

7/7/2025 2:30:07 PM C:\Jack DESIGN\N5789\Roadway\Pro\N5789_ROY_PSH_2C1.dgn
Z:\2025\230907_NCDOT\N5789\Roadway\Pro\N5789_ROY_PSH_2C1.dgn
DAVID BRYANT / zandrews

REVISIONS

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

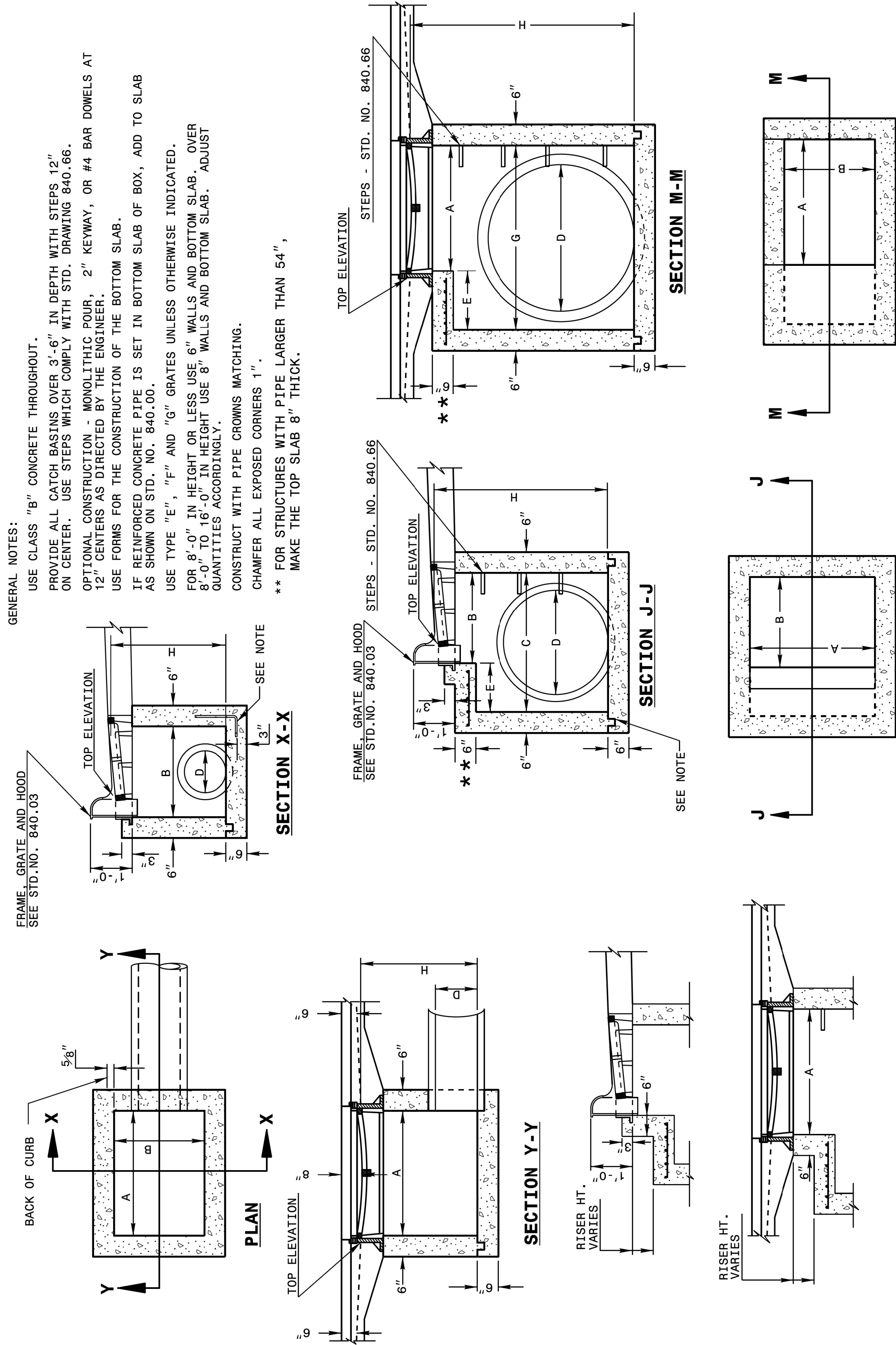
STATE OF
NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

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.



