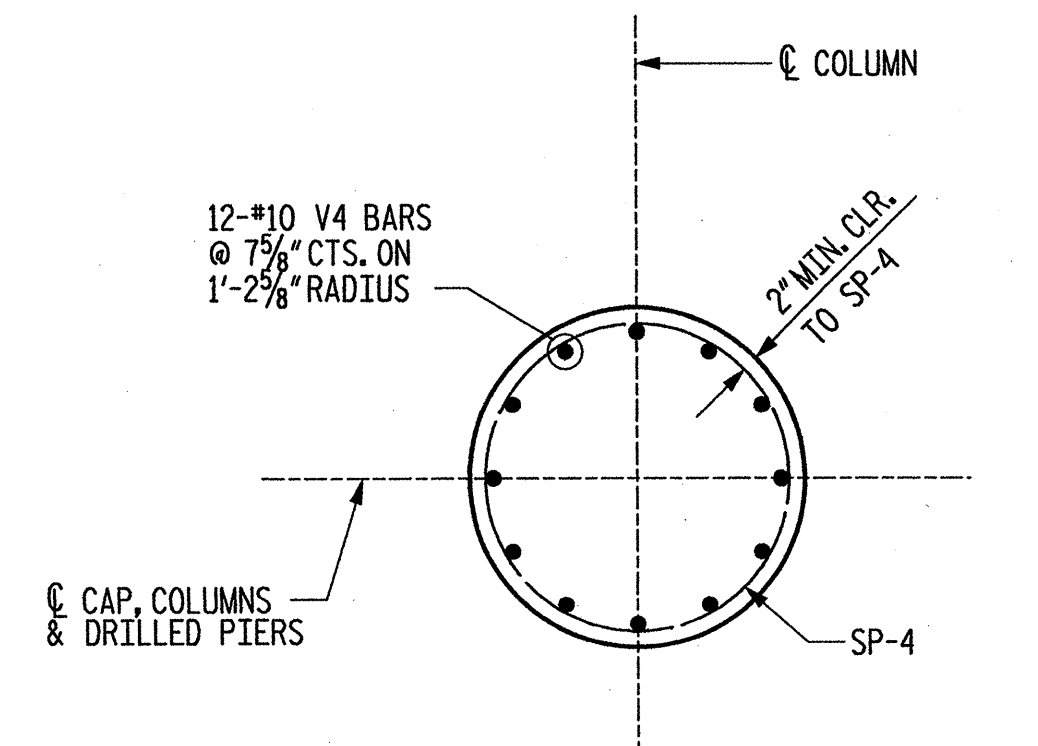
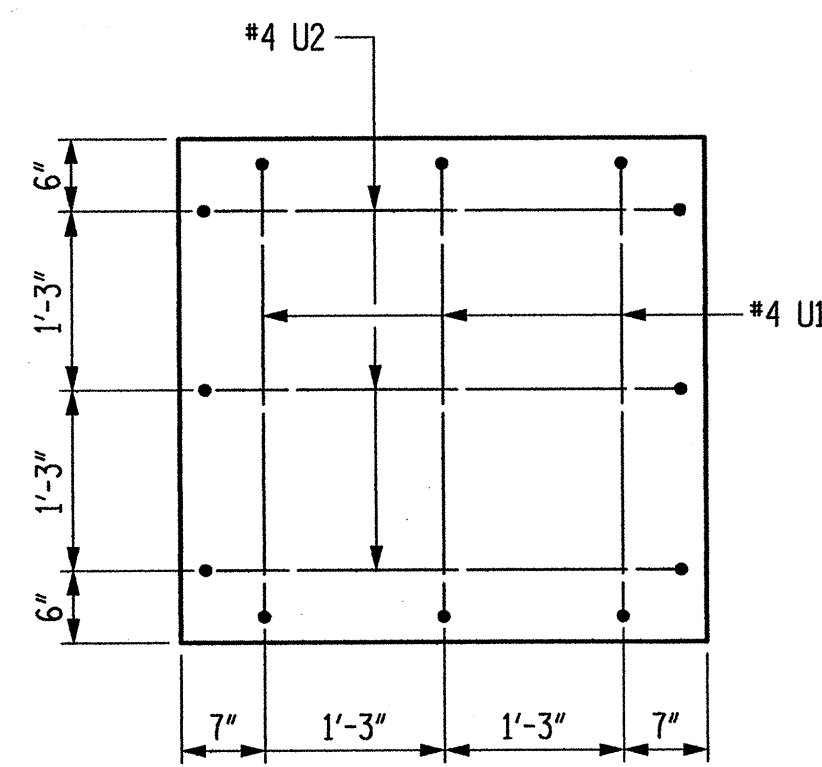


