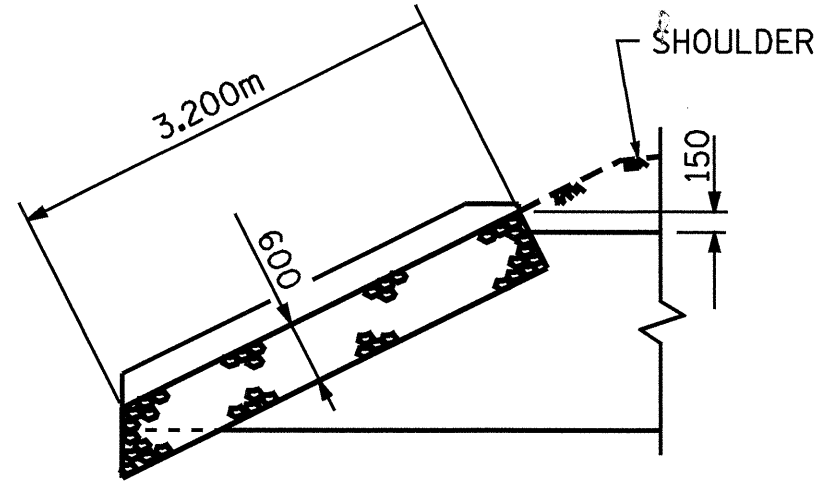
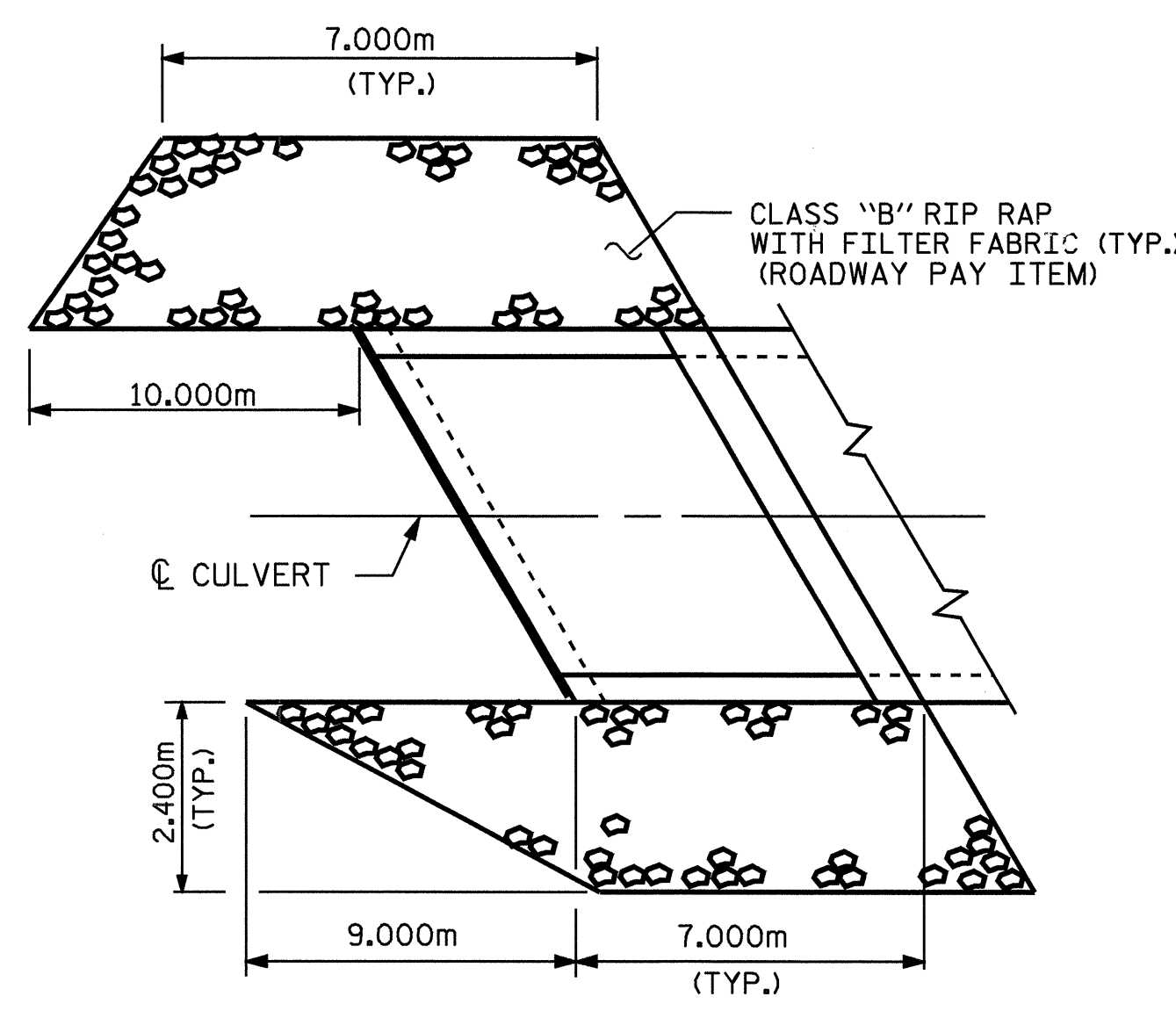


