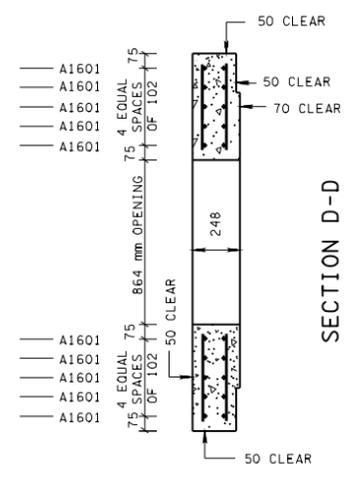
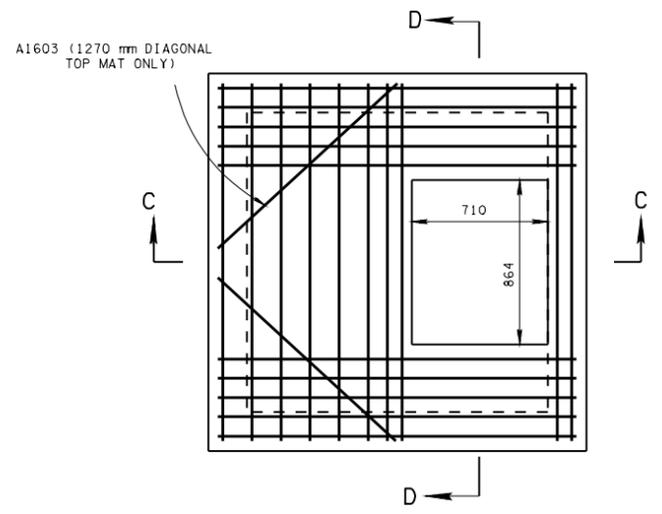
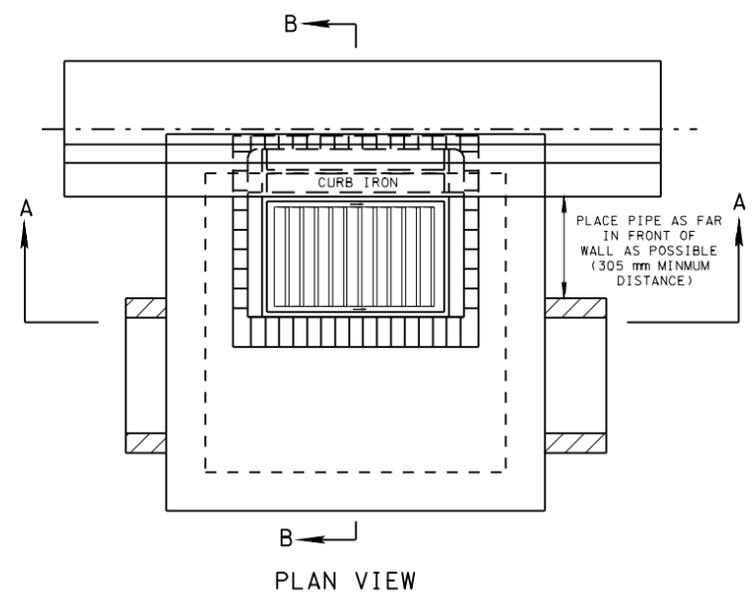
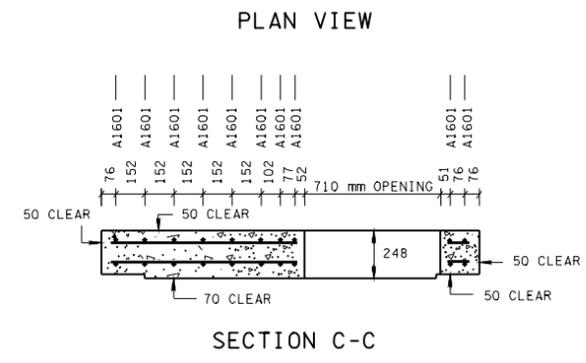
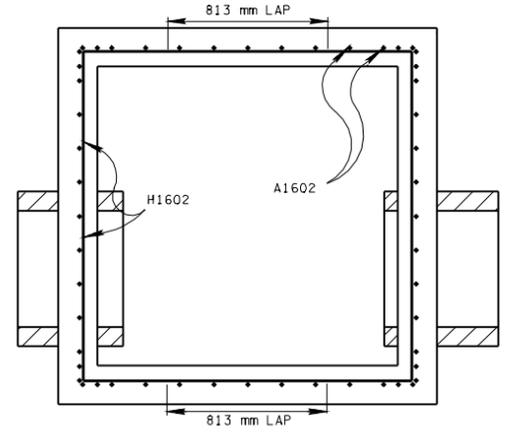


REV. 7-29-02: CHANGED ASTM SPECIFICATION IN GENERAL NOTE C.
 REV. 9-11-02: CHANGED REINFORCING STEEL IN BASE SECTION.
 REV. 5-27-01: CHANGED PAY ITEMS IN GENERAL NOTE J. ADDED CATCH BASIN MAXIMUM DEPTH NOTE.



| INSIDE DIAMETER (X) OF PIPE (mm) | MINIMUM DEPTH - (mm) | | |
|----------------------------------|----------------------|-----------------------|-------------------|
| | CONCRETE PIPE | CORRUGATED METAL PIPE | POLYETHYLENE PIPE |
| 450 | 1.39 | 1.32 | 1.36 |
| 600 | 1.54 | 1.48 | 1.53 |
| 750 | 1.72 | 1.63 | 1.70 |
| 900 | 1.88 | 1.79 | 1.86 |
| 1050 | 2.05 | 1.94 | 2.00 |
| 1200 | 2.21 | 2.10 | 2.15 |

- 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.