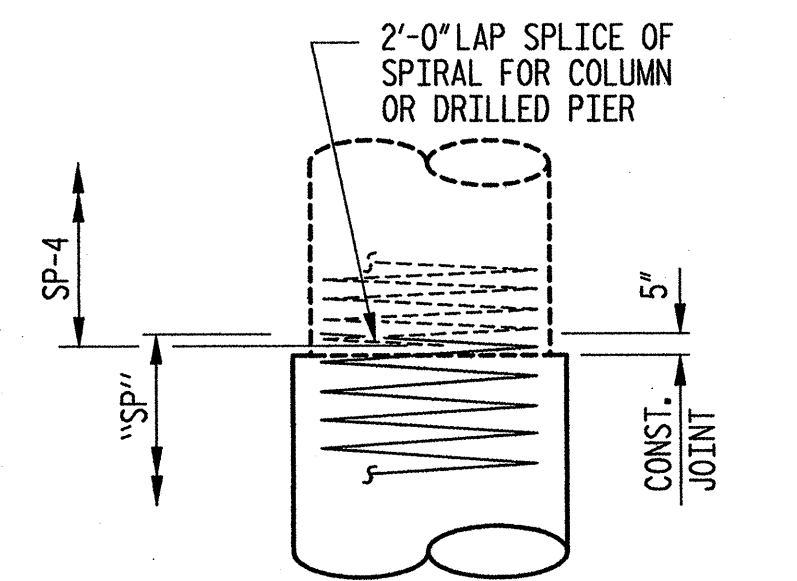
SECTION A-A



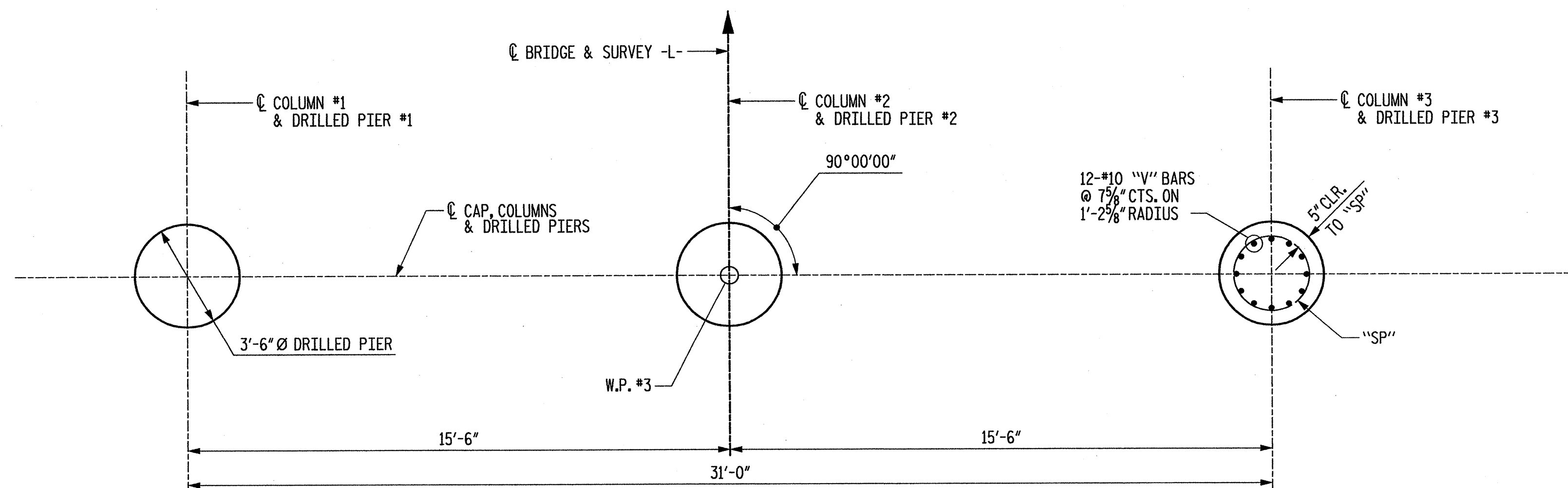
TYPICAL COLUMN SECTION



CAP END VIEW



