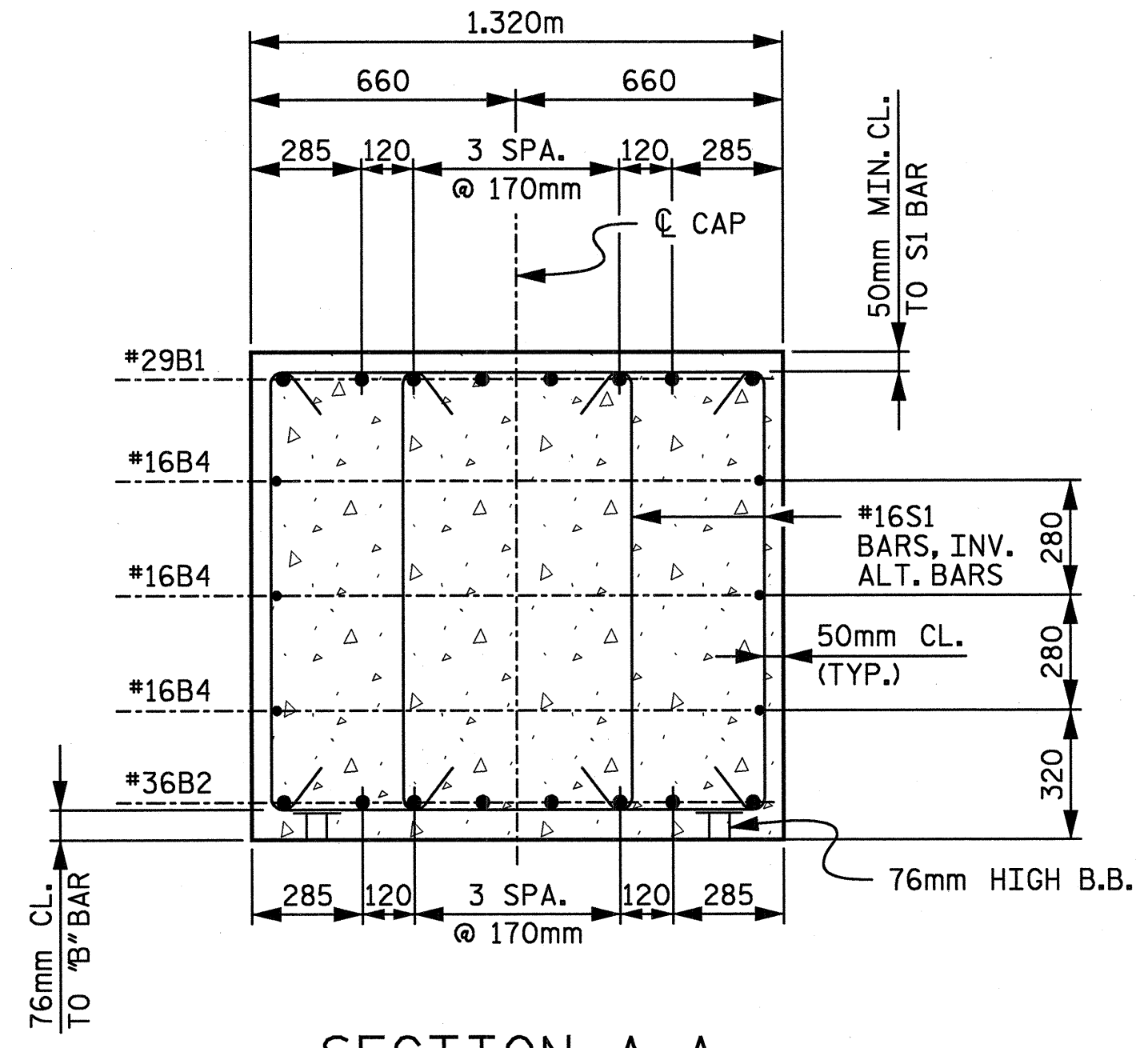
