1. FOR SQUARE OR RECTANGULAR PRECAST DRAINAGE STRUCTURES, EITHER DEFORMED OR SMOOTH WELDED WIRE FABRIC MAY BE USED PROVIDED:

a) THE SMOOTH WELDED WIRE FABRIC SHALL COMPLY WITH ASTM A-185, AND DEFORMED WELDED WIRE FABRIC SHALL COMPLY WITH ASTM A-497.

b) WIDTH AND LENGHT OF THE UNIT IS FOUR TIMES THE SPACING OF THE CROSS WIRES.

c) WIRE FABRIC SHALL BE CONTINUOUS AROUND THE BOX, SPLICED AT QUARTER POINT(S) WITH OVERLAP OF NOT LESS THAN THE SPACING OF THE CROSS WIRES PLUS TWO INCHES.

2. HORIZONTAL STEEL IN THE WALLS OF RECTANGLES STRUCTURES SHALL BE LAPPED A MINIMUM OF 24 BAR DIAMETER AT CORNERS.

3. WELDING OF SPLICES AND LAPS IS PERMITTED. THE REQUIREMENTS AND RESTRICTIONS PLACED ON WELDING IN AASHTO M-259 SHALL APPLY.

4. REBAR STRAIGHT END EMBEDDMENT OR PERIPHERAL REINFORCEMENT MAY BE USED IN LIEU OF ACI STANDARD HOOKS FOR TOP AND BOTTOM SLABS EXCEPT WHEN HOOKS ARE SPECIFICALLY CALLED FOR IN PLANS OR STANDARD DRAWINGS.

5. CONCRETE WHICH MEETS THE REQUIREMENTS OF ASTM C-478 SHALL BE USED FOR STRUCTURES CONSTRUCTED TO THESE DETAILS.

6. REINFORCEMENT CAN BE EITHER DEFORMED BAR REINFORCEMENT OR WELDED WIRE FABRIC. BAR REINFORCEMENT OTHER THAN 40 KSI MAY BE USED, HOWEVER ONLY TWO GRADES ARE RECOGNIZED: GRADE 40 AND GRADE 60. WELDED WIRE FABRIC, INCLUDING SMOOTH AND DEFORMED WELDED WIRE FABRIC, WILL BE RECOGNIZED AS HAVING A DESIGN STRENGHT OF 65 KSI AND 70 KSI RESPECTIVELY. THE AREA OF REINFORCEMENT REQUIRED MAY BE REDUCED IN ACCORDANCE WITH THE EQUIVALENT STEEL AREA TABLE PROVIDED. FOR BARS AND SPACING NOT GIVEN, THE STEEL AREA REQUIRED CAN BE DETERMINED BY THE FOLLOWING EQUATIONS:

GRADE 60 STEEL AREA = AS 60 = 40K/60K X AS 40

WELDED WIRE FABRIC STEEL AREA = AS 65 = 40K/65K X AS 40

IN NO CASE WILL FABRIC WITH WIRES SMALLER THAN W3.1 OR SPACING GREATER THAN 8" BE PERMITTED. BAR REINFORCEMENT SHALL SHOW THE MINIMUM YIELD DESIGNATION GRADE MARK OF EITHER THE NUMBER 60 OR ONE (1) GRADE MARK LINE TO BE ACCEPTABLE AT THE HIGHER VALUE. MAXIMUM BAR SPACING SHALL NOT BE GREATER THAN THREE (3) TIMES THE WALL THICKNESS OR 12".

EQUIVALENT STEEL AREA TABLE

GRADE 40 REINFORCING BAR		EQUIVALENT GRADE 60 REINFORCING BAR		EQUIVALENT 65 KSI SMOOTH WELDED WIRE FABRIC		EQUIVALENT 70 KSI DEFORMED WELDED WIRE FABRIC	
Bar Size & Spacing	Steel Area (in^2/ft)	Bar Size & Spacing	Min Steel Area	Style Designation	Min Steel Area	Style Designation	Min Steel Area
#4 @ 12"CCEW	0.20	#3 @ 9 1/2" CCEW	.1333	3"x3"-W3.1xW3.1 or 4"x4"-W4.5xW4.5 or 6"x6"-W6.5xW6.5	.1230	3"x3"-D4.3xD4.3 or 4"x4"-D5.7xD5.7 or 6"x6"-D8.6xD8.6	0.1714
#4 @ 9" CCEW	0.20	#3 @ 13 1/2" CCEW or #3 @ 7" CCEW	.1778	3"x3"-W3.1xW3.1 or 4"x4"-W5.5xW5.5 or 6"x6"-W8.5xW8.5	.1641	3"x3"-D5.7xD5.7 or 4"x4"-D7.6xD7.6 or 6"x6"-D11.4xD11.4	0.2289
#6 @ 6" CCEW	0.20	#3 @ 9 1/2" CCEW or #6 @ 9" CCEW	.5867	4"x4"-W20xW20 or 6"x6"-W30xW30	.5415	3"x3"-D15.6xD15.6 or 4"x4"-D20.9xD20.9 or 6"x6"-D31.3xD31.3	0.6257
#7 @ 6" CCEW	0.20	#3 @ 6 1/2" CCEW or #7 @ 9" CCEW	.80	4"x4"-W26xW26	.7385	3"x3"-D31.3xD31.3 or 4"x4"-D41.7xD41.7	1.2514

NOTES FOR MANHOLES & INLETS

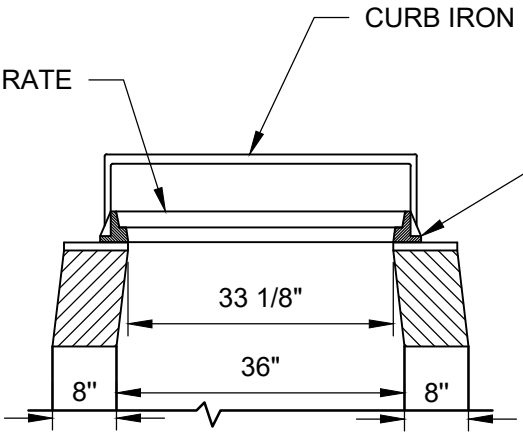
CITY OF JACKSONVILLE STANDARD

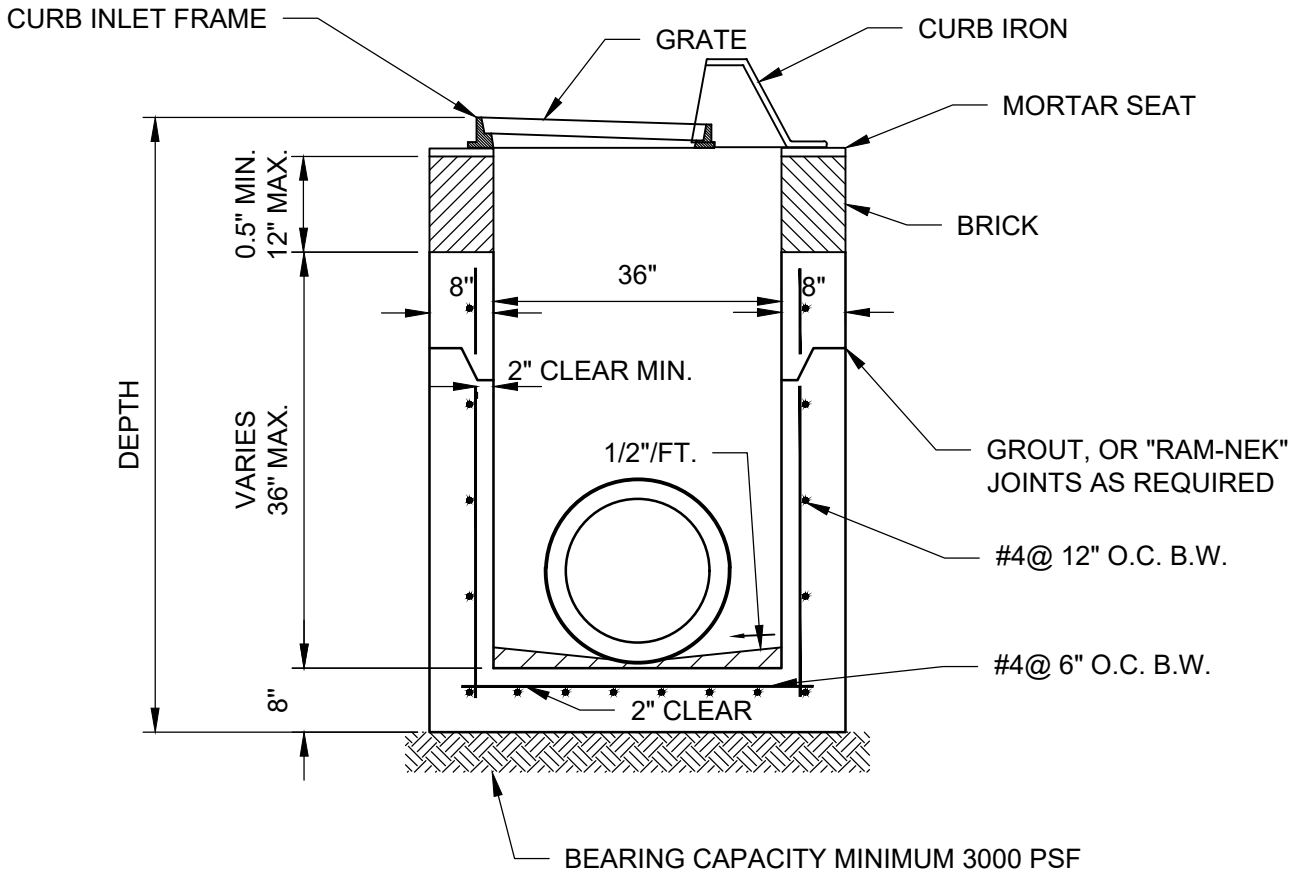
N.T.S.

