



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
DESIGN DIVISION
NASHVILLE, TENNESSEE 37243-0348

JOHN C. SCHROER
COMMISSIONER

BILL HASLAM
GOVERNOR

INSTRUCTIONAL BULLETIN NO. 12-18

Regarding Revised Standard Drawing and Section V of the Design Guidelines

Effective immediately, the following Standard Drawing and Section V of the Design Guidelines are revised.

<u>DRAWING NUMBER</u>	<u>CURRENT REVISION DATE</u>	<u>DESCRIPTION</u>
D-CB-14RB	8-15-12	STANDARD PRECAST CIRCULAR NO. 14RB CATCH BASIN

A copy of the revised standard drawing is attached.



Carolyn Stonecipher, P.E.,
Civil Engineering Director
Design Division

August 15, 2012
CS:ARH:MWC
Attachment

TDOT - ROADWAY DESIGN GUIDELINES

English

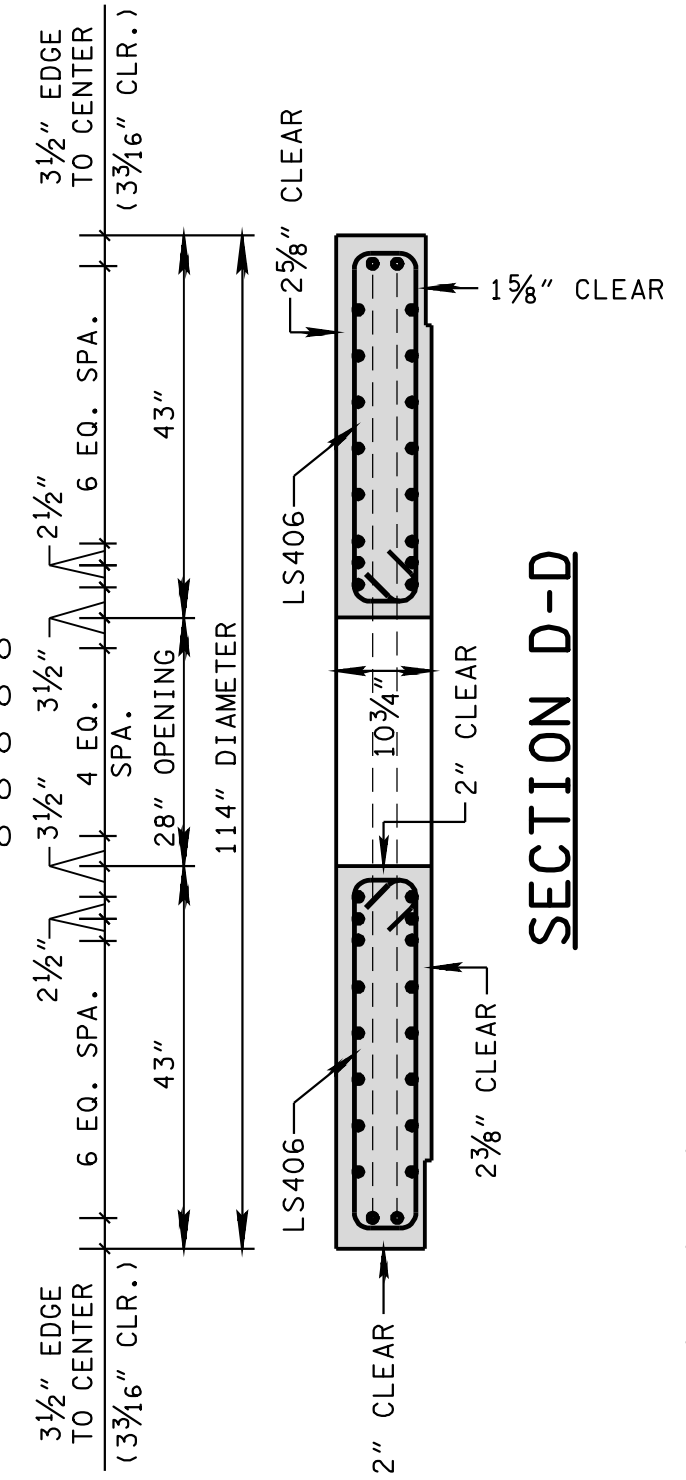
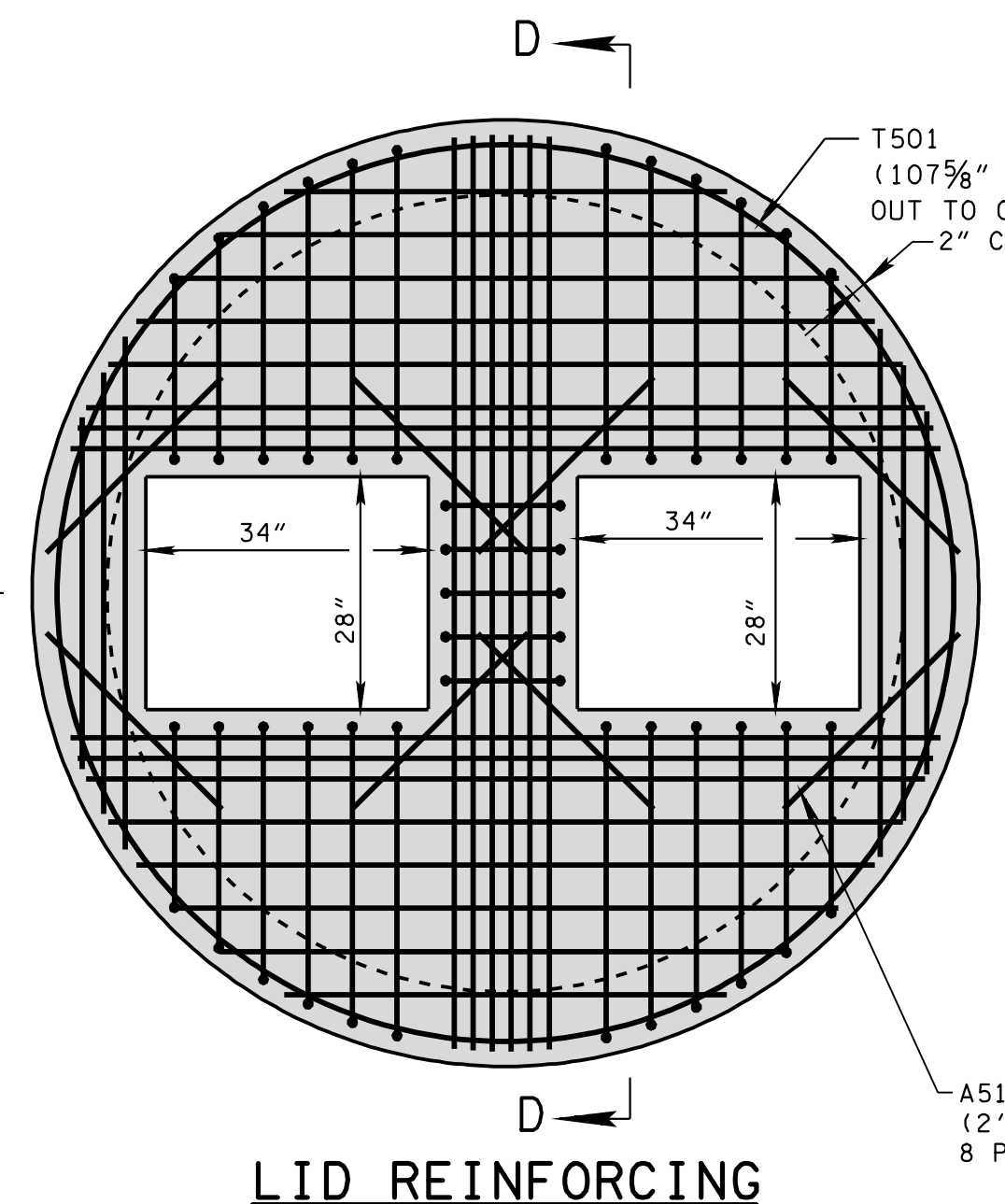
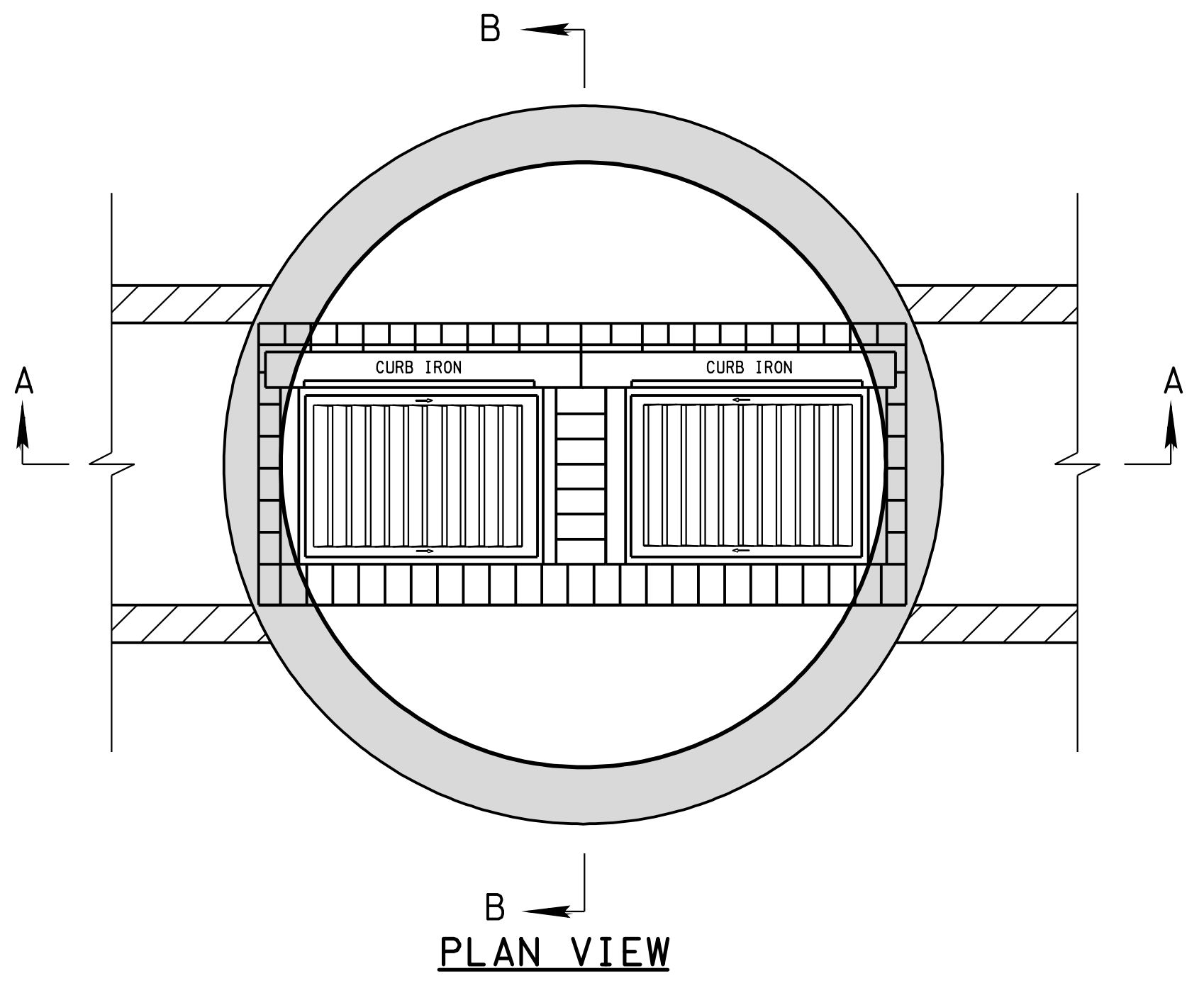
Revised: 08/06/12

