

STATE OF
 NORTH CAROLINA
 DEPT. OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 RALEIGH, N.C.

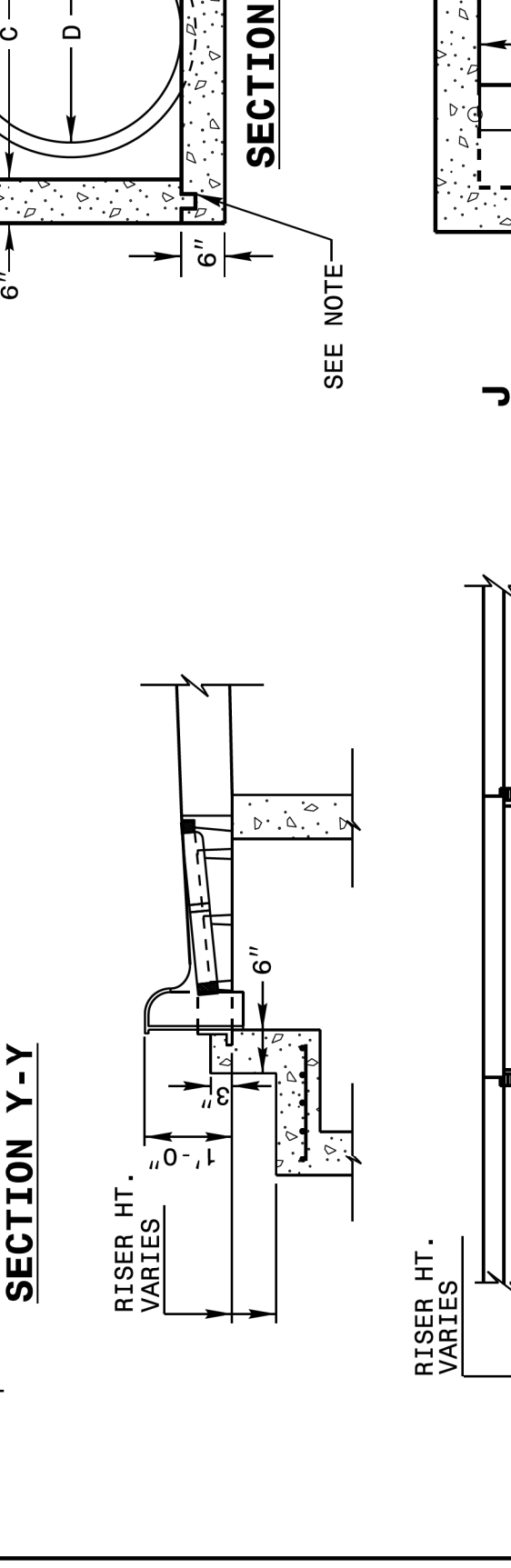
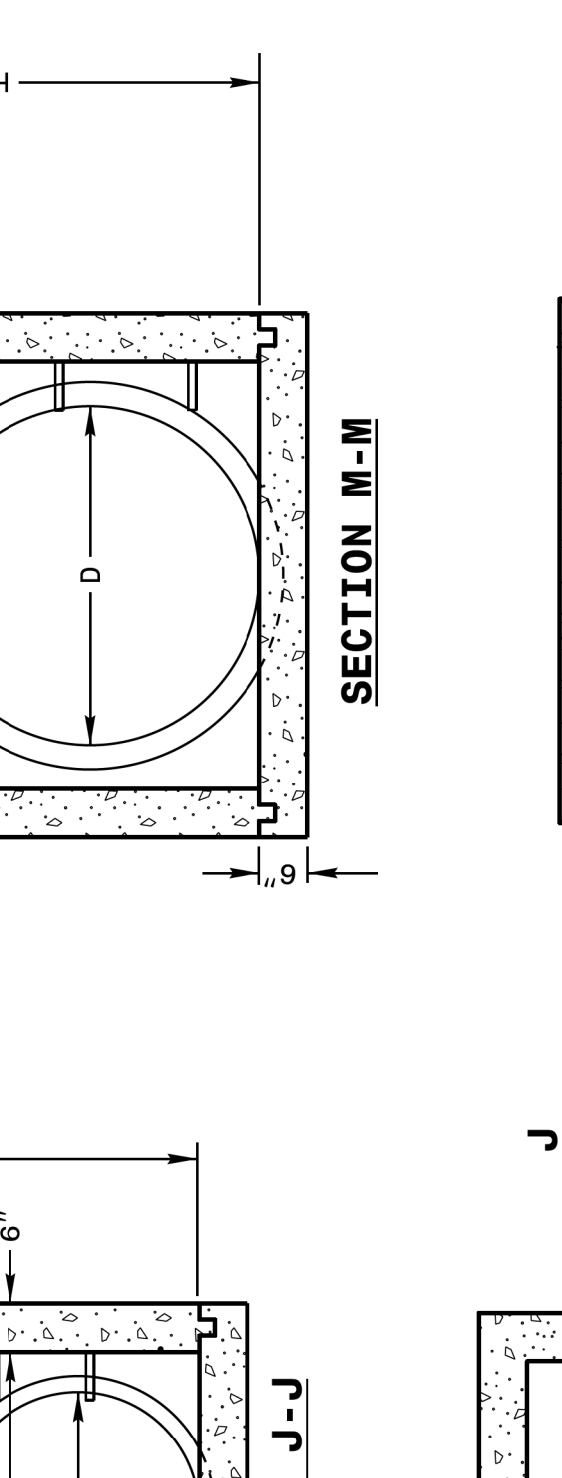
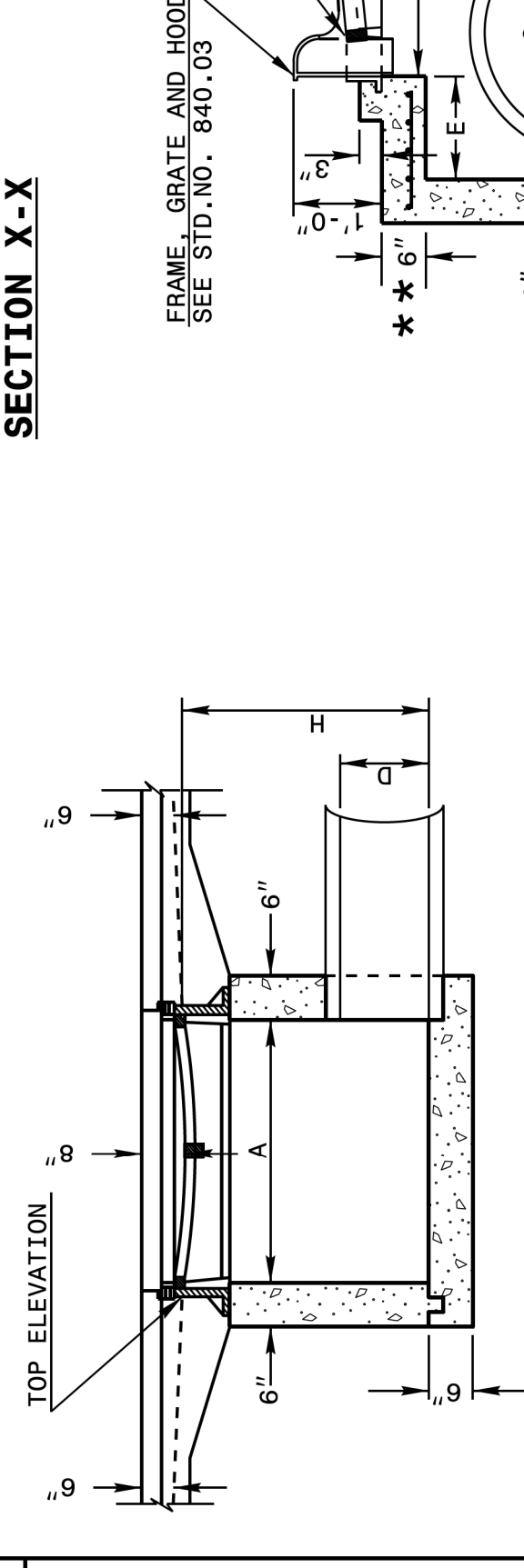