PLATE D-107

DATE DRAWN 07/12/79

REVISED DATE 8-19-24



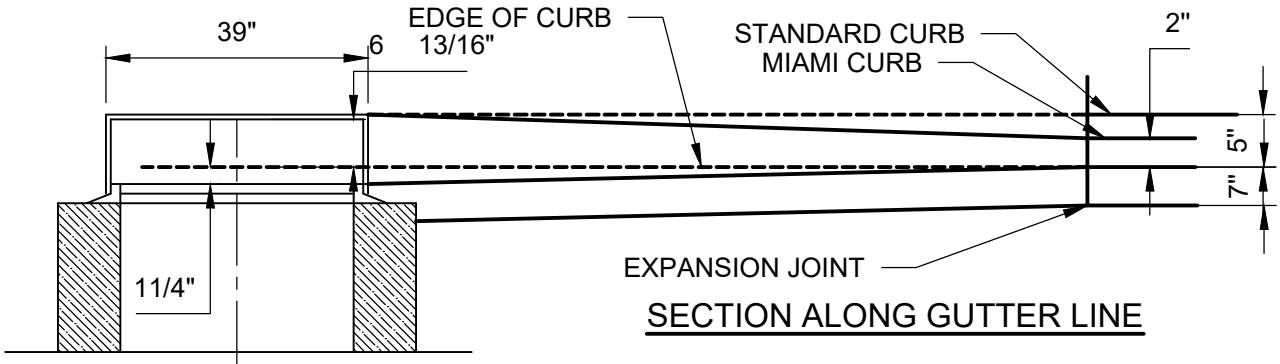


PIPE MUST NOT BE IN CONSTRUCTION JOINT

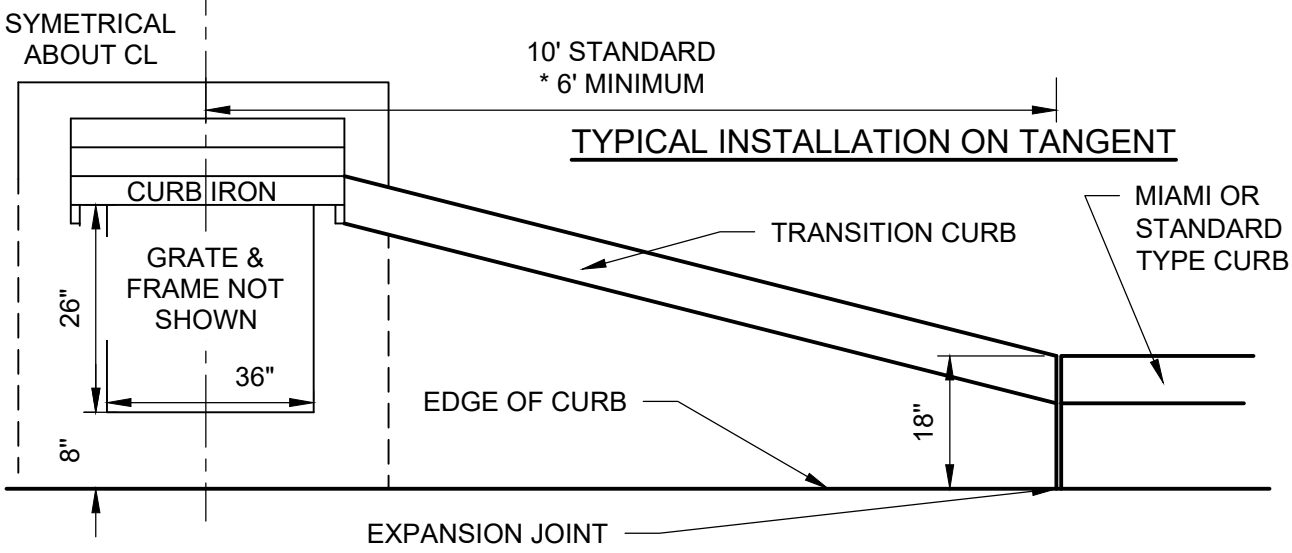
PIPES SHALL BE FLUSH WITH INSIDE WALL

NOTE: CONSTRUCT PRECAST STRUCTURES WITH REINFORCED CONCRETE ONLY.
DESIGN STRENGTH 4000 PSI

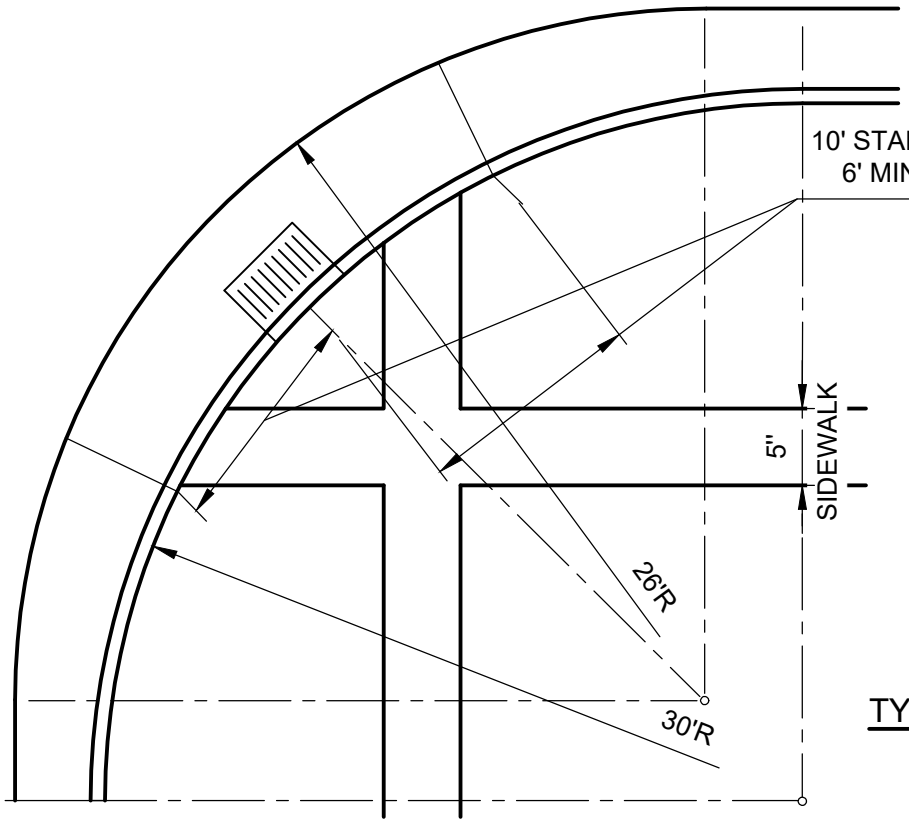
CURB INLET	CITY OF JACKSONVILLE STANDARD	N.T.S.	PLATE D-201
		DATE DRAWN	2-10-79
		REVISED DATE	8-19-24