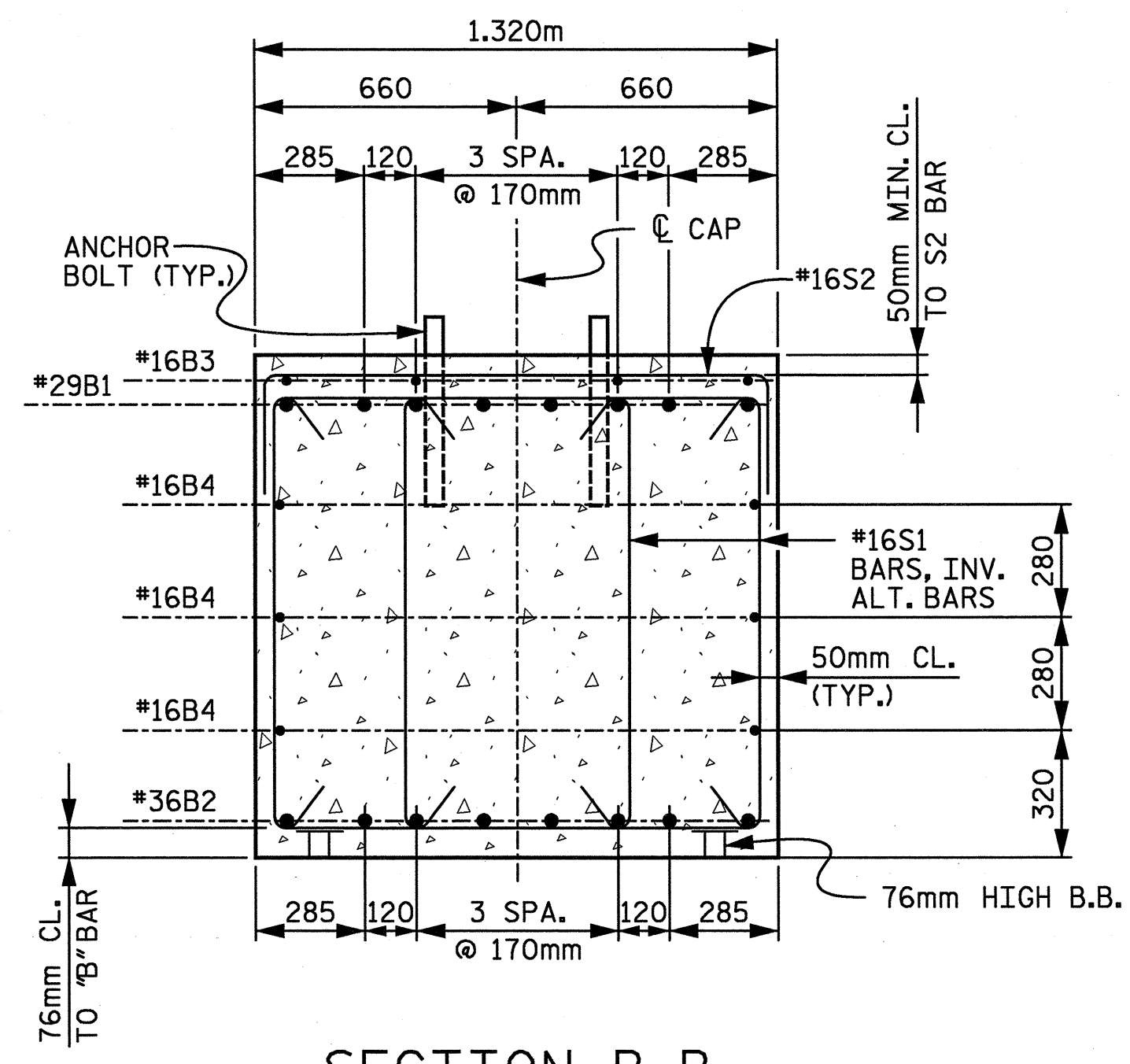