SECTION THRU OUTLET WING

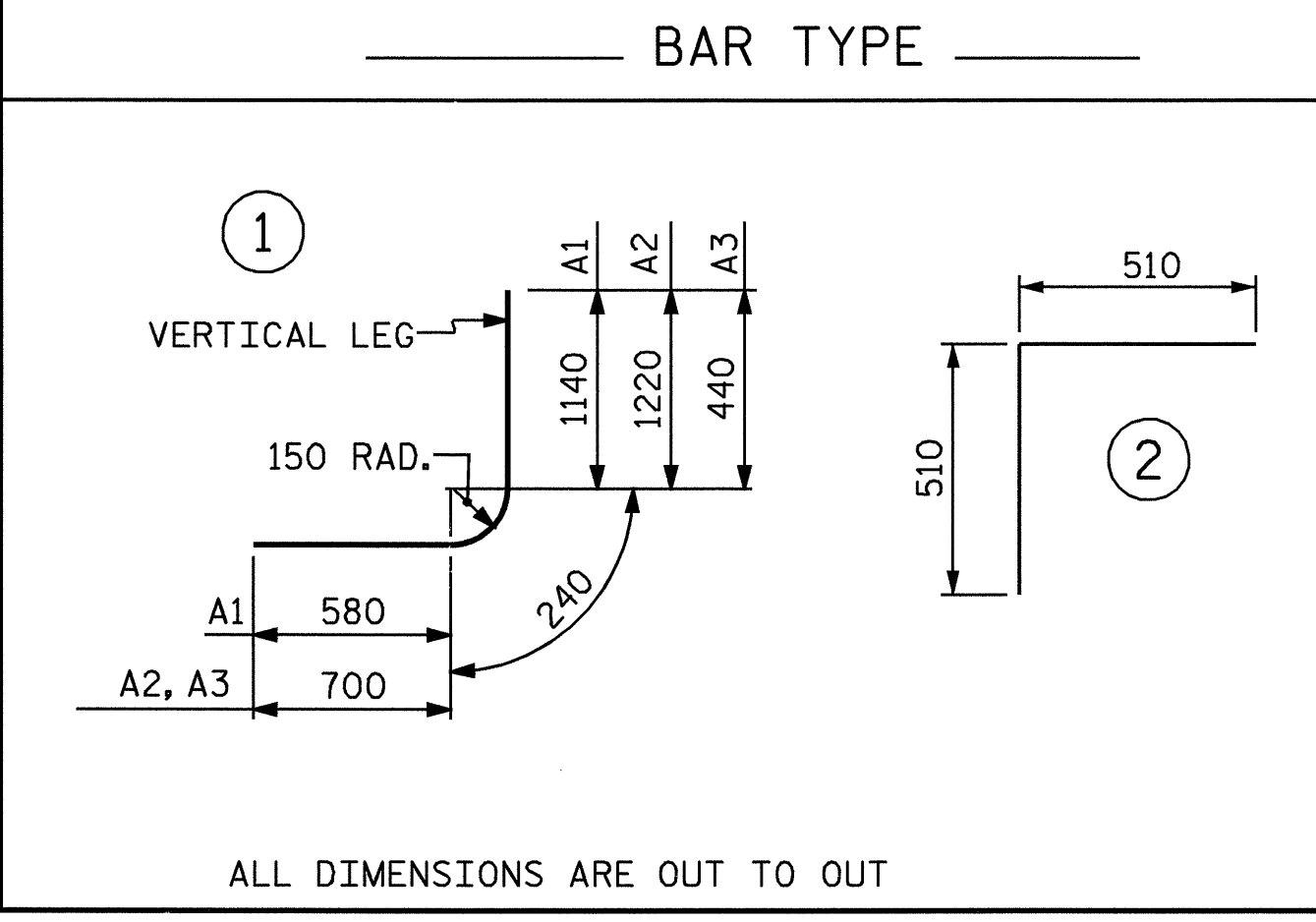


ELEVATION



PLAN

OUTLET WING RIP RAP DETAILS

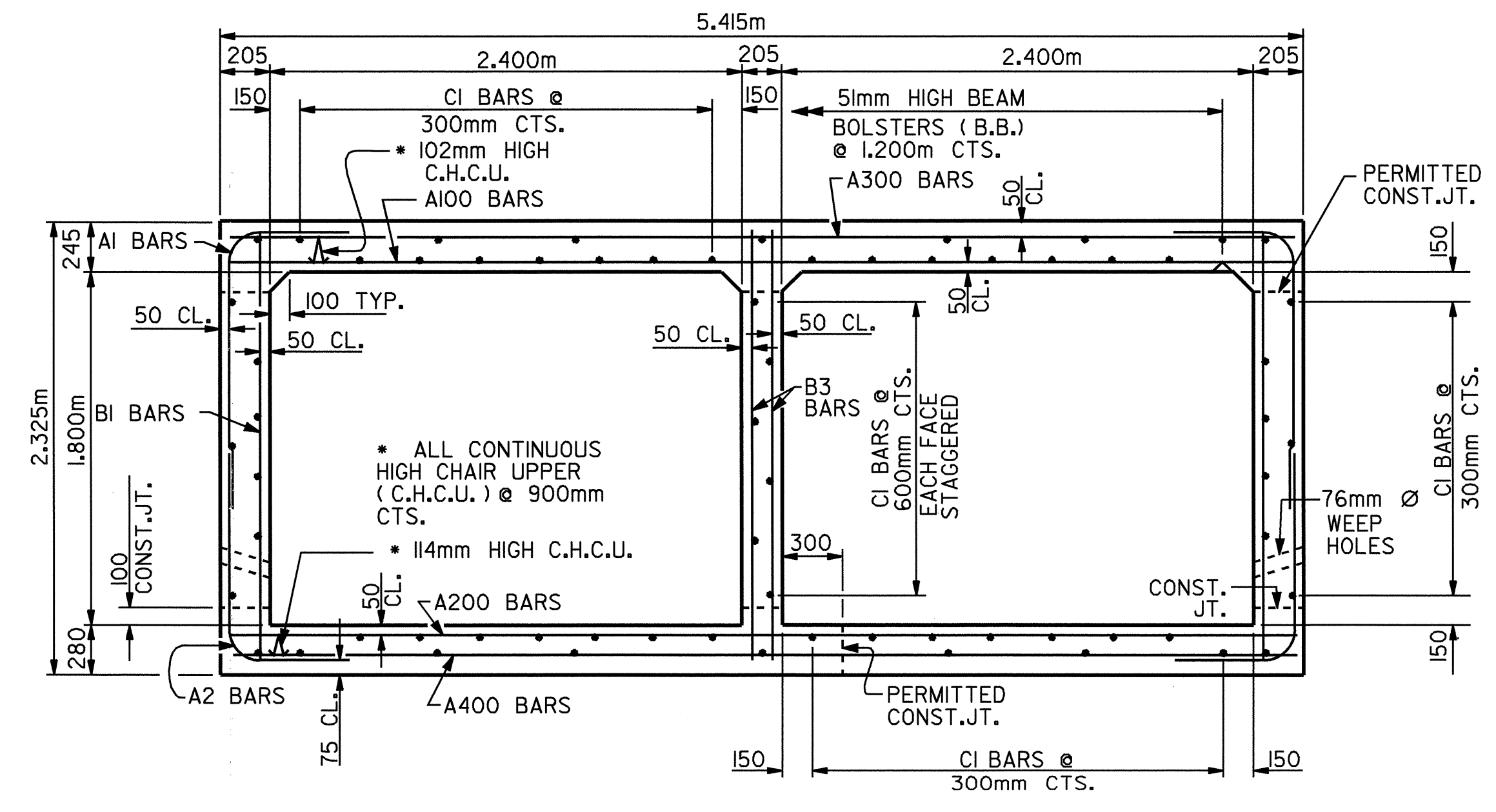


ALL DIMENSIONS ARE OUT TO OUT

SPLICE LENGTH CHART		
BAR	SIZE	SPLICE LENGTH
A200	16	540
A400	16	670
B1	13	540
B3	13	540
C1	13	590

BILL OF MATERIAL																	
BAR NO.	NO.	SIZE	TYPE	LENGTH	WEIGHT	BAR NO.	NO.	SIZE	TYPE	LENGTH	WEIGHT	BAR NO.	NO.	SIZE	TYPE	LENGTH	WEIGHT
A100	183	#16	STR	5260	1494	A301	6	#16	STR	4540	42	G1	8	#16	STR	6120	76
A101	4	#16	STR	4640	29	A302	6	#16	STR	3880	36	H1	4	#13	STR	6740	27
A102	4	#16	STR	4060	25	A303	6	#16	STR	3200	30	H2	4	#13	STR	6460	26
A103	4	#16	STR	3460	21	A304	6	#16	STR	2540	24	H3	4	#13	STR	6400	25
A104	4	#16	STR	2880	18	A305	6	#16	STR	1860	17	H4	4	#13	STR	5340	21
A105	4	#16	STR	2280	14	A306	6	#16	STR	1160	11	H5	4	#13	STR	4300	17
A106	4	#16	STR	1700	11							H6	4	#13	STR	3240	13