SECTION ALONG GUTTER LINE



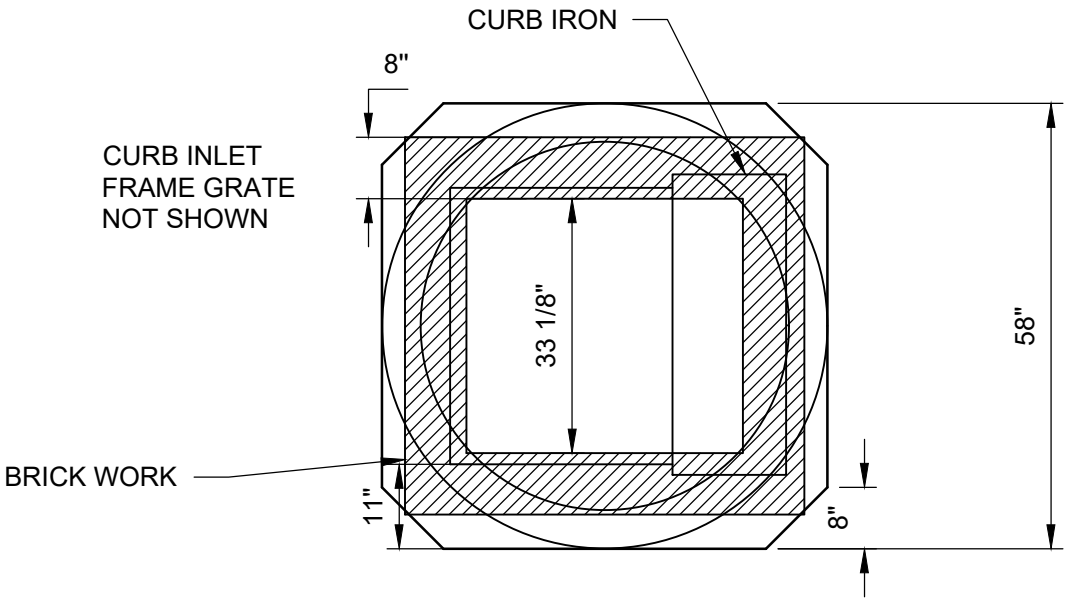
TYPICAL INSTALLATION ON TANGENT



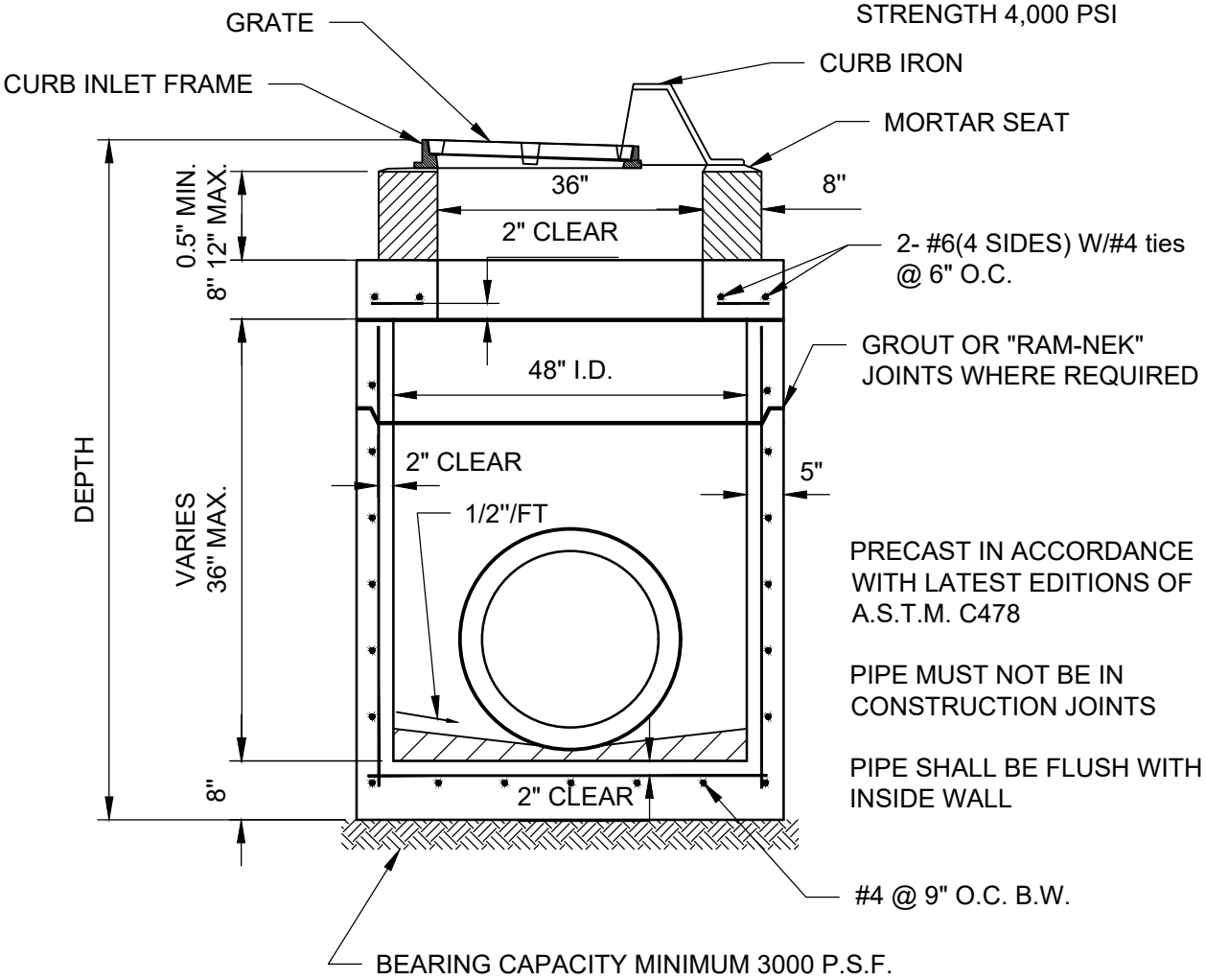
* CURB TRANSITION LESS THAN 10' TO BE USED WHERE LOT FRONTAGE IS 60' OR LESS, IN CASE OF HANDICAP RAMP CONFLICTS, OR AS APP'D. BY THE CITY ENGINEER.

TYPICAL INSTALLATION ON CURB RETURN

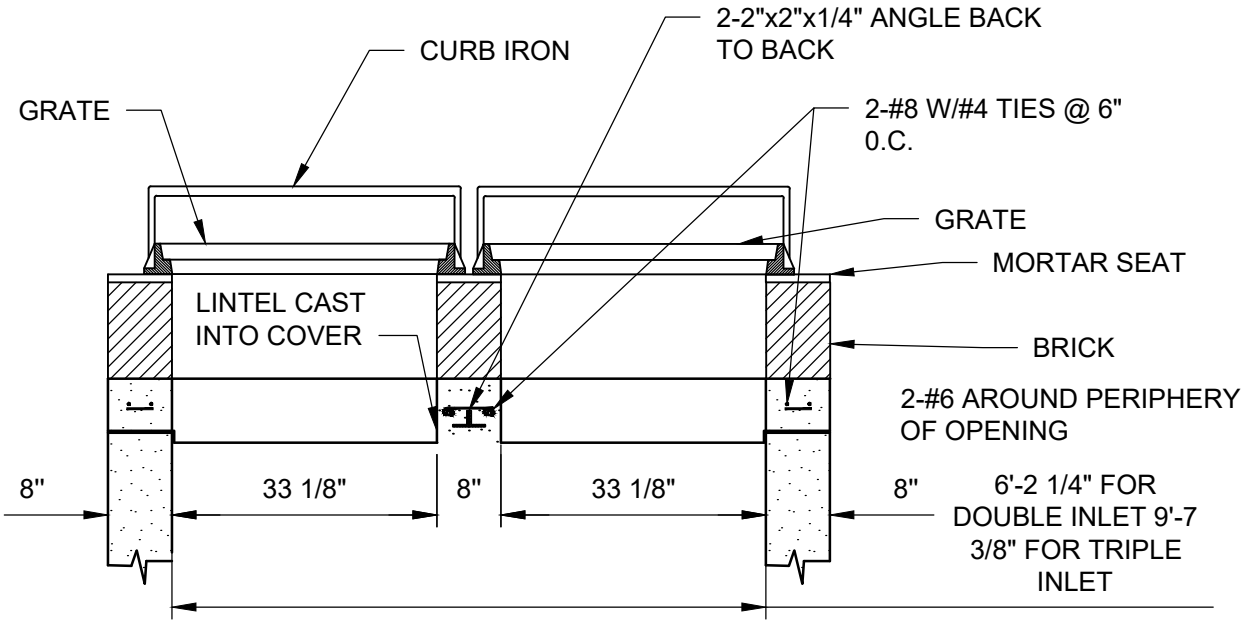
STANDARD CURB INLET INSTALLATION	CITY OF JACKSONVILLE STANDARD	N.T.S.	PLATE D-202
		DATE DRAWN	2-10-79
		REVISED DATE	8-19-24

