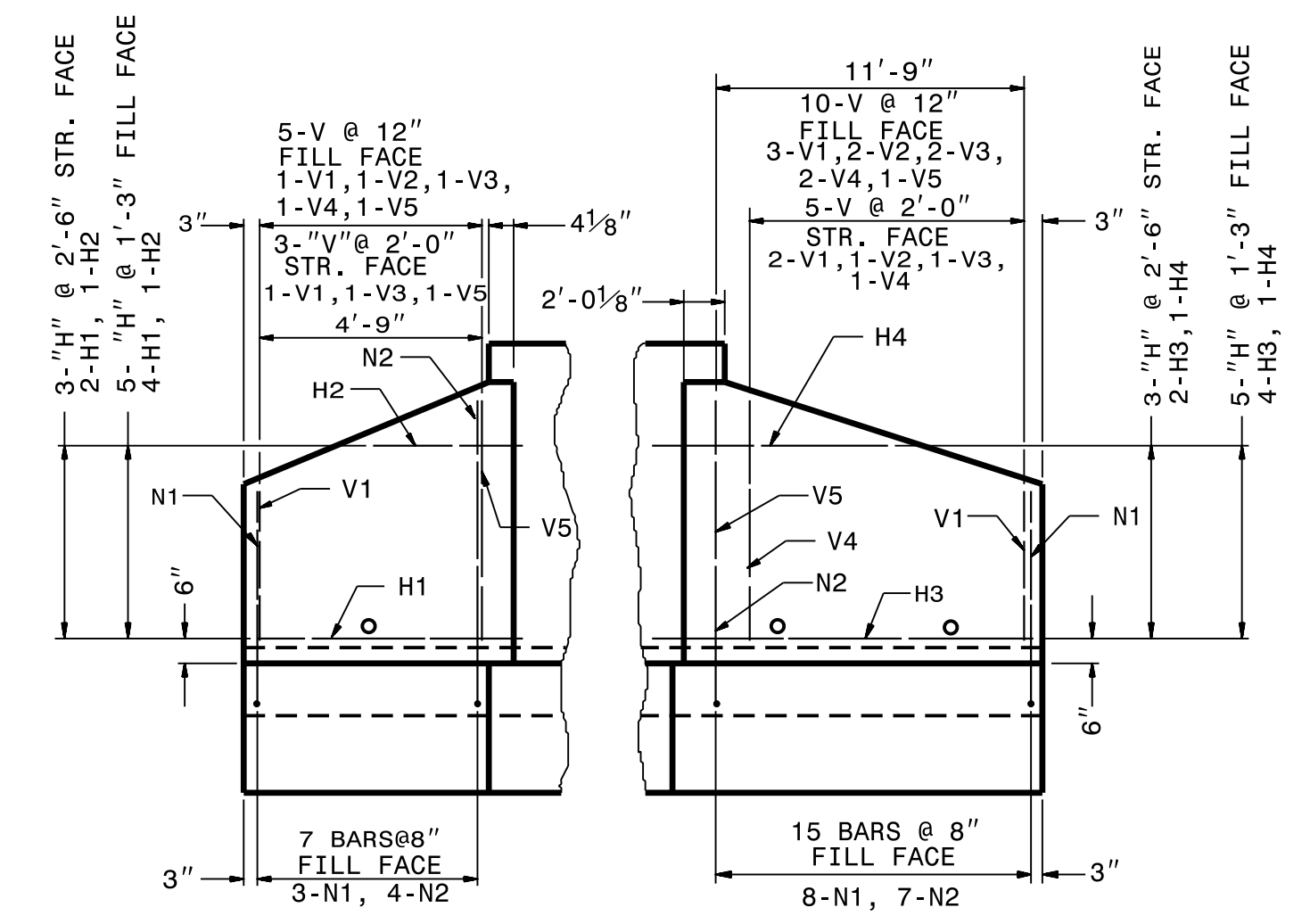
