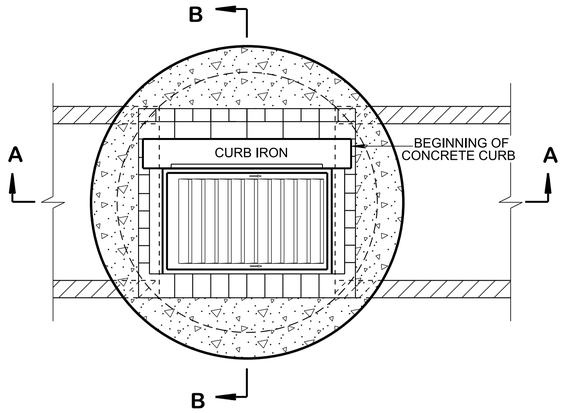
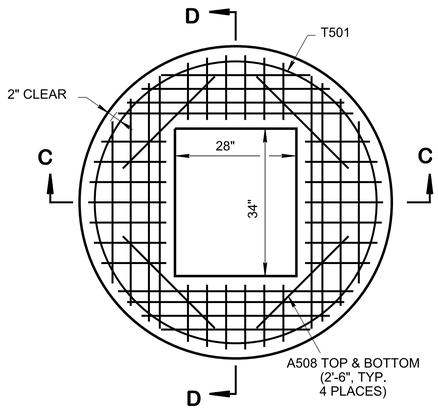
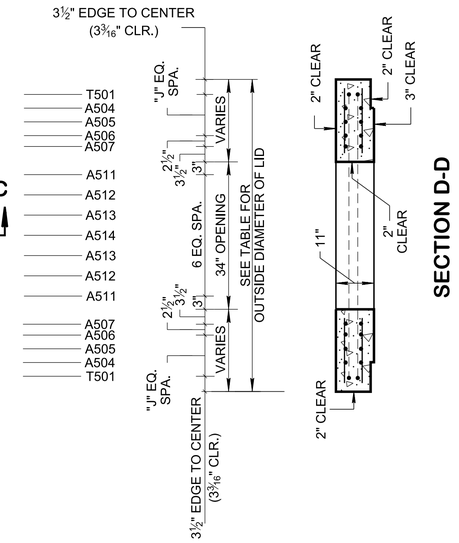



PLAN VIEW




LID REINFORCING







SECTION D-D

| CATCH BASIN MAXIMUM DEPTH NOTE |
|---|
| MAXIMUM DEPTH FOR THIS STRUCTURE IS 40.00'. |

## CATCH BASIN DIMENSIONS

| INSIDE DIAMETER (D) OF PIPE (INCHES) | PIPE WALL THICKNESS (INCHES) | DIAMETER OF CUT-OUT HOLES (INCHES) | PRECAST SECTION MIN. HEIGHTS (INCHES) | | FOR DESIGN ▲ USE ONLY CATCH BASIN MINIMUM DESIGN DEPTH (FEET) | |
|---|---|---|---|---|---|---|
| | | | 60" | 72" | 60" | 72" |
| 18 | 2½ | 25 | 53½ | 54 | 3.94 | 3.98 |
| 24 | 3 | 32 | 60½ | 61 | 4.48 | 4.53 |
| 30 | 3½ | 39 | 67½ | 68 | 5.02 | 5.07 |
| 36 | 4 | 46 | 74½ | 75 | 5.56 | 5.61 |
| 42 | 4½ | 53 | 81½ | 82 | 6.11 | 6.15 |
| 48 | 5 | 60 | 88½ | 89 | 6.65 | 6.69 |

(1) CUT-OUT HOLES BASED ON REINFORCED CONCRETE PIPE WITH WALL TYPE "B".

(2) ALL FLEXIBLE PIPE MATERIALS REQUIRE GASKET. SEE STANDARD DRAWING D-PB-2.

(3) 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.

REV. 12-18-96: REMOVED 0.5" PREMOLDED FIBER EXPANSION JOINT FROM SECTION "B-B". REMOVED OLD GENERAL NOTE (F) HANGED LABEL OF LAST FOUR GENERAL NOTES.

REV. 4-15-97: CHANGED CATCH BASIN DIMENSION TABLE.

REV. 7-29-97: CHANGED HEIGHT OF CATCH BASIN.