A107	4	#16	STR	1120	7	A400	290	#16	STR	5260	2367	H7	4	#13	STR	2200	9
						A401	6	#16	STR	4540	42	H8	4	#13	STR	1140	5
A200	157	#16	STR	5260	1282	A402	6	#16	STR	3880	36	K1	9	#13	2	1020	9
A201	2	#16	STR	4820	15	A403	6	#16	STR	3200	30						
A202	2	#16	STR	4400	14	A404	6	#16	STR	2540	24	S2	14	#25	STR	6120	340
A203	2	#16	STR	3980	12	A405	6	#16	STR	1860	17						
A204	2	#16	STR	3580	11	A406	6	#16	STR	1160	11						
A205	2	#16	STR	3140	10												
A206	2	#16	STR	2740	9	A1	526	#13	1	1960	1025	V1	16	#13	STR	2060	33
A207	2	#16	STR	2320	7	A2	586	#16	1	2160	1964	V2	16	#13	STR	1900	30
A208	2	#16	STR	1900	6	A3	42	#16	1	1380	90	V3	16	#13	STR	1760	28
A209	2	#16	STR	1500	5							V4	16	#13	STR	1600	25
A210	2	#16	STR	1060	3	B1	228	#13	STR	2160	490	V5	16	#13	STR	1460	23
A211	2	#16	STR	660	2	B3	274	#13	STR	2160	588	V6	16	#13	STR	1300	21
												V7	16	#13	STR	1160	18
A300	239	#16	STR	5260	1951	C1	264	#13	STR	8960	2351	V8	16	#13	STR	1020	16
