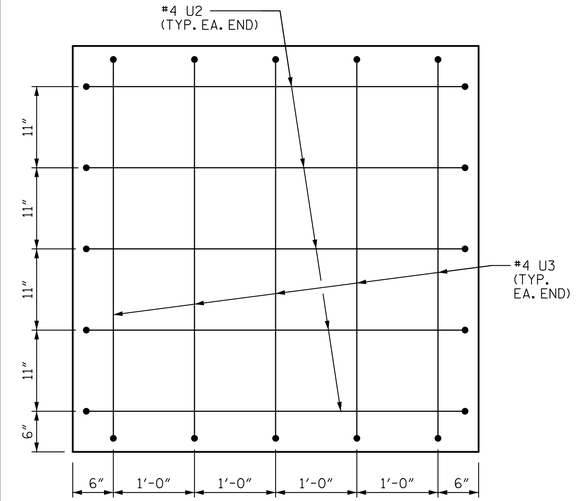
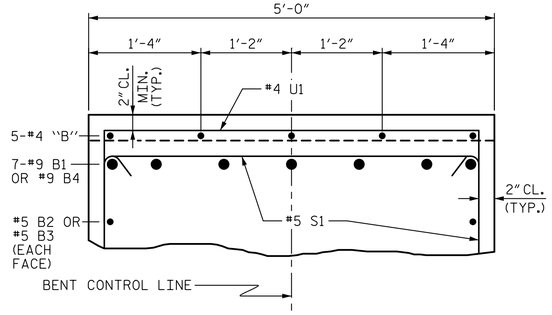
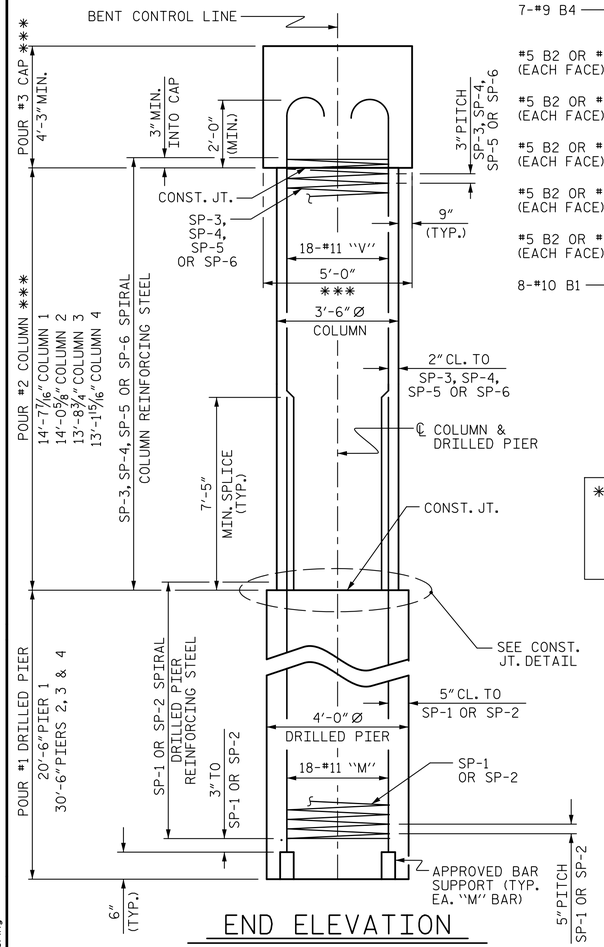


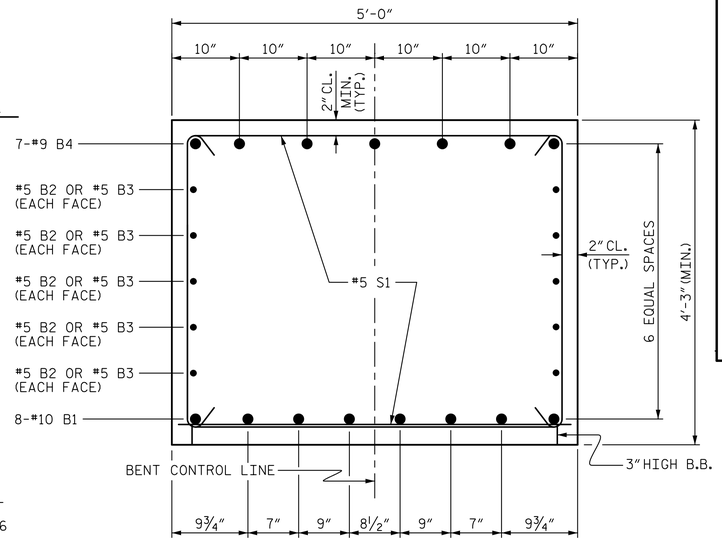
END OF CAP DETAIL (TYP.)