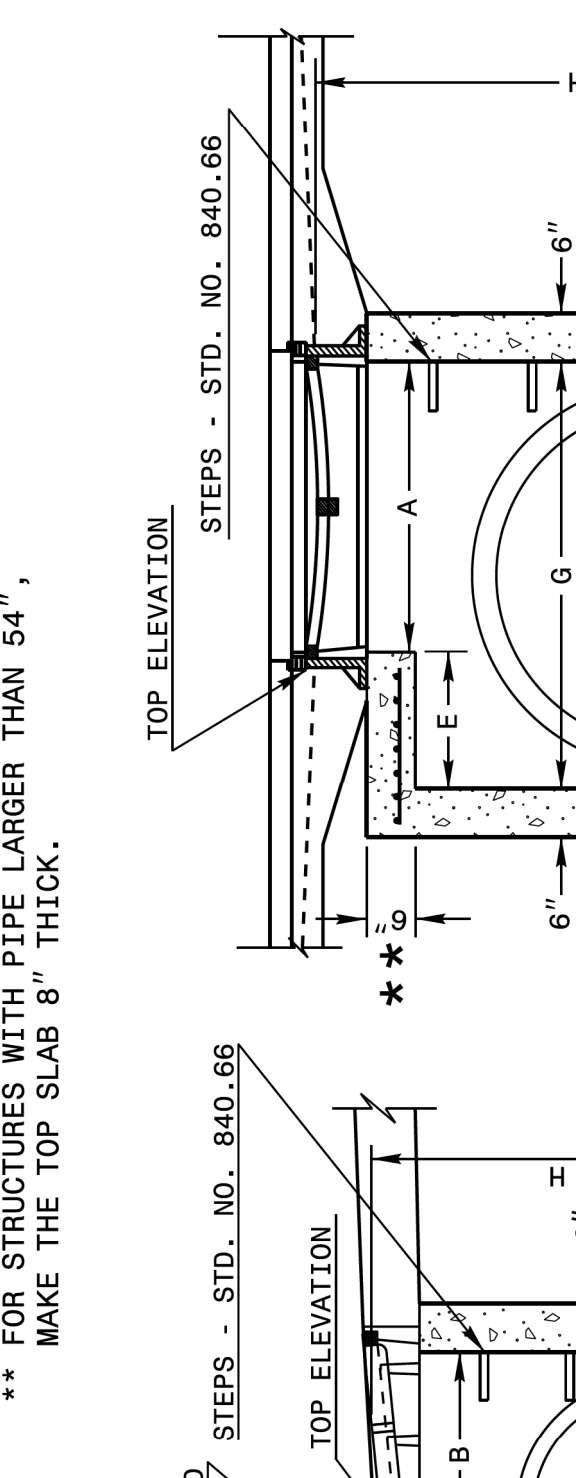
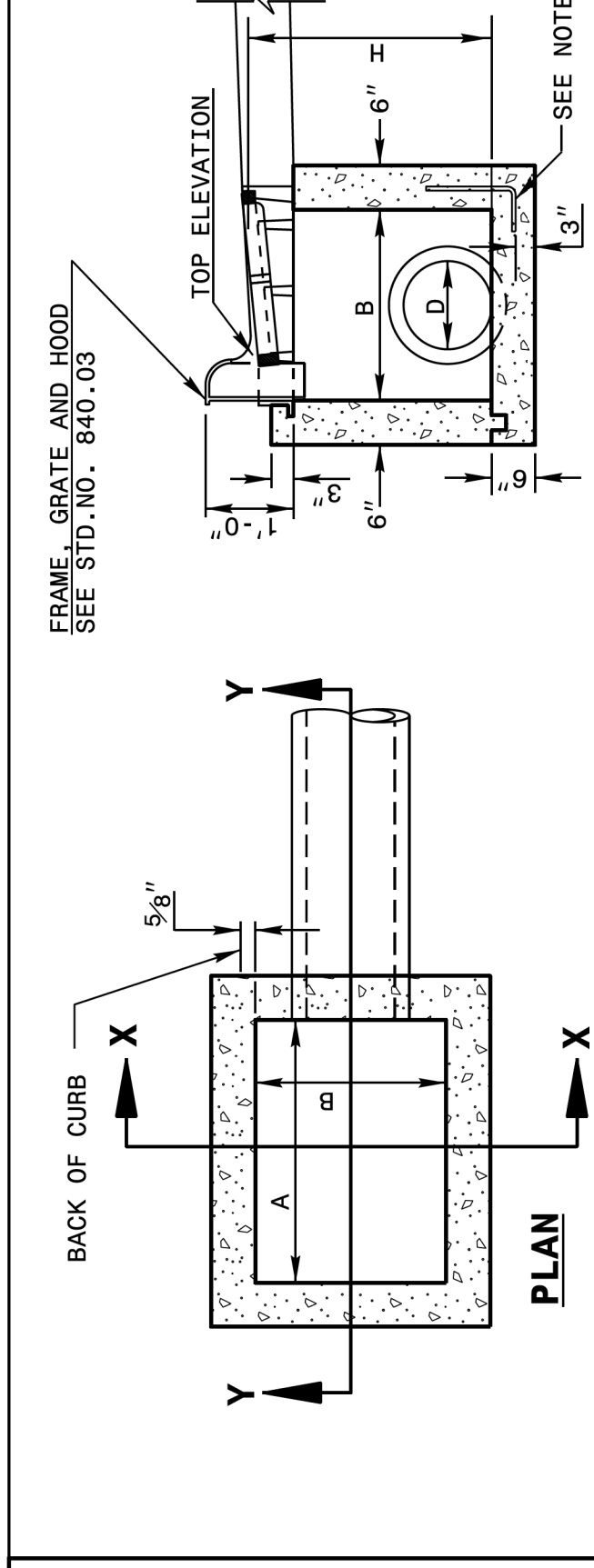
