

CATCH BASIN MAXIMUM DEPTH NOTE

MAXIMUM DEPTH FOR PRECAST CONCRETE CIRCULAR CATCH BASINS IS 40.00'.

	CATCH BASIN DIMENSIONS								FOR DESIGN USE ONLY				
	INSIDE DIAMETER (D) OF PIPE (INCHES)	PIPE WALL THICKNESS (INCHES)	DIAMETER OF CUT-OUT HOLES (INCHES)	PRECAST SECTION MIN. HEIGHTS (INCHES)				CATCH BASIN MINIMUM DESIGN DEPTH (FEET)					
				60"	72"	84"	96"	60"	72"	84"	96"		
	18	2½	25	53½	54	58½	59	3.94	3.98	4.36	4.41		
	24	3	32	60½	61	65½	66	4.48	4.53	4.90	4.95		
	30	3½	39	67½	68	72½	73	5.02	5.07	5.45	5.49		
	36	4	46	74½	75	79½	80	5.56	5.61	5.99	6.03		
	42	4½	53	81½	82	86½	87	6.11	6.15	6.53	6.57		
	48	5	60	88½	89	93½	94	6.65	6.69	7.07	7.12		
	54	5½	67	95½	96	100½	101	7.19	7.23	7.61	7.66		
	60	6	74	102½	103	107½	108	7.73	7.78	8.15	8.20		
	66	6½	81	109½	110	114½	115	8.27	8.32	8.70	8.74		

- CUT-OUT HOLES BASED ON REINFORCED CONCRETE PIPE WITH WALL TYPE "B".
- ALL FLEXIBLE PIPE MATERIALS REQUIRE GASKET. SEE STANDARD DRAWING D-PB-2.
- CUT-OUT HOLES FOR PRECAST STRUCTURES TO BE FORMED IN ORDER TO OBTAIN A SMOOTH EDGED HOLE. SCORED OR ETCHED HOLES WITH REINFORCING STEEL LEFT UNCUT WILL NOT BE PERMITTED.

GENERAL NOTES

- (A) ALL PRECAST ELEMENTS TO MEET ASTM C478 (CURRENT EDITION) AND AASHTO M199 (CURRENT EDITION) UNLESS SUPERSEDED BY THIS DRAWING.
 - CONCRETE: f = 4,000 POUNDS PER SQUARE INCH AT 28 DAYS REINFORCING STEEL: ASTM A615, F. = 60,000 POUNDS PER SQUARE INCH ALL REINFORCING IS TO BE INSTALLED AS DETAILED ON THIS DRAWING

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SECTION

- (B) THIS DIMENSION MAY VARY FROM A MINIMUM OF 0 INCHES TO A MAXIMUM OF 24 INCHES AS LONG AS 23 INCHES (FOR 60 OR 72 INCH INSIDE DIAMETER CATCH BASIN) OR 27 INCHES (FOR 84 OR 96 INCH INSIDE DIAMETER CATCH BASIN) IS SATISFIED. THE CONTRACTOR HAS THE OPTION OF USING BRICK OR STANDARD PRECAST CONCRETE RISER FRAMES. THE USE OF BRICK SHALL BE LIMITED TO 6 INCHES. IF THIS DIMENSION EXCEEDS 6 INCHES. PRECAST CONCRETE RISER FRAMES SHALL BE USED AS SHOWN ON STANDARD DRAWING D-RF-1.
- (C) 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.
- (D) APPROPRIATE SIZING AND LOCATION OF LIFTING DEVICES SHALL BE THE RESPONSIBILITY OF THE FABRICATOR.
- THE CONTRACTOR IS TO PATCH ALL LIFTING DEVICE HOLES WITH GROUT AND PLACE A MINIMUM OF ONE (1) INCH OF COVER OVER THE HARDWARE OF THESE DEVICES ON BOTH TOP AND BOTTOM SURFACES.
- ALTERNATIVE JOINT DETAILS MAY BE ACCEPTABLE. SEE STANDARD DRAWING D-CB-99R FOR ADDITIONAL DETAILS.
- SEE ROADWAY PLANS DRAINAGE TABULATION FOR PIPE INLET AND OUTLET ELEVATIONS. IF NEEDED, INVERT ELEVATIONS MAY BE ADJUSTED AS DIRECTED BY THE ENGINEER IN ORDER TO ACCOMMODATE INLET AND OUTLET PIPES.
- (H) FOR CASES WHERE THE OUTLET PIPE DIAMETER IS LARGER THAN THE INLET PIPE DIAMETER, A MINIMUM 23 INCH DEPTH (FOR 60 OR 72 INCH INSIDE DIAMETER CATCH BASIN) OR 27 INCH DEPTH (FOR 84 OR 96 INCH INSIDE DIAMETER CATCH BASIN) SHALL BE MAINTAINED ABOVE THE OUTLET PIPE.
- SEE STANDARD DRAWING D-CBB-12C FOR DETAILS REGARDING CAST IRON GRATES, FRAMES AND CURB INLETS.
- SEE STANDARD DRAWING D-CB-28RA FOR DETAILS REGARDING 48" CIRCULAR NO. 28 CATCH BASIN (FOR USE WITH 4" SLOPING CURB).
- (K) PAY DEPTH MEASUREMENT MADE FROM TOP OF GRATE TO OUTLET FLOW ELEVATION. PAYMENT FOR CATCH BASIN WILL BE MADE UNDER ITEM NUMBERS 611-28.01 CATCH BASINS, TYPE 28, 0'-4' DEPTH THROUGH 611-28.07, CATCH BASINS, TYPE 28, > 24'-28' DEPTH PER EACH. PAYMENT FOR CATCH BASINS DEEPER THAN 28' WILL BE MADE UNDER ITEM NUMBER 611-28.08, CATCH BASINS, TYPE 28, —'-—' DEPTH PER EACH. PAYMENT INCLUDES RISER SECTION AND GRATE.