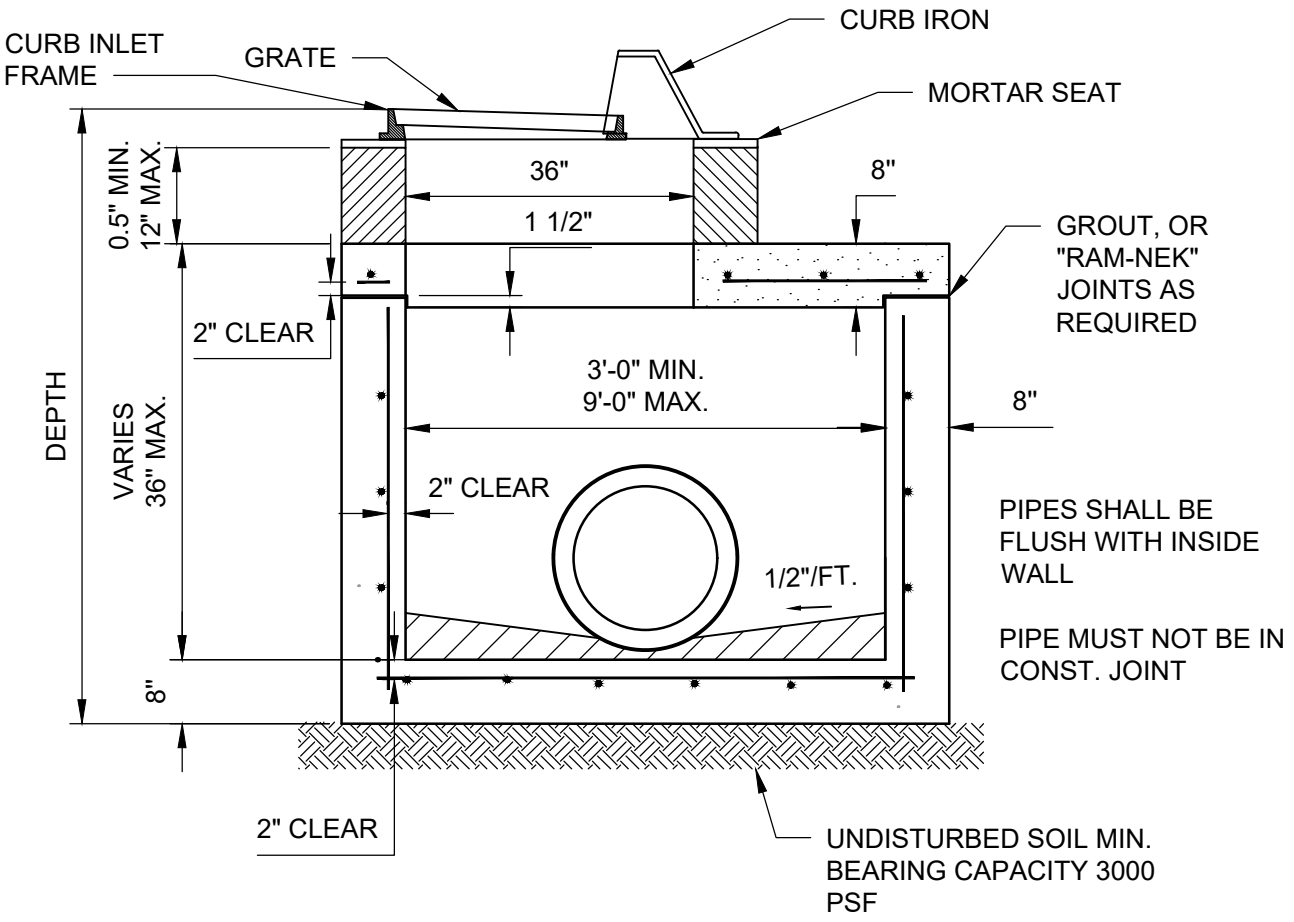


NOTE: CONC. DESIGN
STRENGTH 4,000 PSI



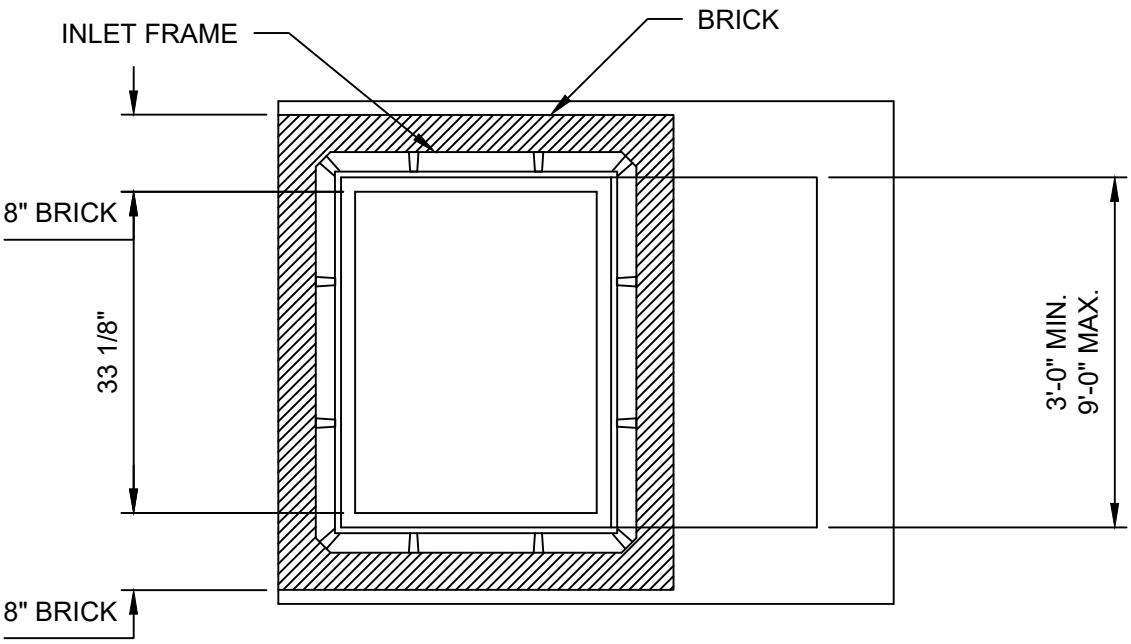
48" I.D. CURB INLET	CITY OF JACKSONVILLE STANDARD	N.T.S.	PLATE D-203
		DATE DRAWN	4-21-79
		REVISED DATE	8-19-24

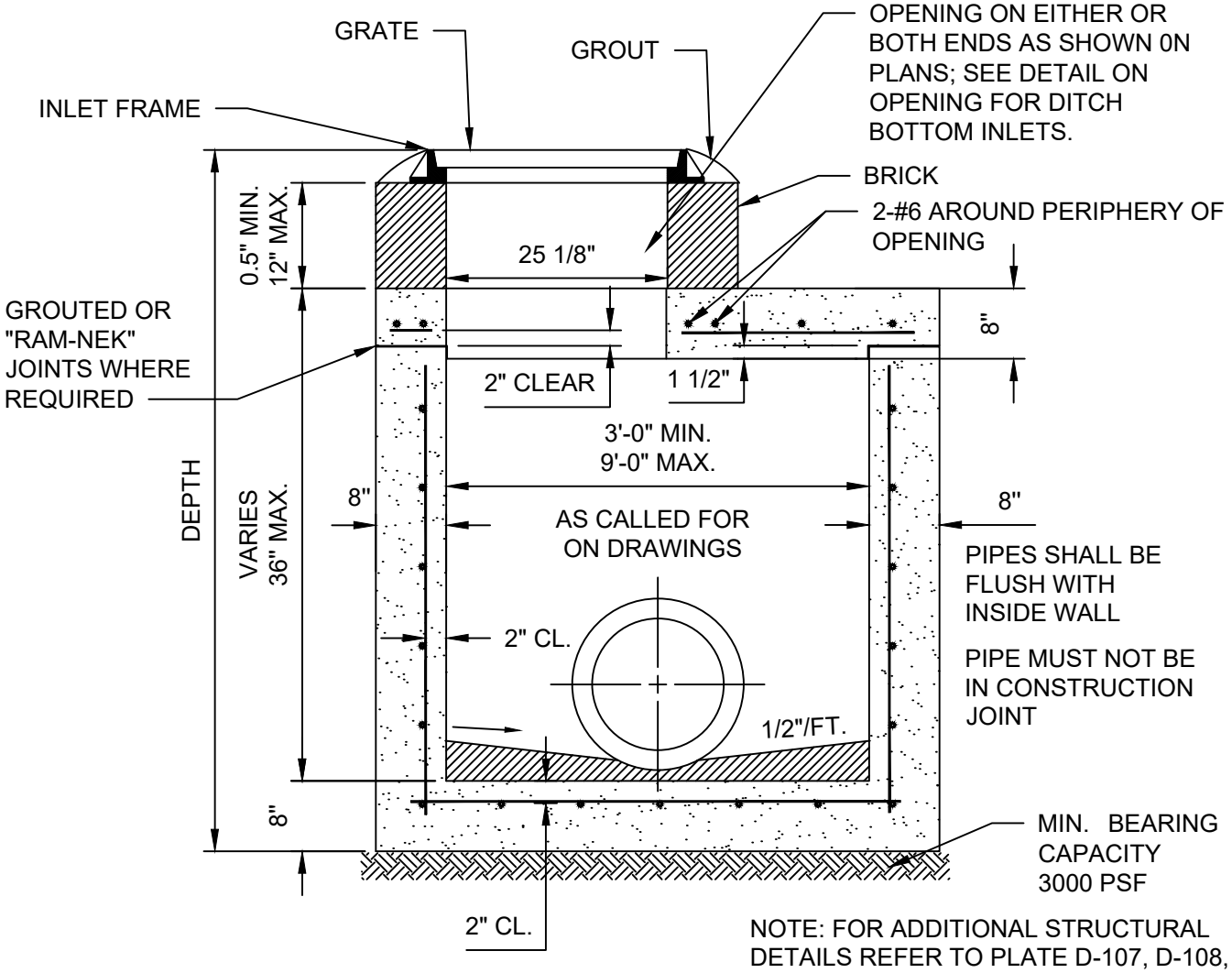




NOTE: FOR ADDITIONAL STRUCTURAL DETAIL
REFER TO PLATE D-107, D-108, & D-109

DOUBLE AND TRIPLE CURB INLET	CITY OF JACKSONVILLE STANDARD	N.T.S.	PLATE D-204
		DATE DRAWN	4-26-79
		REVISED DATE	8-19-24

