

# STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION

#### **ENGINEERING DIVISION - PRODUCTION SUPPORT**

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### **INSTRUCTIONAL BULLETIN NO. 24-04**

## Regarding New Round Catch Basin Standard Drawings and Revisions to the Drainage Manual

Effective August 16, 2024, letting (June 5, 2024, Turn-in), the following new Standard Drawings are released for use. In addition, Chapter 10 of the Roadway Design Guidelines - Index of Standard Drawings and the web site have been updated accordingly and are available online.

When designing storm drainage systems for a project, designers should now design the system with the new Round Catch Basin Standard Drawings and pay item numbers. The current ORD workspace version 10.12 (2022 Release 3) offers the option to use the new standards. Compared to the existing round CB series, the new standards use Welded Wire Reinforcement (WWR) as well as improved structural details assisting with the precast manufacturing saving time and possible material limitations. The new Round CB standard drawing series will offer the designer more flexibility over the existing CB standard drawings. Due to this new flexibility it is important that the designer lists both the base, and the lid standard drawing numbers within the tabulated quantities. However, if the storm drainage system cannot be designed with the new Round Catch Basins, then the existing catch basin standard drawings showing, square, rectangular or Round CB alternatives should be used.

In addition, Table 7-4 on page 7-24, in Section 7.03.5, Catch Basins and Manholes, of the Drainage Manual has been revised.

## **New Standard Drawings:**

10-103.00

10 100100			
10-103.01	CATCH BASINS		
DRAWING NUMBER	REVISION DATE	DESCRIPTION	
D-RL-1		ROUND LID DETAILS FOR DOUBLE CURB AND WALL INLET	
D-RL-2		ROUND LID DETAILS FOR DOUBLE CURB AND WALL INLET	
D-RL-3		ROUND LID DETAILS FOR SINGLE OPENING AREA DRAIN	
D-RL-4		ROUND LID DETAILS FOR DOUBLE OPENING AREA DRAIN	
D-RS-1		PRECAST ROUND STRUCTURES (48" THRU 120")	

**CATCH BASINS AND MANHOLES** 

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D-RS-2 PRECAST ROUND STRUCTURES REINFORCEMENT DETAILS

D-RS-3 MISCELLANEOUS DETAILS FOR ROUND STRUCTURES

10-103.02 JUNCTION BOXES

DRAWING REVISION

NUMBER DATE DESCRIPTION

D-RJB-1 PRECAST ROUND JUNCTION BOX STRUCTURES (48" THRU 120")

10-103.03 MANHOLES

DRAWING REVISION

NUMBER DATE DESCRIPTION

D-RMH-1 PRECAST MANHOLE STRUCTURES (48" THRU 120")

10-103.05 SPRING DRAIN BOXES

DRAWING REVISION

NUMBER DATE DESCRIPTION

D-RSB-1 PRECAST ROUND SPRING DRAIN BOX STRUCTURES (48" THRU

120")

These standard drawings are located on the web site and in Chapter 10 of the Design Guidelines and can be found in the following links.

### Standard Drawings:

https://www.tn.gov/content/tn/tdot/roadway-design/standard-drawings-library/standard-roadway-drawings.html

#### Roadway Design Guidelines:

Chapter 10 - Index of Standard Drawings is available online at this location:

https://www.tn.gov/content/dam/tn/tdot/roadway-design/documents/design\_guidelines/rdg\_pdn/pdnDG-C10.pdf

The revised Table 7-4 is located on the web site and can be found in the following link.

Drainage Manual:

Chapter 7 – Revised Table 7-4 is available online at this location:

https://www.tn.gov/content/dam/tn/tdot/roadway-design/documents/drainage manual/DM-Chapter 07.pdf

Shane Hester, PE Engineering Division Director

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SH:LC:ARH:RBB April 30, 2024

## TDOT DESIGN DIVISION DRAINAGE MANUAL

January 17, 2024

	Shape	Inside Dimensions (inches)	Inlet types
Precast & Cast-in-Place	Rectangular	48 x 36	Single, double, quad, MH, JB, Area, Spring 10, 12, 13, 25, 41
		96 x 36	14, 26, 29
			, ,
		96 x 48	16, 27, 40, 43, 45
		96 x 62	17,43
	Square	32 x 32	10, 12, 25, 41, 38, 42
		48 x 48	10, 12, 25, 41 38, 39, 42
		62 x 62	12, 25, 41, 51, 38, 39, 42
		84 x 84	12, 25, 31, 39, 41, 42
		108 x 108	12, 14, 25, 31, 39,41, 44, 46
	Round	48	10, 12, 13, 25
		60	12, 13, 25, 41, 38, 42
		72	12, 13, 25, 41, 38, 42
		84	12, 13, 25, 31,41, 38, 42
		96	12, 13, 14, 25, 39, 41
		108	12, 13
		120	12,13
Precast	Round with WWR	48	10, 12, 13, 25
		60	12, 13, 25, 38, 41, 42
		72	12, 13, 25, 41, 38, 42
		84	12, 13, 25,31, 38, 41, 42
		96	12, 13,14, 25, 38, 41, 42
		108	12, 13, 14, 25, 31, 38, 39, 41, 42, 43
		120	12, 13, 14, 25, 31, 38, 39, 41, 42, 43

Table 7-4 Standard Inlet Types and Applications