

POST-TENSIONED STEEL BAR DIAMETER (in)	1- 1/4
AREA (in*in)	1.25
ULTIMATE STRESS fpu (ksi)	150
MAX. JACKING FORCE (kips)	150
DESIGN PRESTRESSING FORCE (kips)	112.5
ANCHOR PLATE SIZE(IN X IN X IN)	6X7X1/2

GRADE 270 STRANDS	
AREA ( SQUARE INCHES )	0.153
ULTIMATE STRENGTH ( LBS. PER STRAND )	41,300
APPLIED PRESTRESS ( LBS. PER STRAND )	30,980

GROOVING BRIDGE FLOORS		
BRIDGE DECK	2786	SQ. FT.
APPROACH SLAB	1950	SQ. FT.
TOTAL	4736	SQ. FT.

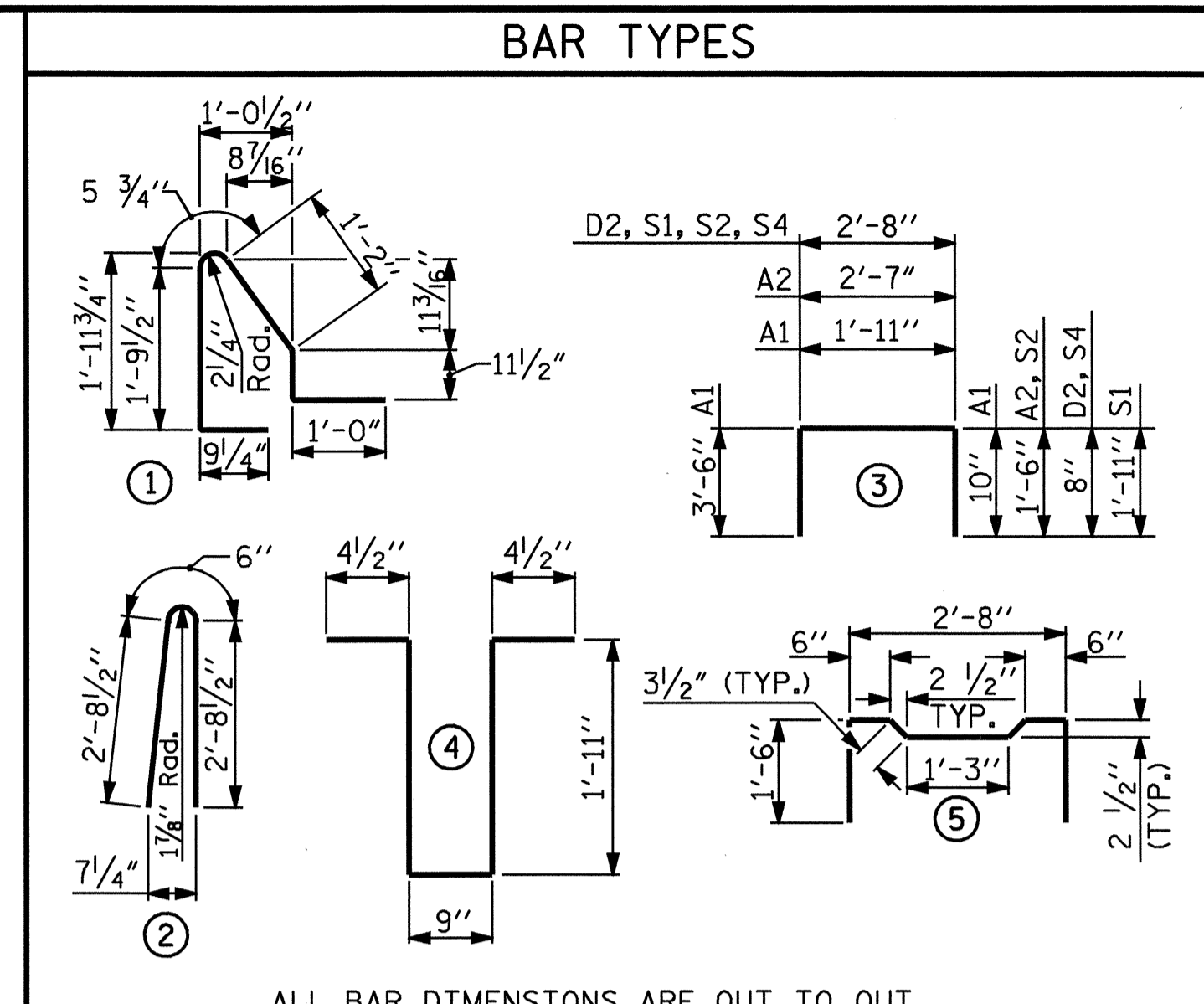
CLASS AA CONCRETE (FOR CONCRETE WEARING SURFACE)	
*CONCRETE WEARING SURFACE	65.8
	( CU. YARDS )