D-CB-12P	08-01-12	STANDARD PRECAST RECTANGULAR CONCRETE NO.12 CATCH BASIN
D-CB-12RA	08-01-12	STANDARD PRECAST 48" CIRCULAR NO. 12 CATCH BASIN (FOR USE WITH 6" NONMOUNTABLE CURB)
D-CB-12RB	08-01-12	STANDARD PRECAST 60" AND 72" CIRCULAR NO. 12 CATCH BASIN (FOR USE WITH 6" NONMOUNTABLE CURB)
D-CB-12RC	08-01-12	STANDARD PRECAST 84" THRU 120" CIRCULAR NO. 12 CATCH BASIN (FOR USE WITH 6" NONMOUNTABLE CURB)
D-CB-12S	08-01-12	STANDARD RECTANGULAR CONCRETE NO. 12 CATCH BASIN
D-CB-12SB	08-01-12	STANDARD 4' X 4' SQUARE CONCRETE NO. 12 CATCH BASIN
D-CB-12SC	08-01-12	STANDARD 5'2" X 5'2" SQUARE CONCRETE NO. 12 CATCH BASIN
D-CB-12SD	08-01-12	STANDARD 7' X 7' SQUARE CONCRETE NO. 12 CATCH BASIN
D-CB-12SE	08-01-12	STANDARD 9' X 9' SQUARE CONCRETE NO. 12 CATCH BASIN
D-CB-13B	08-01-12	STANDARD RECTANGULAR BRICK NO. 13 CATCH BASIN
D-CB-13P	08-01-12	STANDARD PRECAST RECTANGULAR CONCRETE NO. 13 CATCH BASIN
D-CB-13RA	08-01-12	STANDARD PRECAST 48" CIRCULAR NO. 13 CATCH BASIN (FOR USE WITH 6" NONMOUNTABLE CURB)
D-CB-13RB	08-01-12	STANDARD PRECAST 60" AND 72" CIRCULAR NO. 13 CATCH BASIN (FOR USE WITH 6" NONMOUNTABLE CURB)
D-CB-13RC	08-01-12	STANDARD PRECAST 84" THRU 120" CIRCULAR NO. 13 CATCH BASIN (FOR USE WITH 6" NONMOUNTABLE CURB)
D-CB-13S	08-01-12	STANDARD RECTANGULAR CONCRETE NO. 13 CATCH BASIN
D-CB-14B	08-01-12	STANDARD RECTANGULAR BRICK NO. 14 CATCH BASIN
D-CB-14P	08-01-12	STANDARD PRECAST RECTANGULAR CONCRETE NO. 14 CATCH BASIN
D-CB-14RB	08-15-12	STANDARD PRECAST CIRCULAR NO. 14RB CATCH BASIN
D-CB-14S	08-01-12	STANDARD RECTANGULAR CONCRETE NO. 14 CATCH BASIN

