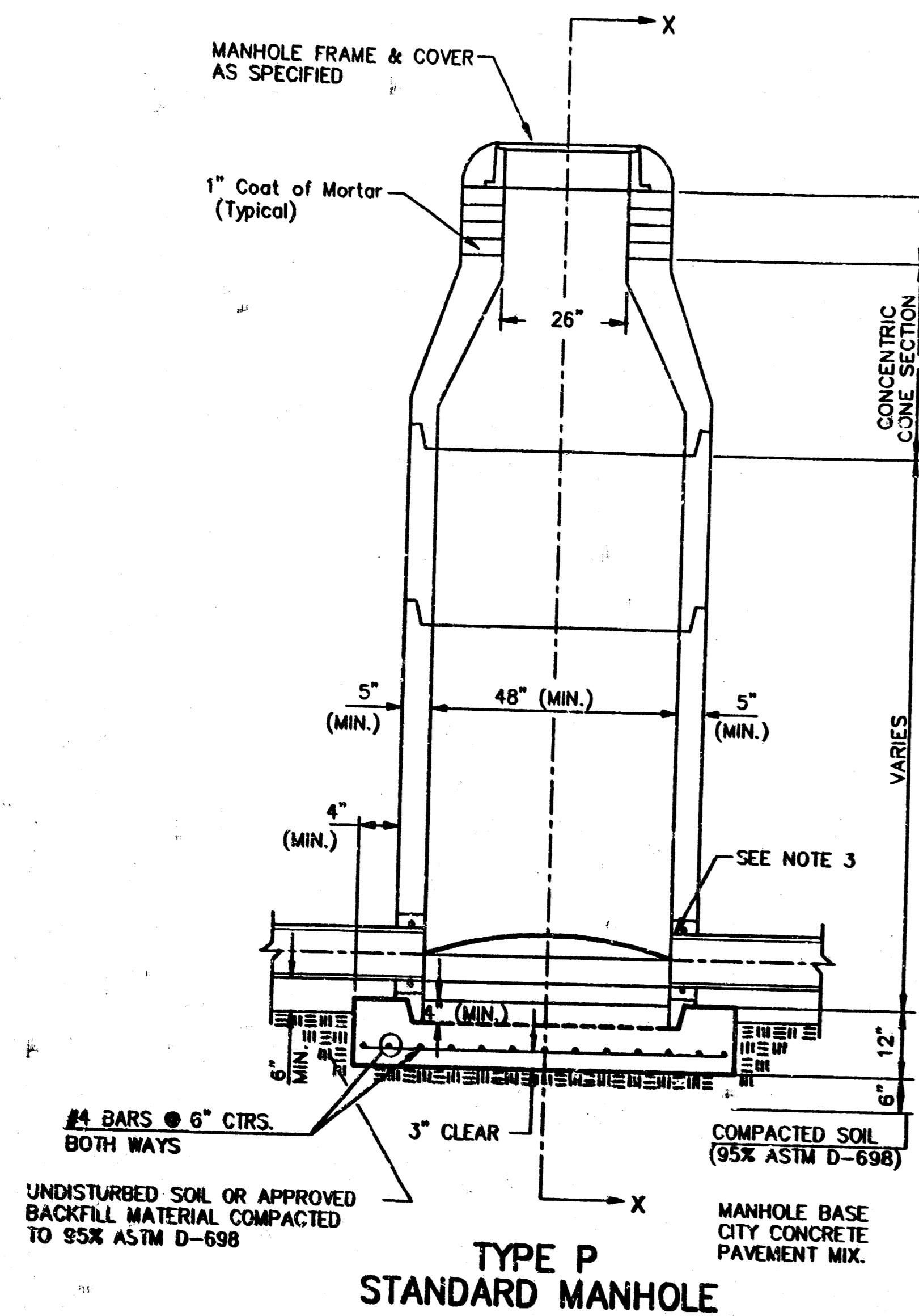
BAUGHMAN COMPANY P. A.
 ENGINEERING, SURVEYING & PLANNING
 316/262-1271 • 316 ELLIS & MOBILE, ALABAMA 36621

PROJECT NUMBER
475-SPS (607861)

DESIGN	DRAWN	CHECKED	DATE	SCALE
PJM/CLK	JUL	OTL	7-1-94	1"=20'

SHEET
 SP 3
 OF

SEWER APPURTENANCES DETAILS



GENERAL NOTES

- 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 SEWER PIPE SHALL BE SUPPORTED WITH CONCRETE ENCASEMENT A 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 THEMEX SERIES 66 H-BUILD EPOXYLINE, DRY THICKNESS OF 8 MILS (MIL).
 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 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 ENTRAPPING 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.

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 FURNISHING AND INSTALLING 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 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 CONSTRUCTION ON EXISTING MANHOLE.
13. THE FLOORS OF ALL MANHOLES SHALL BE SHAPED WITH FLOW CHANNELS SUCH THAT THE MANHOLES WILL BE SELF-CLEANING WITH FLOW CHANNELS 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 LAD 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.
14. PIPES INSTALLED WITHIN THE EXCAVATION MADE FOR THE MANHOLE SHALL BE GRADED 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.

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 FLOWING 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. 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.
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.