\*PAID FOR BY THE SQ. FT. PRICE FOR "CONCRETE WEARING SURFACE." (3043 SQ. FT.)

BOX BEAMS REQUIRED			
	NUMBER	LENGTH	TOTAL LENGTH
EXTERIOR B.B.	2	72'-9"	145'-6"
INTERIOR B.B.	13	72'-9"	945'-9"
TOTAL	15		1091'-3"

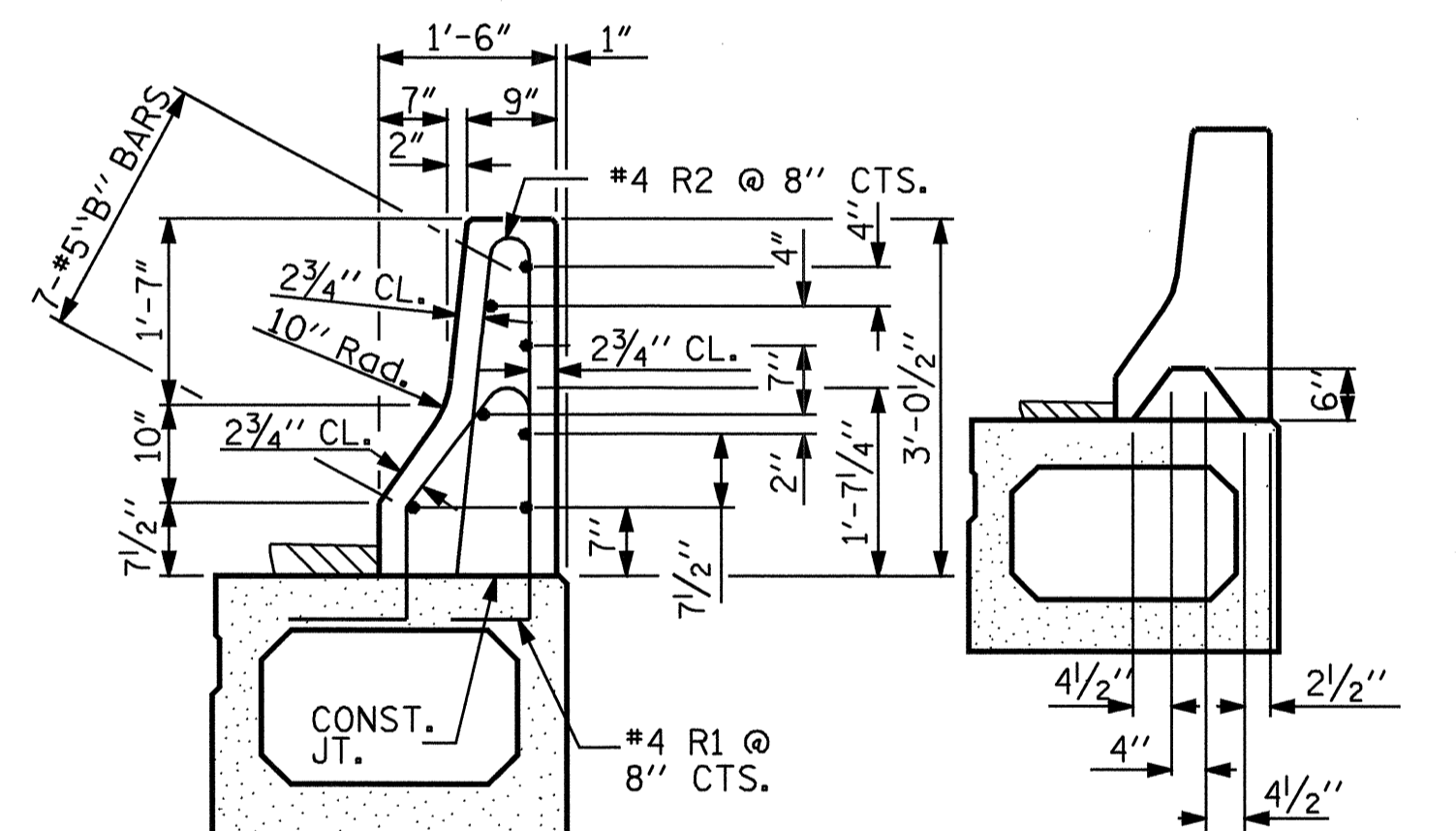
DEAD LOAD DEFLECTION AND CAMBER	
	3'-0" x 2'-3"
	1/2" Ø L.R. STRAND
CAMBER ( BEAM ALONE IN PLACE )	2 7/16"
DEFLECTION DUE TO SUPERIMPOSED DEAD LOAD **	1"
FINAL CAMBER	1 7/16"