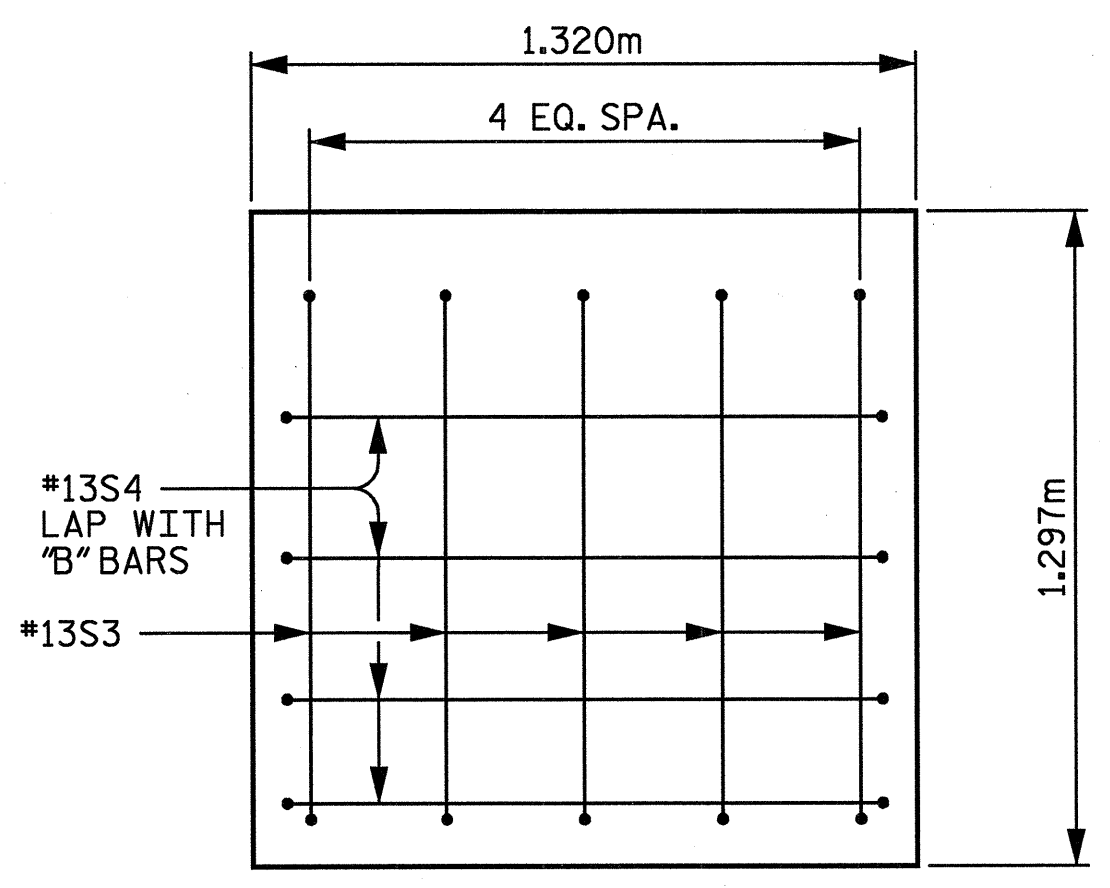
02/23/2005 10:50:38 AM n:\p\o\3109-300\ubstation\struct\find\3109-300_Int Bent_lb.dgn



