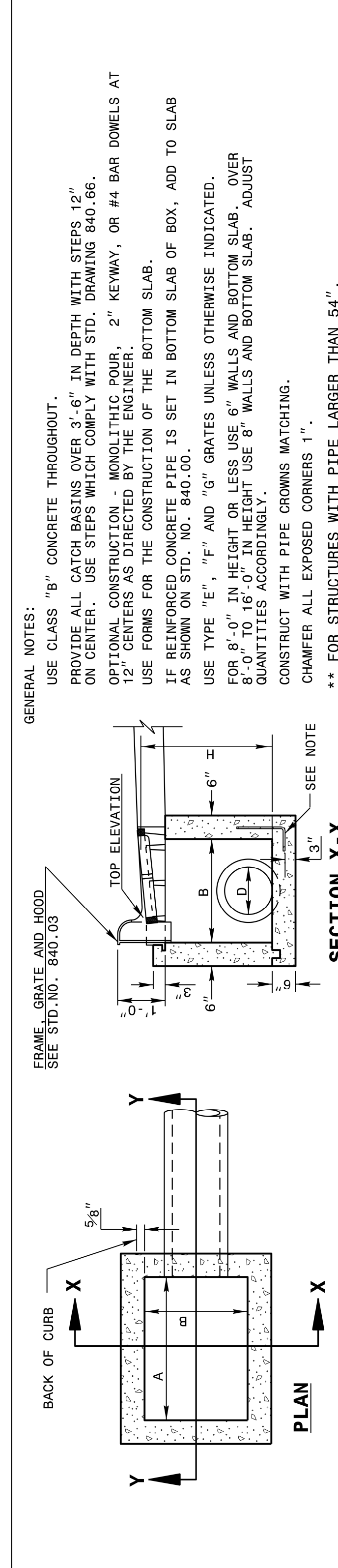


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DIVISION OF HIGHWAYS  
RALEIGH, N.C.

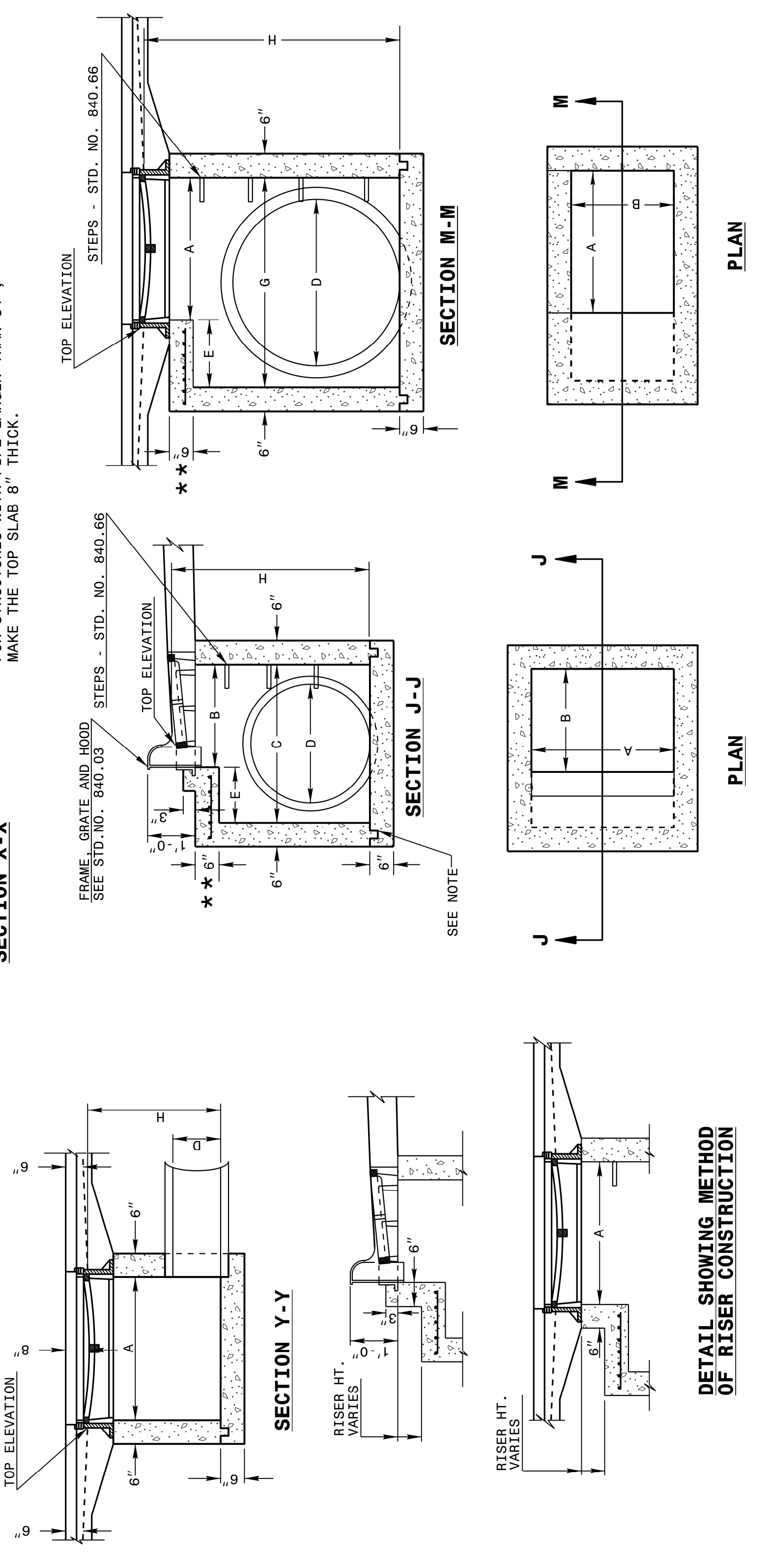
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RALEIGH, N.C.