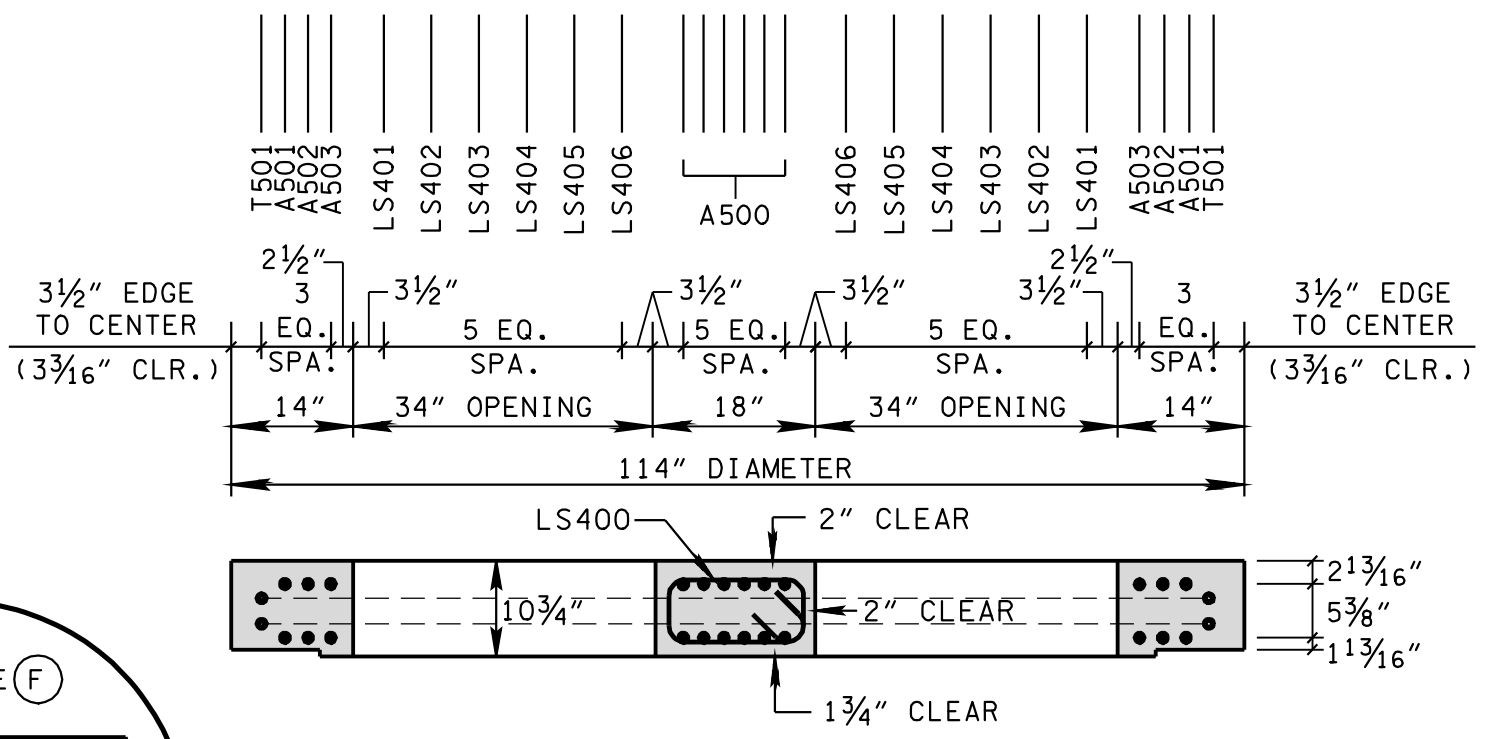
CATCH BASIN MAXIMUM DEPTH NOTE
 MAXIMUM DEPTH FOR THIS STRUCTURE IS 40.00'.