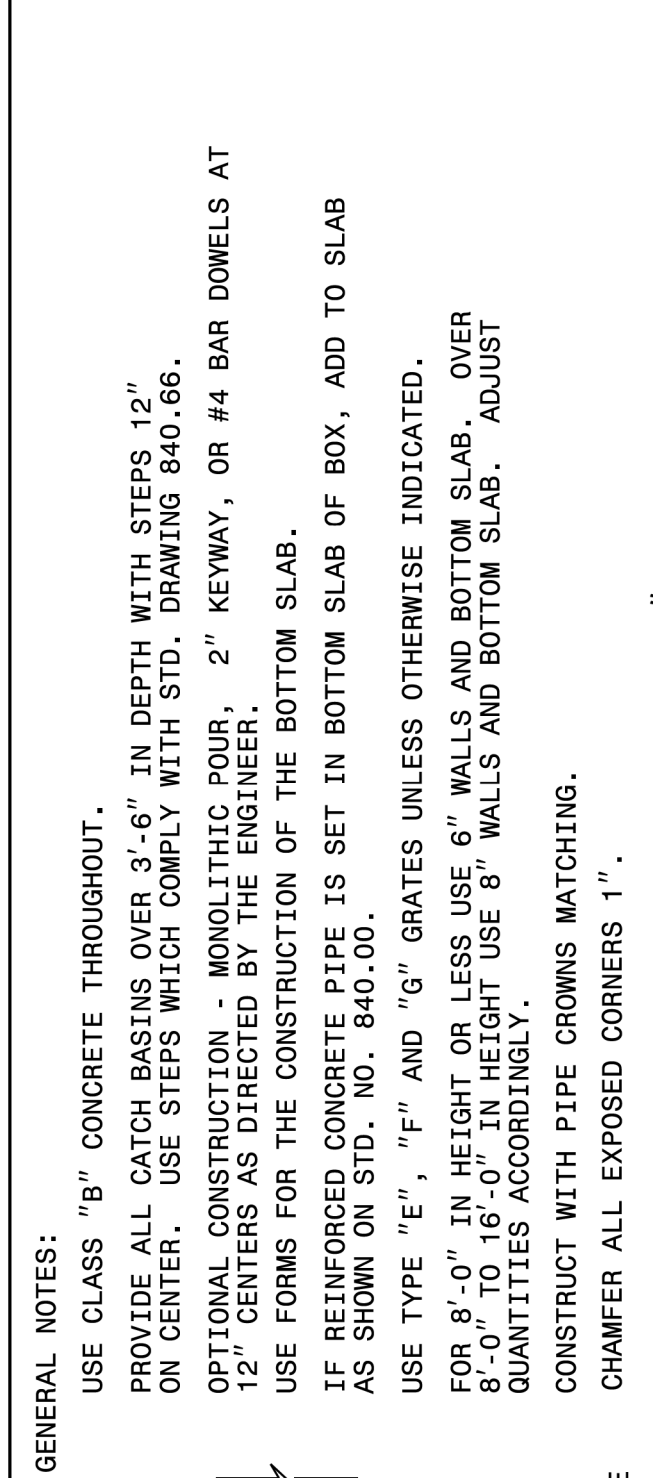
ENGLISH DETAIL DRAWING FOR
**MINIMUM DEPTH
 CONCRETE CATCH BASIN**
 12" THRU 84" PIPE

