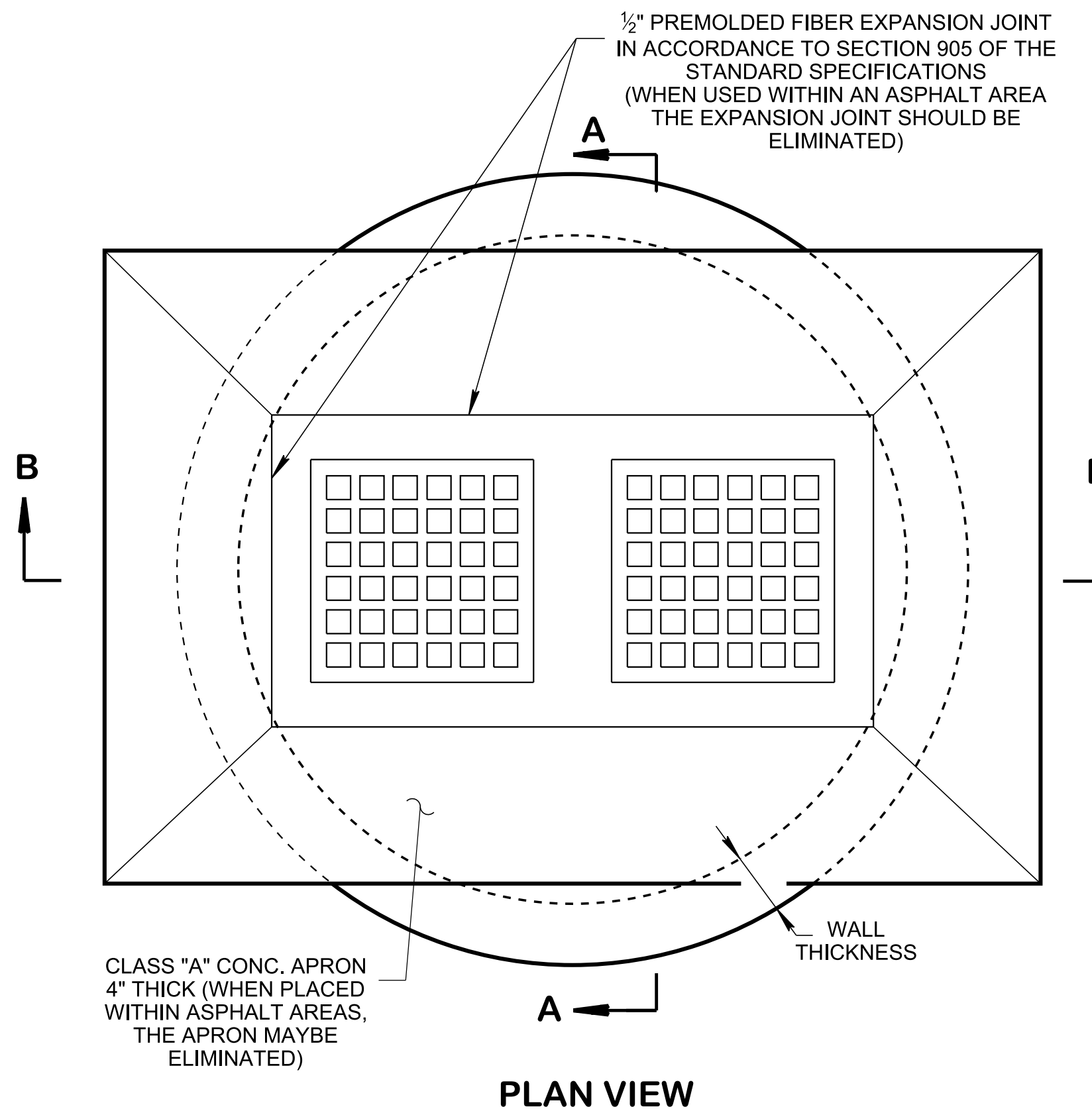


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