REV. 5-27-01: CHANGED PAY ITEMS IN GENERAL NOTE (B) 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. 8-15-12: REVISED CATCH BASIN DIMENSIONS TABLE

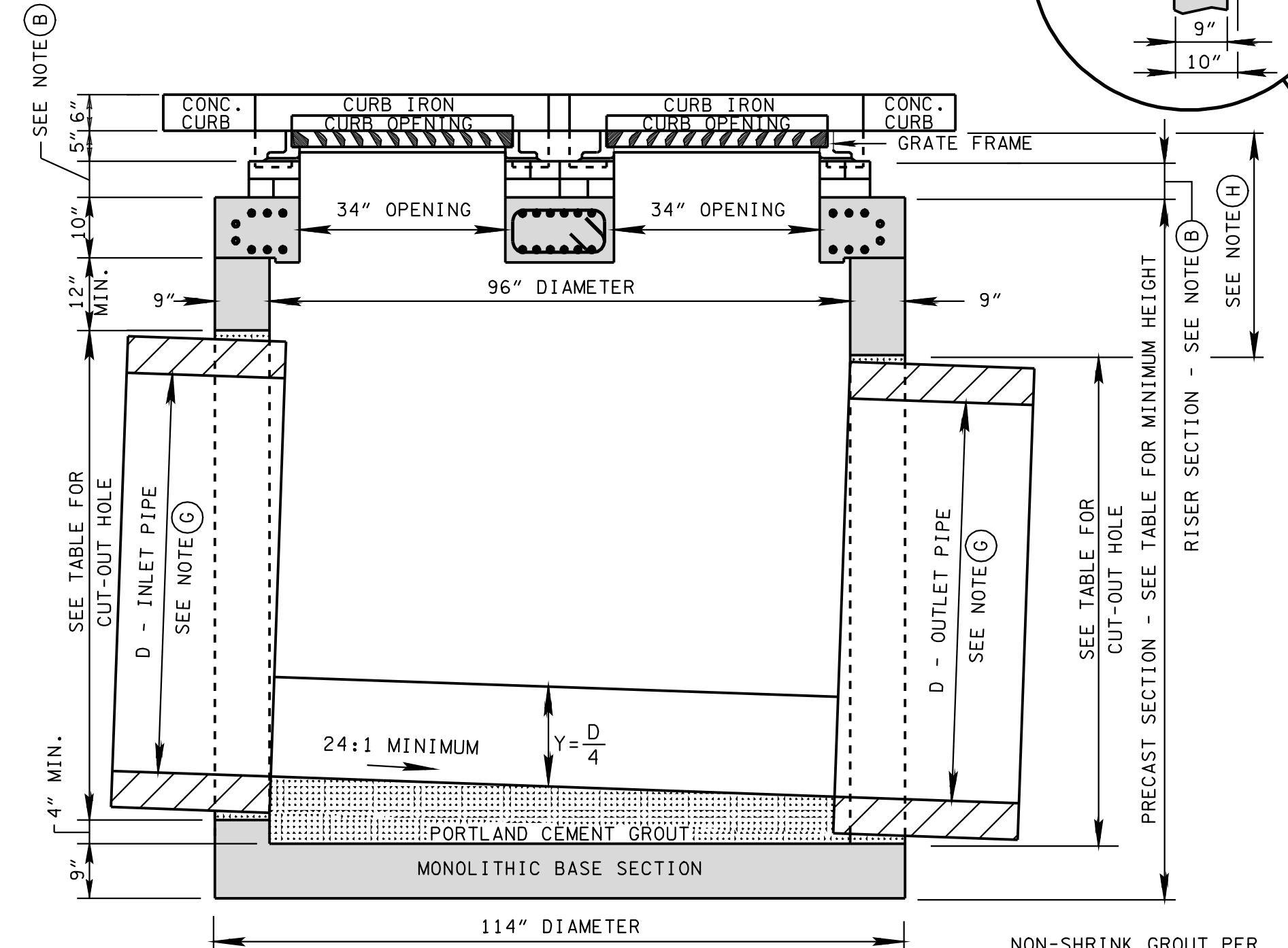
CATCH BASIN DIMENSIONS				FOR DESIGN USE ONLY
INSIDE DIAMETER (D) OF PIPE (INCHES)	PIPE WALL THICKNESS (INCHES)	DIAMETER OF CUT-OUT HOLES (INCHES)	PRECAST SECTION MIN. HEIGHTS (INCHES)	CATCH BASIN MINIMUM DESIGN DEPTH (FEET)
18	2½	25	60	4.38
24	3	32	67	4.92
30	3½	39	74	5.46
36	4	46	81	6.00
42	4½	53	88	6.54
48	5	60	95	7.08
54	5½	67	102	7.63
60	6	74	109	8.17
66	6½	81	116	8.71