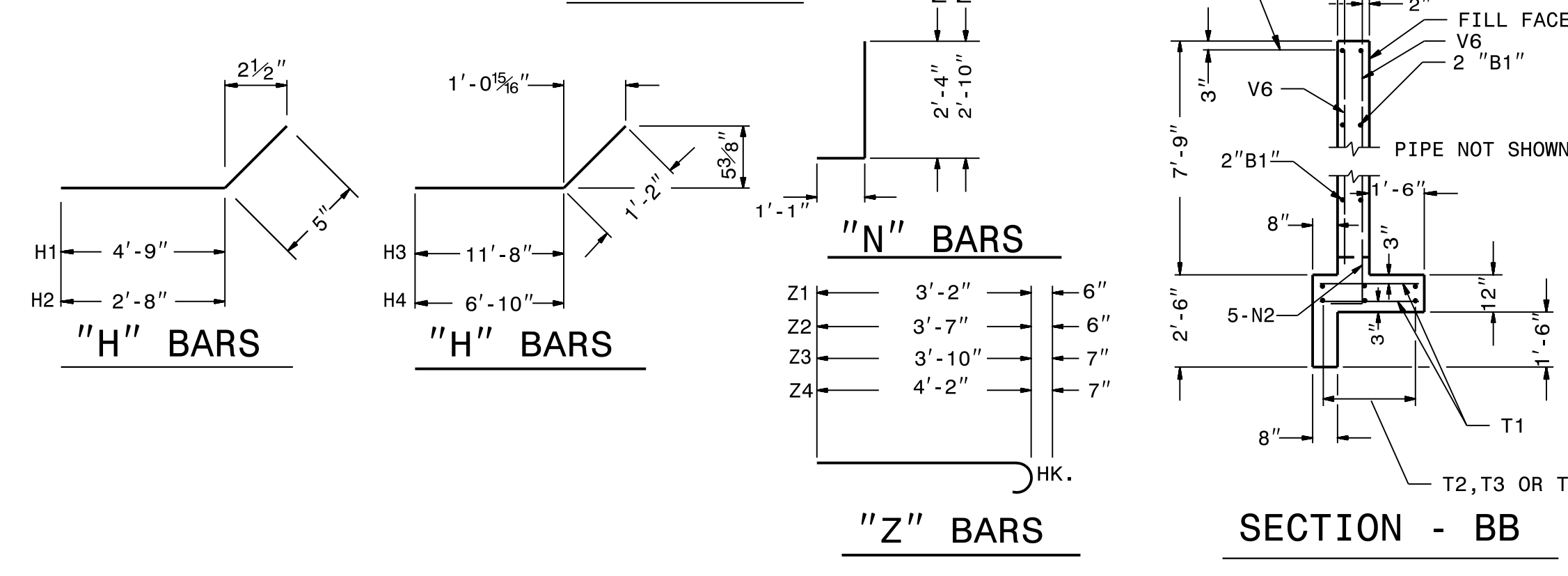
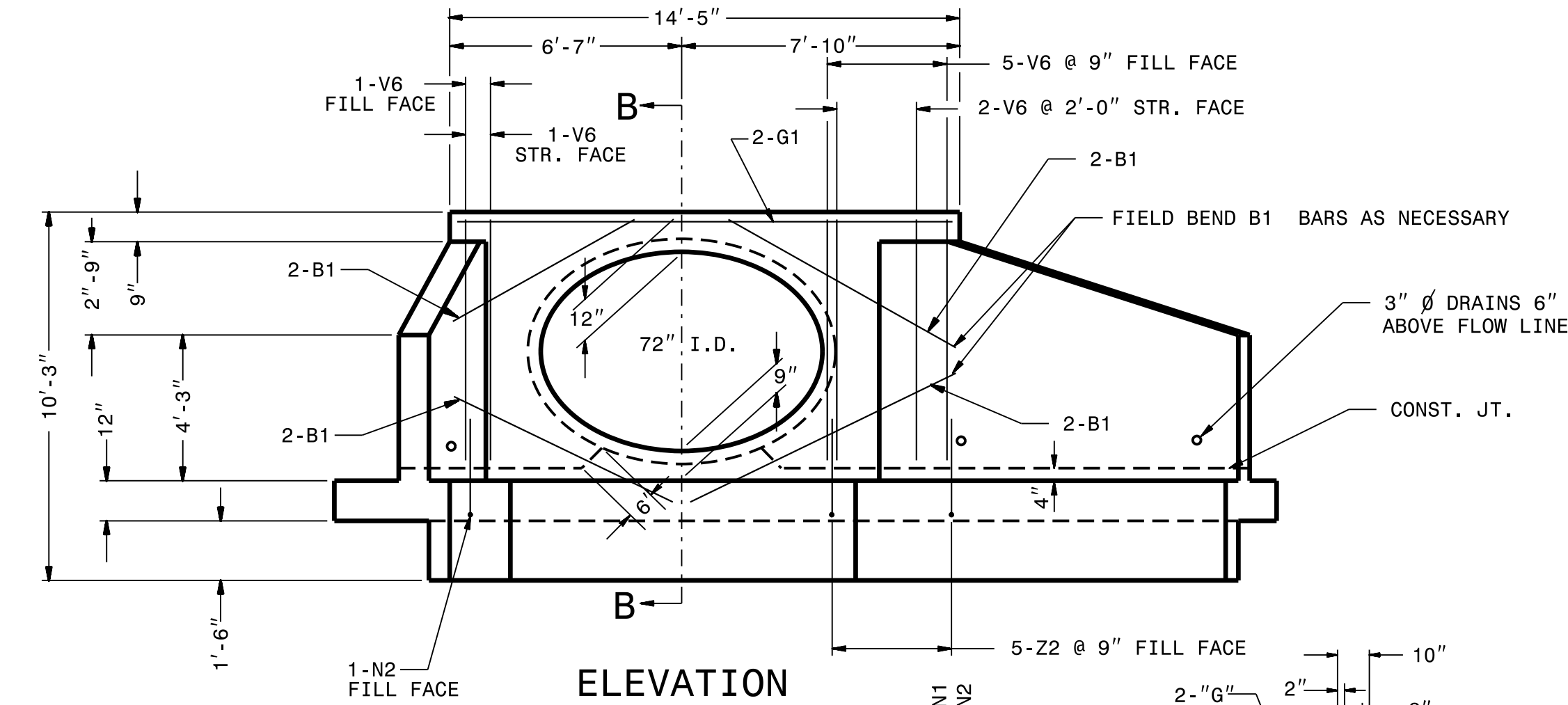