SHEET 1 OF 2
840D02

STATE OF
 NORTH CAROLINA
 DEPT. OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 RALEIGH, N.C.

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

SHEET 1 OF 2
840D02



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.

STATE OF
 NORTH CAROLINA
 DEPT. OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 RALEIGH, N.C.

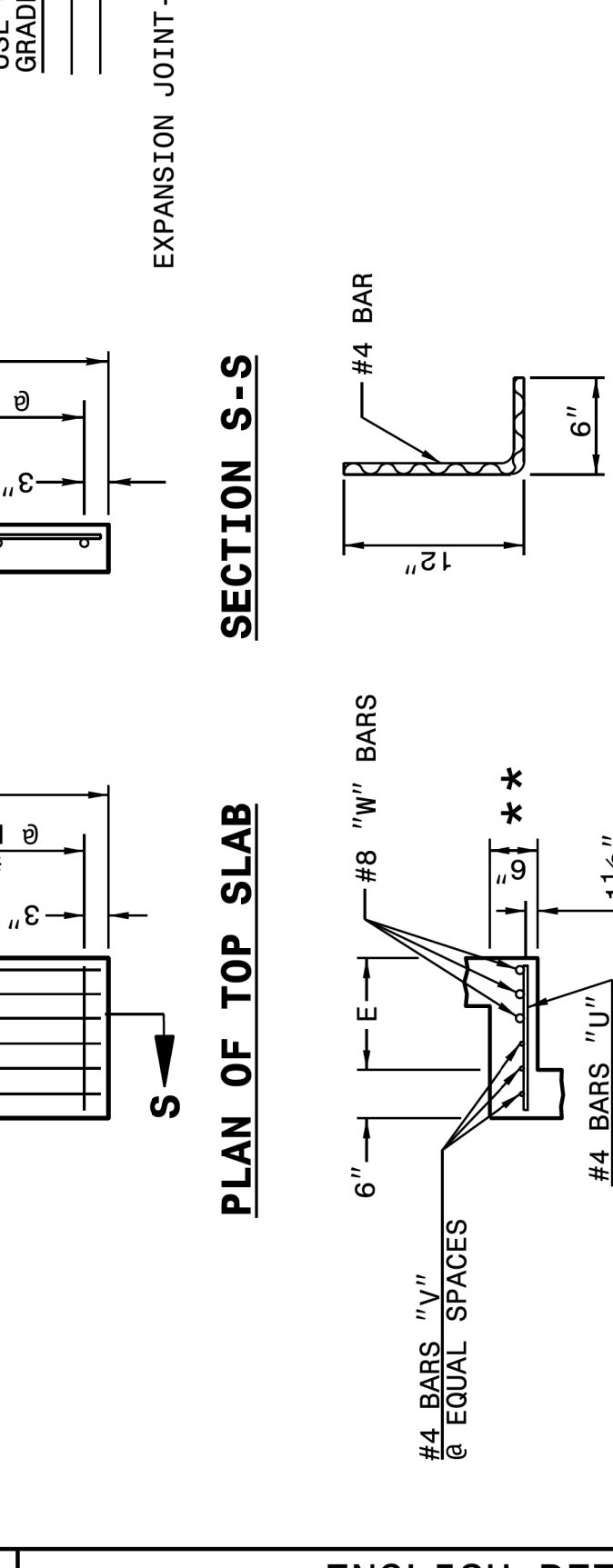