DETAIL SHOWING METHOD
OF RISER CONSTRUCTION

PLAN

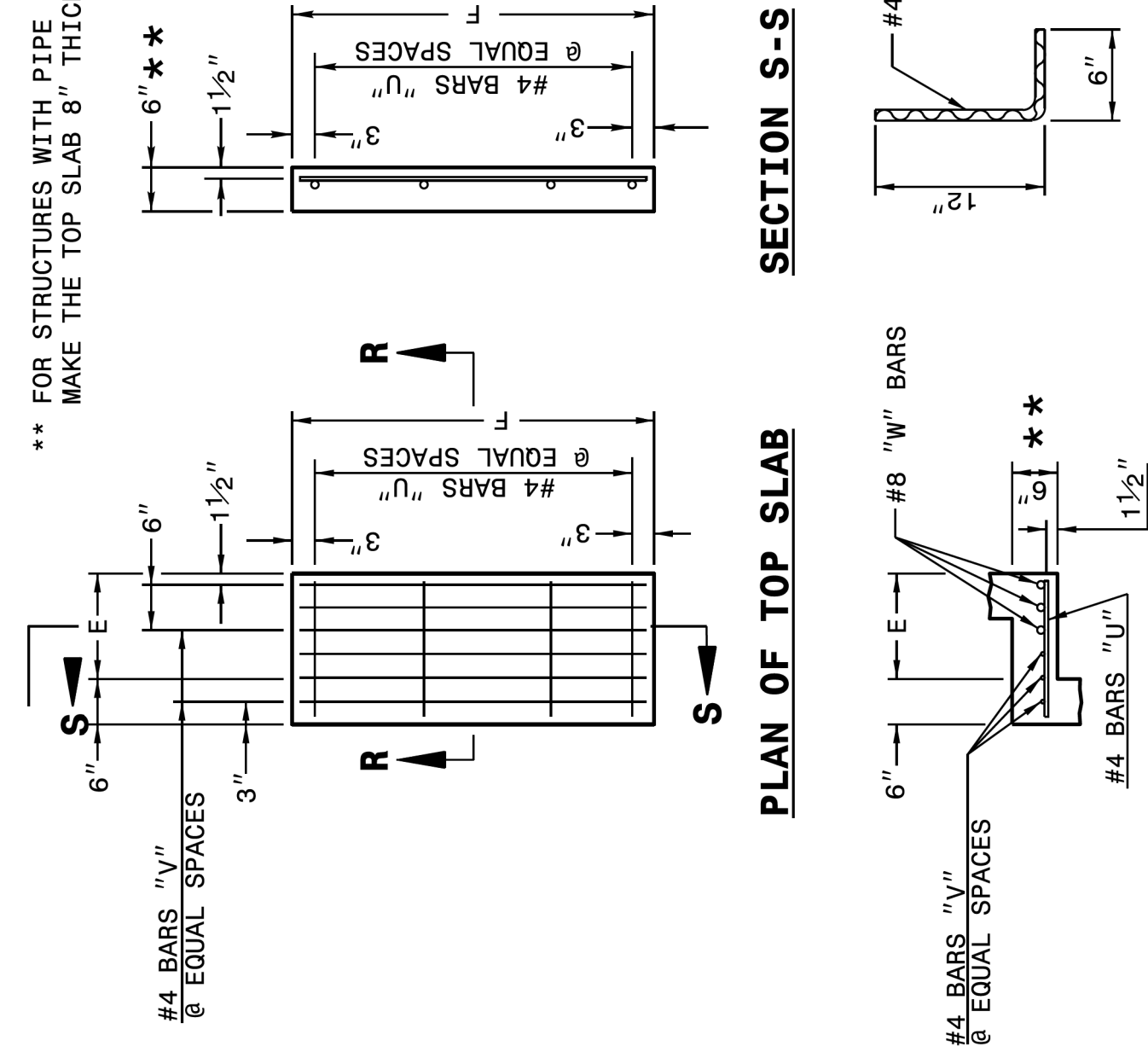
PLAN

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

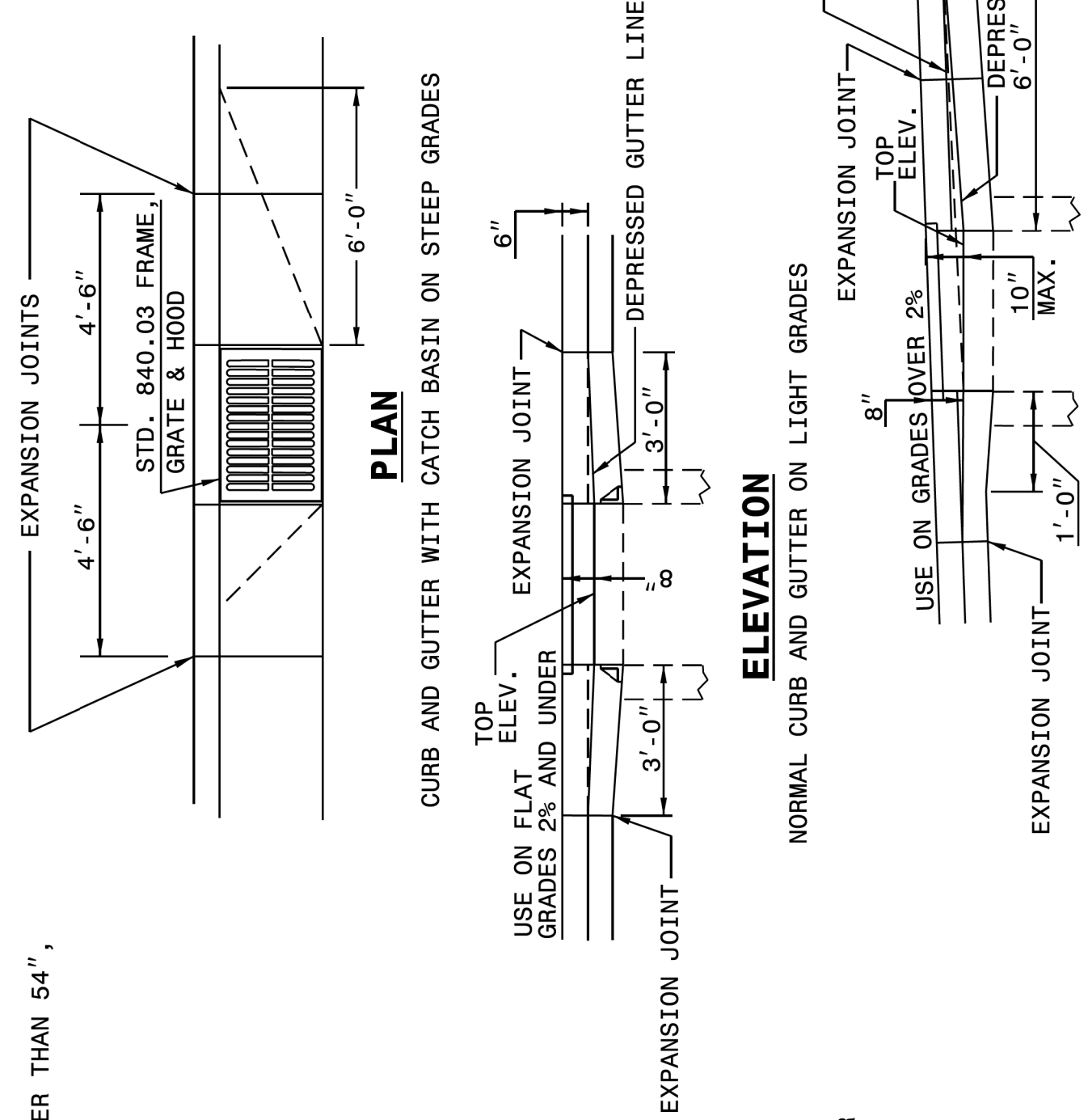


PLAN OF TOP SLAB

SECTION S-S

SECTION R-R

DOWEL



ELEVATION

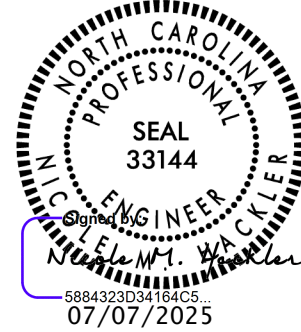
ELEVATION

ELEVATION

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

MINIMUM DIMENSIONS AND QUANTITIES FOR CONCRETE CATCH BASIN (BASED ON MIN. HEIGHT, H, WITH NO RISER) *									
DIMENSIONS OF BOX AND PIPE					COVER DIMENSION				
PIPE D	SPAN	WIDTH	WIDTH	SPAN	MIN.	HEIGHT	E	F	
12"	3'-0"	2'-2"	2'-2"	3'-0"	2'-0"	2'-0"	2'-0"	2'-0"	
15"	3'-0"	2'-2"	2'-2"	3'-0"	2'-0"	2'-0"	2'-0"	2'-0"	
18"	3'-0"	2'-2"	2'-2"	3'-0"	2'-0"	2'-0"	2'-0"	2'-0"	
24"	3'-0"	2'-2"	2'-2"	3'-0"	2'-0"	2'-0"	2'-0"	2'-0"	
30"	3'-0"	2'-2"	2'-2"	3'-0"	2'-0"	2'-0"	2'-0"	2'-0"	
