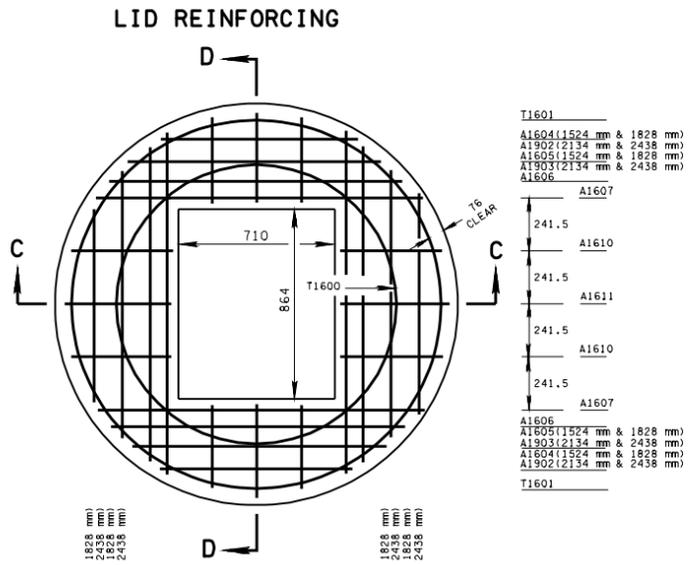


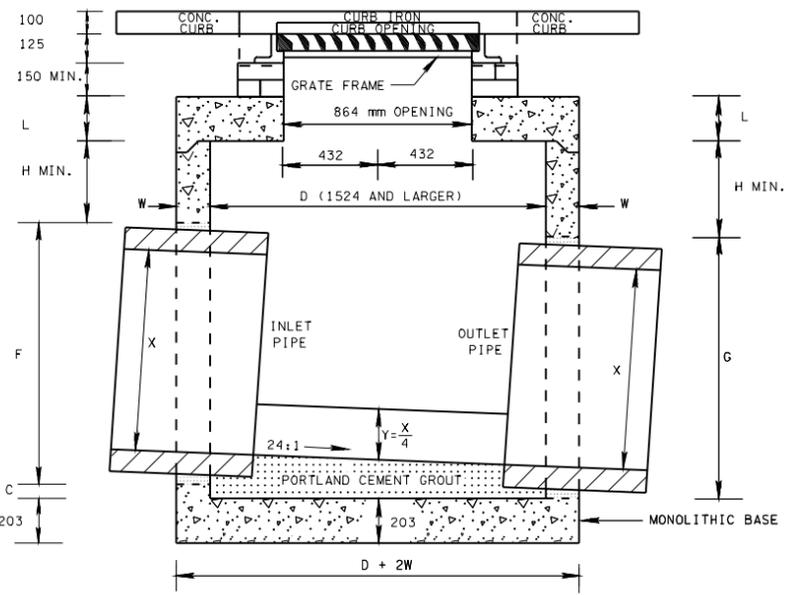
PLAN VIEW

INSIDE DIAMETER (X) OF PIPE (mm)	DIAMETER OF CUT-OUT HOLES F & G - (mm)		
	CONCRETE PIPE	CORRUGATED METAL PIPE	POLYETHYLENE PIPE
450	660	535	610
600	815	685	785
750	1015	840	990
900	1195	1015	1145
1050	1370	1170	1270
1200	1550	1320	1420
1350	1725	1475	—
1500	1905	1625	—
1650	2085	1780	—

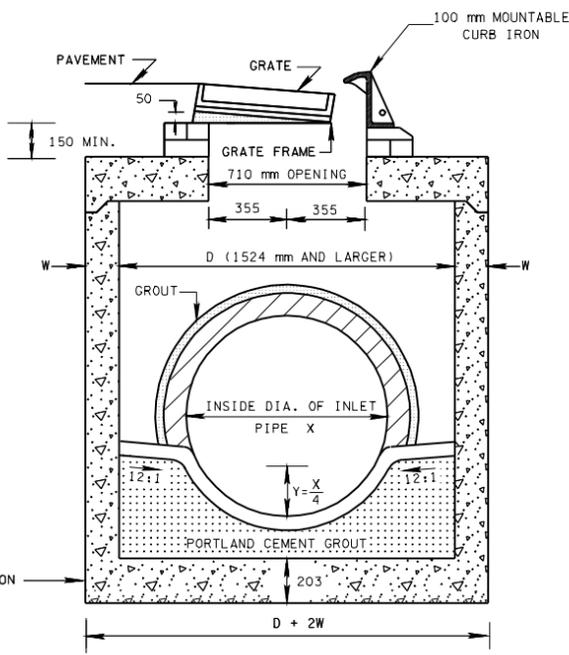
CUT-OUT HOLES FOR PRECAST STRUCTURES TO BE CORED OR FORMED IN ORDER TO OBTAIN A SMOOTH EGED HOLE. SCORED OR ETCHED HOLES WITH REINFORCING STEEL LEFT UN CUT WILL NOT BE PERMITTED.