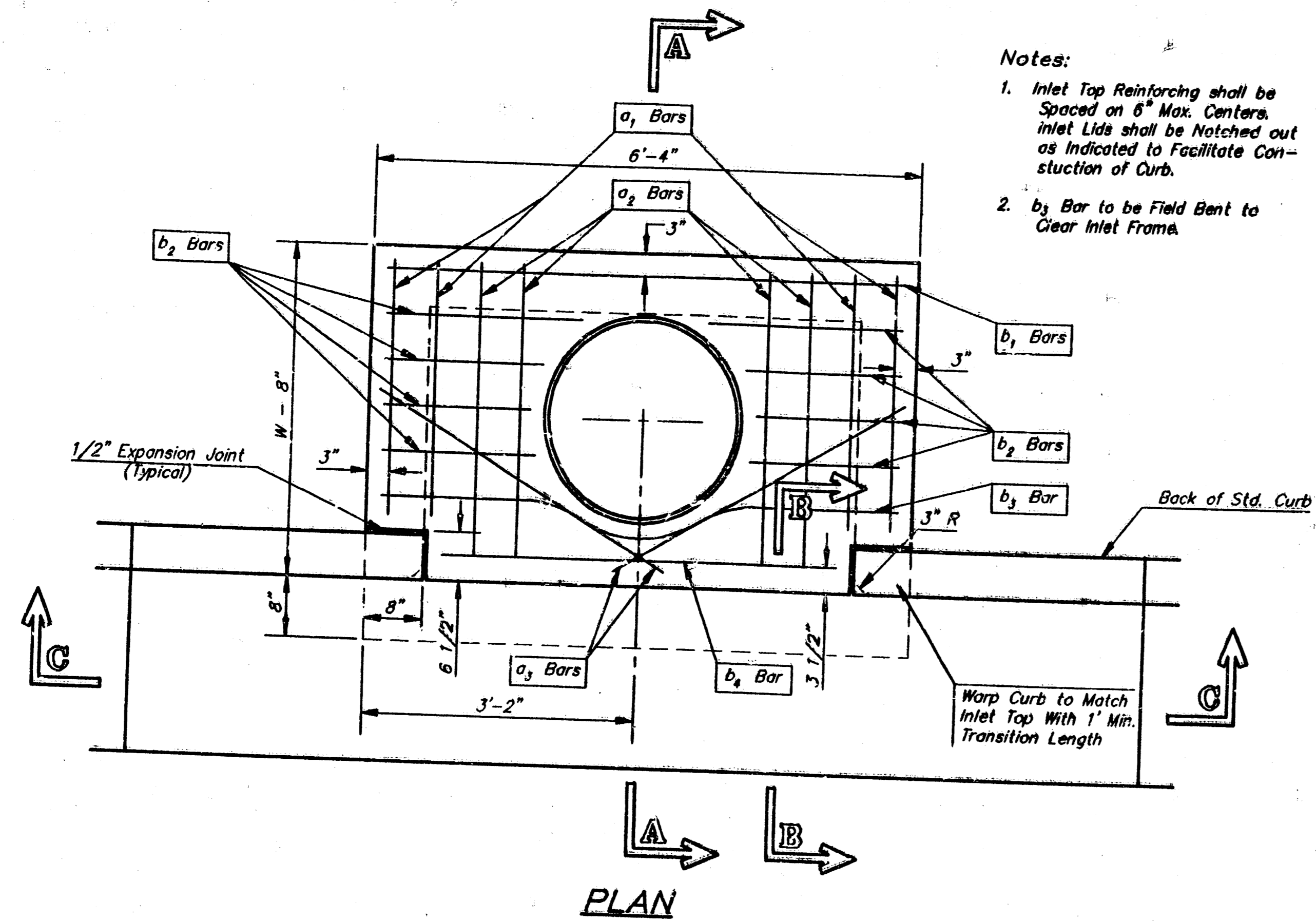
CITY OF WICHITA, KANSAS
STANDARD MANHOLE DETAILS
SEWER APPURTENANCES DETAILS

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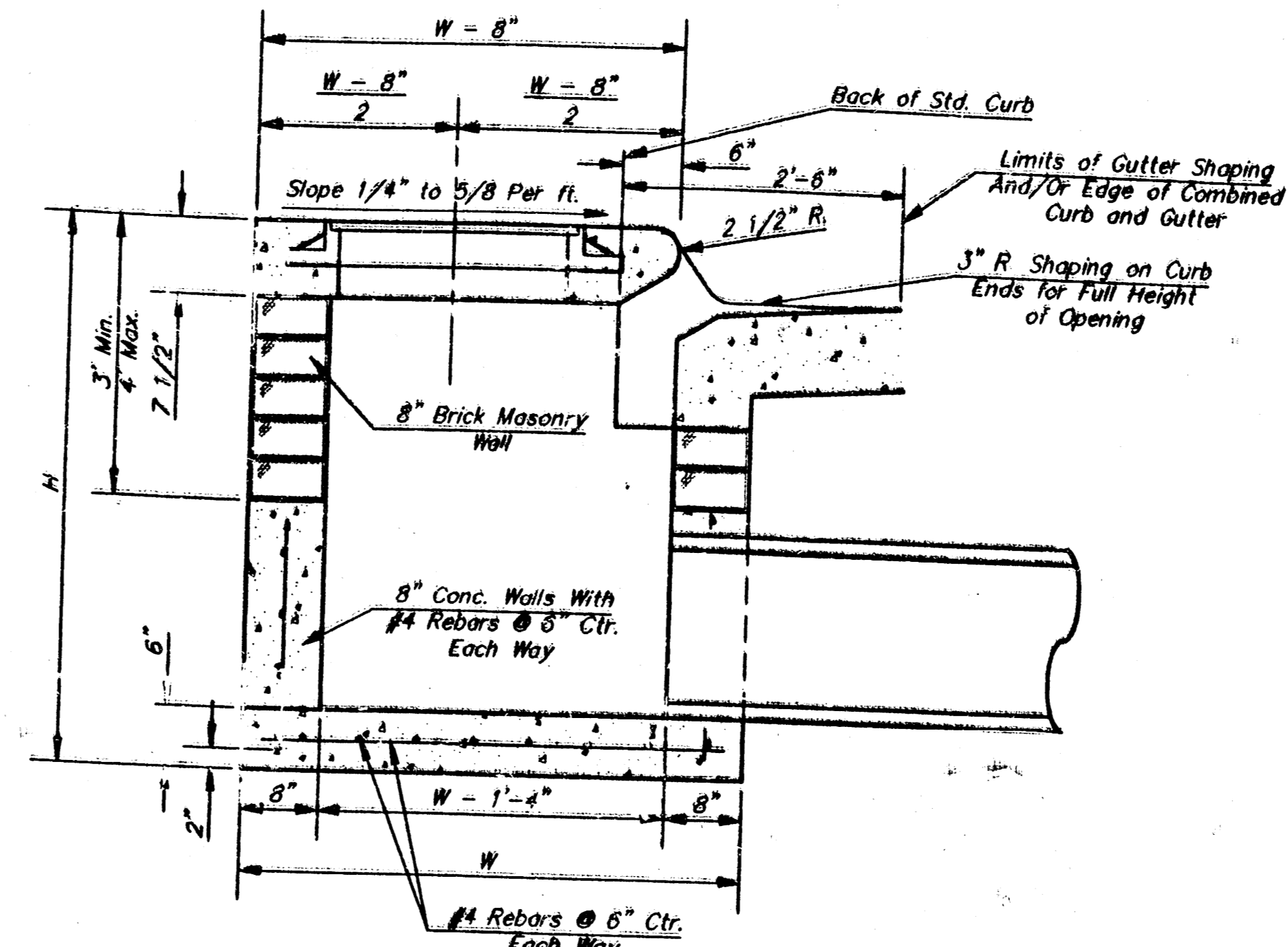
PROJECT NUMBER _____

