

3251

SECTION B-B

3251

SECTION A-A

CATCH BASIN MAXIMUM DEPTH NOTE

MAXIMUM DEPTH FOR THIS STRUCTURE IS 8.5 m. WHEN DEPTH REQUIREMENTS EXCEED THIS DEPTH THE CONTRACTOR IS TO USE OTHER VERSIONS OF THE NO.46 CATCH BASIN, WHICH WILL BE SHOWN AS A DETAIL IN THE PLANS SECOND SHEETS.

50 CLEAR

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SECTION

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REV. 2-13-04: CHANGED REINFORCING STEEL IN BASE SECTION.

REV. 5-5-05: ADDED EXTRA STEEL DIMENSION TO SECTION C-C.



CATCH BASIN DIMENSIONS							
INSIDE WIDTH OF CATCH BASIN (mm)	WALL THICKNESS W (mm)	OUTSIDE WIDTH OF CATCH BASIN (mm)	MAX. INLET OR OUTLET CONC. PIPE SIZE - STR. (mm)	MAX. INLET OR OUTLET CONC. PIPE SIZE - 90° (mm)	DIMENSION C (mm)		
2743	254	3251	1950	1800	114		

DIAMETER

				DIAMETER				
CUT-OL	JT HOLES FOR	INLET & OUTLET	(X) OF PIPE (mm)	CONCRETE PIPE	CORRUGATED METAL PIPE	POLYETHYLENE PIPE		
INSIDE			450	1.56	1.50	1.54		
DIAMETER (X) OF PIPE	CONCRETE	F & G - (mm)	F & G - (mm) CORRUGATED POLYETHYLENE		1.72	1.65	1.70	
(mm)	PIPE	METAL PIPE	PIPE	750	1.89	1.80	1.88	
450	660	535	610	900	2.06	1.97	2.03	
600	815	685	785	1050	2.22	2.12	2.17	
750	1015	840	990	1200	2.39	2.27	2.33	
900	1195	1015	1145	1350	2.55	2.43		
1050	1370	1170	1270	1500	2.72	2.58		
1200	1550	1320	1420	1650	2.88	2.73		
1350	1730	1475		1800	3.05			
1500	1905	1625				2.88		
1650	2085	1780		1950	3.21	3.04		
1800	2260	1930		1 DEPTH MEASUREMENT MADE FROM TOP OF GRATE TO OUTLET FLOI ELEVATION BASED ON INLET AND OUTLET PIPES BEING THE SAI DIAMETER, IF OUTLET PIPE IS GREATER ADJUSTMENT IN DEPTI				
1950	2440	2085						

(X) OF PIPE (mm)	CONCRETE PIPE	CORRUGATED METAL PIPE	POLYETHYLENE PIPE
450	1.56	1.50	1.54
600	1.72	1.65	1.70
750	1.89	1.80	1.88
900	2.06	1.97	2.03
1050	2.22	2.12	2.17
1200	2.39	2.27	2.33
1 350	2.55	2.43	
1500	2.72	2.58	
1650	2.88	2.73	
1800	3.05	2.88	
1950	3.21	3.04	
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CATCH BASIN MINIMUM DEPTH TABLE

MINIMUM DEPTH - (m)

CUT- OUT HOLES FOR PRECAST STRUCTURES TO BE CORED OR FORMED IN ORDER TO OBTAIN A SMOOTH EDGED HOLE. SCORED OR ETCHED HOLES WITH REINFORCING STEEL LEFT UNCUT WILL NOT BE PERMITTED.

- DEPTH MEASUREMENT MADE FROM 10P OF GRATE TO OUTLET FLOW ELEVATION BASED ON INLET AND OUTLET PIPES BEING THE SAME DIAMETER, IF OUTLET PIPE IS GREATER ADJUSTMENT IN DEPTHS MUST BE MADE TO ACCOMMODATE THIS SITUATION.) TO DETERMINE FLOOR OF CATCH BASIN ELEVATION, WHEN INLET AND OUTLET PIPES ARE THE SAME SIZE, ADD PIPE WALL THICKNESS PLUS 40 mm TO THE ABOVE MINIMUM DEPTHS.
- GENERAL NOTES
- (A) DRAWING TO BE USED FOR ALL CAST-IN-PLACE NO. 46 CONCRETE CATCH BASINS AND ALL PRECAST NO. 46 CONCRETE CATCH BASINS.
- B CAST-IN-PLACE CONCRETE CATCH BASINS SHALL BE CONSTRUCTED IN ACCORDANCE WITH STANDARD SPECIFICATIONS, SECTION 611 AND/OR SPECIAL PROVISIONS.
- © 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 M913 (CURRENT EDITION) UNLESS SUPERSEDED BY THIS DRAWING.

CONCRETE: f'c= 28 MPa AT 28 DAYS REINFORCING STEEL: ASTM A615M, f_Y = 415 MPa ALL REINFORCING IS TO BE INSTALLED AS DETAILED ON THIS DRAWING.

- (D) 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.
- (E) ADDITIONAL REINFORCING STEEL NECESSARY ABOVE THE CORED OR FORMED CUT-OUT HOLES TO MAINTAIN THE INTEGRITY OF THE STRUCTURE DURING HANDLING AND PLACEMENT SHALL BE THE RESPONSIBILITY OF THE FABRICATOR.
- (F) APPROPRIATE SIZING AND LOCATION OF LIFTING DEVICES SHALL BE THE RESPONSIBILITY OF THE FABRICATOR TO ASSURE BALANCED HANDLING DURING INSTALLATION OF THE CATCH BASIN.
- (G) THE CONTRACTOR IS TO PATCH ALL LIFTING DEVICE HOLES AND PLACE A MINIMUM OF 25 mm OF COVER OVER THE HARDWARE OF THESE DEVICES ON BOTH TOP AND BOTTOM SURFACES.
- (H) INVERT ELEVATIONS ARE TO BE ADJUSTED AS DIRECTED BY THE ENGINEER IN ORDER TO ACCOMMODATE INLET AND
- (I) SEE STANDARD DRAWING DM-CBB-31 FOR DETAILS REGARDING CAST IRON GRATES.
- (J) PAYMENT FOR CATCH BASIN WILL BE MADE UNDER ITEM NUMBERS 611M46.02 CATCH BASINS, TYPE 46, > 1m-2m DEPTH THROUGH 611M46.09, CATCH BASINS, TYPE 46, > 8m-9m DEPTH PER EACH.



ALL UNITS ARE IN MILLIMETERS UNLESS NOTED OTHERWISE.

MINOR REVISION -- FHWA APPROVAL NOT REQUIRED.

STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION

STANDARD 2743 mm X 2743 mm SQUARE CONCRETE NO. 46 CATCH BASIN (FOR USE UNDER CONCRETE MEDIAN BARRIER WALL)

5-27-99 DM-CB-46SE