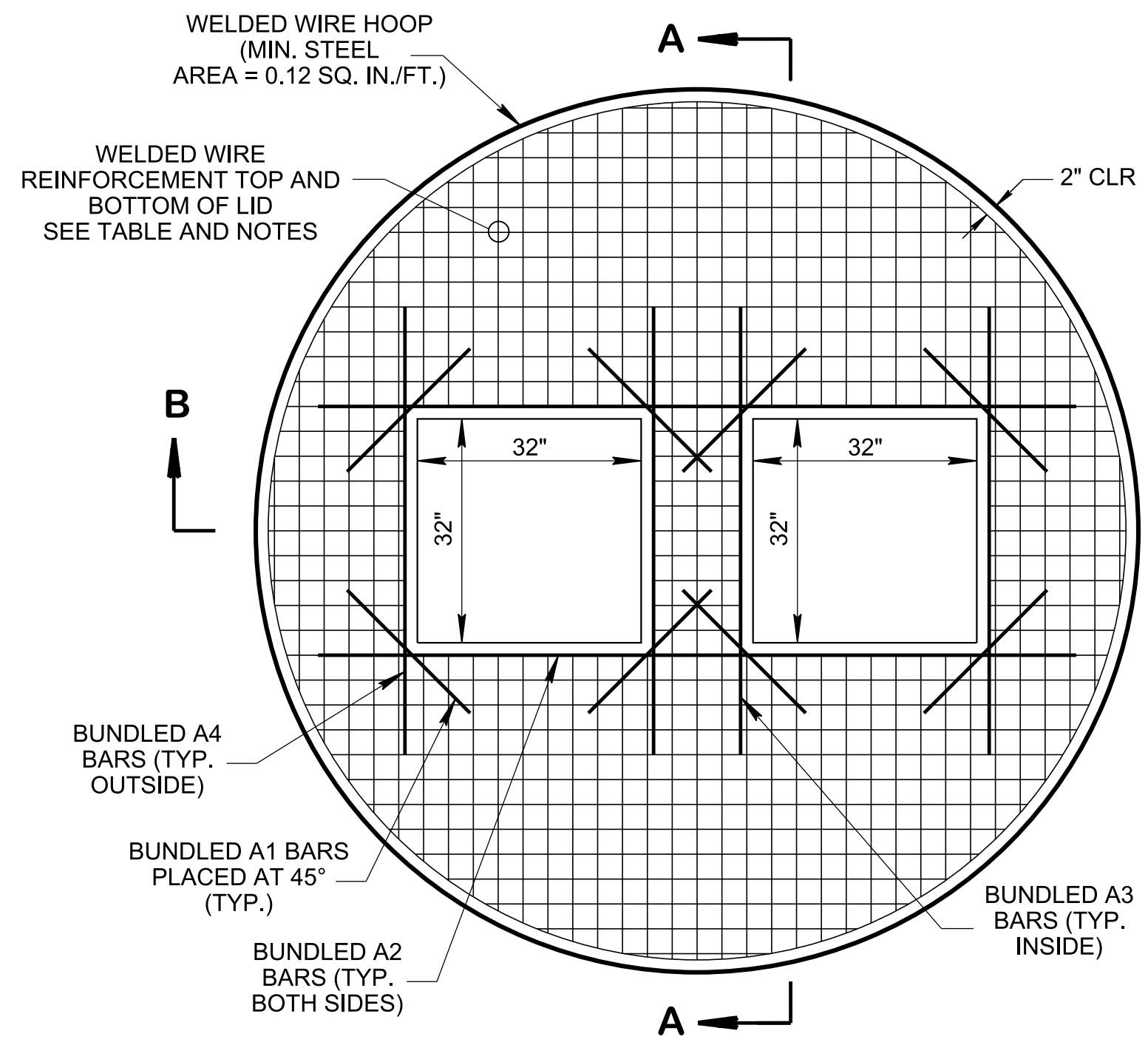