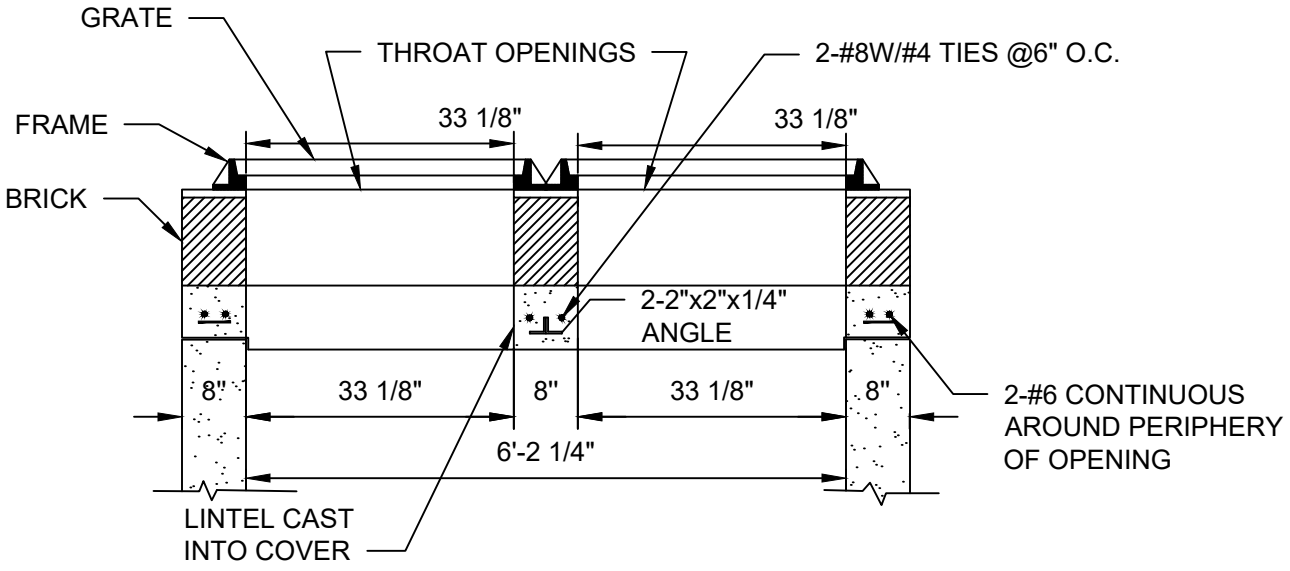


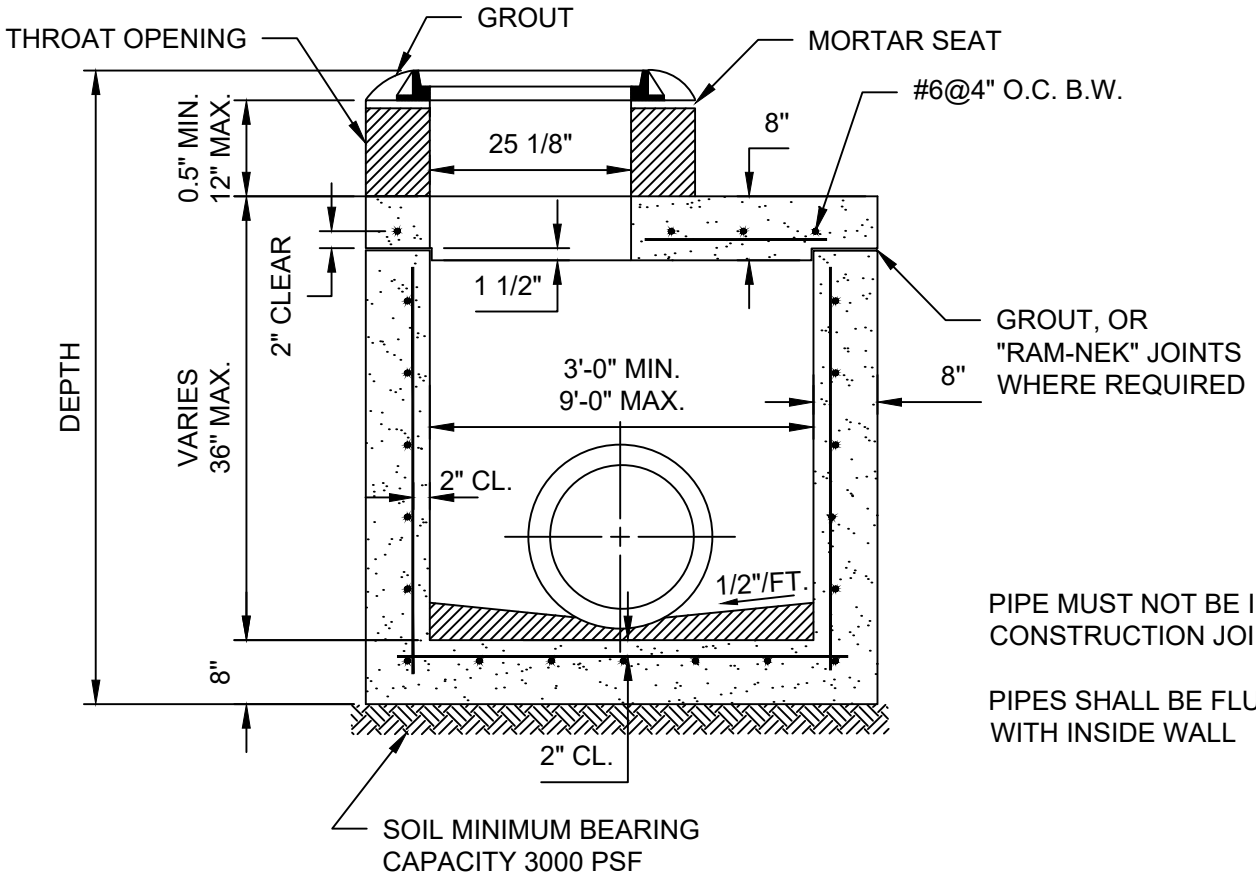


NOTE: FOR ADDITIONAL STRUCTURAL DETAILS REFER TO PLATE D-107, D-108, & D-109

TYPE "B" INLET	CITY OF JACKSONVILLE STANDARD	N.T.S.	PLATE D-205
		DATE DRAWN	5-15-79
		REVISED DATE	8-19-24

THROAT OPENING ON EITHER OR BOTH SIDES AS SHOWN ON PLANS; SEE DETAILS ON OPENING FOR DITCH BOTTOM INLETS.