SECTION A-A

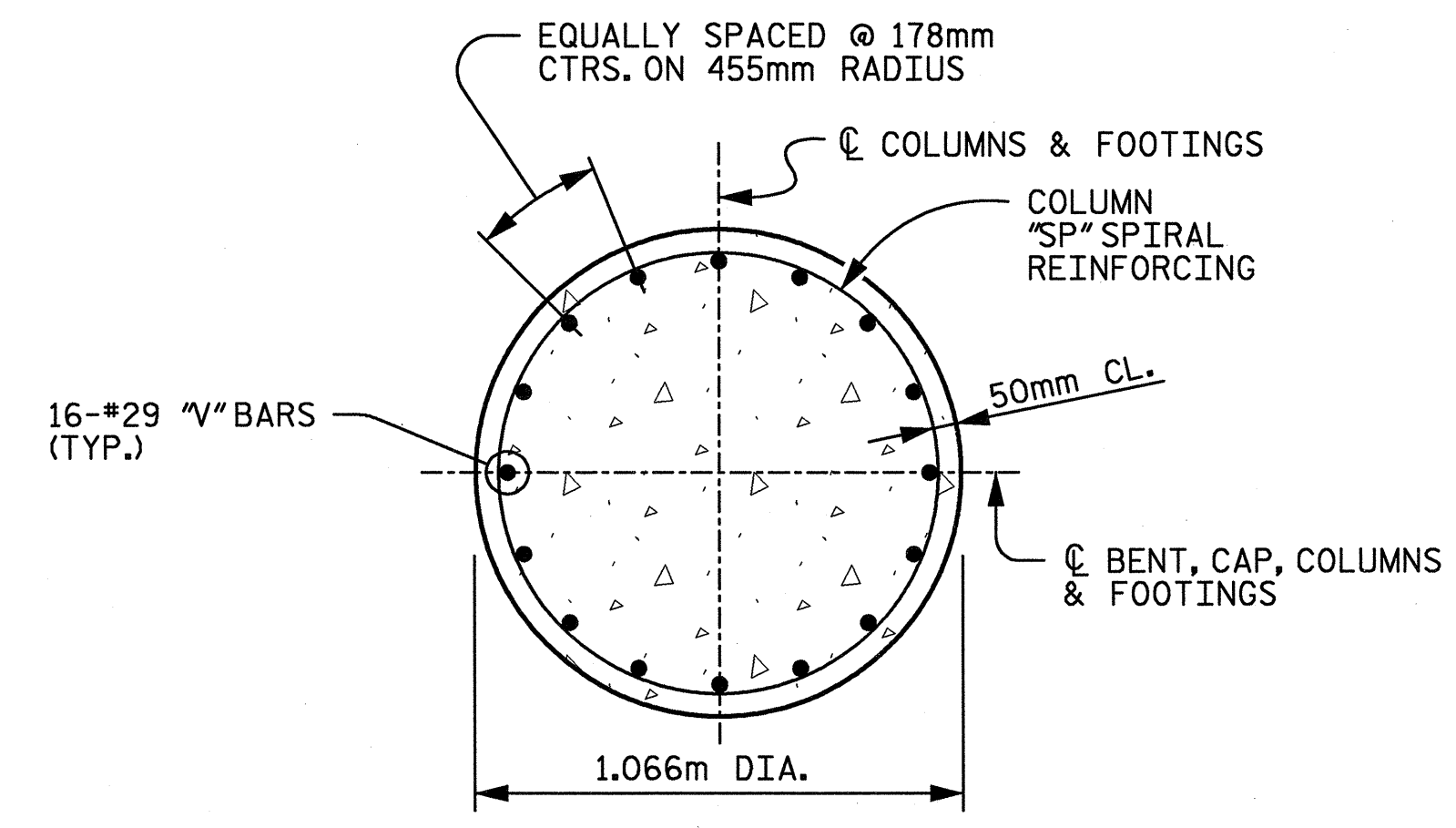


SECTION B-B