REV. 1-19-99: CHANGED MINIMUM DEPTH TABLE AND DRAWING IN GENERAL TO REFLECT REDUCTION IN INVERT DROP ACROSS CATCH BASIN.

REV. 4-15-00: MOVED 84" AND 96" DIAMETER CATCH BASINS TO NEW STANDARD DRAWING D-CB-12RC. RENAMED SHEET.

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

☐ 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.

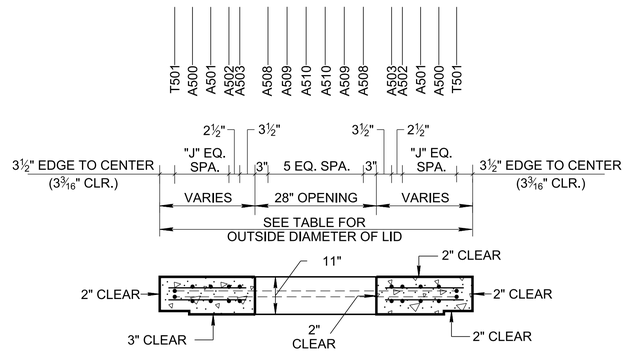
REV. 05-15-18: REVISED CATCH BASIN MINIMUM DESIGN DEPTH VALUES. CORRECTED STANDARD SPECIFICATIONS SECTION NUMBER TO 921 FOR NON -SHRINK GROUT. ADDED DIMENSION IN SECTION VIEW A-A FOR NOTE (B). CORRECTED REBAR PLACEMENT IN LIDS. ADDED DIMENSION IN SECTION VIEW A-A FOR MINIMUM DESIGN DEPTH. CHANGED TO "VERTICAL CURB" FROM "NONMOUNTABLE CURB". ADJUSTED BOX SECTION MINIMUM HEIGHTS.

REV. 02-20-2020: REDREW SHEET.

## VARIABLE REINFORCING DIMENSIONS AND SPACING IN CONCRETE LID

| INSIDE DIA. OF CATCH BASIN (INCHES) | OUTSIDE DIA. OF LID (INCHES) | NO. OF EQUAL SPACES "J" |
|---|---|---|
| 60 | 72 | 3 |
| 72 | 86 | 4 |

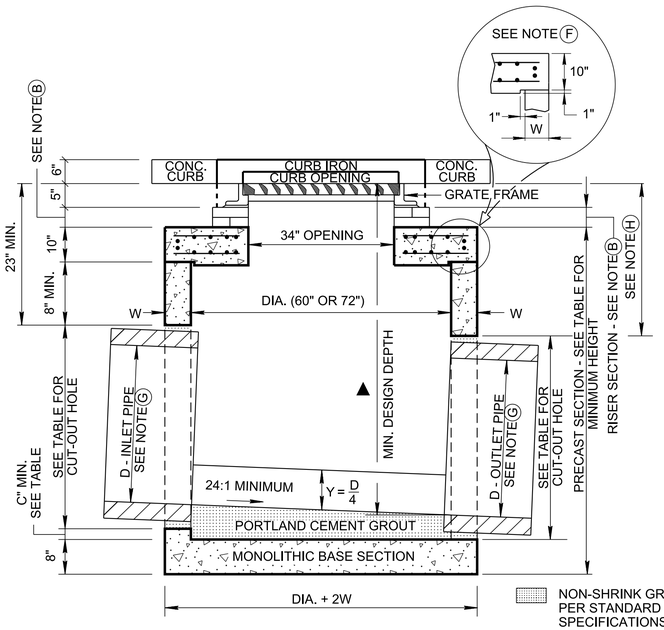
OUT-TO-OUT DIAMETER FOR T501 REINFORCING BARS EQUALS OUTSIDE DIAMETER OF LID MINUS 6⅜ INCHES. ADDITIONAL A-BARS ARE REQUIRED FOR THE LARGER STRUCTURE AS INDICATED BY "NO. OF EQ. SPACES 'J'"