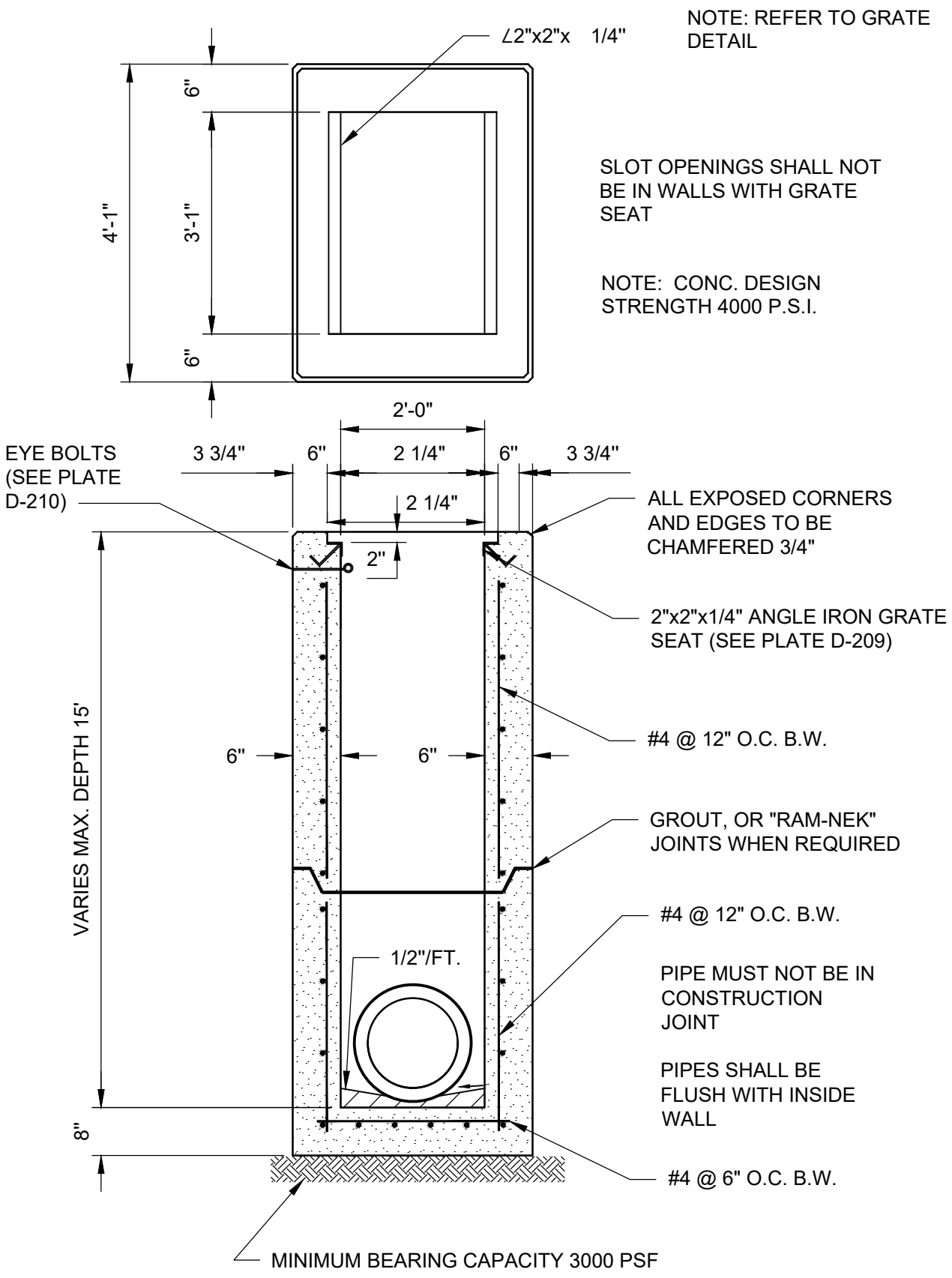


PIPE MUST NOT BE IN CONSTRUCTION JOINT

PIPES SHALL BE FLUSH WITH INSIDE WALL

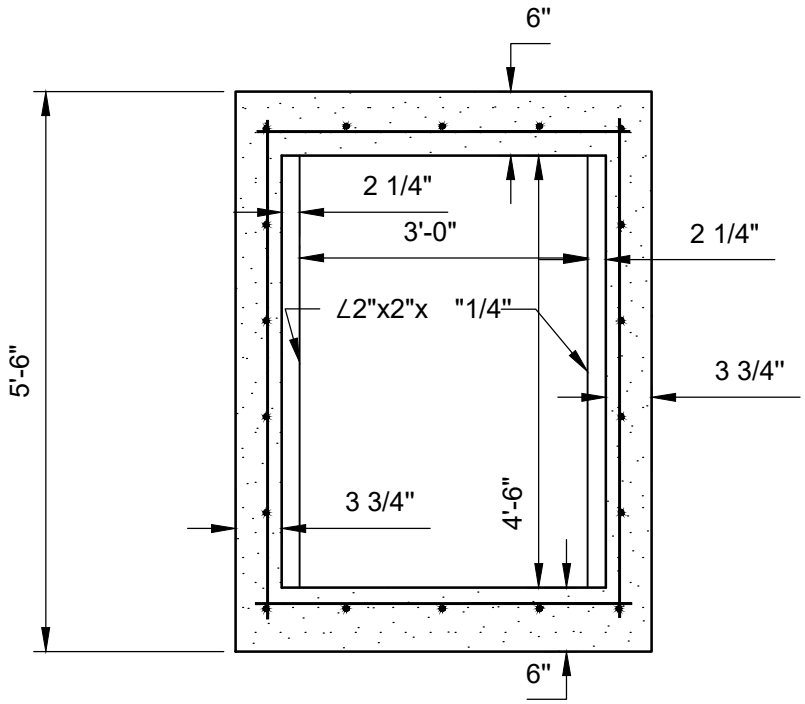
NOTE: FOR ADDITIONAL STRUCTURAL DETAIL REFER TO PLATE D-107,D-108, & D-109

DOUBLE TYPE "B" INLET	CITY OF JACKSONVILLE STANDARD	N.T.S.	PLATE D-206
		DATE DRAWN	5-16-79
		REVISED DATE	8-19-24



TYPE "C" INLET	CITY OF JACKSONVILLE STANDARD	N.T.S.	PLATE D-207
		DATE DRAWN	5-19-79
		REVISED DATE	8-19-24

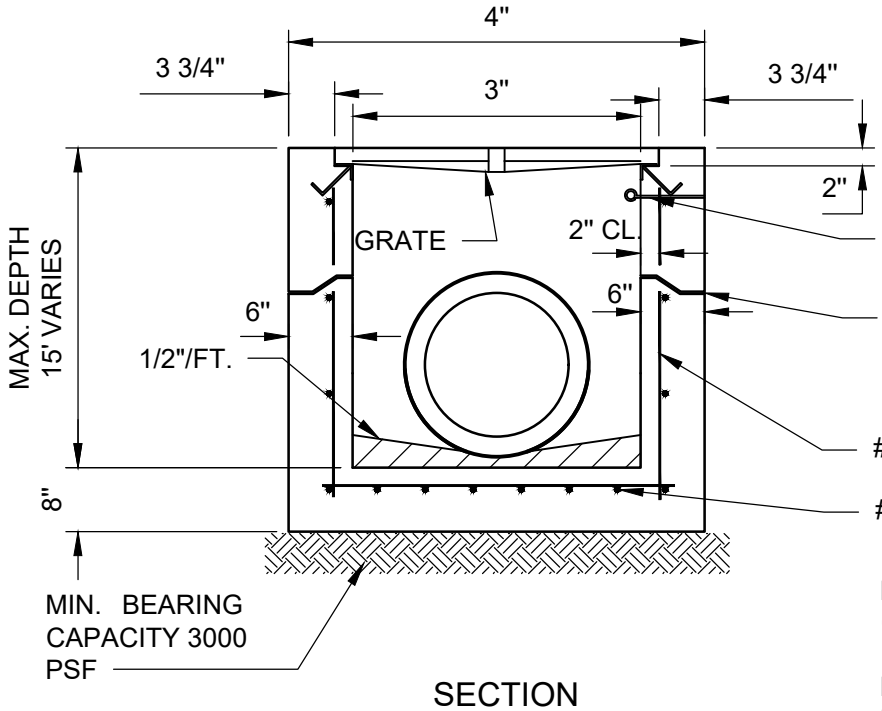
SEE PLATE D-307 FOR GRATE DETAIL



SLOT OPENINGS SHALL NOT BE IN WALLS WITH GRATE SEAT

NOTE: CONC. DESIGN STRENGTH 4,000 P.S.I.

PLAN



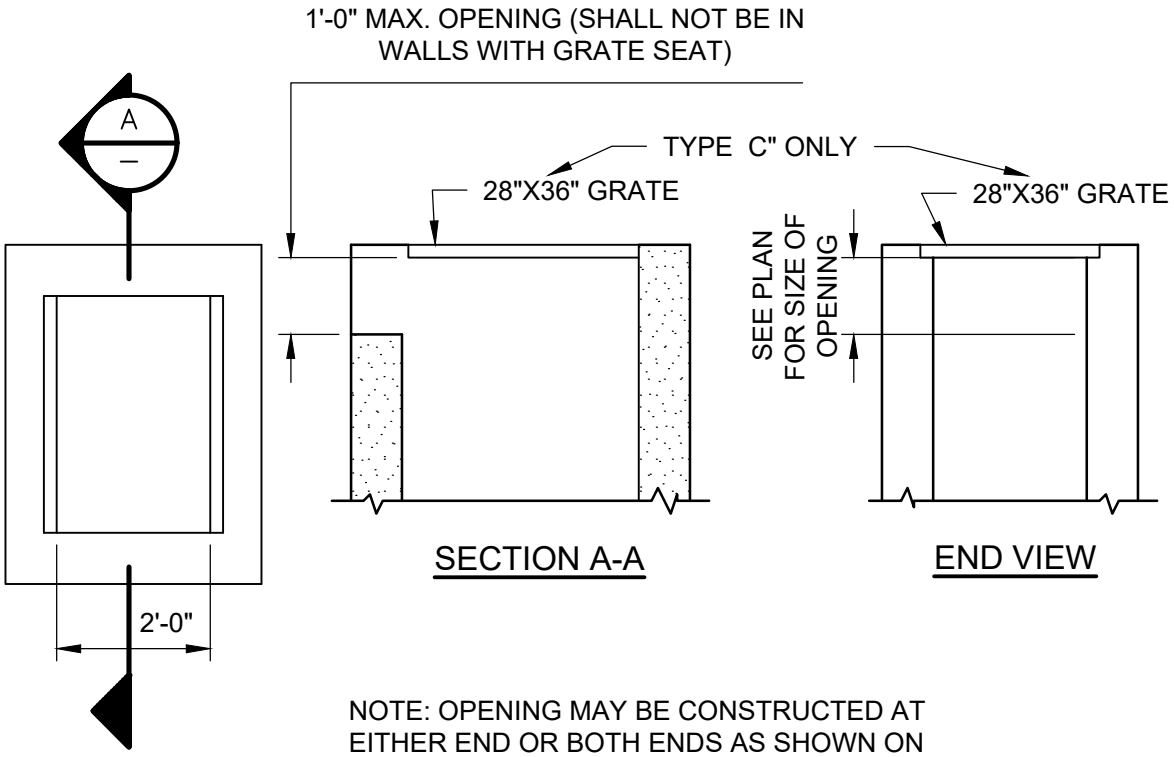
PIPES MUST NOT BE IN CONSTRUCTION JOINTS

PIPES SHALL BE FLUSH WITH INSIDE WALL

SECTION

TYPE "E" INLET	CITY OF JACKSONVILLE STANDARD	N.T.S.	PLATE D-208
		DATE DRAWN	5-23-79
		REVISED DATE	8-19-24

NOTE:
ALL TYPE C" & E" INLETS WITH SLOTS DEEPER THAN 6" SHALL BE CONSTRUCTED WITH A HORIZONTAL BAR(S) MAXIMUM SPACING 6". 1" DIAMETER GALV. PIPE EMBEDDED 2" IN PRE-CAST OR OTHER APPROVED METHOD.