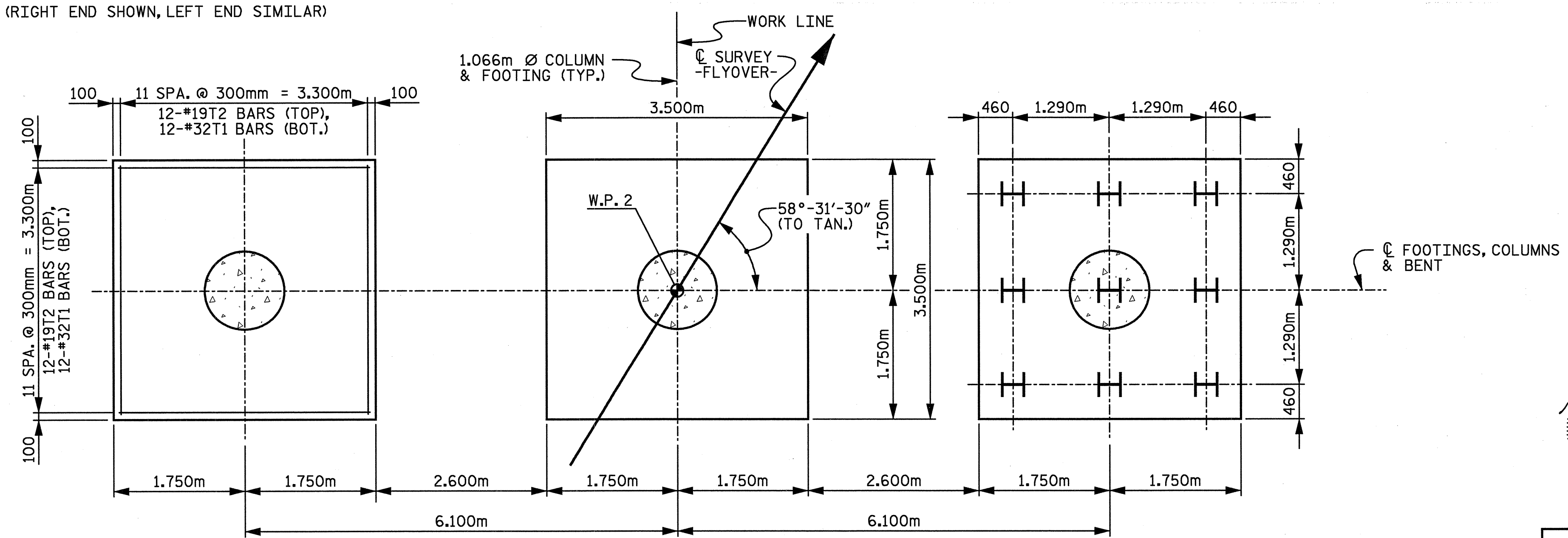


VIEW C-C

(RIGHT END SHOWN, LEFT END SIMILAR)