CONSTRUCTION JOINT DETAIL



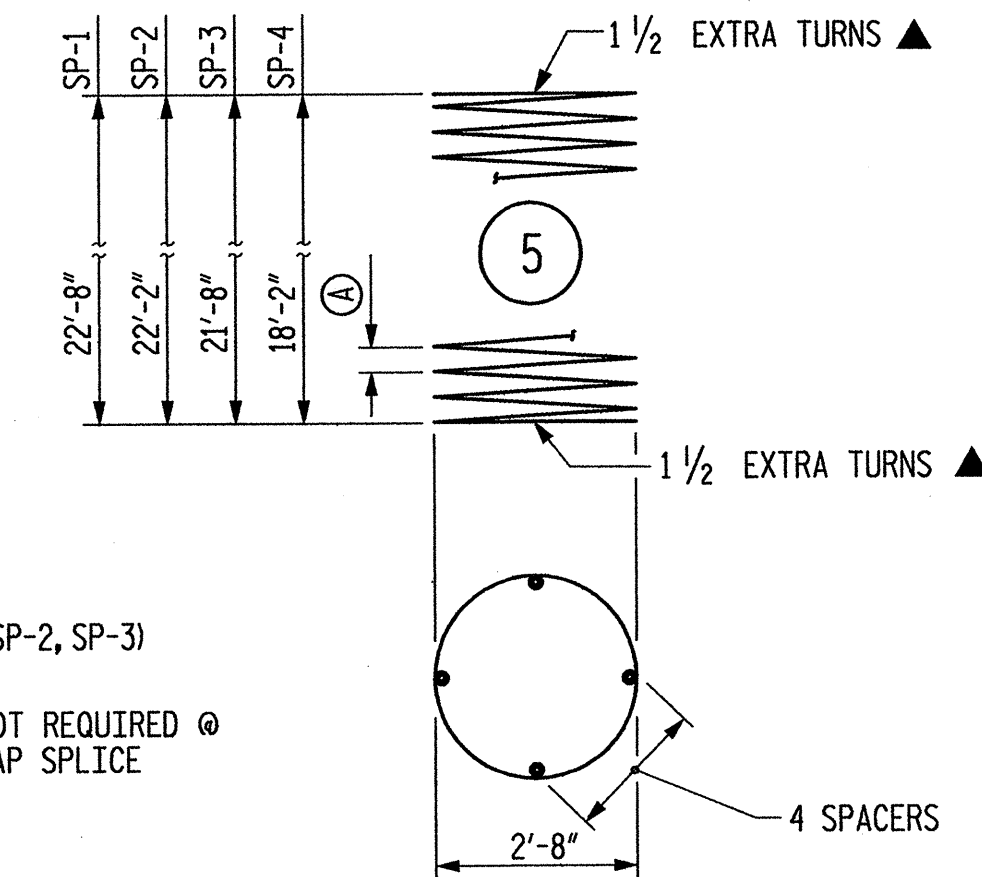
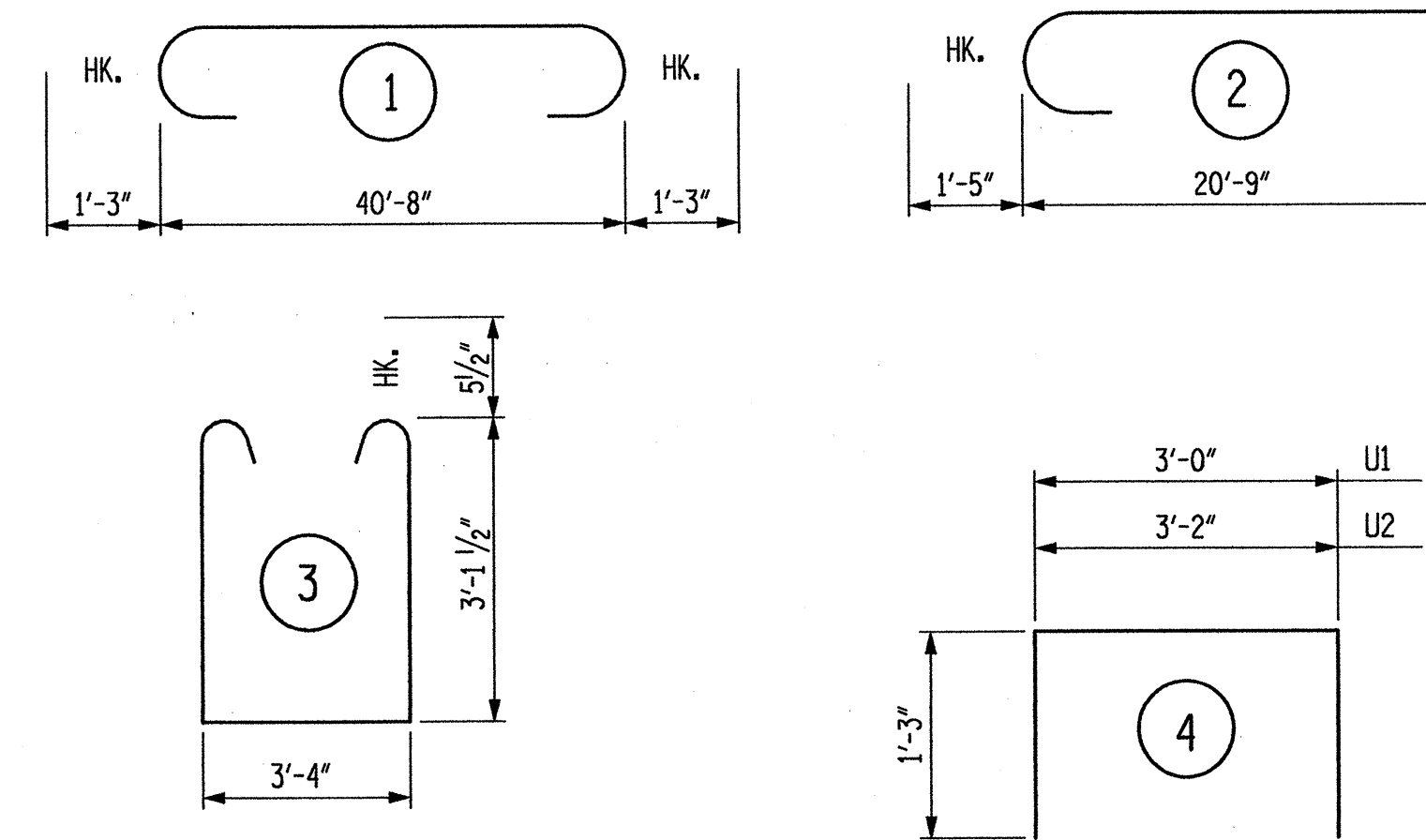
PLAN OF DRILLED PIERS