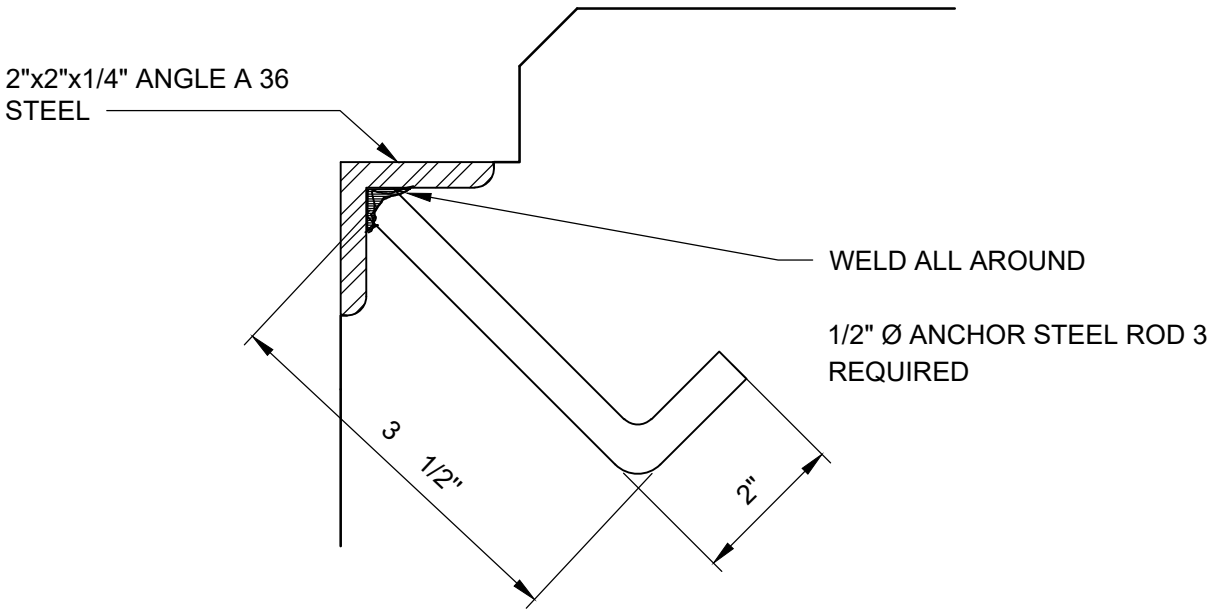


SECTION A-A

END VIEW

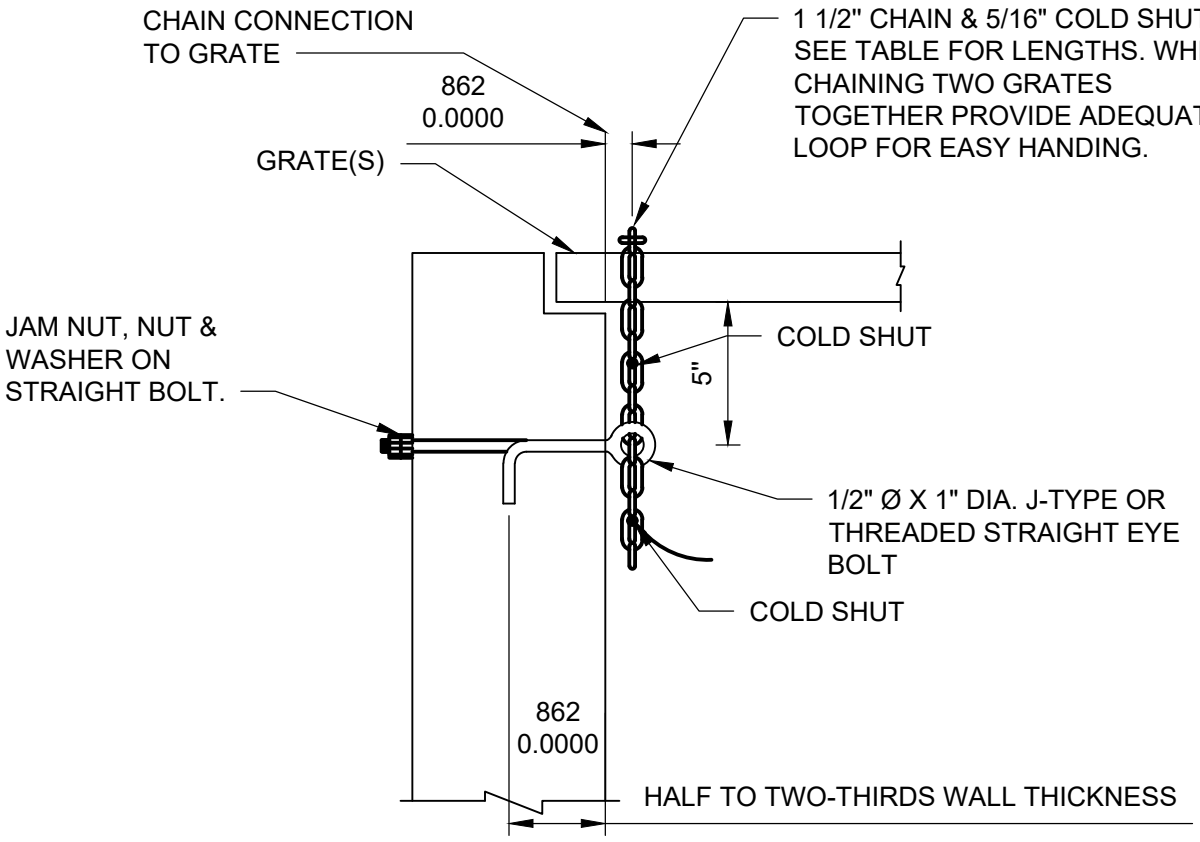
NOTE: OPENING MAY BE CONSTRUCTED AT EITHER END OR BOTH ENDS AS SHOWN ON PLANS TYPE C" OR E"

DETAILS OF OPENINGS IN DITCH BOTTOM INLETS



GRATE SEAT DETAIL

DETAIL FOR TYPE "C & E" INLET	CITY OF JACKSONVILLE STANDARD	N.T.S.	PLATE D-209
		DATE DRAWN	5-24-79
		REVISED DATE	8-19-24

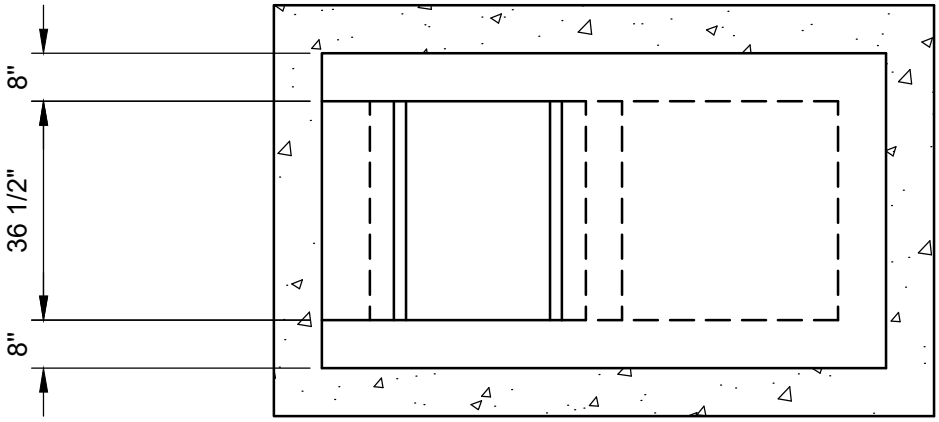


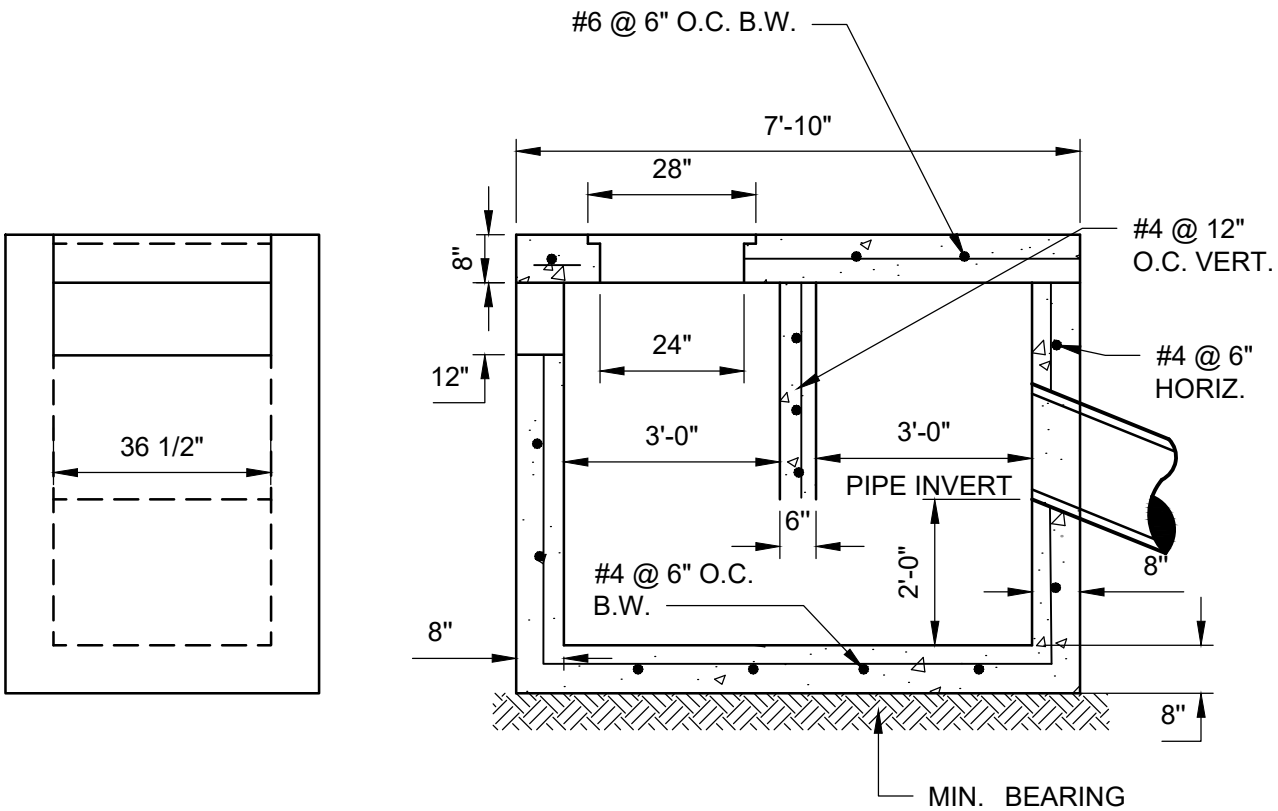
COST OF GALVANIZED EYE BOLT AND CHAIN TO BE INCLUDED IN THE CONTRACT UNIT PRICE FOR INLET.

EYE BOLT AND CHAIN REQUIREMENTS

PLATE NUMBER	INLET TYPE	EYE BOLT	LENGTH OF CHAIN	HANDLING AND REMARKS
207	C	1	2'-6"	SLIDE AND SPIN
208	E	2	2 @ 2'-6"	SLIDE AND SPIN

EYE BOLT AND CHAIN FOR LOCKING GRATES TO INLET	CITY OF JACKSONVILLE STANDARD	N.T.S.	PLATE D-210
		DATE DRAWN	7-15-79
		REVISED DATE	8-19-24

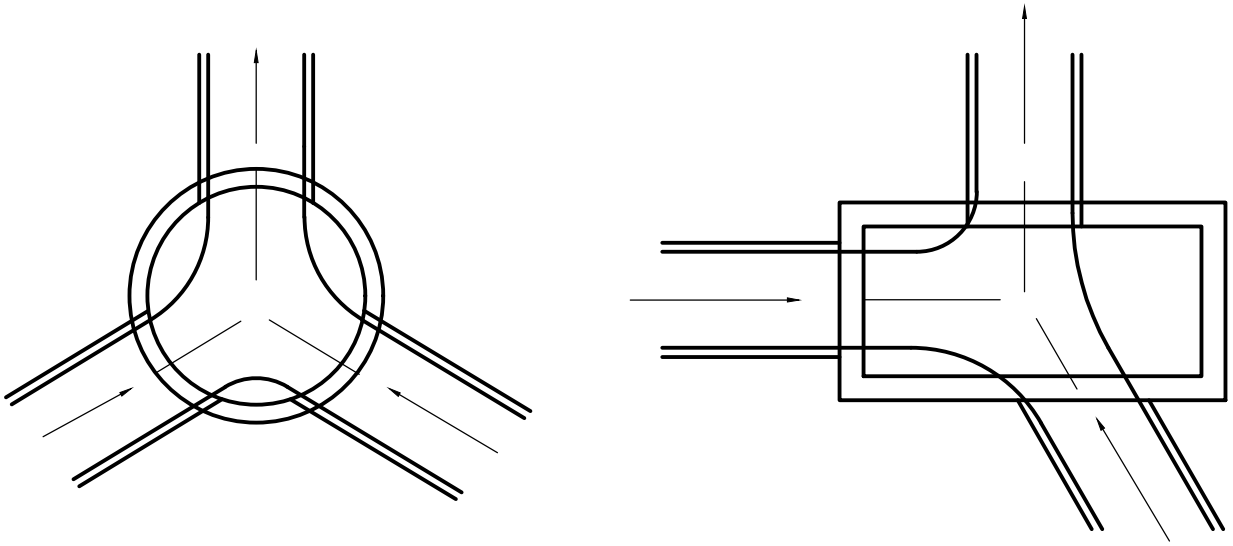




NOTE: CONC. DESIGN STRENGTH 4,000 P.S.I.

