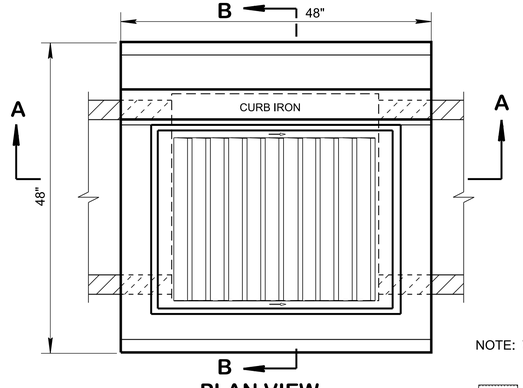
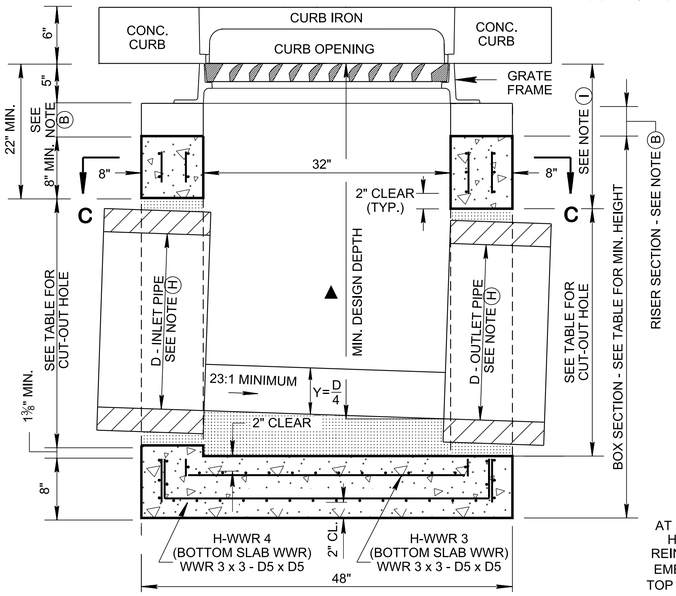


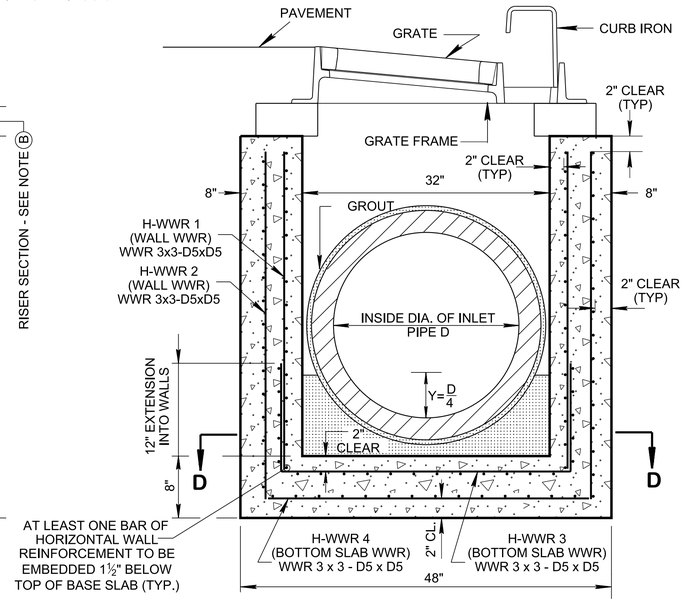
PLAN VIEW

NOTE: WALL AND SLAB POURED MONOLITHICALLY.

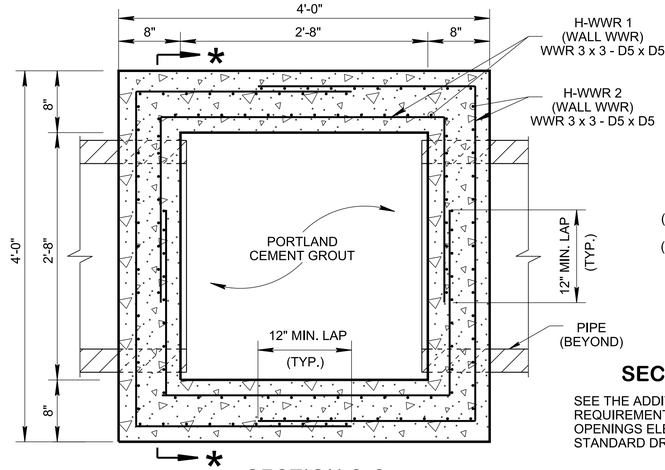
NON-SHRINK GROUT PER STANDARD SPECIFICATIONS SECTION 921 REQUIRED AROUND PIPE OPENINGS ONLY