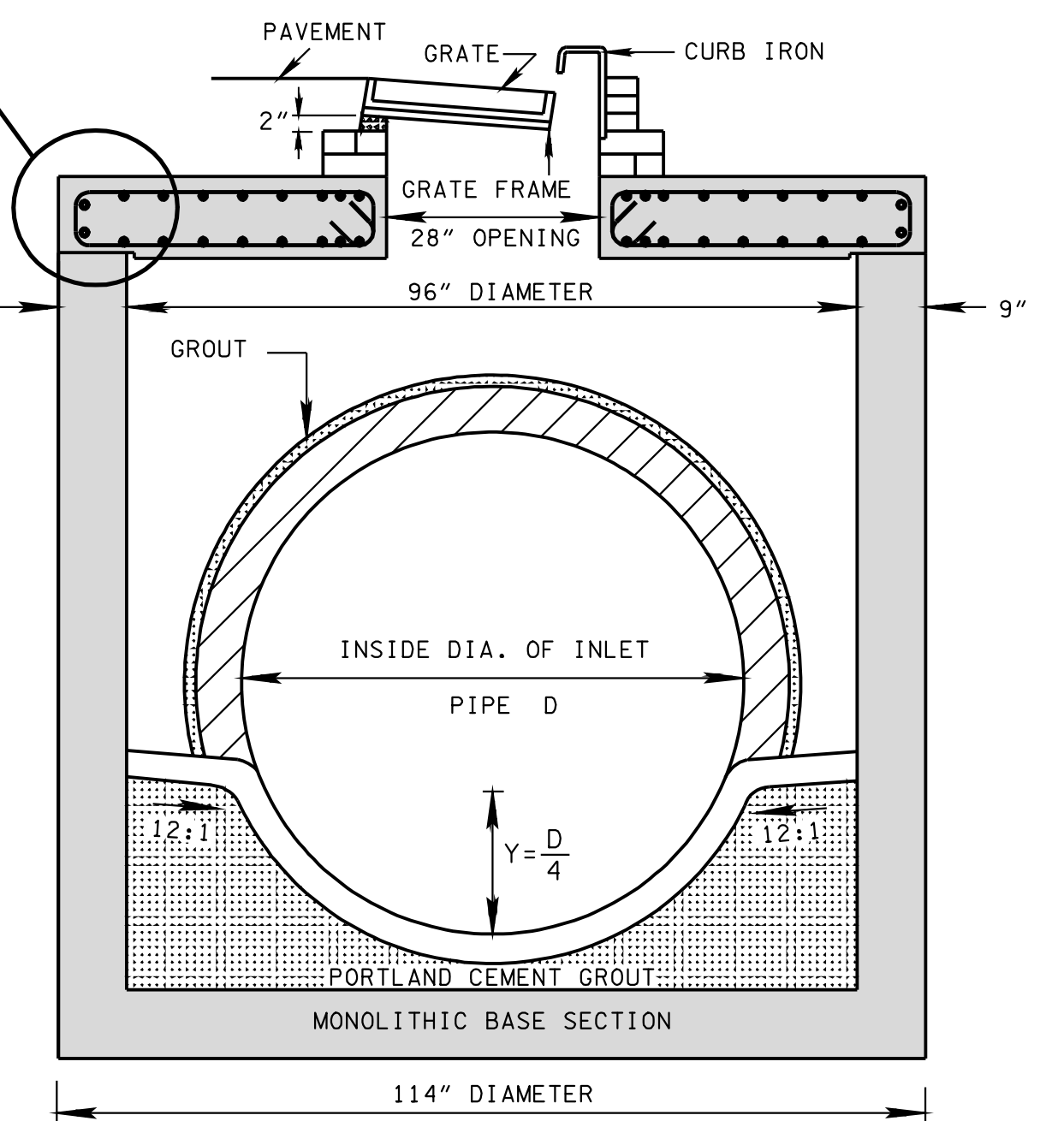
- ① CUT-OUT HOLES BASED ON REINFORCED CONCRETE PIPE WITH WALL TYPE "B".
- ② ALL FLEXIBLE PIPE MATERIALS REQUIRE GASKET. SEE STANDARD DRAWING D-PB-2.
- ③ CUT-OUT HOLES FOR PRECAST STRUCTURES TO BE FORMED IN ORDER TO OBTAIN A SMOOTH EDGED HOLE. SCORED OR ETCHED HOLES WITH REINFORCING STEEL LEFT UN CUT WILL NOT BE PERMITTED.