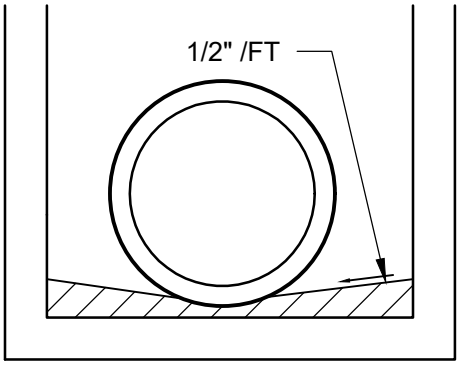
SAND TRAP BASIN	CITY OF JACKSONVILLE STANDARD	N.T.S.	PLATE D-211
		DATE DRAWN	05-09-79
		REVISED DATE	8-19-24

GENERAL NOTE: MORTAR USED TO SEAL THE PIPE INTO THE WALLS OF PRECAST UNITS WILL BE OF SUCH A MIX THAT SHRINKAGE WILL NOT CAUSE LEAKAGE INTO OR OUT OF THE UNITS. MAXIMUM OPENING FOR PIPE SHALL BE THE O.D. OF THE PIPE REQUIRED PLUS 6".



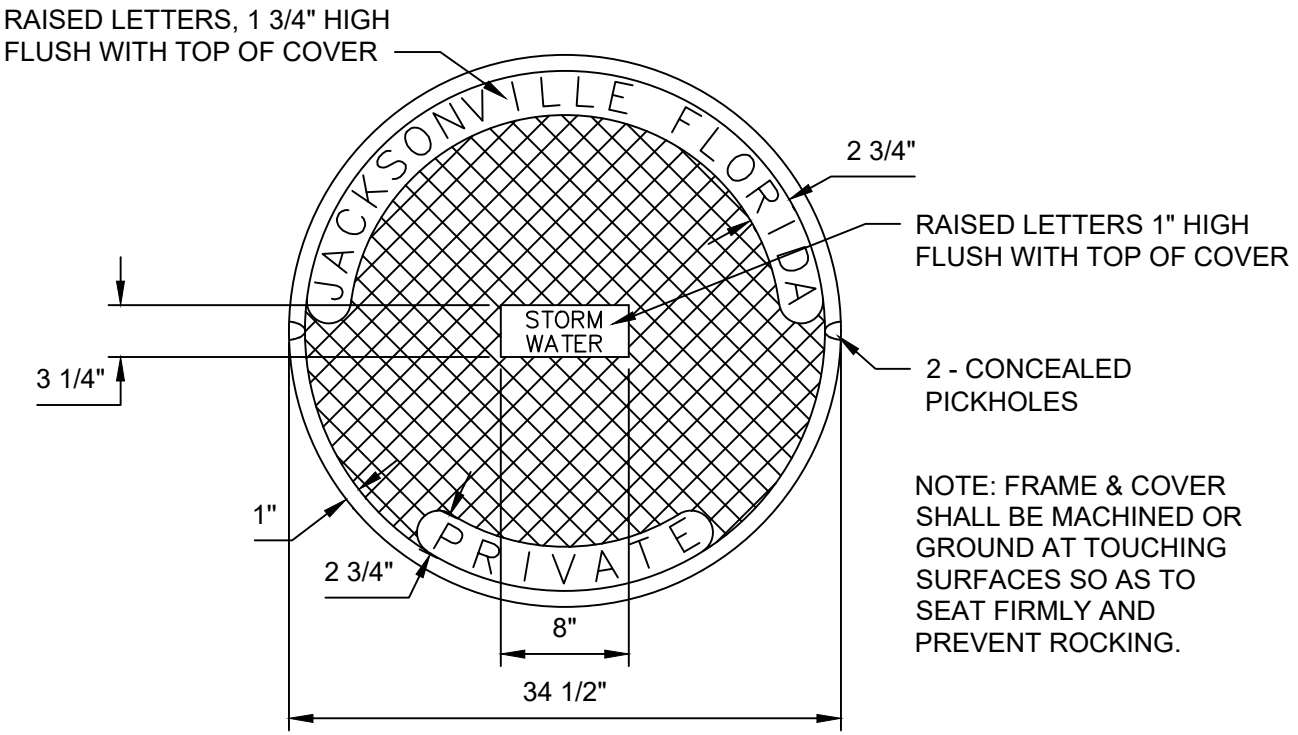
DETAIL OF CHANNELIZATION

NOTE: CHANNELIZATION REQUIRED AT ALL DRAINAGE STRUCTURES

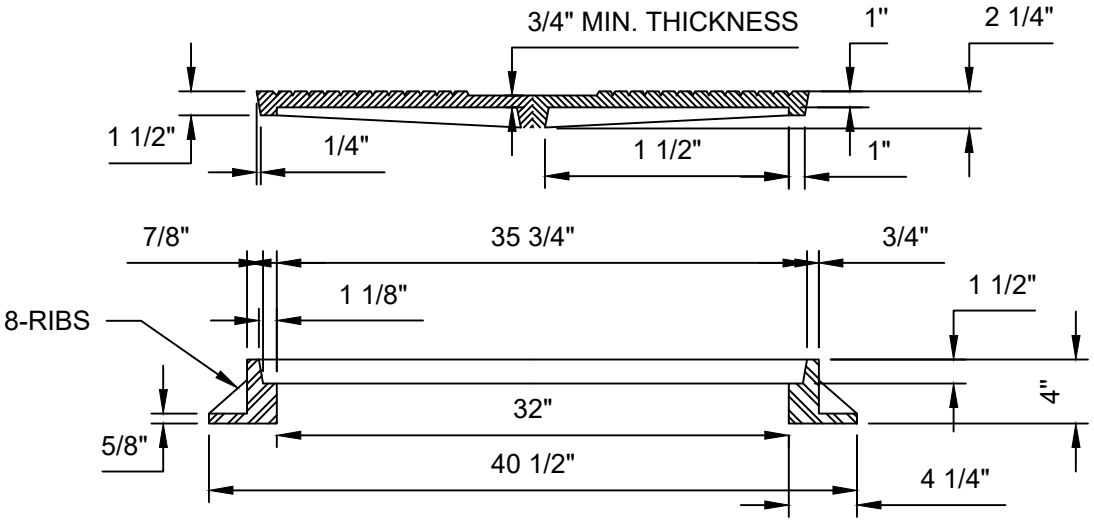


SMOOTH FLOW CHANNELS COMPOSED OF CONCRETE OR BRICK AND MORTAR SHALL BE CONSTRUCTED ON THE BOTTOMS OF ALL STRUCTURES TO A DEPTH EQUAL TO HALF THE DIAMETER OF THE LARGEST PIPE.

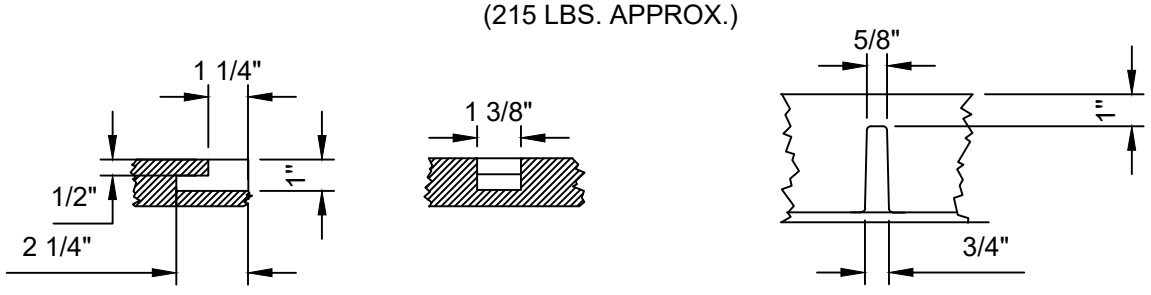
INVERT DETAIL	CITY OF JACKSONVILLE STANDARD	N.T.S.	PLATE D-212
		DATE DRAWN	08-05-79
		REVISED DATE	8-19-24



COVER
(265 LBS.± 5 LBS.)



FRAME
(215 LBS. APPROX.)



PICKHOLE DETAILS

RIB DETAIL

STORMWATER MANHOLE COVER AND FRAME	CITY OF JACKSONVILLE STANDARD	N.T.S.	PLATE D-301
		DATE DRAWN	4-26-89
		REVISED DATE	8-19-24