SECTION B-B



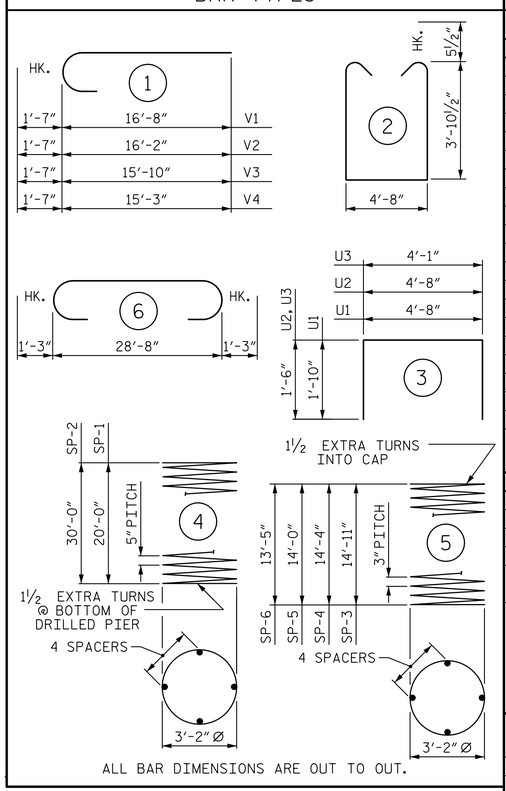
END ELEVATION



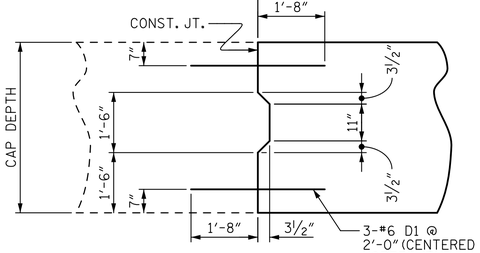
SECTION A-A

*** SEE SPECIAL PROVISIONS FOR APPLICATION OF BRIDGE COATING. LIMITS TO INCLUDE ENTIRE SURFACE OF COLUMNS AND BENT CAP EXCEPT FOR THE TOP OF THE CAP.

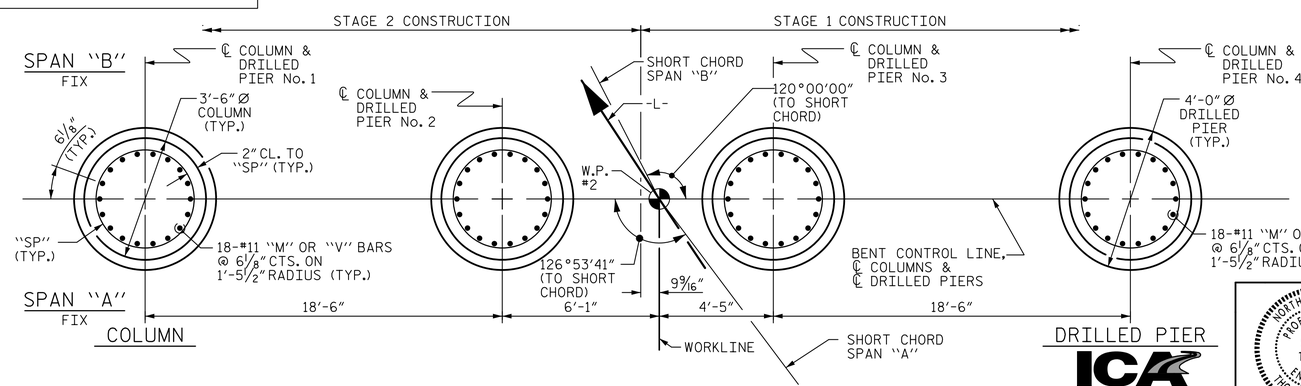
BAR TYPES



ALL BAR DIMENSIONS ARE OUT TO OUT.



SHEAR KEY DETAIL



PLAN OF DRILLED PIERS & COLUMNS

(DETAILS ARE TYPICAL EACH DRILLED PIER & COLUMN)

BILL OF MATERIAL — STAGE 1

BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
B1	8	#10	STR	28'-8"	987
B3	10	#5	STR	28'-4"	296
B4	7	#9	6	31'-2"	742
B5	5	#4	STR	11'-9"	39
B8	5	#4	STR	4'-9"	16
B9	5	#4	STR	11'-4"	38
D1	6	#6	STR	3'-4"	30
M2	36	#11	STR	40'-5"	7730
S1	45	#5	2	13'-4"	626
U1	44	#4	3	8'-4"	245
U2	5	#4	3	7'-8"	26
U3	5	#4	3	7'-1"	24
V3	18	#11	1	17'-5"	1666
V4	18	#11	1	16'-10"	1610

REINFORCING STEEL (STAGE 1) 14,075 LBS.

BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
SP-2	2	*	4	719'-10"	1502
SP-5	1	**	5	567'-2"	379
SP-6	1	**	5	545'-1"	364

SPIRAL COLUMN REINFORCING STEEL (STAGE 1) 2245 LBS.

* THE SP-2 SPIRAL REINFORCING STEEL SHALL BE W31 OR D-31 COLD DRAWN WIRE OR #5 PLAIN OR DEFORMED BAR

** THE SP-5 AND SP-6 SPIRAL REINFORCING STEEL SHALL BE W20 OR D-20 COLD DRAWN WIRE OR #4 PLAIN OR DEFORMED BAR

CLASS A CONCRETE BREAKDOWN (STAGE 1)

POUR #2 (COLUMNS)	9.6 C.Y.
POUR #3 (CAP)	24.0 C.Y.
TOTAL CLASS A CONCRETE	33.6 C.Y.

DRILLED PIERS: (STAGE 1)

DRILLED PIER CONCRETE POUR #1 (DRILLED PIERS)	28.4 C.Y.
4'-0" Ø DRILLED PIER NOT IN SOIL	26.5 LIN. FT.
4'-0" Ø DRILLED PIER IN SOIL	34.5 LIN. FT.
PERMANENT STEEL CASING FOR 4'-0" Ø DRILLED PIER	44.0 LIN. FT.
CSL TUBES	256.0 LIN. FT.

BILL OF MATERIAL — STAGE 2

BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
B1	8	#10	STR	28'-8"	987
B2	10	#5	STR	28'-8"	299
B4	7	#9	6	31'-2"	742
B6	5	#4	STR	4'-11"	16
B7	10	#4	STR	9'-9"	65
M1	18	#11	STR	30'-5"	2909
M2	18	#11	STR	40'-5"	3865
S1	34	#5	2	13'-4"	473
U1	40	#4	3	8'-4"	223
U2	5	#4	3	7'-8"	26
U3	5	#4	3	7'-1"	24
V1	18	#11	1	18'-3"	1745
V2	18	#11	1	17'-9"	1698

REINFORCING STEEL (STAGE 2) 13,072 LBS.

BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
SP-1	1	*	4	484'-10"	506
SP-2	1	*	4	719'-10"	751
SP-3	1	**	5	601'-6"	402
SP-4	1	**	5	579'-5"	387

SPIRAL COLUMN REINFORCING STEEL (STAGE 2) 2046 LBS.

* THE SP-1 AND SP-2 SPIRAL REINFORCING STEEL SHALL BE W31 OR D-31 COLD DRAWN WIRE OR #5 PLAIN OR DEFORMED BAR

** THE SP-3 AND SP-4 SPIRAL REINFORCING STEEL SHALL BE W20 OR D-20 COLD DRAWN WIRE OR #4 PLAIN OR DEFORMED BAR

CLASS A CONCRETE BREAKDOWN (STAGE 2)

POUR #2 (COLUMNS)	10.3 C.Y.
POUR #3 (CAP)	23.9 C.Y.
TOTAL CLASS A CONCRETE	34.2 C.Y.

DRILLED PIERS: (STAGE 2)

DRILLED PIER CONCRETE POUR #1 (DRILLED PIERS)	23.7 C.Y.
4'-0" Ø DRILLED PIER NOT IN SOIL	26.5 LIN. FT.
4'-0" Ø DRILLED PIER IN SOIL	24.5 LIN. FT.
PERMANENT STEEL CASING FOR 4'-0" Ø DRILLED PIER	32.0 LIN. FT.
CSL TUBES	216.0 LIN. FT.

DRAWN BY : D. H. CARTER DATE : OCT 2015
CHECKED BY : K. M. MOBLEY/T. E. TALLMAN DATE : OCT 2015
DESIGN ENGINEER OF RECORD: T. E. TALLMAN DATE : OCT 2015

10/14/2015
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ICA Engineering

ICA Engineering
5121 Kingdom Way, Suite 100 Raleigh, NC 27607
NC License No: F-0258

SEAL 14408 — NORTH CAROLINA PROFESSIONAL ENGINEER — THOMAS E. TALLMAN
Thomas E. Tallman 10/15/2015
E9B7B9620EE24D5...

PROJECT NO. B-4159
JACKSON COUNTY
STATION: 20+16.00 -L-
SHEET 2 OF 2

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SUBSTRUCTURE

BENT 1

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-50
1			3			TOTAL SHEETS
2			4			64