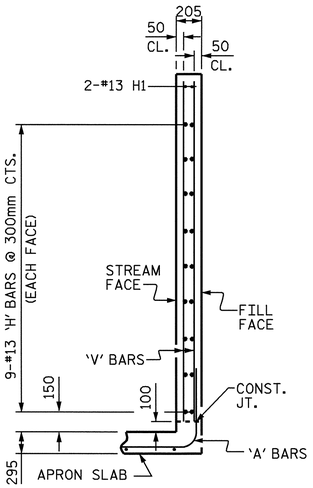
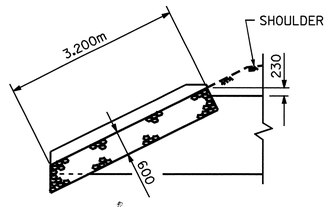
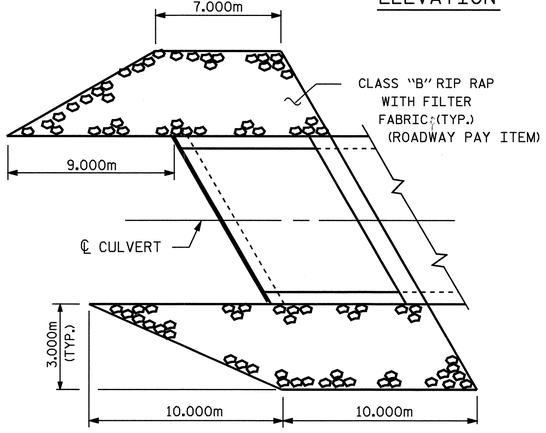
W:\SquadM\r-0513ba\str8\swance\Microstation\R-513ba_sd_CU_
wkfischer



SECTION THRU OUTLET WING



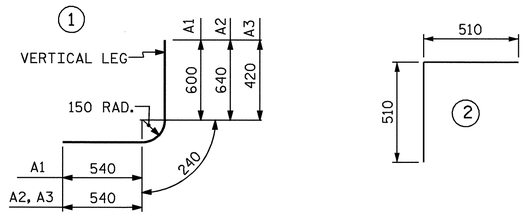
ELEVATION



PLAN

OUTLET WING RIP RAP DETAILS

BAR TYPE



ALL DIMENSIONS ARE OUT TO OUT

SPLICE LENGTH CHART		
BAR	SIZE	SPLICE LENGTH
A200	16	540
A400	22	920
B1	13	540
B3	19	690
C1	13	590
C2	13	590

BILL OF MATERIAL

BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
A100	712	#19	STR	9680	15404
A101	4	#19	STR	9040	81
A102	4	#19	STR	8460	76
A103	4	#19	STR	7880	70
A104	4	#19	STR	7280	65
A105	4	#19	STR	6680	60
A106	4	#19	STR	6100	55
A107	4	#19	STR	5520	49
A108	4	#19	STR	4920	44
A109	4	#19	STR	4340	39
A110	4	#19	STR	3740	33
A111	4	#19	STR	3140	28
A112	4	#19	STR	2560	23
A113	4	#19	STR	1980	18
A114	4	#19	STR	1400	13
A115	4	#19	STR	820	7
A200	687	#16	STR	9680	10321
A201	4	#16	STR	8960	56
A202	4	#16	STR	8340	52
A203	4	#16	STR	7680	48
A204	4	#16	STR	7020	44
A205	4	#16	STR	6340	39
A206	4	#16	STR	5680	35
A207	4	#16	STR	5020	31
A208	4	#16	STR	4360	27
A209	4	#16	STR	3700	23
A210	4	#16	STR	3040	19
A211	4	#16	STR	2380	15
A212	4	#16	STR	1720	11
A213	4	#16	STR	1060	7

BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
A300	756	#22	STR	9680	22262
A301	4	#22	STR	9100	111
A302	4	#22	STR	8540	104
A303	4	#22	STR	7980	97
A304	4	#22	STR	7420	90
A305	4	#22	STR	6860	83
A306	4	#22	STR	6300	77
A307	4	#22	STR	5760	70
A308	4	#22	STR	5200	63
A309	4	#22	STR	4640	56
A310	4	#22	STR	4080	50
A311	4	#22	STR	3540	43
A312	4	#22	STR	2980	36
A313	4	#22	STR	2440	30
A314	4	#22	STR	1880	23
A315	4	#22	STR	1320	16
A316	4	#22	STR	760	9
A400	816	#22	STR	9680	24028
A401	4	#22	STR	9100	111
A402	4	#22	STR	8540	104
A403	4	#22	STR	7980	97
A404	4	#22	STR	7420	90
A405	4	#22	STR	6860	83
A406	4	#22	STR	6300	77
A407	4	#22	STR	5760	70
A408	4	#22	STR	5200	63
A409	4	#22	STR	4640	56
A410	4	#22	STR	4080	50
A411	4	#22	STR	3540	43
A412	4	#22	STR	2980	36
A413	4	#22	STR	2440	30
A414	4	#22	STR	1880	23
A415	4	#22	STR	1320	16
A416	4	#22	STR	760	9
A1	1584	#16	1	1380	3393
A2	1696	#16	1	1420	3738
A3	10	#16	1	1200	19

BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
B1	844	#13	STR	3080	2584
B2	1584	#13	STR	2480	3905
B3	2028	#19	STR	3080	13960
C1	1770	#13	STR	8960	15764
C2	80	#13	STR	5100	406
D1	20	#19	STR	900	40
G1	8	#16	STR	11200	139
S2	14	#25	STR	11200	623
H1	4	#16	STR	9940	62
H2	4	#16	STR	9560	59
H3	4	#16	STR	9200	57
H4	4	#16	STR	8160	51
H5	4	#16	STR	7120	44
H6	4	#16	STR	6080	38
H7	4	#16	STR	5040	31
H8	4	#16	STR	4000	25
H9	4	#16	STR	2760	17
H10	4	#16	STR	1960	12
K1	16	#13	2	1020	16
V1	16	#13	STR	2900	46
V2	16	#13	STR	2720	43
V3	16	#13	STR	2540	40
V4	16	#13	STR	2360	38
V5	16	#13	STR	2180	35
V6	16	#13	STR	2000	32
V7	16	#13	STR	1800	29
V8	16	#13	STR	1620	26
V9	16	#13	STR	1440	23
V10	16	#13	STR	1260	20
V11	16	#13	STR	1060	17
V12	16	#13	STR	880	14
V13	16	#13	STR	700	11
V14	16	#13	STR	520	8
V15	20	#13	STR	280	6

REINFORCING STEEL IN BARREL & OUTLET WINGS = 120,370Kg

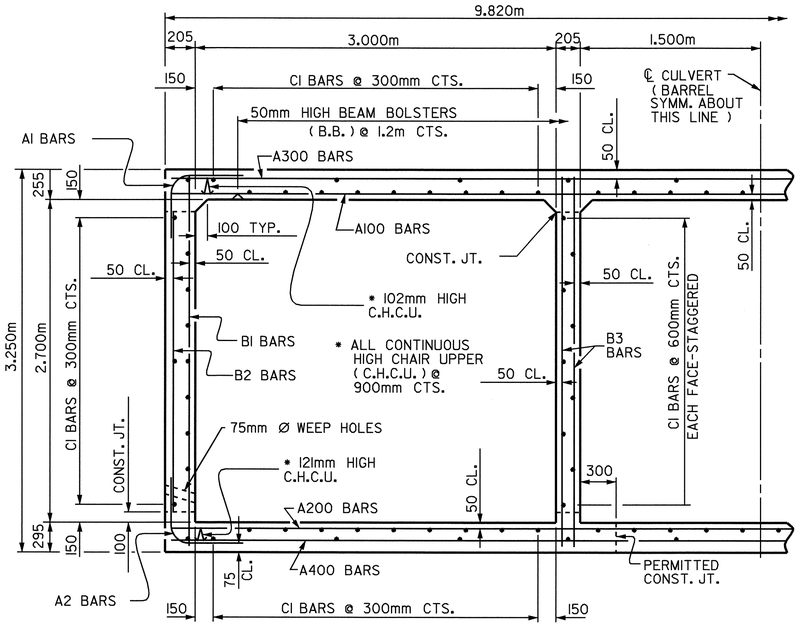
CLASS A CONCRETE

BARREL & OUTLET WINGS = 995.2 m^3

1 HEADWALL = 1.3 m^3

1 END CURTAIN WALL = 1.0 m^3

TOTAL = 997.5 m^3



RIGHT ANGLE SECTION OF BARREL

THERE ARE 118 "C" BARS IN SECTION OF BARREL.

PROJECT NO. R-513BA

ROBESON COUNTY

STATION: 120+86.500 -L-

SHEET 4 OF 5

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

TRIPLE 3.000m X 2.700m CONCRETE BOX CULVERT

1994

ASSEMBLED BY : N. Q. TRAN	DATE : 2-13-03
CHECKED BY : SWANcePE	DATE : 08-06-04
DRAWN BY : EEM 6/97	
CHECKED BY : ARB 7/97	

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	C-23
1			3			TOTAL SHEETS
2			4			24

NORTH CAROLINA PROFESSIONAL SEAL 21545 ENGINEER STEVEN L. WANCE
06/20/04

STR.#8