DESIGN _____ DRAWN _____ APPROVED _____ DATE 6-29-94 SCALE NO SCALE

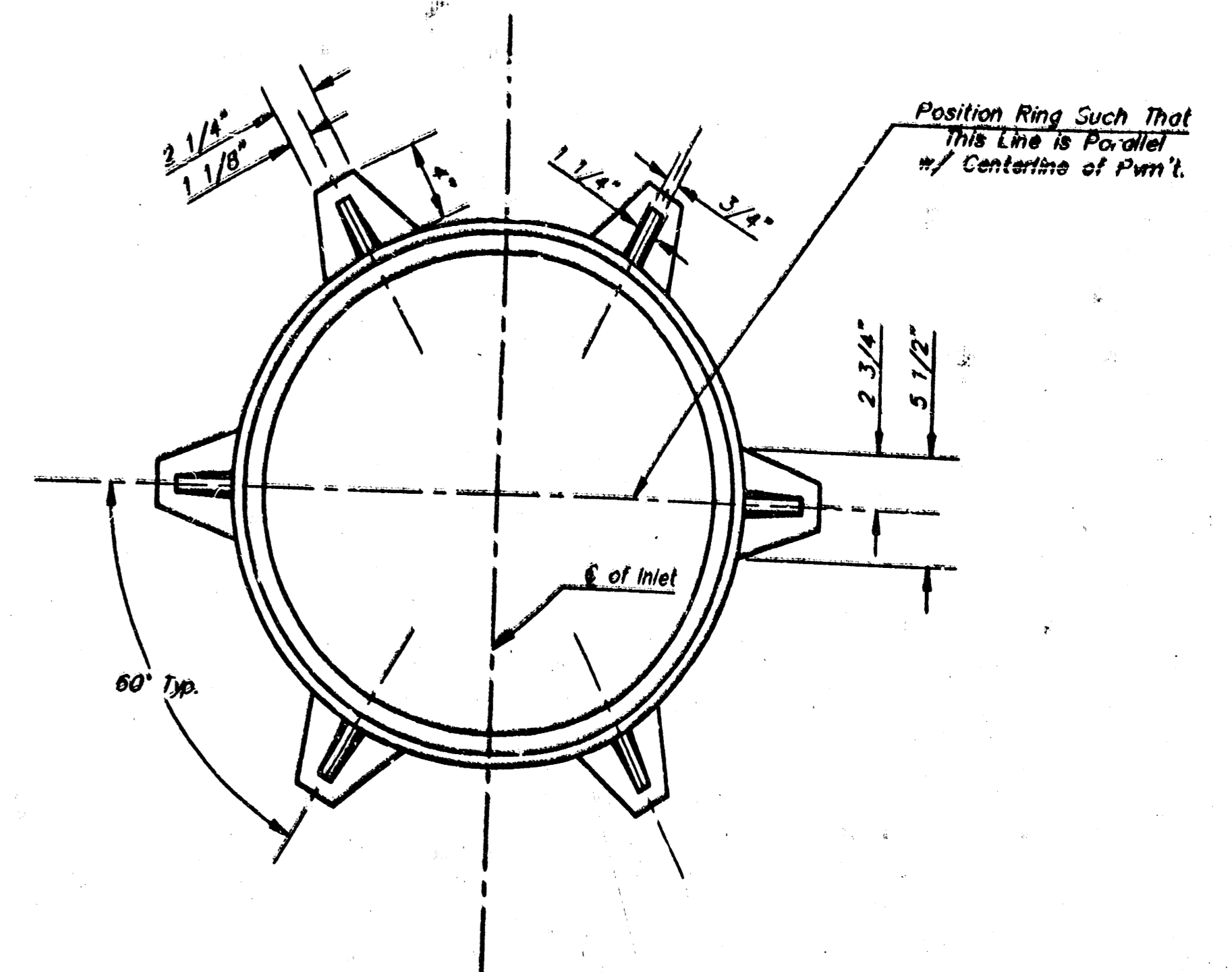
REV. _____ SHEET 8P OF 14



Notes:
 1. Inlet Top Reinforcing shall be Spaced on 6" Max. Centers. Inlet Lids shall be Notched out as Indicated to Facilitate Construction of Curb.
 2. b₂ Bar to be Field Bent to Clear Inlet Frame.

