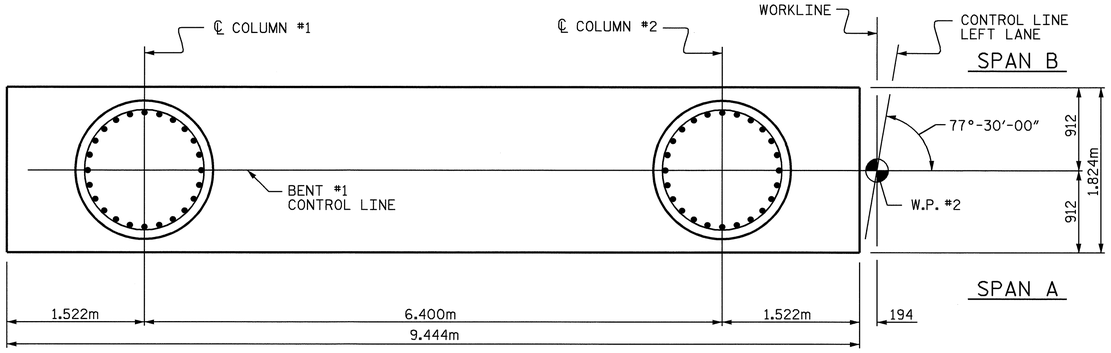
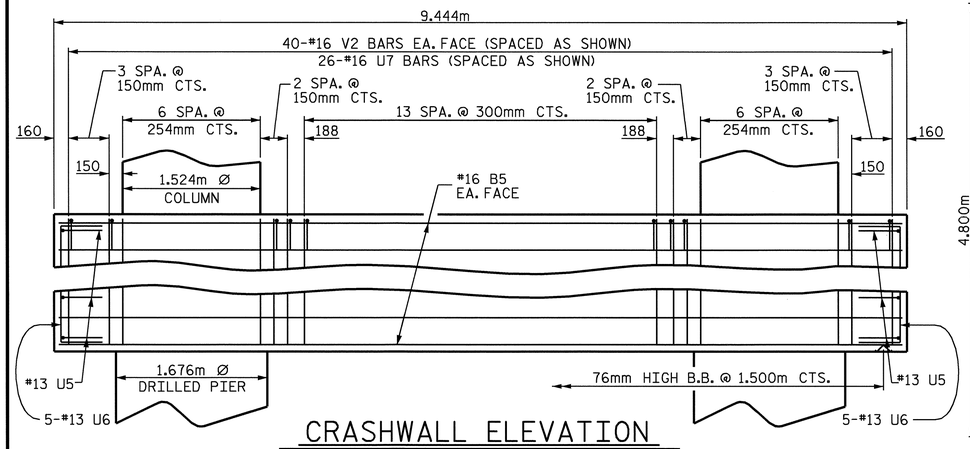
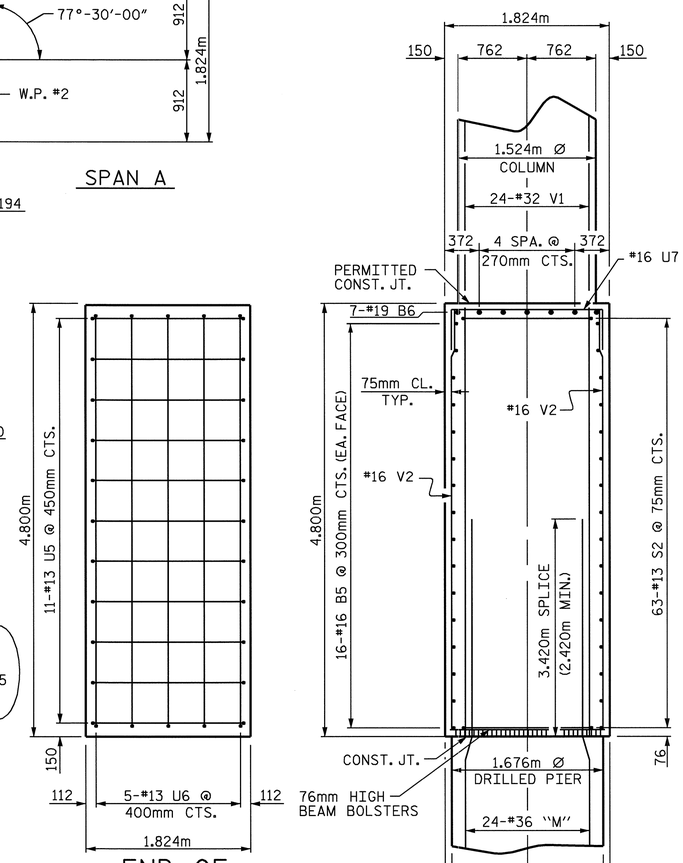