SECTION C-C



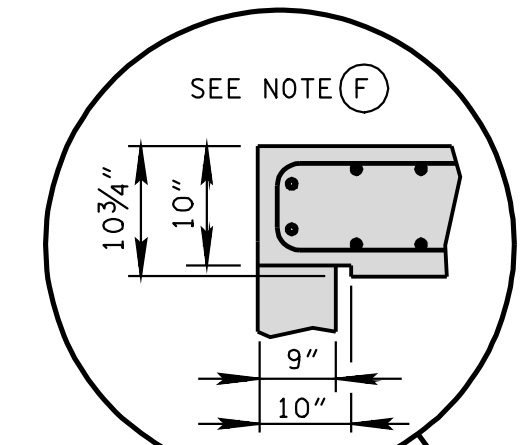
SECTION A-A



SECTION B-B

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 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.
- (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.
- (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 27 INCH DEPTH 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) PAY DEPTH MEASUREMENT MADE FROM TOP OF GRATE TO OUTLET FLOW ELEVATION. PAYMENT FOR CATCH BASIN WILL BE MADE UNDER ITEM NUMBERS 611-14.01 CATCH BASINS, TYPE 14, 0'-4' DEPTH THROUGH 611-14.07, CATCH BASINS, TYPE 14, > 24'-28' DEPTH PER EACH. PAYMENT FOR CATCH BASINS DEEPER THAN 28' WILL BE MADE UNDER ITEM NUMBER 611-14.08, CATCH BASINS, TYPE 14, _____' - _____' DEPTH PER EACH. PAYMENT INCLUDES RISER SECTIONS AND GRATES.



SEE NOTE (F)

NON-SHRINK GROUT PER STANDARD SPECIFICATIONS SECTION 918 REQUIRED AROUND PIPE OPENINGS ONLY

MINOR REVISION -- FHWA APPROVAL NOT REQUIRED.

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
STANDARD PRECAST CIRCULAR NO. 14RB CATCH BASIN