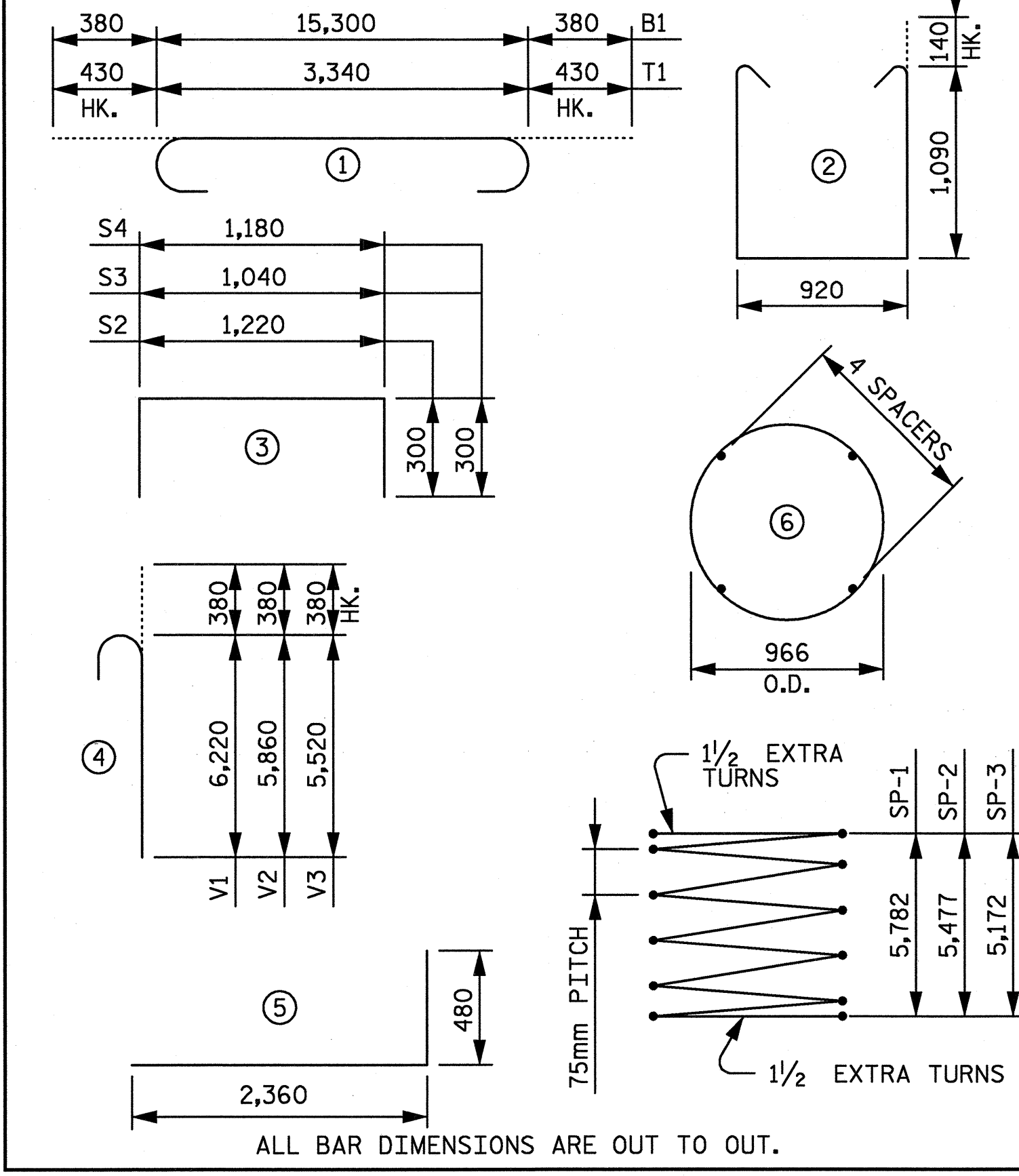
TYPICAL SECTION THROUGH COLUMN



FOOTING PLAN

(DATA SHOWN IS TYPICAL FOR EACH FOOTING)

BAR TYPES



ALL BAR DIMENSIONS ARE OUT TO OUT.

BILL OF REINFORCING

MARK	NO.	SIZE	TYPE	LENGTH (mm)	MASS (kg)
B1	8	#29	①	16,060	650
B2	8	#36	STR.	15,300	968
B3	20	#16	STR.	1,220	38
B4	6	#16	STR.	15,300	142
M1	48	#29	⑤	2,840	690
S1	88	#16	②	3,380	462
S2	35	#16	③	1,820	99
S3	10	#13	③	1,640	16
S4	8	#13	③	1,780	14
T1	72	#32	①	4,200	1,937
T2	72	#19	STR.	3,340	537
V1	16	#29	④	6,600	534
V2	16	#29	④	6,240	505
V3	16	#29	④	5,900	478
SP-1	1	△	⑥	239,960	239
SP-2	1	△	⑥	227,780	226
SP-3	1	△	⑥	215,580	214

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

QUANTITIES

REINFORCING STEEL	7,070 kg
SPIRAL COLUMN REINFORCING STEEL	679 kg
CLASS A CONCRETE	POUR 1: 44.1 CU. METERS POUR 2: 14.5 CU. METERS POUR 3: 24.8 CU. METERS TOTAL: 83.4 CU. METERS
HP 310 X 79 STEEL PILES	27 (NO.) 484.2 METERS

PROJECT No R-2552C
JOHNSTON COUNTY
STATION: POS 16+52.599 -Y4- =
POC 9+28.021 -FLYOVER-

SHEET 2 OF 2

REVISIONS	NO.	BY	DATE
	1		
	2		
	3		
	4		

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

BENT 1

MARK F. ROBBINS
ENGINEER
2/23/05

ALCANG LIU
ENGINEER
2/23/05

RALPH WHITEHEAD ASSOCIATES, INC.
CONSULTING ENGINEERS
P.O. BOX 35624 CHARLOTTE, N.C. 28235

DRAWN BY LGH DATE 10-04 DWG. NO. D-1748.27
CHECKED BY TVR DATE 11-04

SHEET NO. 5-422
TOTAL SHEETS 451