CATCH BASIN DIMENSIONS										
INSIDE DIA. OF CATCH BASIN	WALL THICKNESS W (INCHES)	LID THICKNESS L (INCHES)	OUTSIDE DIA. OF CATCH BASIN DIA. + 2W (INCHES)	MAX. INLET OR OUTLET CONC. PIPE SIZE - STR. (INCHES)	MAX. INLET OR OUTLET CONC. PIPE SIZE - 90° (INCHES)	DIMENSION				
DIA. (INCHES)						C (INCHES)	H (INCHES)] s		
60	6	10	72	36	24	2.5	8			
72	7	10	86	48	30	3.0	8			
84	8	10	100	60	36	3.5	12			
96	9	10	114	66	42	4.0	12			

DEPTH TABLE AND DRAWING IN **GENERAL TO REFLECT REDUCTION** IN INVERT DROP ACROSS CATCH

REV. 5-27-01: CHANGED PAY ITEMS IN GENERAL NOTE(I)ADDED CATCH BASIN MAXIMUM DEPTH NOTE. CHANGED REINFORCING STEEL IN

REV. 1-19-99: CHANGED MINIMUM

REV. 8-01-12: REVISED CATCH BASIN LID FOR COMPLIANCE WITH AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 4TH EDITION WITH INTERIMS. REVISED REINFORCING, GENERAL NOTES AND ADDITIONAL MISC. DRAFTING EDITS.

REV. 9-24-12: MODIFIED TOP SLAB AND MINIMUM DEPTH.

REV. 3-11-14: ELIMINATED STIRRUPS.

REV. 4-12-16: CORRECTED GENERAL NOTE(J.)

REV. 05-15-18: REVISED CATCH BASIN MINIMUM DESIGN DEPTH VALUES. CORRECTED STANDARD SPECIFICATIONS SECTION NUMBER TO 921 FOR NON-SHRINK GROUT. ADDED DIMENSION IN SECTION VIEW A-A FOR NOTE (B) CORRECTED REBAR PLACEMENT IN LIDS. ADDED DIMENSION IN SECTION VIEW A-A FOR MINIMUM DESIGN DEPTH. CHANGED "MOUNTABLE CURB" TO "SLOPING CURB". CORRECTED REFERENCED STD. DWG. IN NOTE(I)TO D-CBB-12C. ADJUSTED BOX SECTION MINIMUM HEIGHTS.

> MINOR REVISION -- FHWA APPROVAL NOT REQUIRED.

> > NOT TO SCALE

STATE OF TENNESSEE **DEPARTMENT OF TRANSPORTATION**

STANDARD PRECAST CIRCULAR NO. 28 **CATCH BASIN** (FOR USE WITH 4"

SLOPING CURB)

12-18-95

D-CB-28RB