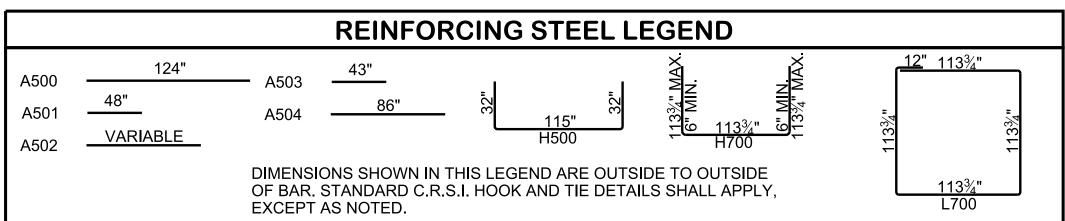


CATCH BASIN DIMENSIONS FOR DESIGN USE ONLY BOX SECTI CATCH BASIN PIPE WALL DIAMETER OF CUT-OUT MINIMUM MINIMUM **THICKNESS** (D) OF PIPE HOLES HEIGHTS DESIGN DEPT (INCHES) (ÍNCHES) (INCHES) (INCHES) (FEET) $2\frac{1}{2}$ 18 25 $63\frac{1}{2}$ 4.62 24 32 70½ 5.16 $3\frac{1}{2}$ 30 39 $77\frac{1}{2}$ 36 46 841/2 6.24 42 $4\frac{1}{2}$ 53 91½ 6.79 48 60 98½ 7.33 $5\frac{1}{2}$ 67 54 7.87 60 6 74 $112\frac{1}{2}$ 8.41 66 $6\frac{1}{2}$ 81 119½ 8.95 9.50 72 78 10.04

- (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.



GENERAL NOTES

- DRAWING TO BE USED FOR ALL CAST-IN-PLACE NO. 51SE CONCRETE CATCH BASINS AND ALL PRECAST NO. 51SE CONCRETE CATCH BASINS. SEE STANDARD DRAWING D-CB-99 FOR ADDITIONAL CONSTRUCTION NOTES & DETAILS
- THIS DIMENSION MAY VARY FROM A MINIMUM OF 0 INCHES TO A MAXIMUM OF 24 INCHES AS LONG AS 27 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.
- THIS DRAWING DEPICTS THE MINIMUM HORIZONTAL REINFORCING AT THE TOP OF CATCH BASIN WALLS. SEE ADDITIONAL DETAILS ON STANDARD DRAWING D-CB-99 FOR TALLER SECTIONS AND STEEL PLACEMENT ABOVE PIPE
- CAST-IN-PLACE CONCRETE CATCH BASINS SHALL BE CONSTRUCTED IN ACCORDANCE WITH STANDARD SPECIFICATIONS, SECTION 611 AND/OR SPECIAL PROVISIONS UNLESS SUPERSEDED BY THIS DRAWING. THE CONTRACTOR MAY WITH PERMISSION FROM THE ENGINEER SUBSTITUTE PRECAST CATCH BASINS FOR CAST-IN-PLACE CATCH BASINS PROVIDED THAT ALL PRECAST ELEMENTS MEET ASTM C913 (CURRENT EDITION) UNLESS SUPERSEDED BY THIS DRAWING.
- THE FOLLOWING MATERIAL PROPERTIES ARE REQUIRED FOR BOTH CAST-IN-PLACE AND PRECAST STRUCTURES:

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

5

2" CLEAR

- 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.
- THE CONTRACTOR MAY ELIMINATE THE A502 BARS BY LENGTHENING THE VERTICAL LEG OF THE H500/H501 BARS SO THAT 1½ INCHES OF CLEAR COVER IS PROVIDED AT THE TOP OF THE STRUCTURE.
- 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-99 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
- FOR CASES WHERE THE OUTLET PIPE DIAMETER IS LARGER THAN THE INLET PIPE DIAMETER, A MINIMUM 29 INCH DEPTH SHALL BE MAINTAINED ABOVE THE OUTLET PIPE.
- SEE STANDARD DRAWING D-CBB-31 FOR DETAILS REGARDING CAST IRON GRATES.
- 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:

611-51.02. CATCH BASINS, TYPE 51, > 4'-8' DEPTH, 611-51.07, CATCH BASINS, TYPE 51, > 24'-28' DEPTH, EACH, EACH.

(THROUGH)

■ APPROVED BY FHWA (ALL OTHERS APPROVED BY TDOT)

☐ REV. 8-01-12: REVISED CATCH BASIN FOR LRFD DESIGN SPECIFICATIONS, 4TH

EDITION WITH INTERIMS. REVISED

REINFORCING, GENERAL NOTES, LEGEND

AND ADDITIONAL MISC. DRAFTING EDITS.

REV. 3-11-14: ELIMINATED STIRRUPS.

REV. 05-15-18: REVISED CATCH BASIN

CORRECTED STANDARD SPECIFICATIONS

MINIMUM DESIGN DEPTH VALUES.

SECTION NUMBER TO 921 FOR NON

SECTION VIEW A-A FOR NOTE (B)

FOR MINIMUM DESIGN DEPTH.

REV. 02-20-2020: REDREW SHEET

-SHRINK GROUT. ADDED DIMENSION IN

CORRECTED REBAR PLACEMENT IN LIDS

ADDED DIMENSION IN SECTION VIEW A-A

STATE OF TENNESSEE STANDARD DRAWING **DEPARTMENT OF TRANSPORTATION**

STANDARD 9' X 9' SQUARE CONCRETE NO. 51 **CATCH BASIN**

D-CB-51SE

NOT TO SCALE

3/2020 9:15:46 AM Users\jj00547\Desk

05-05-2005