PLAN VIEW

CLASS "A" CONC. APRON 4" THICK (WHEN PLACED WITHIN ASPHALT AREAS, THE APRON MAYBE ELIMINATED)

1/2" PREMOLDED FIBER EXPANSION JOINT IN ACCORDANCE TO SECTION 905 OF THE STANDARD SPECIFICATIONS (WHEN USED WITHIN AN ASPHALT AREA THE EXPANSION JOINT SHOULD BE ELIMINATED)

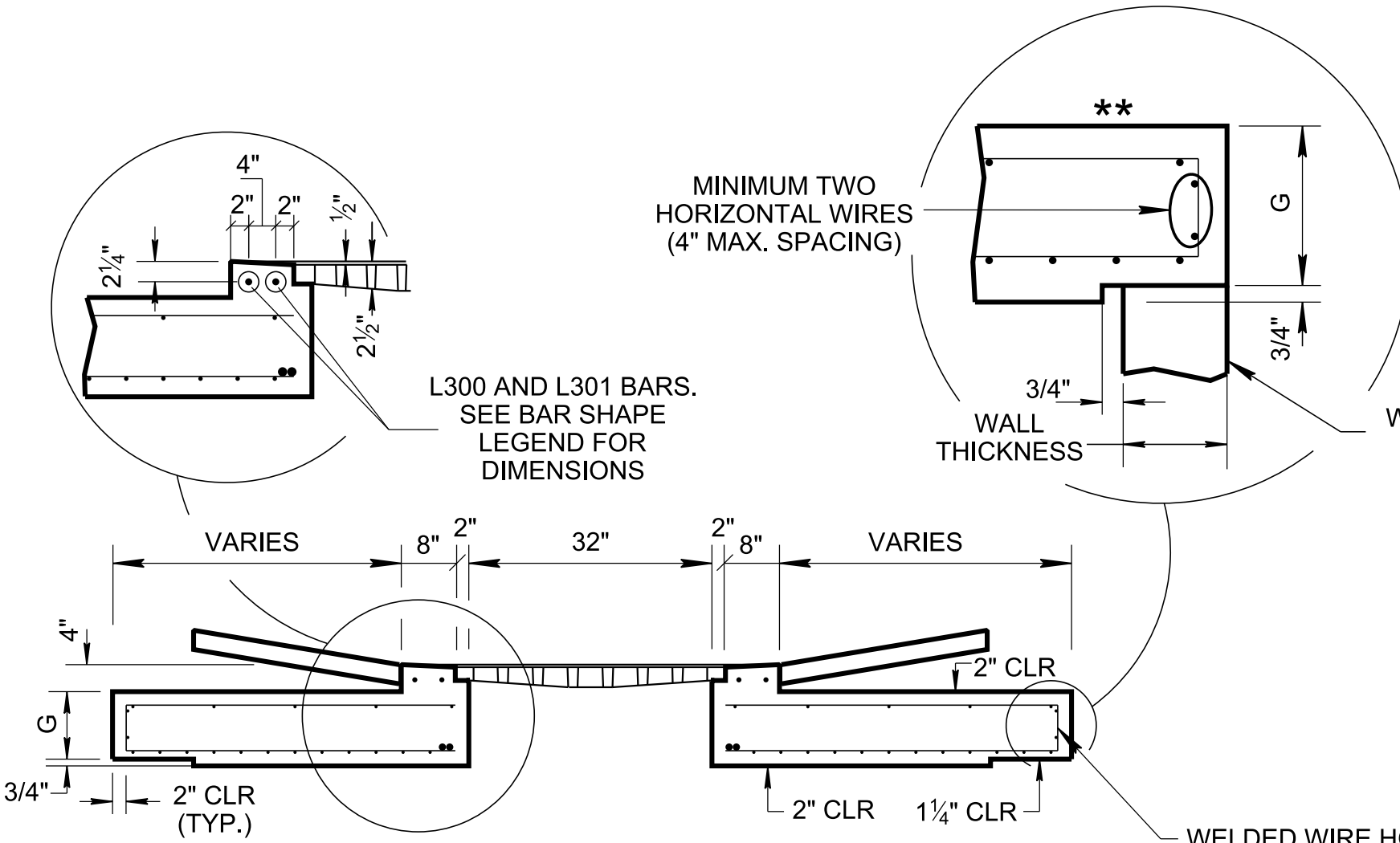
WALL THICKNESS



LID REINFORCING

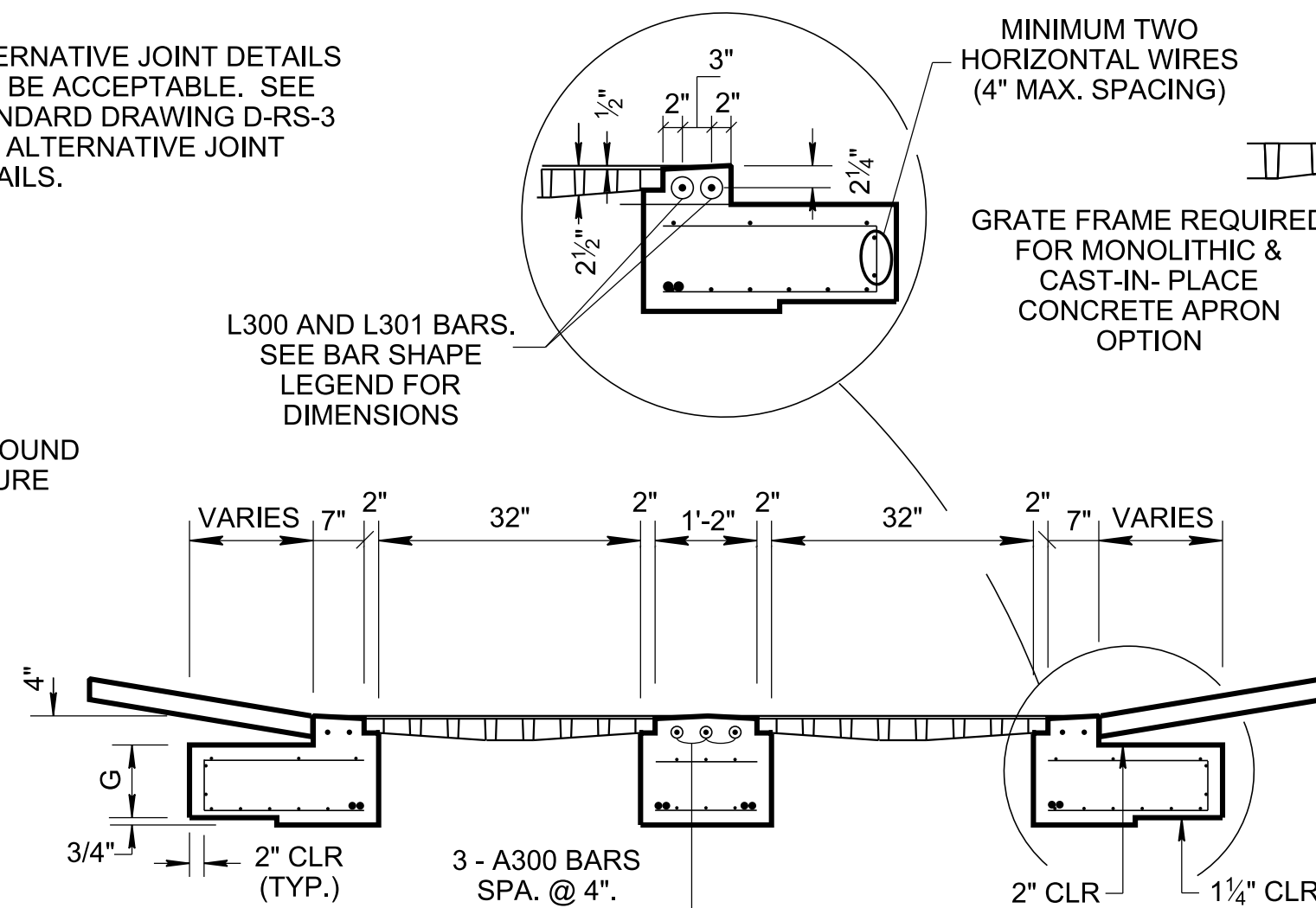
A-BARS PLACED ON BOTTOM OF LID ONLY SHOWING BOTTOM OF LID
L-BARS NOT SHOWN FOR CLARITY