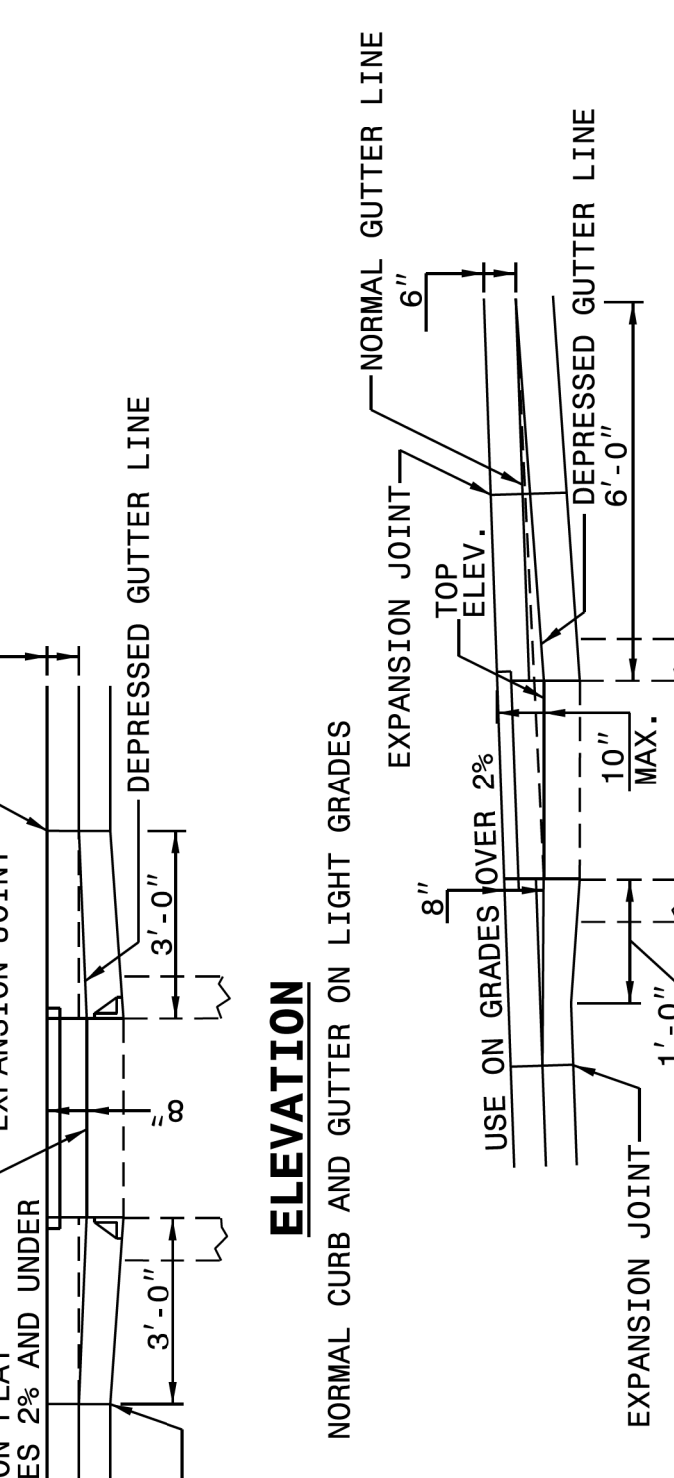
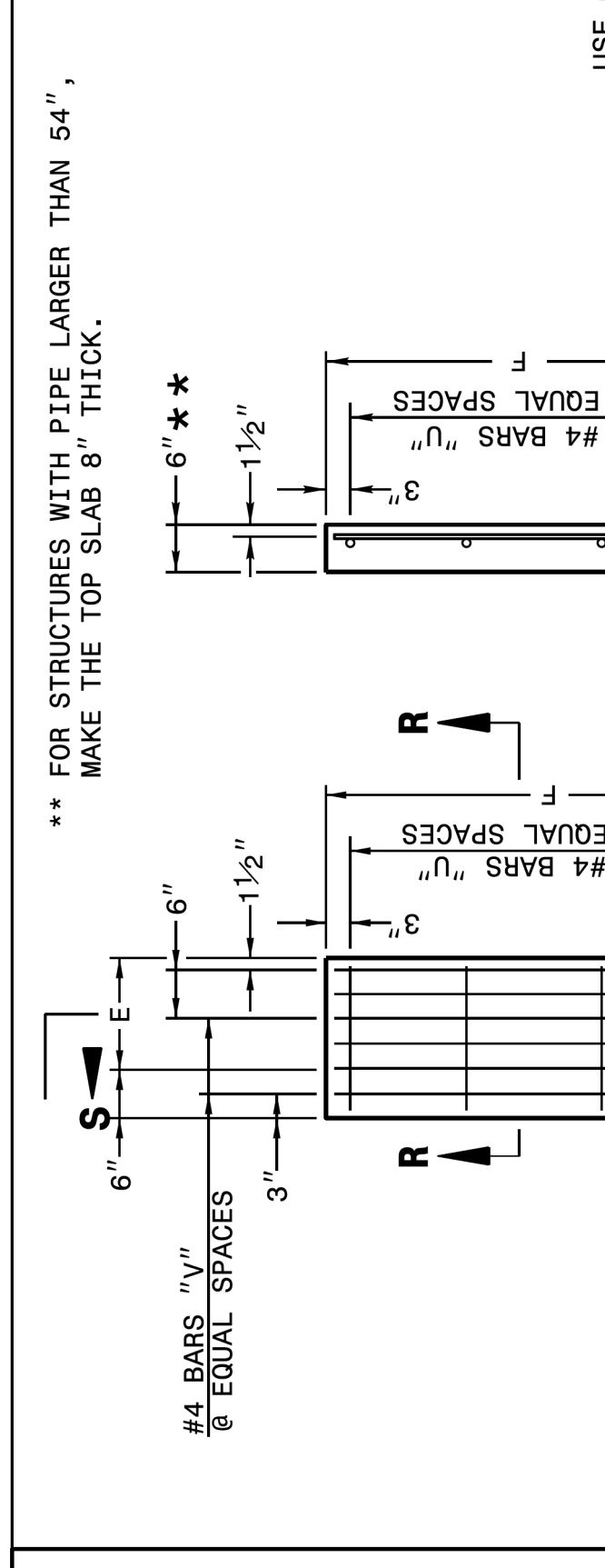
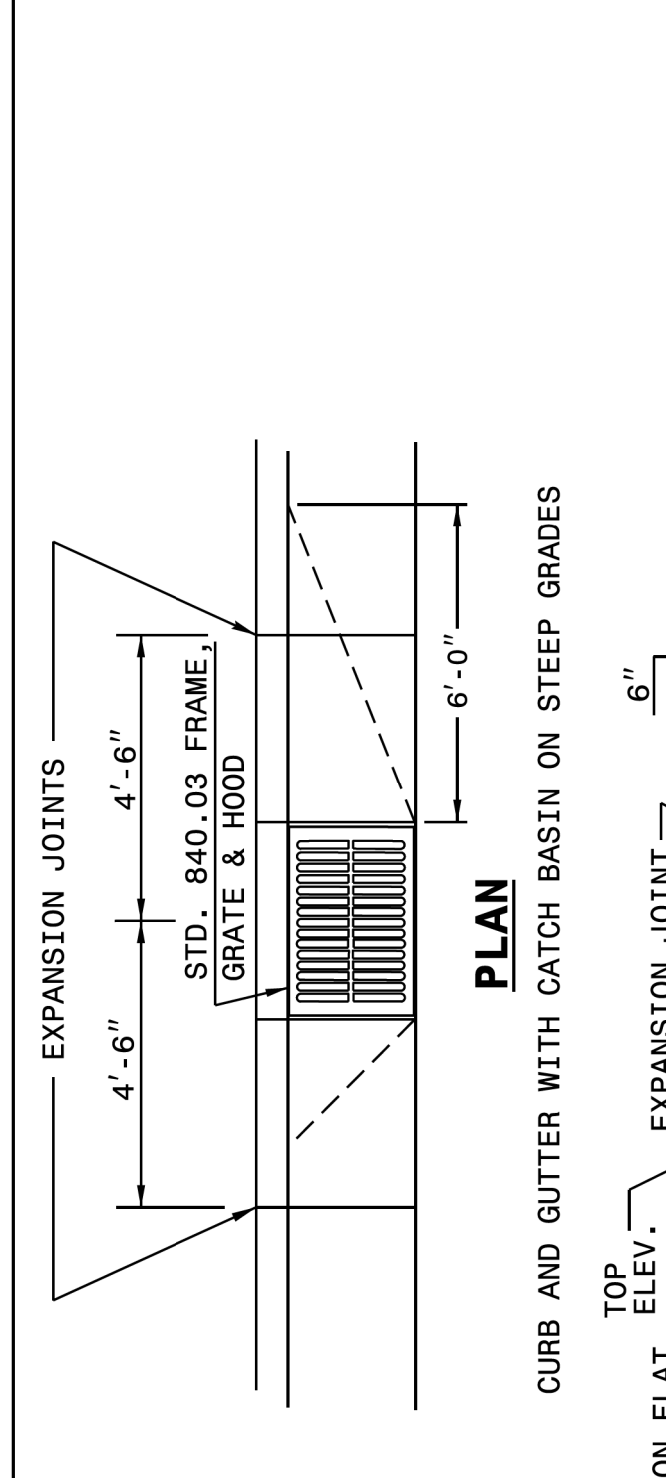
ENGLISH DETAIL DRAWING FOR
**MINIMUM DEPTH
 CONCRETE CATCH BASIN**
 12" THRU 84" PIPE