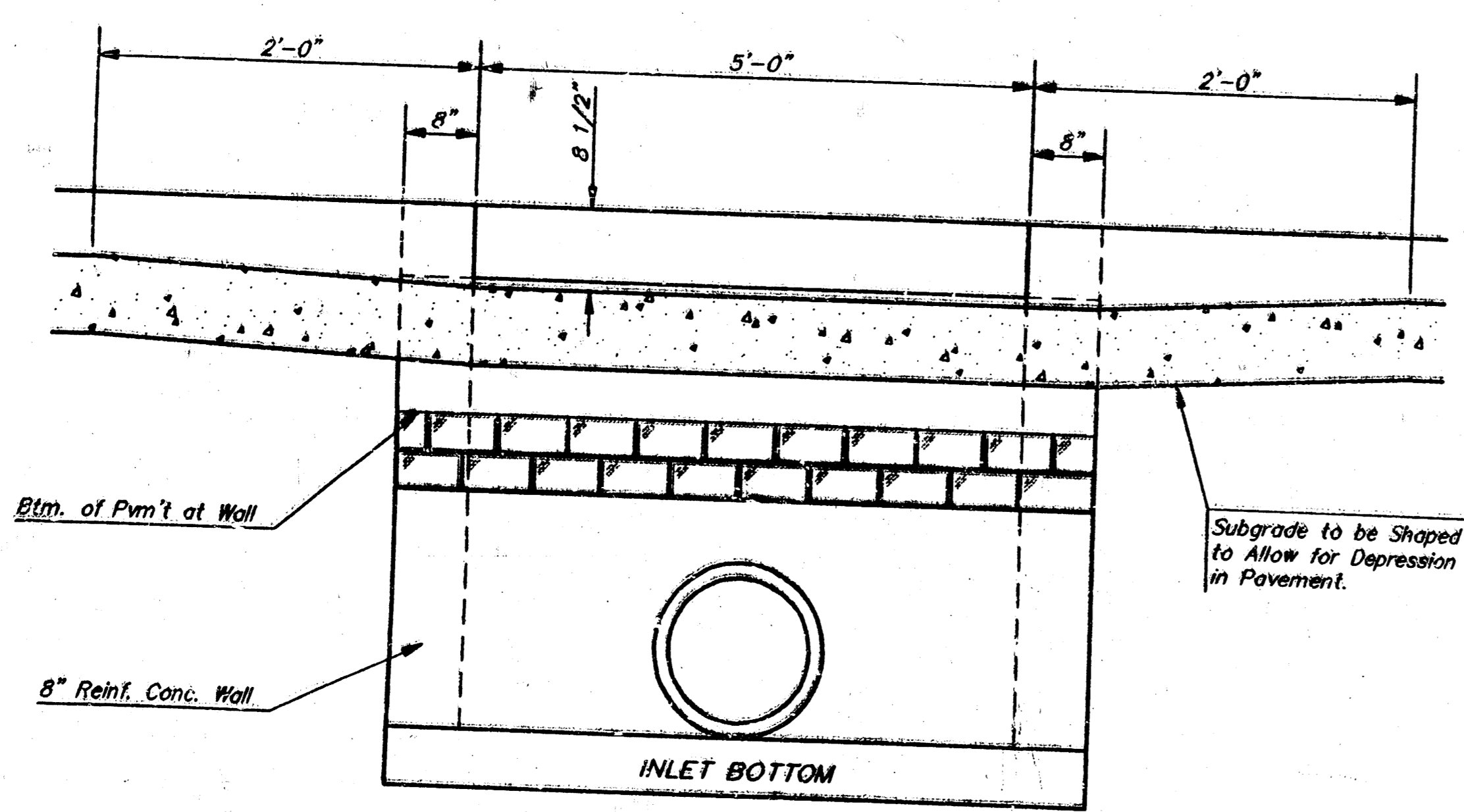


SECTION A-A

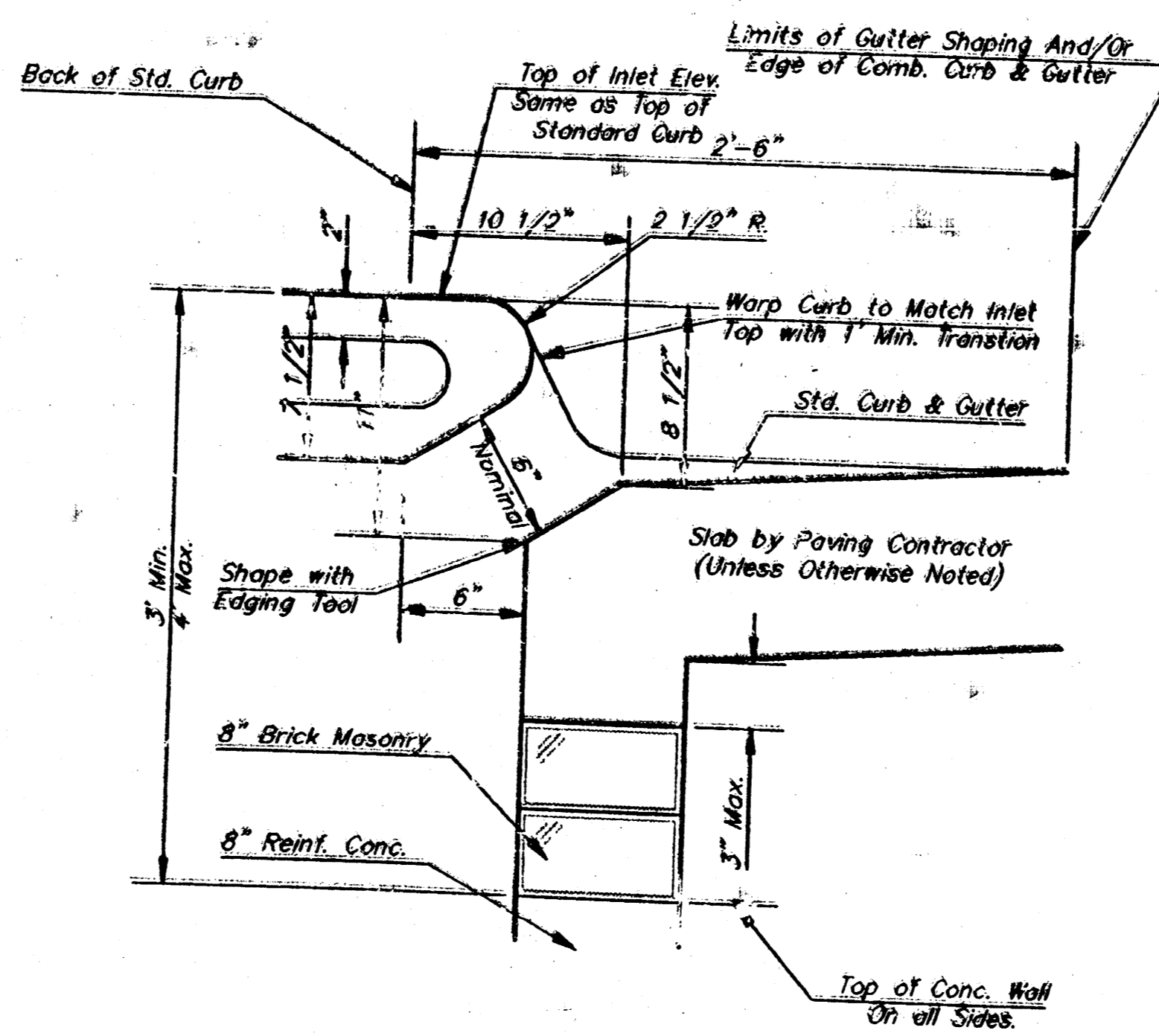


MANHOLE RING AND COVER

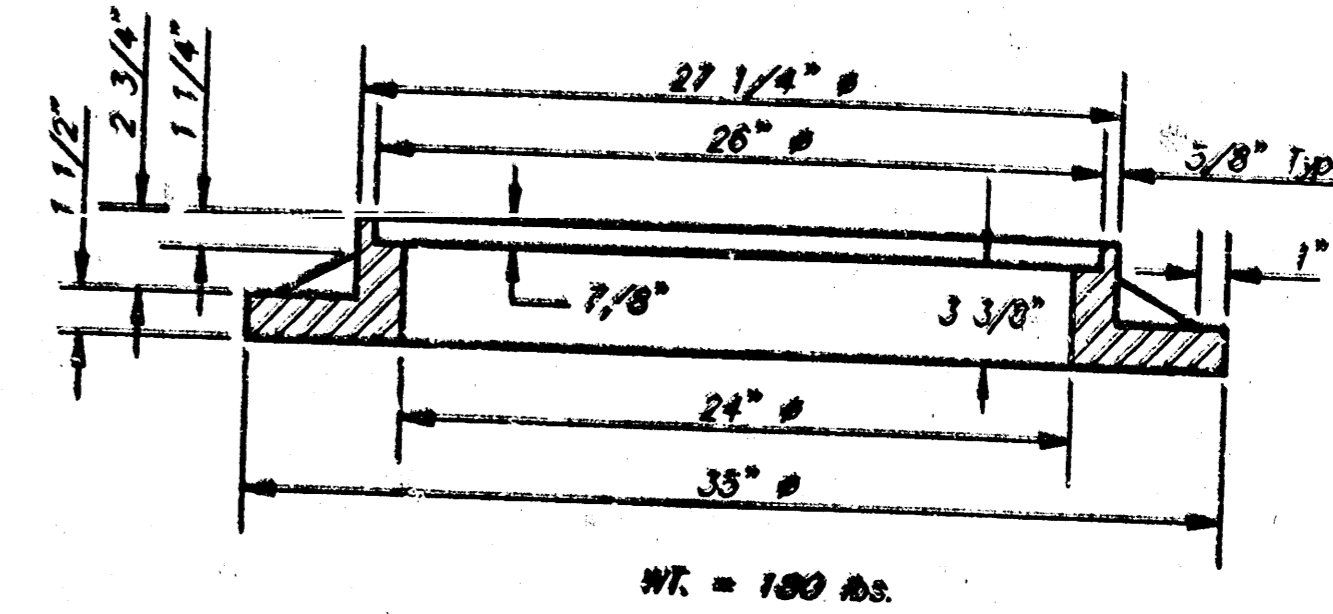
Also City of Wichita Standard Manhole Ring and Cover Detail Sheet for Cover Details to be Used with Inlet Frame.



SECTION C-C



SECTION B-B



BENDING DIAGRAM

STEEL SCHEDULE

BAR NUMBER	a ₁	a ₂	a ₃	b ₁				b ₂	b ₃	b ₄	WT. Lbs.
SIZE	#4	#4	#4	#4	#4	#4	#4	#4	#4	#6	
W-4'-4"	5'-7"	6'-7"	4'-0"	6'-1"	-	-	-	1'-9"	6'-2"	4'-8"	60±