**GENERAL NOTES:**  
 USE CLASS "B" CONCRETE THROUGHOUT.  
 PROVIDE ALL CATCH BASINS OVER 3'-6" IN DEPTH WITH STEPS 12" ON CENTER. USE STEPS WHICH COMPLY WITH STD. DRAWING 840.66.  
 OPTIONAL CONSTRUCTION - MONOLITHIC POUR, 2" KEYWAY, OR #4 BAR DOWELS AT 12 CENTERS AS DIRECTED BY THE ENGINEER.  
 USE FORMS FOR THE CONSTRUCTION OF THE BOTTOM SLAB.  
 IF REINFORCED CONCRETE PIPE IS SET IN BOTTOM SLAB OF BOX, ADD TO SLAB AS SHOWN ON STD. NO. 840.00.  
 USE TYPE "E", "F" AND "G" GRATES UNLESS OTHERWISE INDICATED.  
 FOR 8'-0" IN HEIGHT OR LESS USE 6" WALLS AND BOTTOM SLAB. OVER 8'-0" TO 16'-0" IN HEIGHT USE 8" WALLS AND BOTTOM SLAB. ADJUST QUANTITIES ACCORDINGLY.  
 CONSTRUCT WITH PIPE CROWNS MATCHING.  
 CHAMFER ALL EXPOSED CORNERS 1".  
 \*\* FOR STRUCTURES WITH PIPE LARGER THAN 54", MAKE THE TOP SLAB 8" THICK.