** ALTERNATIVE JOINT DETAILS MAY BE ACCEPTABLE. SEE STANDARD DRAWING D-RS-3 FOR ALTERNATIVE JOINT DETAILS.



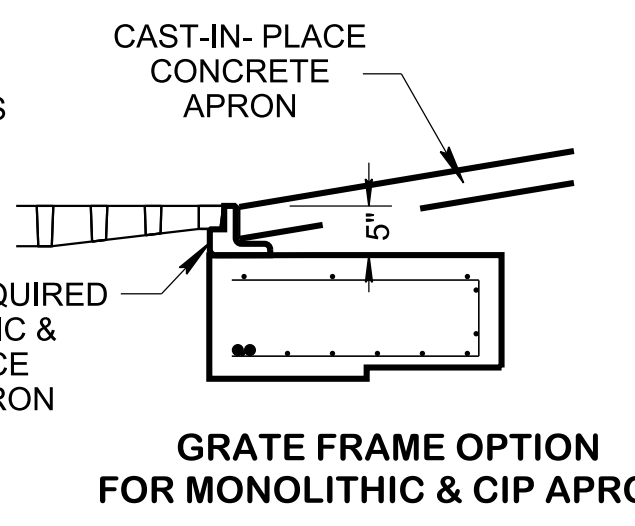
SECTION A-A

SEE STD. DWG. D-CBB-42 FOR GRATE DETAILS

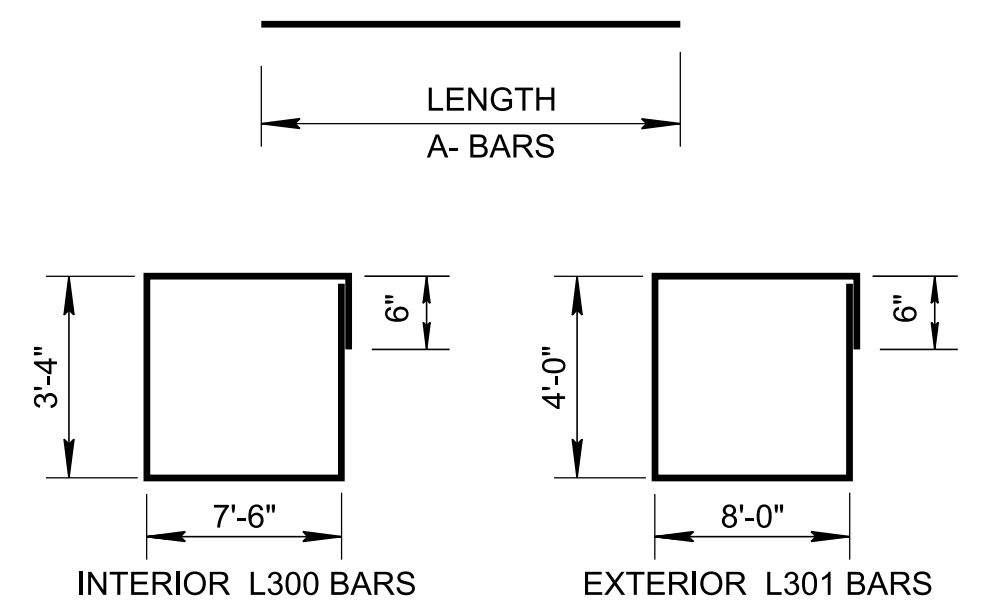


SECTION B-B

SEE STD. DWG. D-CBB-42 FOR GRATE DETAILS



GRATE FRAME OPTION FOR MONOLITHIC & CIP APRON



BAR SHAPE LEGEND
SEE TABLE FOR A-BARS LENGTHS

DOUBLE OPENING AREA DRAINS USE WITH STRUCTURE NO. 43R ONLY

(THIS AREA DRAIN MAY BE USED WITHIN PAVED AREAS. WHEN PLACED WITHIN ASPHALT AREAS, THE CONCRETE APRON MAY BE ELIMINATED AND REPLACED BY DEPRESSED PAVEMENT)

ROUND LIDS DIMENSION & REINFORCEMENT TABLE

ROUND STRUCTURES INSIDE DIA. (ID)	WALL THICKNESS	STRUCTURE NUMBER	LID DIA.	G	MIN. STEEL AREA FOR LID					A- BAR SIZE	A1 BAR LENGTH	A2 BAR LENGTH	A3 BAR LENGTH	A4 BAR LENGTH	A300 BAR LENGTH
					BOTTOM MAT WWR		TOP MAT WWR								
					STEEL AREA (SQ. INCH/ FT)	SPACING (4" MAX.) & SIZE	STEEL AREA (SQ. INCH/ FT)	SPACING (4" MAX.) & SIZE	SPACING (4" MAX.) & SIZE						
96"	9"	43R	9'-6"	10"	0.46	4x4-D16xD16	0.12	4X4-D4xD4	(2) #5	2'-4"	2'-4"	6'-0"	5'-7"	4'-0"	
108"	10"	43R	10'-8"	10"	0.50	4x4-D17xD17	0.12	4X4-D4xD4	(2) #5	2'-4"	2'-4"	6'-0"	6'-0"	4'-0"	