36"	3'-0"	2'-2"	2'-2"	3'-0"	2'-0"	2'-0"	2'-0"	2'-0"	
42"	3'-0"	2'-2"	2'-2"	3'-0"	2'-0"	2'-0"	2'-0"	2'-0"	
48"	3'-0"	2'-2"	2'-2"	3'-0"	2'-0"	2'-0"	2'-0"	2'-0"	
54"	3'-0"	2'-2"	2'-2"	3'-0"	2'-0"	2'-0"	2'-0"	2'-0"	
60"	3'-0"	2'-2"	2'-2"	3'-0"	2'-0"	2'-0"	2'-0"	2'-0"	
66"	3'-0"	2'-2"	2'-2"	3'-0"	2'-0"	2'-0"	2'-0"	2'-0"	
72"	3'-0"	2'-2"	2'-2"	3'-0"	2'-0"	2'-0"	2'-0"	2'-0"	
78"	3'-0"	2'-2"	2'-2"	3'-0"	2'-0"	2'-0"	2'-0"	2'-0"	
84"	3'-0"	2'-2"	2'-2"	3'-0"	2'-0"	2'-0"	2'-0"	2'-0"	

DEDUCTIONS					C.U. YDS. CONC. IN BOX				
ONE PIPE					R.C.				
C.M.					R.C.				
0.026					0.026				
0.036					0.036				
0.049					0.049				
0.085					0.085				
0.127					0.127				
0.178					0.178				
0.243					0.243				
0.317					0.317				
0.401					0.401				
0.546					0.546				
0.655					0.655				
0.774					0.774				
0.893					0.893				
1.010					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/jhowerton/840d02.dgn