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.45 CATCH BASIN, WHICH WILL BE SHOWN AS A DETAIL IN THE PLANS SECOND SHEETS.

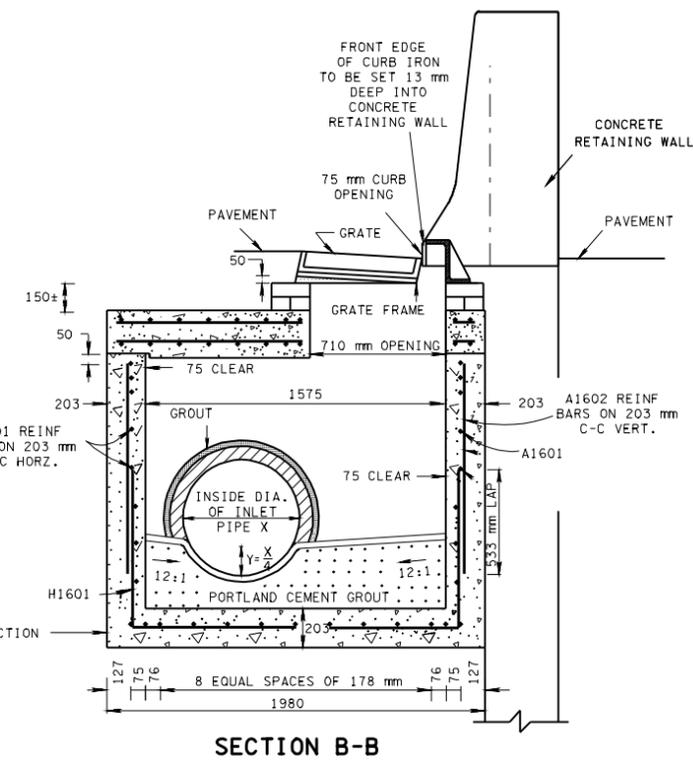
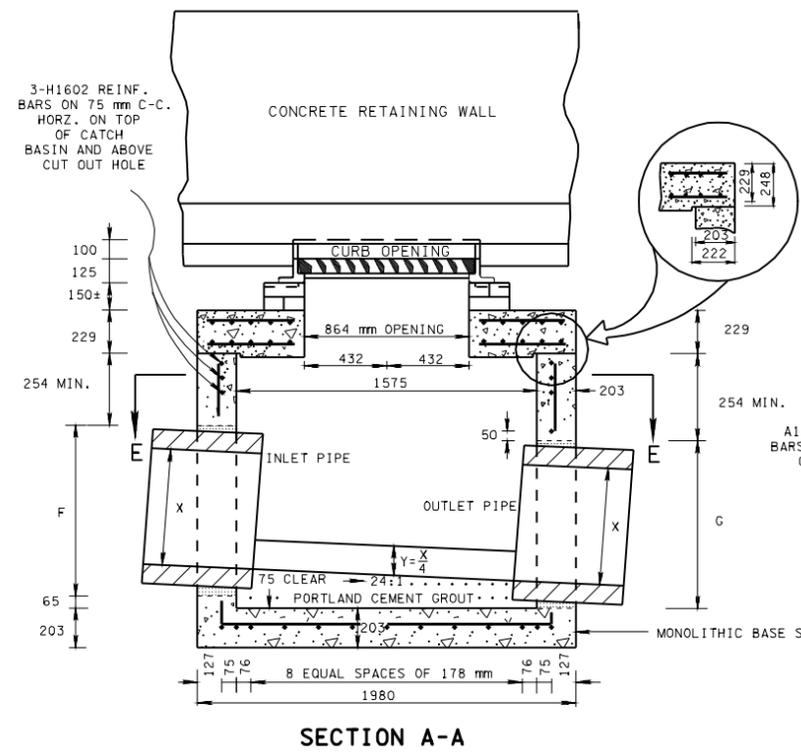
| CATCH BASIN PIPE SIZE TABLE | |
|---|--|
| MAX INLET OR OUTLET CONC. PIPE SIZE-STR. PERPENDICULAR TO CENTERLINE (mm) | MAX INLET OR OUTLET CONC. PIPE SIZE-STR. PARALLEL TO CENTERLINE (mm) |
| 1200 | 750 |

THIS PIPE MUST BE A MINIMUM OF 305 mm IN FRONT OF RETAINING WALL.

| 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 |

- 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 UNCUOT WILL NOT BE PERMITTED.
- TO BE USED IN FRONT AND BACK WALLS ONLY.

| REINFORCING STEEL LEGEND | | | |
|--------------------------|-------|------|-------|
| 1880 | A1601 | 1780 | H1602 |
| VARIABLE | A1602 | 1300 | H1602 |
| 1270 | A1603 | 1780 | 1300 |



GENERAL NOTES

- DRAWING TO BE USED FOR ALL CAST-IN-PLACE AND ALL PRECAST NO. 51 CONCRETE CATCH BASINS.
- 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: $f'_c = 28 \text{ MPa}$ 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 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-31 FOR DETAILS REGARDING CAST IRON GRATES, FRAMES AND CURB INLETS.
- PAYMENT FOR CATCH BASIN WILL BE MADE UNDER ITEM NUMBERS 611M51.02 CATCH BASINS, TYPE 51, > 1m-2m DEPTH THROUGH 611M51.09, CATCH BASINS, TYPE 51, > 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
1575 mm X 1575 mm
SQUARE CONCRETE
NO. 51 CATCH BASIN
(FOR USE IN FRONT OF CONCRETE RETAINING WALL)