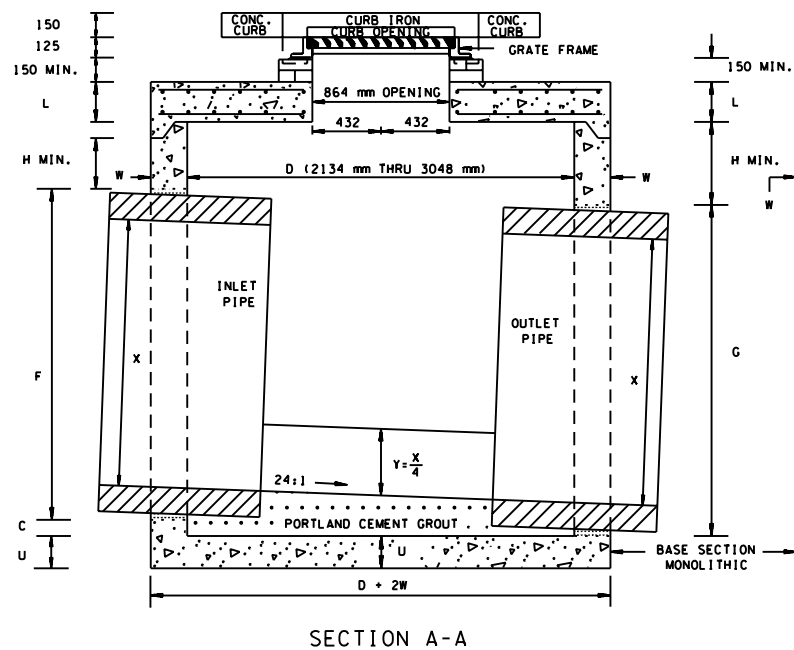




CUT-OUT HOLES FOR PRECAST STRUCTURES TO BE CORED OR FORMED IN ORDER TO OBTAIN A SMOOTH EDGED HOLE. SCORED OR ETCHED HOLES WITH REINFORCING STEEL LEFT UNCUT WILL NOT BE PERMITTED.

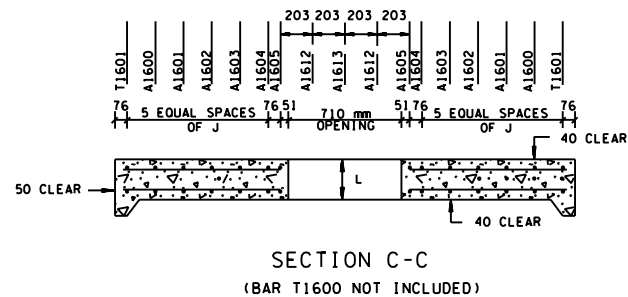


Diagram of Section D-D of a bridge deck. The diagram shows a vertical cross-section with various layers and dimensions. On the left, a vertical scale marks elevations: 241.3, 241.3, 241.3, 241.3, 51, 76, 76, 51, 76, 76, 51, 76. On the right, a vertical scale marks elevations: 76, 51, 76, 51, 76, 76, 51, 76. The diagram includes labels for '40 CLEAR' at the top and bottom, '5 EQUAL SPACES OF K' for the top and bottom reinforcement, and '864 mm OPENING' for the central section. The reinforcement is labeled with 'A1601', 'A1606', 'A1607', 'A1608', 'A1609', 'A1610', 'A1611', 'A1614', and 'A1615'. The central section is labeled 'L'. The diagram is titled 'SECTION D-D' and '(BAR T1600 NOT INCLUDED)'.

CATCH BASIN MINIMUM DEPTH TABLE FOR 84" INSIDE DIAMETER CATCH BASIN			
INSIDE DIAMETER (X) OF PIPE (mm)	MINIMUM DEPTH - (m)		
	CONCRETE PIPE	CORRUGATED METAL PIPE	POLYETHYLENE PIPE
450	1.46	1.40	1.44
600	1.61	1.55	1.60
750	1.79	1.70	1.78
900	1.96	1.87	1.93
1050	2.12	2.02	2.07
1200	2.29	2.17	2.22
1350	2.45	2.33	—
1500	2.62	2.48	—
1650	2.78	2.63	—
1800	2.96	2.78	—
1950	3.11	2.94	—

- 1 DEPTH MEASUREMENT MADE FROM TOP OF GRATE TO OUTLET FLOW ELEVATION BASED ON INLET AND OUTLET PIPES BEING THE SAME DIAMETER, IF OUTLET PIPE IS GREATER ADJUSTMENT IN DEPTHS MUST BE MADE TO ACCOMMODATE THIS SITUATION.
- 2 TO DETERMINE FLOOR OF CATCH BASIN ELEVATION, WHEN INLET AND OUTLET PIPES ARE THE SAME SIZE, ADD PIPE WALL THICKNESS PLUS 40 mm TO THE ABOVE MINIMUM DEPTHS.
- 3 IF 2438 mm INSIDE DIAMETER CATCH BASIN IS USED, ADD 0.040 m TO ALL THE ABOVE MINIMUM DEPTHS. IF 2743 mm INSIDE DIAMETER CATCH BASIN IS USED, ADD 0.052 m TO ALL THE ABOVE MINIMUM DEPTHS. IF 3048 mm INSIDE DIAMETER CATCH BASIN IS USED, ADD 0.064 m TO ALL THE ABOVE MINIMUM DEPTHS.