W-5'-4"	7'-7"	8'-7"	5'-0"	6'-1"	-	-	-	1'-9"	6'-2"	4'-8"	81±
W-6'-4"	9'-7"	10'-7"	6'-0"	-	-	6'-1"	-	1'-9"	6'-2"	4'-8"	101±
W-7'-4"	11'-7"	12'-7"	7'-0"	-	-	6'-1"	-	1'-9"	6'-2"	4'-8"	121±
W-8'-4"	13'-7"	14'-7"	8'-0"	-	-	6'-1"	-	1'-9"	6'-2"	4'-8"	141±

Note: a₃ Bars to be Placed Approx. 2" Below Top of Inlet Cover.

STANDARD CURB INLET PRECAST TOPS

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

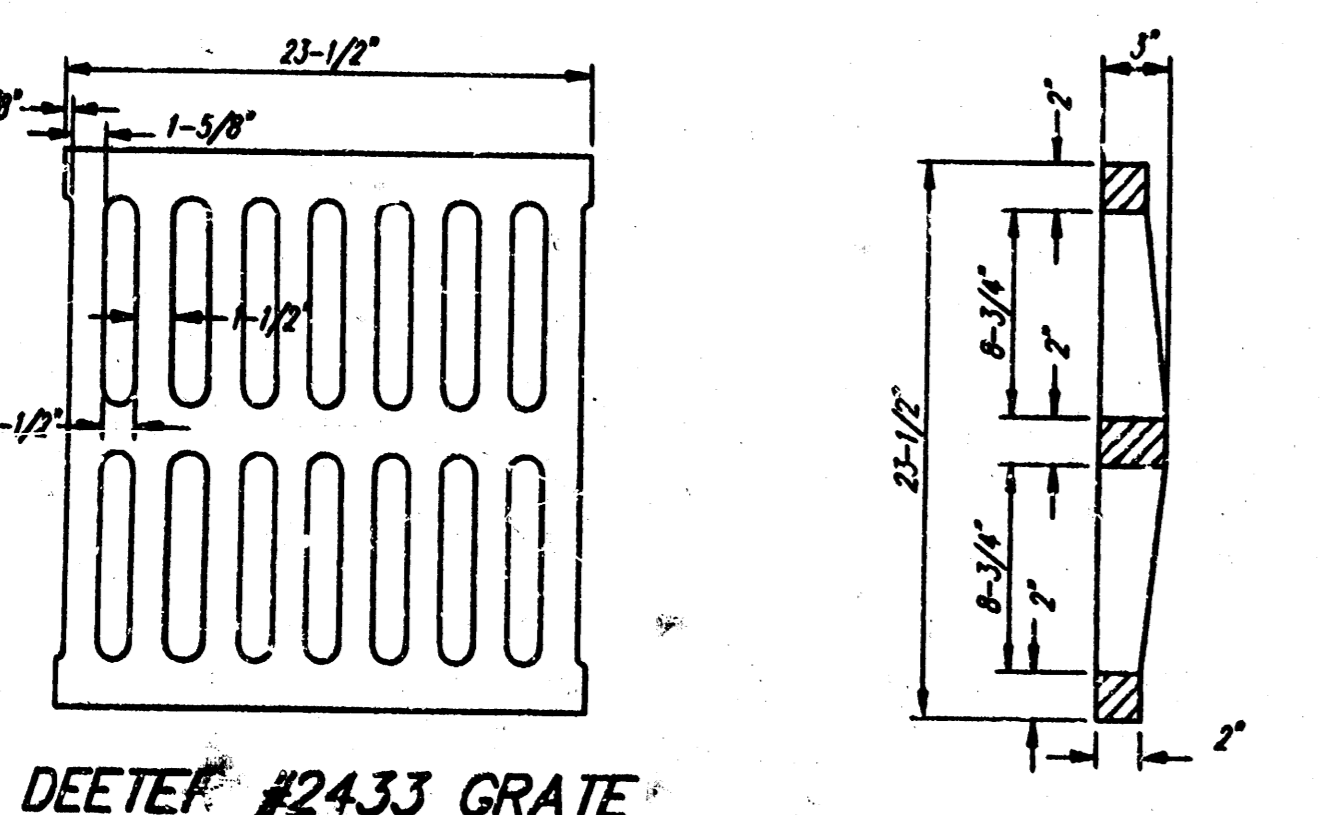
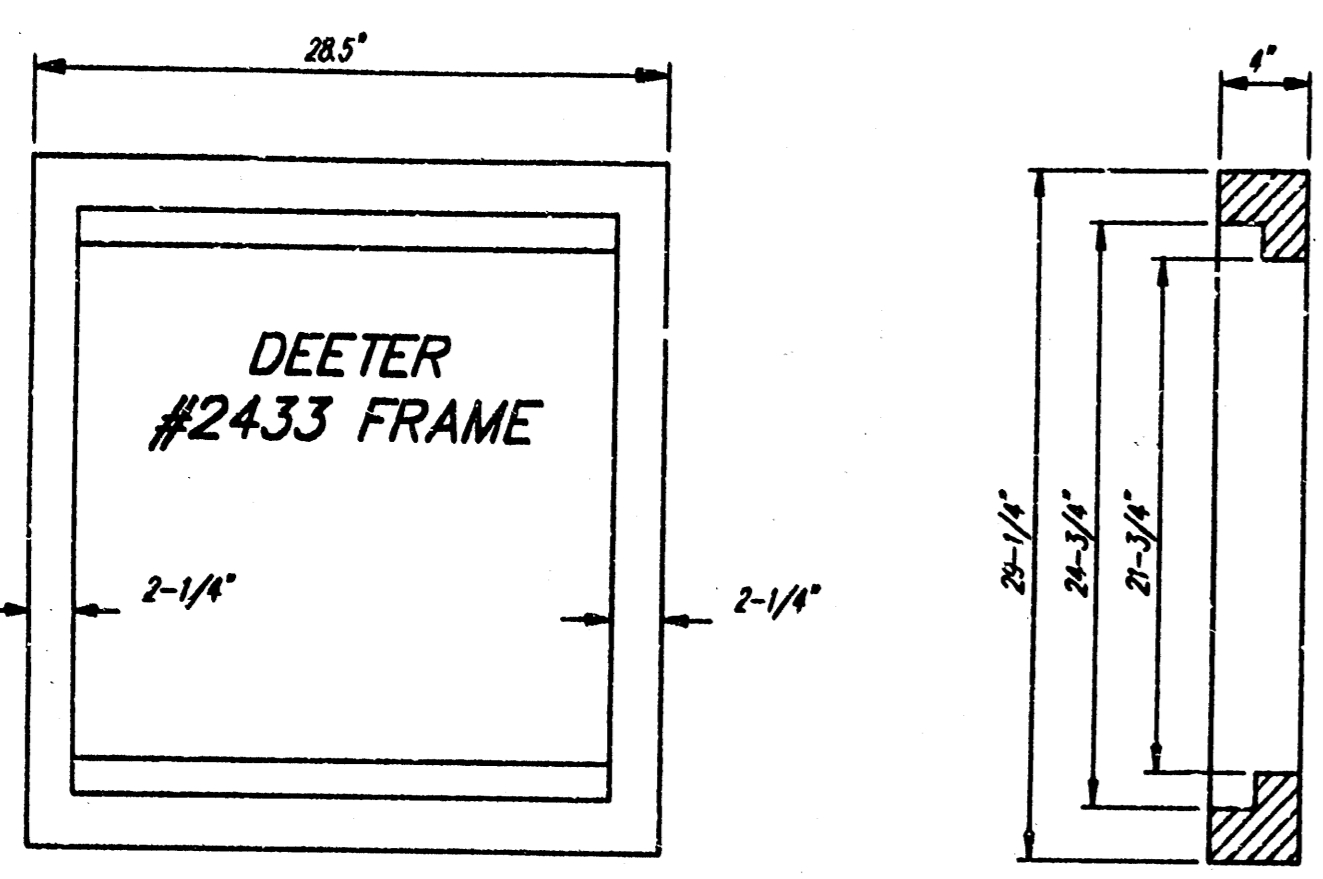
GENERAL NOTES