120"	11"	43R	11'-10"	10"	0.55	4x4-D19xD19	0.12	4X4-D4xD4	(2) #5	2'-4"	2'-4"	6'-0"	6'-0"	4'-0"	

GENERAL NOTES

- (A) ALL PRECAST ELEMENTS TO MEET ASTM C478 (CURRENT EDITION) AND AASHTO M199 (CURRENT EDITION) AND AASHTO LRFD UNLESS SUPERSEDED BY THE STANDARD DRAWINGS.
- (B) THE FOLLOWING MATERIAL PROPERTIES ARE REQUIRED FOR PRECAST STRUCTURES:

CONCRETE: $f_c = 4,000$ POUNDS PER SQUARE INCH AT 28 DAYS.
WWR MEETING ASTM A1064, $F_y = 70,000$ POUNDS PER SQUARE INCH. DEFORMED WIRE SHALL BE USED FOR ALL LIDS.
REINFORCING STEEL: ASTM A615, $F_y = 60,000$ POUNDS PER SQUARE INCH. ALL REINFORCING IS TO BE INSTALLED AS DETAILED.
- (C) BOTTOM MAT OF WWR IN LIDS SHALL HAVE A MAXIMUM SPACING OF 4 INCHES IN EACH DIRECTION. IF REBAR IS USED, MAX. SPACING = 12" EACH DIRECTION.
- (D) TOP MAT OF WWR SHALL HAVE A MINIMUM OF 0.12 SQ. INCH PER FT IN BOTH DIRECTIONS.
- (E) PAYMENT OF LID, GRATE, FRAME AND CURB IRON SHALL BE INCLUDED IN THE PRICE BID FOR ROUND STRUCTURES. SEE STANDARD DRAWING D-RS-1 FOR GENERAL NOTES & PAY ITEM NUMBERS.
- (F) REFER TO STANDARD DRAWINGS D-RS-2 AND D-RS-3 FOR ROUND STRUCTURES BASE DETAIL.

STATE OF TENNESSEE
STANDARD DRAWING
DEPARTMENT OF TRANSPORTATION

ROUND LID DETAILS FOR DOUBLE OPENING AREA DRAIN