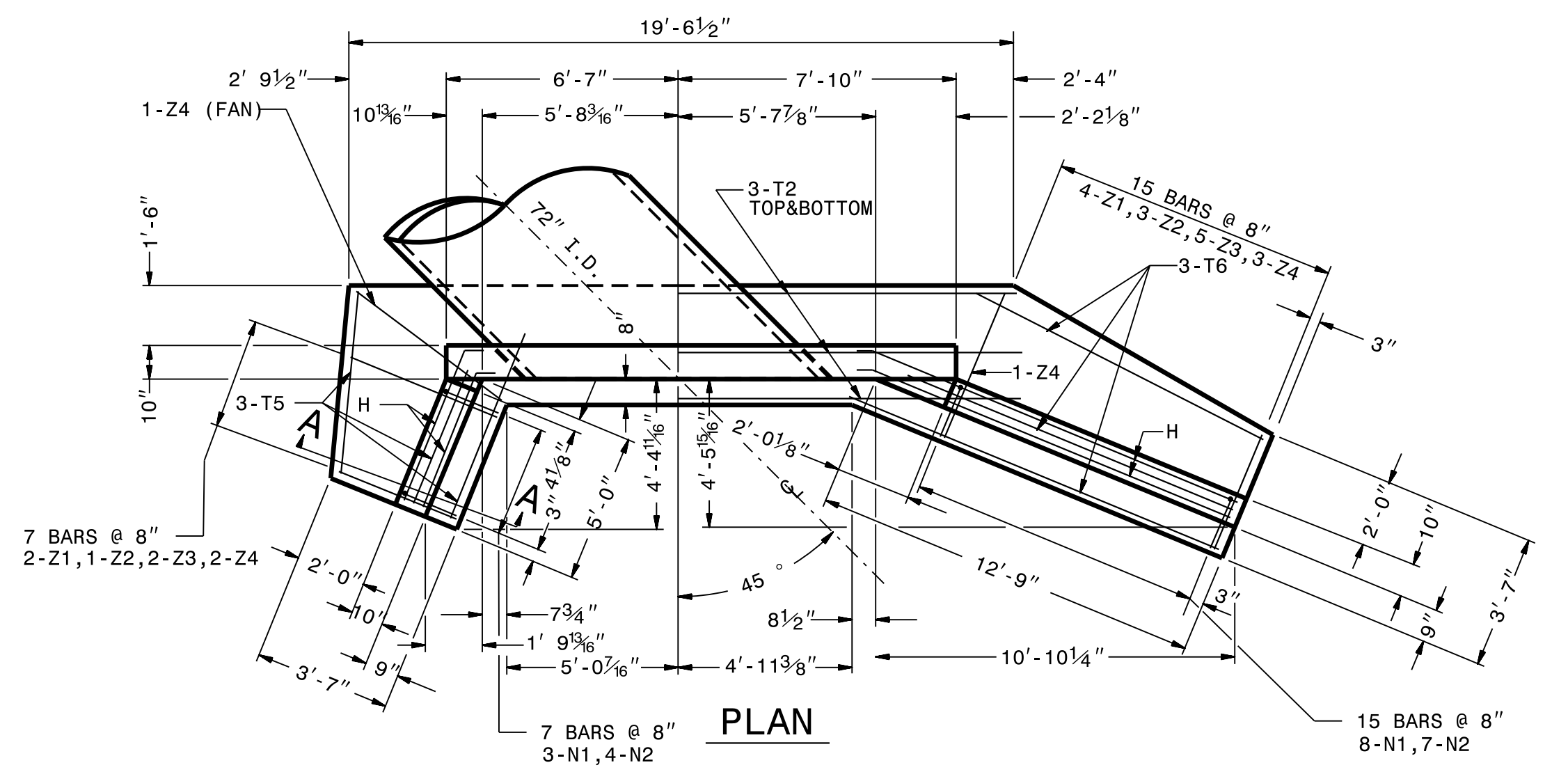


STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

ENGLISH DETAIL DRAWING FOR
REINFORCED CONCRETE ENDWALL
FOR SINGLE 72" PIPE 45° OR 135° SKEW

SHEET 1 OF 1
838D43



WING ELEVATION

NOTES:
ALL CONCRETE TO BE CLASS "A".
ALL REINFORCING STEEL TO BE ASTM A615-GRADE 60.
ALL REINFORCING STEEL TO BE DEFORMED BARS. WHERE SPLICING OF REINFORCEMENT IS NECESSARY, BARS ARE TO BE LAPPED 45 DIAMETERS. ALL DIMENSIONS RELATIVE TO REINFORCEMENT ARE TO CENTERS OF BARS.
THE FOOTING, CURTAIN WALL AND 4" OF WALL ARE TO BE POURED IN ONE OPERATION ALLOWING NO TIME FOR INITIAL SET TO TAKE PLACE BETWEEN THEM. THE REMAINING WALL SHALL THEN BE POURED IN ONE OPERATION.
ALL EXPOSED CORNERS ARE TO BE CHAMFERED 1".
3" DIAMETER DRAINS TO BE PLACED IN WALL AS SHOWN AND BE 6" ABOVE NORMAL FLOW LINE.
ALL MATERIAL AND WORKMANSHIP AS PER N.C. DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS.

BILL OF MATERIAL FOR ENDWALL					
REINF. STEEL			1 - PIPES		
BAR	SIZE	LENGTH	NO.	WEIGHT	
Z1	#4	3'-8"	6	15	
Z2	#4	4'-1"	4	11	
Z3	#5	4'-5"	7	32	
Z4	#5	4'-9"	6	30	
N1	#4	3'-5"	11	25	
N2	#5	3'-11"	17	69	
V1	#4	3'-10"	7	10	
V2	#4	4'-6"	4	12	
V3	#4	5'-1"	5	17	
V4	#4	5'-8"	4	15	
V5	#4	6'-3"	3	13	
V6	#4	7'-3"	9	44	
H1	#4	5'-3"	6	21	
H2	#4	3'-2"	2	4	
H3	#4	12'-10"	6	51	
H4	#4	8'-0"	2	11	
G1	#7	14'-1"	2	58	
T1	#4	2'-6"	56	94	
T2	#4	19'-2"	6	77	
T5	#4	5'-3"	3	11	
T6	#4	10'-0"	3	20	
B1	#4	6'-6"	8	35	
REINF. STEEL LBS.				683	
CONC/C.M. CU. YDS.				10.0	
CONC/R.C. CU. YDS.				9.4	

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FOR SINGLE 72" PIPE 45° OR 135° SKEW

SHEET 1 OF 1
838D43

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DocuSigned by:
Ron Davenport
F81B8038A7A442

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

CONTRACT STANDARDS & DEVELOPMENT UNIT
STANDARDS AND SPECIAL DESIGN
Office 919-707-6950 FAX 919-250-4119

**DETAIL OF REINFORCED
CONCRETE ENDWALL FOR
72" DIAMETER PIPE - 45° SKEW**

ORIGINAL BY: R.S.WICKER DATE: 6-46
MODIFIED BY: nbritt DATE: 05-28-10
CHECKED BY: DATE:
FILE SPEC.: details/nbritt/english/hydro/72endwall1,45sk.dgn

DRAWING NOT TO SCALE