- 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.
- 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 W-7'-0" or less.
- Inlet invert shall be shaped with 3 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.

CITY OF WICHITA STANDARD TYPE 1 CURB INLET DETAILS
 INLET OPENING = 6" x 10'-0"

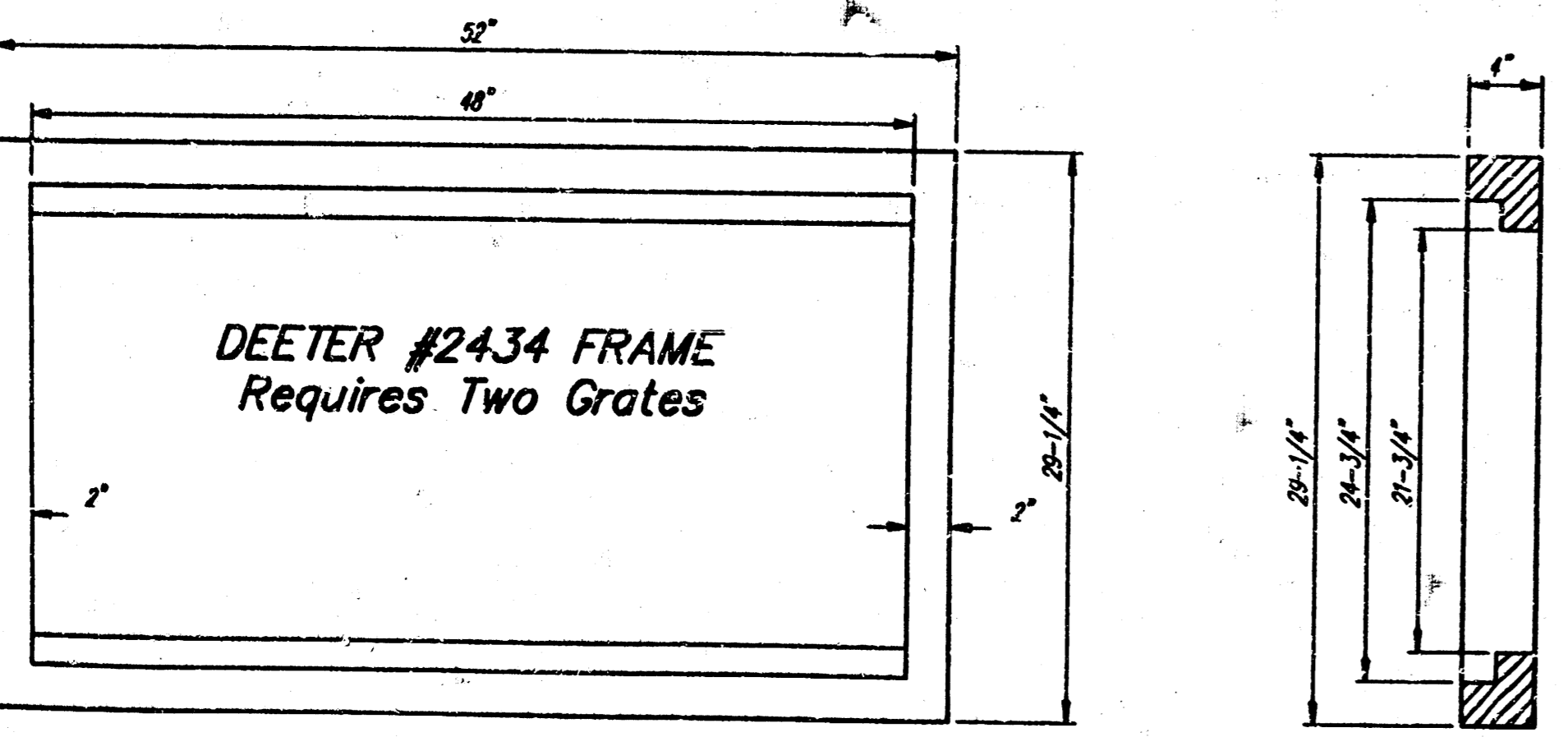
PROJECT NUMBER: _____ SHEET OF SP. 6 / 6