SECTION D-D



CRASHWALL ELEVATION

COLUMN STEEL NOT SHOWN FOR CLARITY

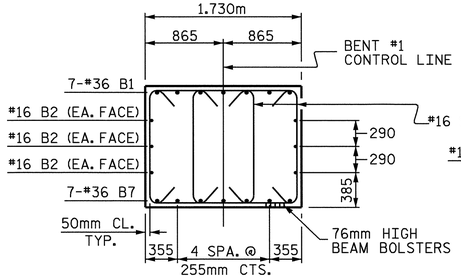


END OF CRASHWALL VIEW

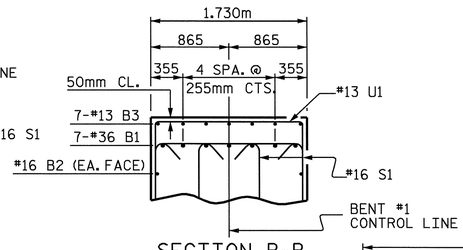
(TYPICAL EACH END)

SECTION C-C

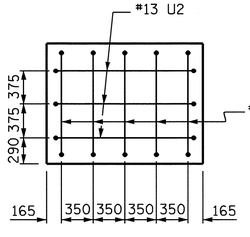
SPIRAL COLUMN STEEL NOT SHOWN FOR CLARITY