ALL DIMENSIONS AND DETAILS SHOWN FOR DRILLED PIERS ARE TYPICAL FOR EACH DRILLED PIER.

DRAWN BY: B.E. LANNING DATE: JULY 2004
 CHECKED BY: J.C. KO DATE: JULY 2004

BAR TYPES

ALL BAR DIMENSIONS ARE OUT TO OUT.



- Ⓐ 3" PITCH (SP-4)
5" PITCH (SP-1, SP-2, SP-3)
- ▲ EXTRA TURNS NOT REQUIRED @
CONST. JOINT LAP SPLICE

BILL OF MATERIAL

BENT #2					
BAR NO.	NO.	SIZE	TYPE	LENGTH	WEIGHT
B1	5	9	STR	40'-8"	691
B2	5	9	1	43'-2"	734
B3	4	6	STR	40'-8"	244
D1	52	6	STR	1'-6"	117
S1	36	5	3	10'-6"	394
U1	6	4	4	5'-6"	22
U2	6	4	4	5'-8"	23
V1	12	10	STR	31'-10"	1,643
V2	12	10	STR	31'-4"	1,618
V3	12	10	STR	30'-10"	1,592
V4	36	10	2	22'-2"	3,434

REINFORCING STEEL TOTAL 10,512 LB

SPIRAL COLUMN REINFORCING STEEL

BAR NO.	NO.	SIZE	TYPE	LENGTH	WEIGHT
SP-1	1	**	5	461'-7"	481
SP-2	1	**	5	451'-8"	471
SP-3	1	**	5	441'-9"	461
SP-4	3	***	5	611'-11"	1,226

SPIRAL COLUMN REINF. STEEL TOTAL 2,639 LB

POUR #1 DRILLED PIER	24.1	CY
POUR #2 COLUMN	14.3	CY
POUR #3 CAP	19.5	CY
TOTAL CY	57.9	

3'-6" Ø DRILLED PIER IN SOIL	29.7	LF
3'-6" Ø DRILLED PIER NOT IN SOIL	37.8	LF
3'-6" Ø PERMANENT STEEL CASING	30.0	LF

** NOTE: THE SP-1, SP-2, SP-3 SPIRAL REINFORCING STEEL SHALL BE W31 OR D-31 COLD DRAWN WIRE OR #5 PLAIN OR DEFORMED BAR.

*** NOTE: THE SP-4 SPIRAL REINFORCING STEEL SHALL BE W20 OR D-20 COLD DRAWN WIRE OR #4 PLAIN OR DEFORMED BAR.

PROJECT NO. 36971
 COUNTY: UNION
 STATION: 17 + 51.30
 REPLACES BRIDGE NO. 33

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

CAST - IN - PLACE
 INTERIOR BENT #2
 36' CLEAR ROADWAY - 90° SKEW

Plans prepared by:
KO & ASSOCIATES, P.C.
 Consulting Engineers
 1011 SCHAUH DR., SUITE #202
 RALEIGH, N.C. 27606
 For Division of Highways

REVISIONS						SHEET NO.
NO.	BY	DATE	NO.	BY	DATE	TOTAL SHEETS
1			3			24
2			4			

NOT TO SCALE