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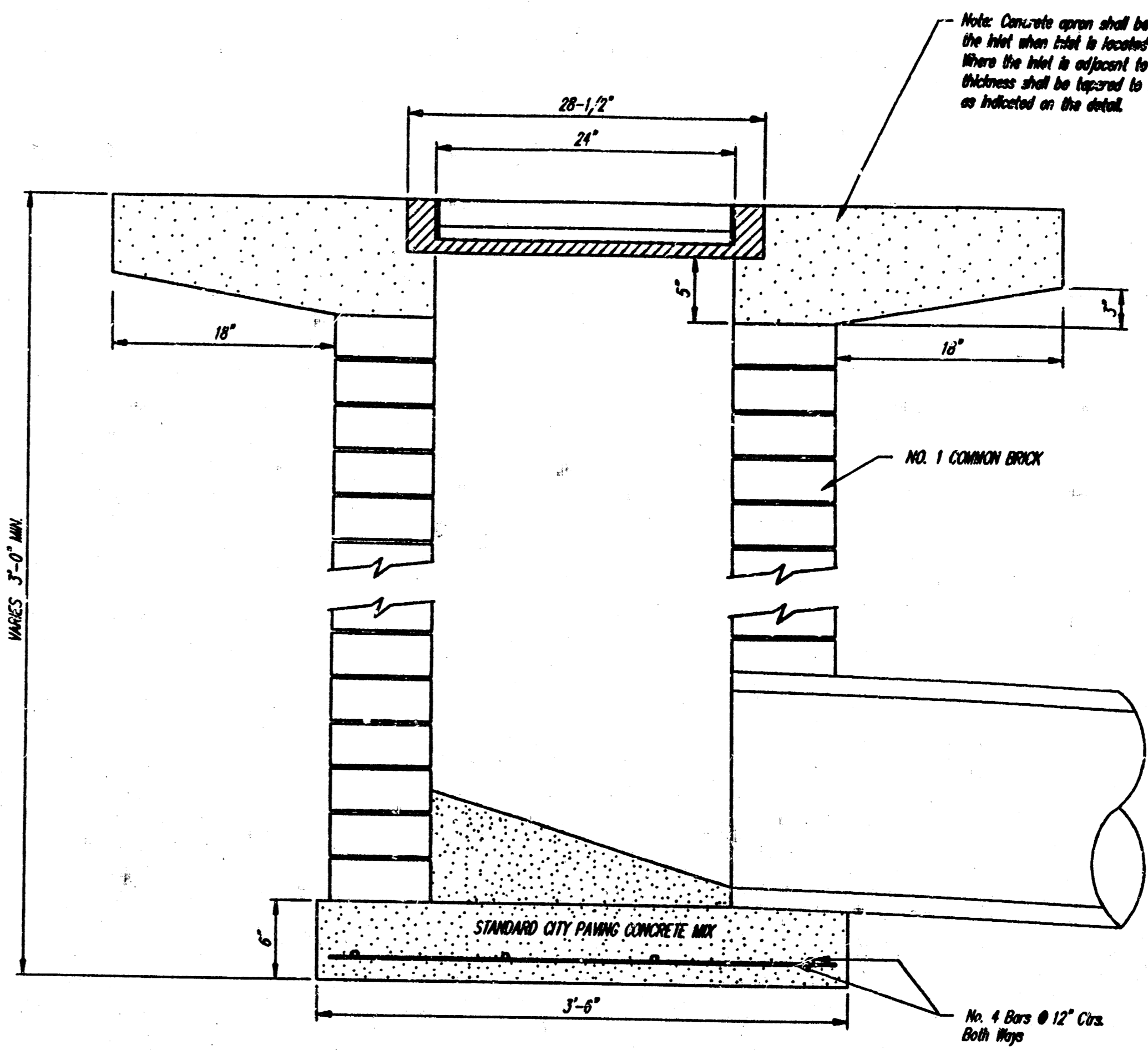
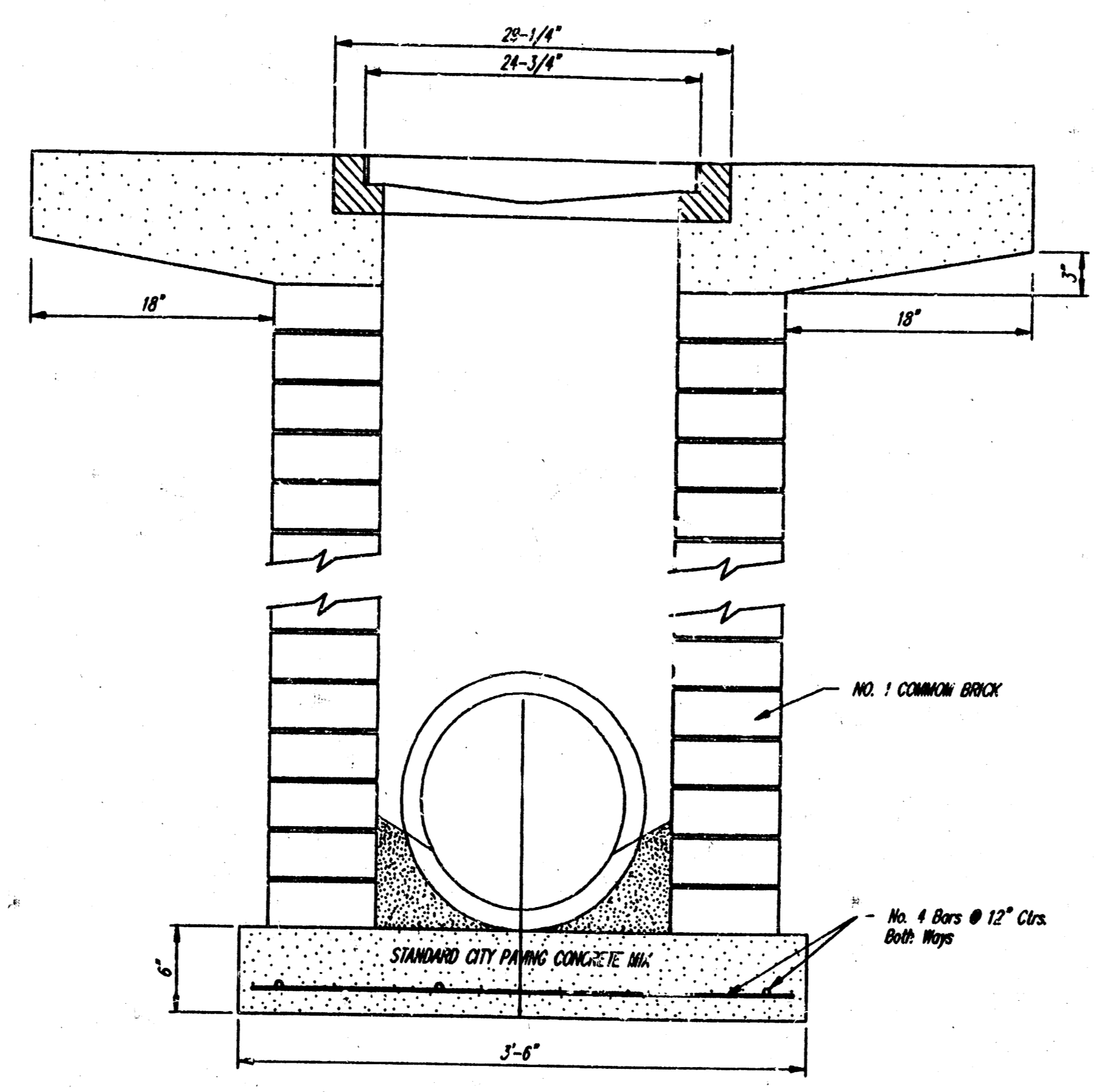