\*\* INCLUDES FUTURE WEARING SURFACE



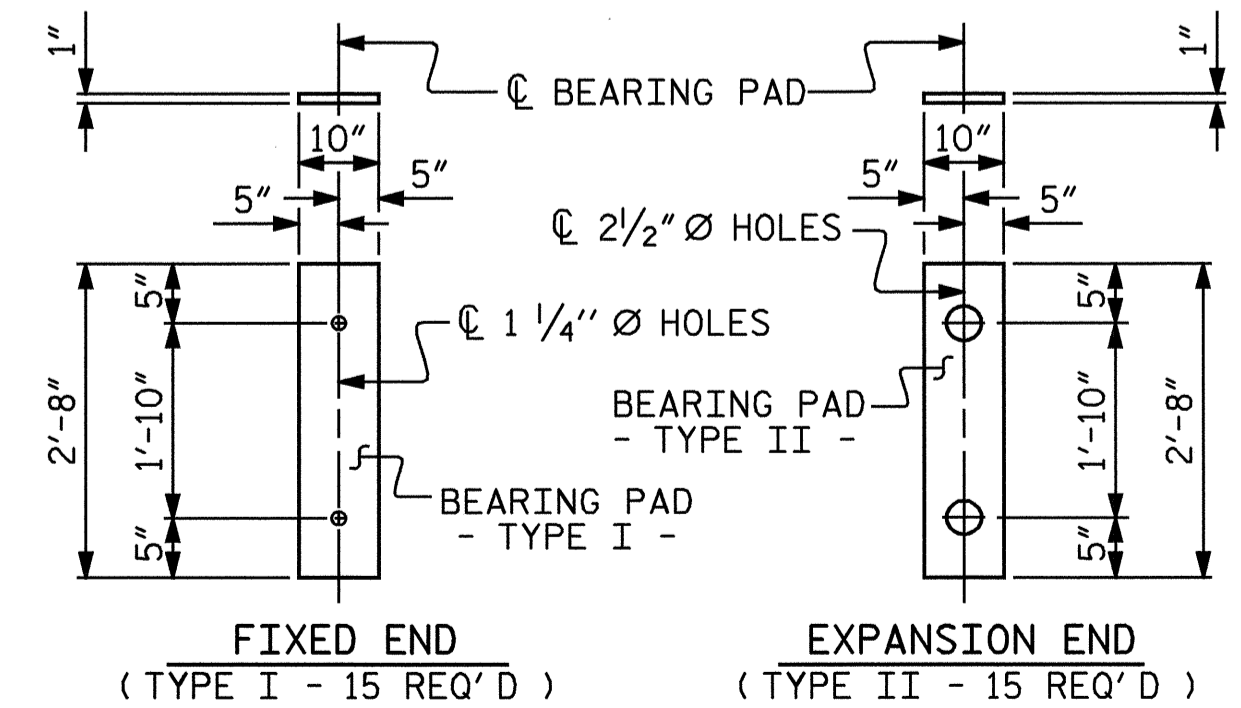