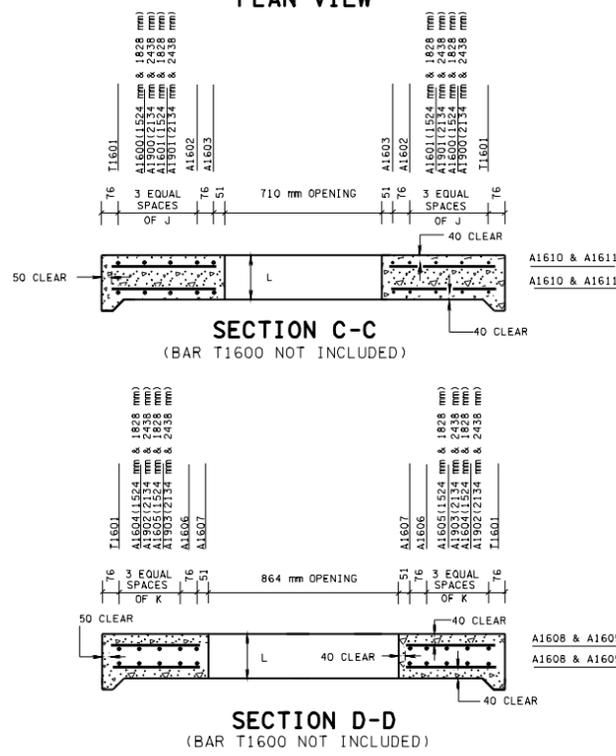
PLAN VIEW



SECTION A-A



SECTION B-B



SECTION C-C
(BAR T1600 NOT INCLUDED)

SECTION D-D
(BAR T1600 NOT INCLUDED)

CATCH BASIN MAXIMUM DEPTH NOTE
MAXIMUM DEPTH FOR PRECAST CONCRETE CIRCULAR CATCH BASINS IS 12 m.

INSIDE DIAMETER (X) OF PIPE (mm)	MINIMUM DEPTH - (m)		
	CONCRETE PIPE	CORRUGATED METAL PIPE	POLYETHYLENE PIPE
450	1.31	1.24	1.28
600	1.46	1.40	1.45
750	1.64	1.55	1.62
900	1.80	1.72	1.78
1050	1.97	1.87	1.92
1200	2.13	2.02	2.07
1350	2.30	2.17	—
1500	2.46	2.33	—
1650	2.63	2.48	—

- DEPTH MEASUREMENT MADE FROM TOP 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.
- IF 1828 mm INSIDE DIAMETER CATCH BASIN IS USED, ADD 0.040 m TO ALL THE ABOVE MINIMUM DEPTHS. IF 2134 mm INSIDE DIAMETER CATCH BASIN IS USED, ADD 0.152 m TO ALL THE ABOVE MINIMUM DEPTHS. IF 2438 mm INSIDE DIAMETER CATCH BASIN IS USED, ADD 0.192 m TO ALL THE ABOVE MINIMUM DEPTHS.

VARIABLE REINFORCING DIMENSIONS IN CONCRETE LID			
INSIDE DIA. OF CATCH BASIN (mm)	OUTSIDE DIA. OF LID (mm)	DIMENSION J (mm)	DIMENSION K (mm)
1524	1828	118.7	93.0
1828	2184	178.2	152.5
2134	2540	237.3	211.7
2438	2896	296.7	271.0

DIAMETER FOR T1300 REINFORCING BARS EQUAL 1270 MILLIMETERS.
DIAMETER FOR T1301 REINFORCING BARS EQUAL OUTSIDE DIAMETER OF LID MINUS 152 MILLIMETERS.

- GENERAL NOTES**
- ALL PRECAST ELEMENTS TO MEET ASTM C478M (CURRENT EDITION) AND AASHTO M199 (CURRENT EDITION) UNLESS SUPERSEDED BY THIS DRAWING.
CONCRETE: $f'_c = 28 \text{ MPa}$ AT 28 DAYS
REINFORCING STEEL: ASTM A615M, $f_y = 415 \text{ MPa}$
ALL REINFORCING IS TO BE INSTALLED AS DETAILED ON THIS DRAWING.
 - 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.
 - 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.
 - APPROPRIATE SIZING AND LOCATION OF LIFTING DEVICES SHALL BE THE RESPONSIBILITY OF THE FABRICATOR TO ASSURE BALANCED HANDLING DURING INSTALLATION OF THE PRECAST CATCH BASIN.
 - 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.
 - INVERT ELEVATIONS ARE TO BE ADJUSTED AS DIRECTED BY THE ENGINEER IN ORDER TO ACCOMMODATE INLET AND OUTLET PIPES.
 - SEE STANDARD DRAWING DM-CBB-12C FOR DETAILS REGARDING CAST IRON GRATES, FRAMES AND CURB INLETS.
 - SEE STANDARD DRAWING DM-CB-28RA FOR DETAILS REGARDING 1219 mm CIRCULAR NO. 28 CATCH BASIN (FOR USE WITH 100 mm MOUNTABLE CURB).
 - PAYMENT FOR CATCH BASIN WILL BE MADE UNDER ITEM NUMBERS 611M28.02 CATCH BASINS, TYPE 28, > 1m-2m DEPTH THROUGH 611M28.09, CATCH BASINS, TYPE 28, > 8m-9m DEPTH PER EACH. PAYMENT FOR CATCH BASINS DEEPER THAN 9 m WILL BE MADE UNDER ITEM NUMBER 611M28.10, CATCH BASINS, TYPE 28, ___ m - ___ m DEPTH PER EACH.

INSIDE DIA. OF CATCH BASIN D (mm)	WALL THICKNESS W (mm)	LID THICKNESS L (mm)	OUTSIDE DIA. OF CATCH BASIN D + 2W (mm)	MAX. INLET OR OUTLET CONC. PIPE SIZE - STR. (mm)	MAX. INLET OR OUTLET CONC. PIPE SIZE - 90° (mm)	DIMENSION	
						C (mm)	H (mm)
1524	152	203	1828	900	600	64	205
1828	178	229	2184	1200	750	76	205
2134	203	229	2540	1500	900	89	305
2438	229	254	2896	1650	1050	102	305



ALL UNITS ARE IN MILLIMETERS UNLESS NOTED OTHERWISE.

MINOR REVISION -- FHWA APPROVAL NOT REQUIRED.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
STANDARD PRECAST CIRCULAR NO. 28 CATCH BASIN
(FOR USE WITH 100 mm MOUNTABLE CURB)