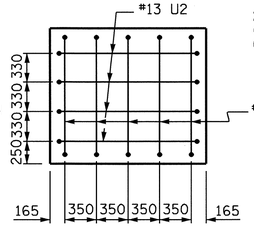
SECTION A-A



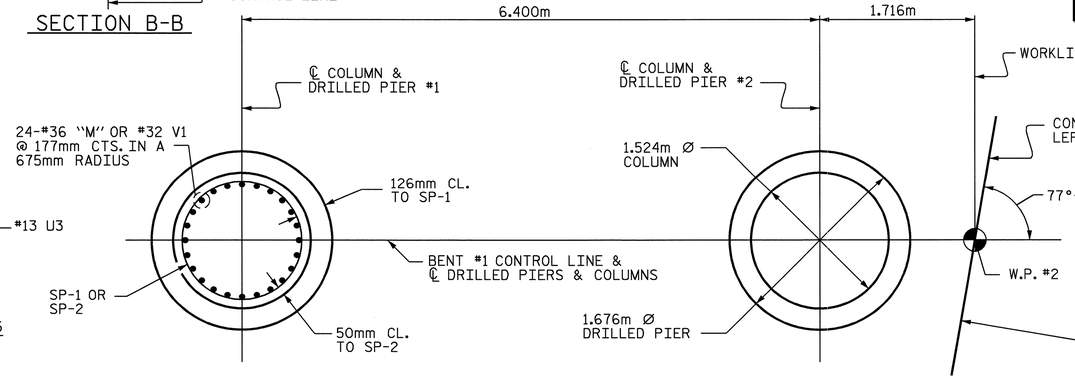
SECTION B-B



VIEW X-X



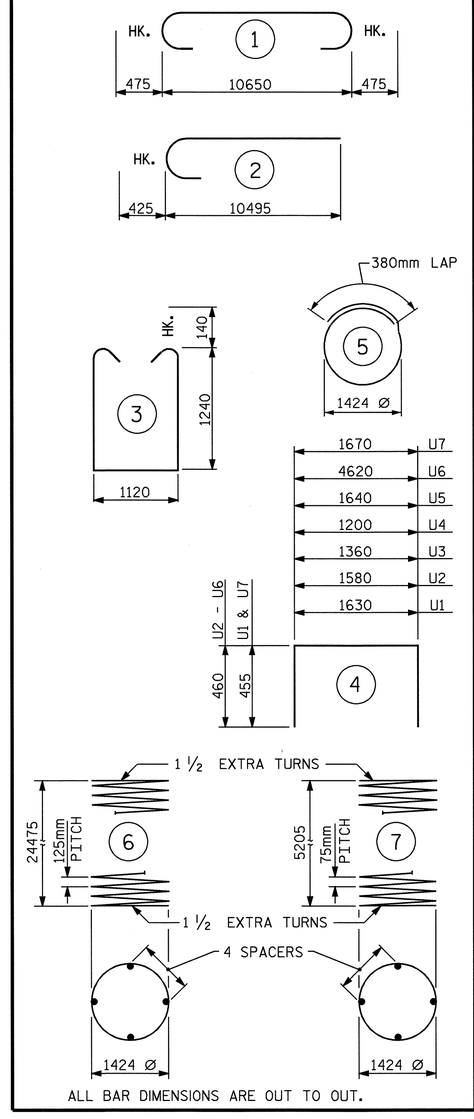
VIEW Y-Y



PLAN OF DRILLED PIERS & COLUMNS

CRASHWALL NOT SHOWN FOR CLARITY

BAR TYPES



ALL BAR DIMENSIONS ARE OUT TO OUT.

BILL OF MATERIAL

BENT NO. 1

BAR	NO	SIZE	TYPE	LENGTH	WEIGHT
B1	7	36	1	11600	642
B2	6	16	STR	10700	100
B3	14	13	STR	1900	26
B4	7	13	STR	1400	10
B5	32	16	STR	9280	461
B6	7	19	STR	9280	145
B7	7	36	STR	10700	592
S1	68	16	3	3880	409
S2	126	13	5	4860	609
U1	47	13	4	2540	119
U2	7	13	4	2500	17
U3	5	13	4	2280	11
U4	5	13	4	2120	11
U5	22	13	4	2560	56
U6	10	13	4	5540	55
U7	26	16	4	2580	104
V1	48	32	2	10920	3357
V2	80	16	STR	4640	576
M1	48	36	STR	13840	5253
M2	48	36	STR	14140	5367
SP-1	2	*	6	880600	2733
SP-2	2	**	7	323640	643

REINFORCING STEEL	kg.	17,920
SPIRAL COLUMN REINFORCING STEEL	kg.	3,376

CLASS A CONCRETE BREAKDOWN:

POUR #2 (CRASHWALL AND COLUMNS)	101.2m³
POUR #3 (CAP)	26.8m³
TOTAL CLASS A CONCRETE	128.0m³

DRILLED PIER QUANTITIES

POUR #1 (DRILLED PIER CONCRETE)	109.0m³
1676mm Ø DRILLED PIERS IN SOIL	39.900m
1676mm Ø DRILLED PIERS NOT IN SOIL	9.500m
CSL TUBES	305.5 METERS
CROSSHOLE SONIC LOGGING	1 EACH
SID INSPECTION	1 EACH
SPT TESTING	2 EACH

THE CONTRACTOR'S ATTENTION IS CALLED TO THE FACT THAT THE LONGITUDINAL REINFORCEMENT IN THE DRILLED PIERS IS DETAILED WITH ONE METER OF EXTRA LENGTH.

** THE SP-2 SPIRAL REINFORCING STEEL SHALL BE W20 OR D-20 COLD DRAWN WIRE OR #13 PLAIN OR DEFORMED BAR.

* THE SP-1 SPIRAL REINFORCING STEEL SHALL BE W31 OR D-31 COLD DRAWN WIRE OR #16 PLAIN OR DEFORMED BAR.

PROJECT NO. R-2911A

IREDELL COUNTY

STATION: 39+62.402 -L-

SHEET 2 OF 2

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SUBSTRUCTURE
BENT #1
(LEFT LANE)

DRAWN BY : D. HODGE DATE : 2/2004
CHECKED BY : M.G. CHEEK DATE : 3/2004

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-22
1			3			TOTAL SHEETS
2			4			106

NORTH CAROLINA PROFESSIONAL SEAL 20125 ENGINEER MARSHALL G. CHEEK 3-27-04

STR #1