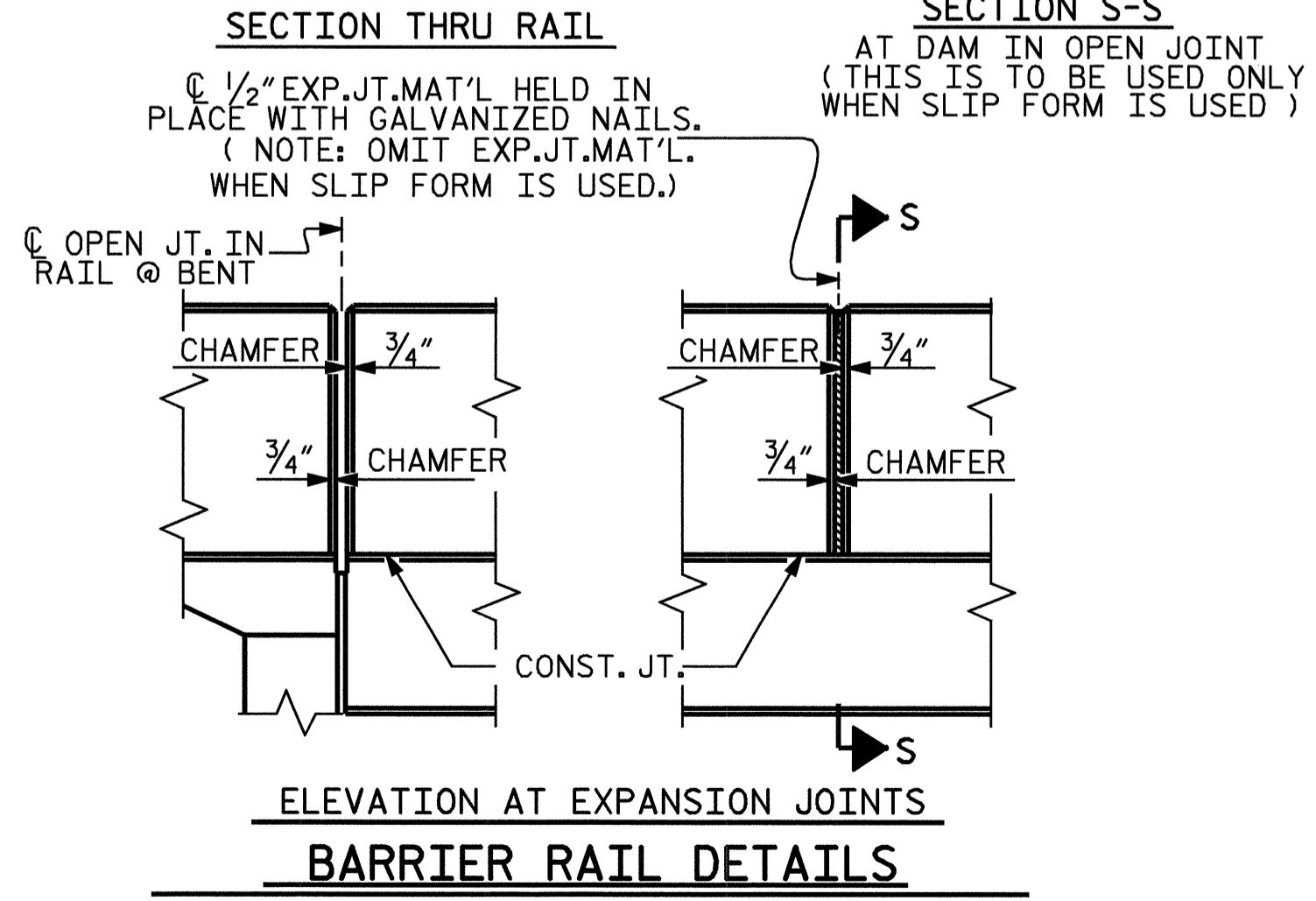
ALL BAR DIMENSIONS ARE OUT TO OUT