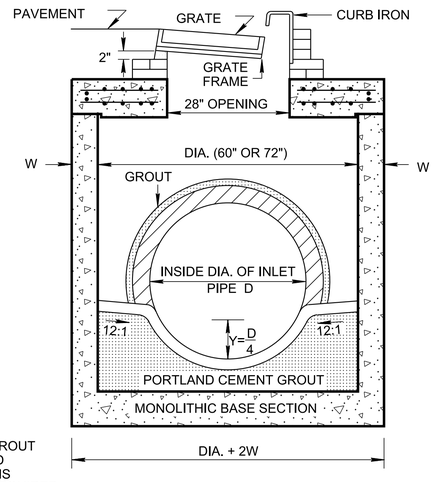




SECTION C-C




SECTION A-A




SECTION B-B

NON-SHRINK GROUT PER STANDARD SPECIFICATIONS SECTION 921 REQUIRED AROUND PIPE OPENINGS ONLY

## GENERAL NOTES

(A) ALL PRECAST ELEMENTS TO MEET ASTM C478 (CURRENT EDITION) AND AASHTO M199 (CURRENT EDITION) UNLESS SUPERSEDED BY THIS DRAWING.

CONCRETE: $f'_c$ = 4,000 POUNDS PER SQUARE INCH AT 28 DAYS
REINFORCING STEEL: ASTM A615, $F_y$ = 60,000 POUNDS PER SQUARE INCH
ALL REINFORCING IS TO BE INSTALLED AS DETAILED ON THIS DRAWING.

(B) THIS DIMENSION MAY VARY FROM A MINIMUM OF 0 INCHES TO A MAXIMUM OF 24 INCHES AS LONG AS 23 INCHES 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 THEIR OWN EXPENSE.

(D) APPROPRIATE SIZING AND LOCATION OF LIFTING DEVICES SHALL BE THE RESPONSIBILITY OF THE FABRICATOR.

(E) 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.

(F) ALTERNATIVE JOINT DETAILS MAY BE ACCEPTABLE. SEE STANDARD DRAWING D-CB-99R FOR ADDITIONAL DETAILS.

(G) 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 INCH INSIDE DIAMETER CATCH BASIN) OR 22 INCH (FOR 72 INCH INSIDE DIAMETER CATCH BASIN) SHALL BE MAINTAINED ABOVE THE OUTLET PIPE.

(I) SEE STANDARD DRAWING D-CBB-12A FOR DETAILS REGARDING CAST IRON GRATES, FRAMES AND CURB INLETS.

(J) SEE STANDARD DRAWING D-CB-12RA FOR DETAILS REGARDING 48" CIRCULAR NO. 12 CATCH BASIN (FOR USE WITH 6" VERTICAL CURB).

(K) SEE STANDARD DRAWING D-CB-12RC FOR DETAILS REGARDING 84" THRU 120" CIRCULAR NO. 12 CATCH BASIN (FOR USE WITH 6" VERTICAL CURB).

(L) PAY DEPTH MEASUREMENT MADE FROM TOP OF GRATE TO OUTLET FLOW ELEVATION. PAYMENT INCLUDES RISER SECTION AND GRATE. PAYMENT FOR CATCH BASIN WILL BE MADE UNDER ITEM NUMBERS:

611-12.01, CATCH BASINS, TYPE 12, 0'-4' DEPTH, EACH, (THROUGH)
611-12.07, CATCH BASINS, TYPE 12, > 24'-28' DEPTH, EACH.

PAYMENT FOR CATCH BASINS DEEPER THAN 28' WILL BE MADE UNDER ITEM NUMBER:

611-12.08, CATCH BASINS, TYPE 12, _ ' - _' DEPTH, EACH.

## CATCH BASIN DIMENSIONS

| INSIDE DIA. OF CATCH BASIN DIA. (INCHES) | 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 C (INCHES) |
|---|---|---|---|---|---|---|
| 60 | 6 | 10 | 72 | 36 | 24 | 2.5 |
| 72 | 7 | 10 | 86 | 48 | 30 | 3.0 |

☐ APPROVED BY FHWA
(ALL OTHERS APPROVED BY TDOT)

STATE OF TENNESSEE
STANDARD DRAWING
DEPARTMENT OF TRANSPORTATION

# STANDARD PRECAST 60" & 72" CIRCULAR NO.12 CATCH BASIN FOR USE WITH 6" VERTICAL CURB

12-18-1993 | D-CB-12RB

NOT TO SCALE

LLP

3/23/2020 8:33:00 AM
C:\Users\jj00547\Desktop\10-102.00 Catch Basins and Manholes IP\102.01 Catch Basins IP\DCB12RB-20200220.DGN