						C2	23	#13	STR	7220	165	V9	16	#13	STR	860	14
												V10	20	#13	STR	720	14
												V11	20	#13	STR	540	11
												V12	20	#13	STR	380	8

REINFORCING STEEL	= 15,143 Kg
CLASS A CONCRETE	
BARREL & OUTLET WINGS	148.2m <sup>3</sup>
1 HEADWALL	0.7m <sup>3</sup>
1 END CURTAIN WALL	0.6m <sup>3</sup>
<b>TOTAL</b>	<b>149.5m<sup>3</sup></b>

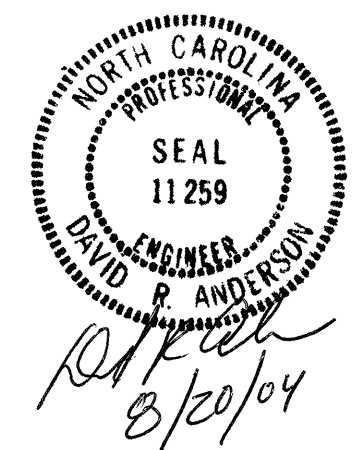


RIGHT ANGLE SECTION OF BARREL  
THERE ARE 66 "C" BARS IN SECTION OF BARREL.

PROJECT NO. R-513BA  
ROBESON COUNTY  
 STATION: 12+86.500 -SR1-

SHEET 4 OF 5

STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH  
 DOUBLE 2.400m X 1.800m  
 CONCRETE BOX CULVERT  
 SKEW 120°



ASSEMBLED BY : N. Q. TRAN	DATE : 2-13-03
CHECKED BY : SWANcøPE	DATE : 08-04-04
DRAWN BY : EEM 6/97	
CHECKED BY : ARB 7/97	

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	TOTAL SHEETS
1			3			C-18
2			4			24