DEETER #2433 GRATE
24" x 24" Frame and Grate Detail

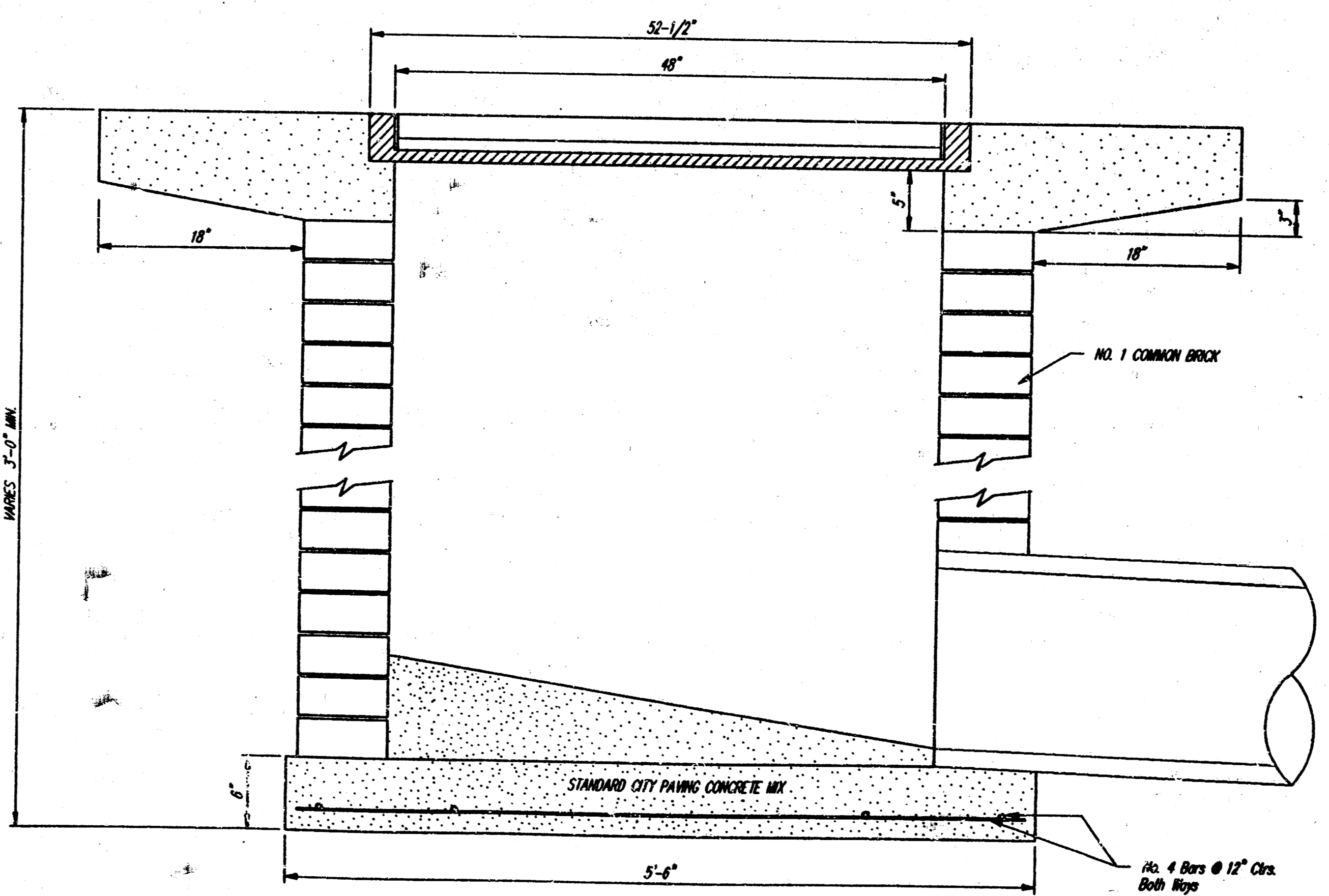
NOTE: Grates shall be imprinted on the top surface with "CITY OF WICHITA" using letters at least 1" in height. Other marking methods may be approved by the engineer.



DEETER #2434 FRAME
Requires Two Grates
Double 24" x 24" Frame Detail



Note: Concrete curb shall be constructed around the inlet when inlet is located in an exposed area. Where the inlet is adjacent to pavement, the pavement thickness shall be tapered to the inlet in 18 inches as indicated on the sheet.



DROP INLET DETAILS
M.E. Lindebak, City Engineer
City of Wichita, Kansas

PROJECT
ST. GEORGE CHURCH IMPROVEMENTS

6-29-94

SP: 6