SHEET 2 OF 2
840D02

STATE OF
 NORTH CAROLINA
 DEPT. OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 RALEIGH, N.C.

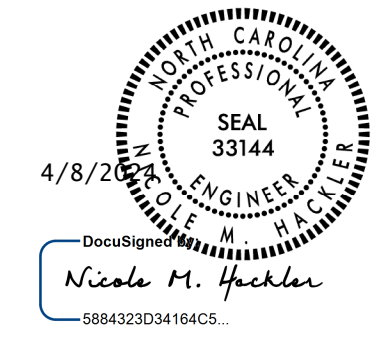
ENGLISH DETAIL DRAWING FOR
**MINIMUM DEPTH
 CONCRETE CATCH BASIN**
 12" THRU 84" PIPE

SHEET 2 OF 2
840D02



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

PIPE D	MINIMUM DIMENSIONS OF BOX AND PIPE COVER		E	F	BARS-U			BARS-V			BARS-W			TOTAL LBS.	CU. YDS. CONC. IN BOX FOR MINIMUM HEIGHT, H.	DEDUCTIONS		
	SPAN	WIDTH			NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	C.M.			R.C.		
12"	3'-0"	2'-2"	2'-0"	2'-3"	--	--	--	--	--	--	--	--	--	0.285	0.772	0.015	0.026	
15"	3'-0"	2'-2"	2'-0"	2'-3"	--	--	--	--	--	--	--	--	--	0.235	0.829	0.023	0.036	
18"	3'-0"	2'-2"	2'-0"	2'-3"	--	--	--	--	--	--	--	--	--	0.235	0.887	0.033	0.049	
24"	3'-0"	2'-2"	3'-1"	3'-1"	--	--	--	--	--	--	--	--	--	0.235	1.001	0.059	0.085	
30"	3'-0"	2'-2"	3'-4"	3'-10"	1'-2"	4'-4"	4	1'-5"	2	4'-1"	3	4'-1"	39	0.123	0.347	1.433	0.092	0.127
36"	3'-0"	2'-2"	3'-10"	4'-6"	1'-8"	4'-10"	4	1'-11"	3	4'-7"	3	4'-7"	43	0.161	0.492	1.714	0.132	0.178
42"	3'-0"	2'-2"	4'-5"	4'-5"	2'-2"	5'-5"	5	2'-5"	4	5'-2"	3	5'-2"	47	0.200	0.543	1.738	0.180	0.243
48"	3'-0"	2'-2"	5'-0"	5'-0"	2'-10"	6'-0"	5	3'-1"	4	5'-9"	3	5'-9"	51	0.235	0.687	2.082	0.235	0.317
54"	3'-0"	2'-2"	5'-7"	5'-7"	3'-5"	6'-7"	6	3'-8"	4	6'-4"	3	6'-4"	56	0.289	0.802	2.387	0.287	0.401
60"	3'-0"	2'-2"	6'-3"	6'-3"	4'-1"	7'-3"	6	4'-4"	5	7'-0"	3	7'-0"	61	0.340	0.973	2.722	0.363	0.546
66"	3'-0"	2'-2"	6'-11"	6'-11"	4'-9"	7'-11"	7	5'-0"	6	7'-8"	3	7'-8"	66	0.391	1.160	3.057	0.440	0.655
72"	3'-0"	2'-2"	7'-6"	7'-6"	5'-3"	8'-6"	7	5'-6"	6	8'-3"	3	8'-3"	72	0.442	1.340	3.392	0.524	0.774
78"	3'-0"	2'-2"	8'-1"	8'-1"	5'-11"	9'-1"	8	6'-2"	7	8'-10"	3	8'-10"	78	0.493	1.530	3.727	0.615	0.893
84"	3'-0"	2'-2"	8'-9"	8'-6"	6'-7"	9'-9"	8	6'-10"	7	9'-6"	3	9'-6"	84	0.544	1.760	4.062	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: _____
 FILE SPEC.: s:\Special Details\howerton\840d02.dgn