ENGLISH DETAIL DRAWING FOR  
**MINIMUM DEPTH  
CONCRETE CATCH BASIN**  
12" THRU 84" PIPE

ENGLISH DETAIL DRAWING FOR  
**MINIMUM DEPTH  
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12" THRU 84" PIPE

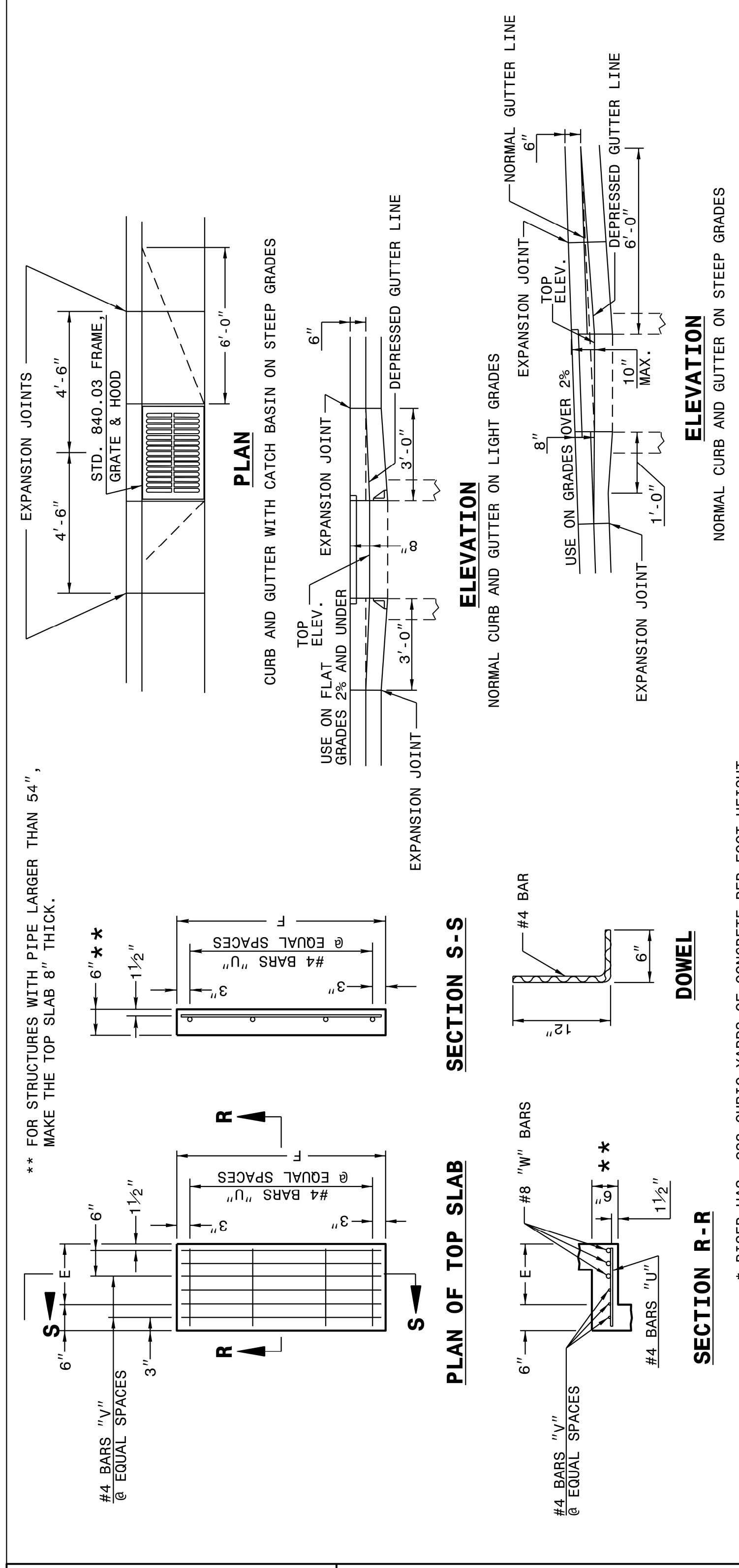


SHEET 1 OF 2  
**840D02**

SHEET 1 OF 2  
**840D02**

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SHEET 2 OF 2  
**840D02**

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\* RISER HAS .228 CUBIC YARDS OF CONCRETE PER FOOT HEIGHT

PIPE D.	DIMENSIONS OF BOX AND PIPE		COVER DIMENSION		BARS-V		BARS-W		TOTAL LBS.		DEDUCTIONS	
	SPAN	WIDTH	MIN.	HEIGHT	E	F	NO.	LENGTH	NO.	LENGTH	CU. YDS. CONC. IN BOX	TOT. CONC. SLAB HEIGHT, H.
12"	3'-0"	2'-2"	2'-0"	2'-3"	..	..	..	..	..	..	0.285	0.772
15"	3'-0"	2'-2"	2'-0"	2'-3"	..	..	..	..	..	..	0.295	0.829
18"	3'-0"	2'-2"	2'-0"	2'-3"	..	..	..	..	..	..	0.295	0.887
24"	3'-0"	2'-2"	3'-1"	3'-1"	..	..	..	..	..	..	0.235	1.001
30"	3'-0"	2'-2"	3'-4"	3'-10"	1'-2"	4'-4"	4	1'-5"	2	4'-1"	0.123	0.347
36"	3'-0"	2'-2"	3'-10"	3'-10"	1'-8"	4'-10"	4	1'-11"	3	4'-7"	0.161	0.432
42"	3'-0"	2'-2"	4'-5"	4'-5"	2'-2"	5'-5"	5	2'-5"	4	5'-2"	0.200	0.543
48"	3'-0"	2'-2"	5'-0"	5'-6"	2'-10"	6'-0"	5	3'-1"	4	5'-9"	0.235	0.667
54"	3'-0"	2'-2"	5'-7"	6'-0"	3'-5"	6'-7"	6	3'-8"	5	6'-4"	0.289	0.802
60"	3'-0"	2'-2"	6'-3"	6'-3"	4'-1"	7'-3"	6	4'-4"	5	7'-0"	0.340	0.973
66"	3'-0"	2'-2"	6'-11"	6'-11"	4'-9"	7'-11"	7	5'-0"	6	7'-8"	0.391	1.160
72"	3'-0"	2'-2"	7'-6"	7'-6"	5'-3"	8'-6"	7	5'-6"	6	8'-3"	0.442	1.340
78"	3'-0"	2'-2"	8'-1"	8'-1"	5'-11"	9'-1"	8	6'-2"	7	8'-10"	0.493	1.530
84"	3'-0"	2'-2"	8'-9"	8'-9"	6'-7"	9'-9"	8	6'-10"	7	9'-6"	0.544	1.760

CU. YDS. CONC. IN BOX DEDUCTIONS  
 TOP SLAB FOR MINIMUM HEIGHT, H. C. M. R.C.  
 0.015 0.026  
 0.023 0.036  
 0.033 0.049  
 0.059 0.085  
 0.092 0.127  
 0.132 0.178  
 0.180 0.243  
 0.235 0.317  
 0.297 0.401  
 0.363 0.546  
 0.440 0.655  
 0.524 0.774  
 0.615 0.893  
 0.713 1.010

DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED

**CONTRACT STANDARDS  
AND DEVELOPMENT UNIT**  
Office 919-707-6950 FAX 919-250-4119

**SEE PLATE FOR TITLE**

ORIGINAL BY: 2002 Std.840.01 DATE: \_\_\_\_\_  
 MODIFIED BY: E.E. WARD DATE: 3-1-02  
 CHECKED BY: \_\_\_\_\_ DATE: \_\_\_\_\_  
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