BILL OF MATERIAL FOR ONE BOX BEAM SECTION							
BAR	NUMBER	SIZE	TYPE	EXTERIOR UNIT		INTERIOR UNIT	
				LENGTH	WEIGHT	LENGTH	WEIGHT
A1	10	#5	3	6'-3"	65	6'-3"	65
A2	6	#4	3	5'-7"	22	5'-7"	22
B1	12	#5	STR	37'-4"	467	37'-4"	467
D1	12	#4	4	5'-4"	43	5'-4"	43
D2	16	#4	3	4'-0"	43	4'-0"	43
D3	8	#4	STR	2'-8"	14	2'-8"	14
S1	60	#4	3	6'-6"	261	6'-6"	261
S2	60	#4	3	5'-8"	227	5'-8"	227
S3	43	#4	5	5'-10"	168	5'-10"	168
S4	103	#4	3	4'-0"	275	4'-0"	275
* R1	109	#4	1	6'-2"	449		
REINFORCING STEEL				1585	LBS.	1585	LBS.
* EPOXY COATED REINFORCING STEEL				449	LBS.	0	LBS.
6000 P.S.I. CONCRETE				11.6	CU. YDS.	11.5	CU. YDS.
1/2" Ø L.R. STRANDS				No. 26			



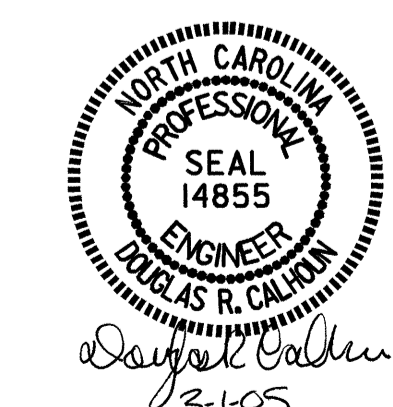
BILL OF MATERIAL FOR CONCRETE BARRIER RAIL					
BAR	TOTAL NO.	SIZE	TYPE	LENGTH	WEIGHT
* B2	42	#5	STR	23'-10"	1044
* R2	218	#4	2	5'-11"	862
* EPOXY COATED REINFORCING STEEL					1906 LBS.
CLASS AA CONCRETE					17.6 CU.YDS.
TOTAL LIN. FT. OF CONCRETE BARRIER RAIL					145.50 LIN. FT.

SPLICE CHART	
B1	2'-2"



ELASTOMERIC BEARING DETAILS

PROJECT NO. B-3866  
LENOIR-GREENE COUNTY  
STATION: 19+21.50 -L-



STATE OF NORTH CAROLINA				DEPARTMENT OF TRANSPORTATION			
RALEIGH				STANDARD			
3'-0" X 2'-3"				PRESTRESSED			
CONCRETE BOX				BEAM UNIT			
OCTOBER		2004		SHEET NO.		S-8	
REVISIONS				TOTAL SHEETS			
NO.	BY:	DATE:	NO.	BY:	DATE:	19	
1			3				
2			4				

DRAWN BY : T. A. HARRIS DATE : 11/2/04  
CHECKED BY : K. P. SEDA DATE : 11/16/04