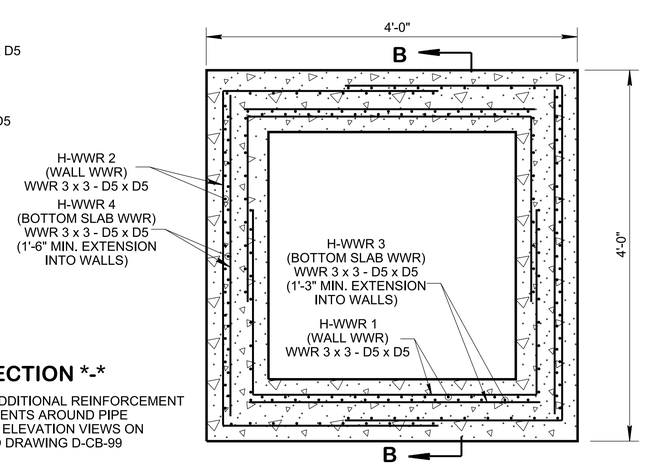
SECTION A-A



SECTION B-B



SECTION C-C
FOR WALL WWR POSITIONING



SECTION D-D
FOR WALL AND BOTTOM SLAB WWR POSITIONING

SECTION *-*

SEE THE ADDITIONAL REINFORCEMENT REQUIREMENTS AROUND PIPE OPENINGS ELEVATION VIEWS ON STANDARD DRAWING D-CB-99

CATCH BASIN MAXIMUM DEPTH NOTE

MAXIMUM DEPTH FOR THIS STRUCTURE IS 4'-6". WHEN DEPTH REQUIREMENTS EXCEED THIS DEPTH THE CONTRACTOR IS TO USE OTHER VERSIONS OF THE NO. 12 CATCH BASIN.

CATCH BASIN DIMENSIONS

INSIDE DIAMETER (D) OF PIPE (INCHES)	PIPE WALL THICKNESS (INCHES)	DIAMETER OF CUT-OUT HOLES (INCHES)	BOX SECTION MINIMUM HEIGHTS (INCHES)	FOR DESIGN USE ONLY CATCH BASIN MINIMUM DESIGN DEPTH (INCHES) ▲
18	2½	25	42⅜	45¼"
24	3	32	49⅜	51¾"

▲ SEE SECTION A-A FOR MINIMUM DESIGN DEPTH MEASUREMENT.

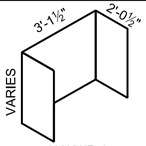
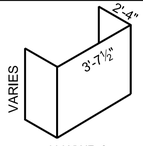
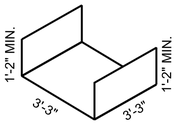
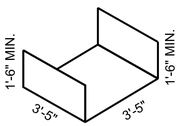
(1) CUT-OUT HOLES BASED ON REINFORCED CONCRETE PIPE WITH WALL TYPE "B".

(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.

(4) THE SUM OF BOX SECTION HEIGHT & RISER SECTION HEIGHT SHALL NOT EXCEED 61".

REINFORCING STEEL LEGEND

H-WWR 1	H-WWR 2	H-WWR 3	H-WWR 4
			
(WALL WWR) WWR 3 x 3 - D5 x D5 (AREA PROVIDED = 0.20 SQ. IN / F.T. E.W.)	(WALL WWR) WWR 3 x 3 - D5 x D5 (AREA PROVIDED = 0.20 SQ. IN / F.T. E.W.)	(BOTTOM SLAB WWR) WWR 3 x 3 - D5 x D5 (AREA PROVIDED = 0.20 SQ. IN / F.T. E.W.)	(BOTTOM SLAB WWR) WWR 3 x 3 - D5 x D5 (AREA PROVIDED = 0.20 SQ. IN / F.T. E.W.)
NUMBER REQUIRED			
2	2	1	1

GENERAL NOTES

(A) THIS DRAWING TO BE USED AS AN ALTERNATE REINFORCEMENT DESIGN FOR PRECAST NO. 12LP (LOW PROFILE) CONCRETE CATCH BASINS. SEE STANDARD DRAWING D-CB-99 FOR ADDITIONAL CONSTRUCTION NOTES & DETAILS.

(B) THIS DIMENSION MAY VARY FROM A MINIMUM OF 0 INCHES TO A MAXIMUM OF 9 INCHES AS LONG AS 22 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) REFER TO ASTM C1577 (LATEST EDITION) FOR DETAILS NOT SHOWN ON THIS DRAWING.

(D) THE DESIGN OF THIS STRUCTURE SHOULD BE IN ACCORDANCE WITH THE CURRENT AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS. THIS CATCH BASIN IS STRUCTURALLY DESIGNED BASED ON HL-93 LIVE LOADS CAPACITY.

(E) THE FOLLOWING MATERIAL PROPERTIES ARE REQUIRED FOR PRECAST STRUCTURES:

CONCRETE: f'_c = 5,000 POUNDS PER SQUARE INCH AT 28 DAYS
REINFORCING STEEL: ASTM A615, Fy = 60,000 PSI.
WELDED WIRE REINFORCEMENT (WWR): ASTM A1064, WITH A MINIMUM YIELD STRENGTH OF 70,000 PSI.
THE MINIMUM SPLICE LENGTH IS TO BE 12 INCHES. ALL REINFORCING STEEL TO BE INSTALLED AS DETAILED ON THIS DRAWING.

(F) 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.

(G) 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.

(H) 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.

(I) FOR CASES WHERE THE OUTLET PIPE DIAMETER IS LARGER THAN THE INLET PIPE DIAMETER, A MINIMUM 22 INCH DEPTH SHALL BE MAINTAINED ABOVE THE OUTLET PIPE.

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

(K) CONTRACTOR TO INSTALL PIPE COMPLETELY INTO WALL OPENING AND FILL VOID BETWEEN PIPE AND OPENING WITH NON-SHRINK GROUT PER STANDARD SPECIFICATION SECTION 921.

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

(M) 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,
611-12.02, CATCH BASINS, TYPE 12, > 4'-8' DEPTH, EACH.

STATE OF TENNESSEE
STANDARD DRAWING
DEPARTMENT OF TRANSPORTATION

ALTERNATE REINFORCEMENT FOR PRECAST CONCRETE 32"X32" NO. 12LP CATCH BASIN

01-28-2022 | D-CB-12LPA

NOT TO SCALE

1/24/2022 10:53:39 AM
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