VARIABLE REINFORCING DIMENSIONS IN CONCRETE LID			
INSIDE DIA. OF CATCH BASIN (mm)	OUTSIDE DIA. OF LID (mm)	DIMENSION J (mm)	DIMENSION K (mm)
2134	2540	142.4	127.0
2438	2896	178.0	162.6
2743	3251	213.6	198.1
3048	3607	249.1	233.7

DIAMETER FOR T501 REINFORCING BARS EQUAL OUTSIDE DIAMETER OF LID MINUS 152 MILLIMETERS.

CATCH BASIN DIMENSIONS								
INSIDE DIA. OF CATCH BASIN D (mm)	WALL THICKNESS W (mm)	LID THICKNESS L (mm)	BASE THICKNESS U (mm)	OUTSIDE DIA. OF CATCH BASIN D + 2W (mm)	MAX. INLET OR OUTLET CONC. PIPE SIZE - STR. (mm)	MAX. INLET OR OUTLET CONC. PIPE SIZE - 90° (mm)	DIMENSION	
							C (mm)	H (mm)
2134	203	229	203	2540	1500	900	89	305
2438	229	254	203	2896	1650	1050	102	305
2743	254	254	305	3251	1800	1200	114	305
3048	280	254	305	3607	1950	1350	127	305



ALL UNITS ARE IN MILLIMETERS
UNLESS NOTED OTHERWISE.

☒ MINOR REVISION -- FHWA
APPROVAL NOT REQUIRED.

**STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION**

STANDARD PRECAST
2134 mm THRU 3048 mm
CIRCULAR
NO. 12 CATCH BASIN
(FOR USE WITH 150 mm
NONMOUNTABLE CURB)

4-15-00	DM-CB-12RC
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GENERAL NOTES

- (A) ALL PRECAST ELEMENTS TO MEET ASTM C478M (CURRENT EDITION) AND AASHTO M199 (CURRENT EDITION) UNLESS SUPERSEDED BY THIS DRAWING.
CONCRETE: $f'_c = 28 \text{ MPa}$ AT 28 DAYS
REINFORCING STEEL: ASTM A615M, $f_y = 415 \text{ MPa}$
ALL REINFORCING IS TO BE INSTALLED AS DETAILED ON THIS DRAWING.
- (B) PRECAST CATCH BASIN UNITS WHICH ARE DAMAGED DURING SHIPMENT OR INSTALLATION WILL BE REJECTED. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REPLACE DAMAGED CATCH BASIN UNITS AT HIS OWN EXPENSE.
- (C) ADDITIONAL REINFORCING STEEL NECESSARY ABOVE THE CORED OR FORMED CUT-OUT HOLES TO MAINTAIN THE INTEGRITY OF THE STRUCTURE DURING HANDLING AND PLACEMENT SHALL BE THE RESPONSIBILITY OF THE FABRICATOR.
- (D) APPROPRIATE SIZING AND LOCATION OF LIFTING DEVICES SHALL BE THE RESPONSIBILITY OF THE FABRICATOR TO ASSURE BALANCED HANDLING DURING INSTALLATION OF THE PRECAST CATCH BASIN.
- (E) THE CONTRACTOR IS TO PATCH ALL LIFTING DEVICE HOLES AND PLACE A MINIMUM OF 25 mm OF COVER OVER THE HARDWARE OF THESE DEVICES ON BOTH TOP AND BOTTOM SURFACES.
- (F) INVERT ELEVATIONS ARE TO BE ADJUSTED AS DIRECTED BY THE ENGINEER IN ORDER TO ACCOMMODATE INLET AND OUTLET PIPES.
- (G) SEE STANDARD DRAWING DM-CBB-12A FOR DETAILS REGARDING CAST IRON GRATES, FRAMES AND CURB INLETS.
- (H) SEE STANDARD DRAWING DM-CB-12RA FOR DETAILS REGARDING 1219 mm CIRCULAR NO. 12 CATCH BASIN (FOR USE WITH 150 mm NONMOUNTABLE CURB).
- (I) SEE STANDARD DRAWING DM-CB-12RB FOR DETAILS REGARDING 1524 mm THRU 1828 mm CIRCULAR NO. 12 CATCH BASIN (FOR USE WITH 150 mm NONMOUNTABLE CURB).
- (J) PAYMENT FOR CATCH BASIN WILL BE MADE UNDER ITEM NUMBERS 611M12.02 CATCH BASINS, TYPE 12, > 1m-2m DEPTH THROUGH 611M12.09, CATCH BASINS, TYPE 12, > 8m-9m DEPTH PER EACH. PAYMENT FOR CATCH BASINS DEEPER THAN 9 m WILL BE MADE UNDER ITEM NUMBER 611M12.10, CATCH BASINS, TYPE 12, ____ m - ____ m DEPTH PER EACH.