REINFORCING BAR LIST

NON-COATED REINFORCING

BAR	LOCATION	SHAPE	222'-0 BTD110 19'-0 NO.	LENGTH	WEIGHT	222'-0 22'-0 NO.	LENGTH	WEIGHT	222'-0 25'-0 NO.	LENGTH	WEIGHT
9a1	CAP, LONGITUDINAL, TOP		10	34'-0	1,156	10	34'-0	1,156	10	34'-0	1,156
5a2	CAP, LONGITUDINAL, SIDES		8	VARIES	244	8	VARIES	244	8	VARIES	244
5a3	CAP, CANTILEVER - END		14	5'-9	84	14	5'-9	84	14	5'-9	84
8b1	CAP, LONGITUDINAL, BOT.		10	26'-8	712	10	26'-8	712	10	26'-8	712
7b2	CAP, LONGITUDINAL, BOT., ENDS		8	9'-11	162	8	9'-11	162	8	9'-11	162
5c1	CAP, STIRRUP		58	14'-6	877	58	14'-6	877	58	14'-6	877
5c2	CAP, STIRRUP, CANTILEVER, ENDS		16	VARIES	144	16	VARIES	144	16	VARIES	144
9d1	COLUMN, VERTICAL		28	21'-9	2,071	--	--	--	--	--	--
10d1	COLUMN, VERTICAL		--	--	--	28	26'-4	3,173	--	--	--
11d1	COLUMN, VERTICAL		--	--	--	--	--	--	36	29'-4	5,611
9d2	FOOTING TO COLUMN DOWEL		28	9'-2	873	--	--	--	--	--	--
10d2	FOOTING TO COLUMN DOWEL		--	--	--	28	12'-0	1,446	--	--	--
11d2	FOOTING TO COLUMN DOWEL		--	--	--	--	--	--	36	13'-10	2,646
5f1	FOOTING, LONGITUDINAL, TOP		18	11'-6	216	18	11'-6	216	18	11'-6	216
5f2	FOOTING, TRANSVERSE, TOP		24	8'-6	213	24	8'-6	213	24	8'-6	213
8g1	FOOTING, LONGITUDINAL, BOT.		34	11'-6	1,044	34	11'-6	1,044	34	11'-6	1,044
8g2	FOOTING, TRANSVERSE, BOT.		24	8'-6	545	24	8'-6	545	24	8'-6	545
5m1	STEP, LONGITUDINAL		12	3'-2	40	12	3'-2	40	12	3'-2	40
5n1	STEP, TRANSVERSE		12	6'-6	81	12	6'-6	81	12	6'-6	81
	#4 COLUMN SPIRAL		2	206'	275	2	234'	313	2	262'	350
	SPIRAL SPACERS, $L\frac{7}{8} \times \frac{7}{8} \times \frac{1}{8} \times 0.75$		8	19'-0	114	8	22'-0	132	8	25'-0	150
	REINFORCING STEEL - NON-EPOXY COATED (LB)				8,851			10,582			14,275

BAR	LOCATION	232'-0 BTD115 19'-0 NO.	LENGTH	WEIGHT	232'-0 22'-0 NO.	LENGTH	WEIGHT	232'-0 25'-0 NO.	LENGTH	WEIGHT
9a1	CAP, LONGITUDINAL, TOP	10	34'-0	1,156	10	34'-0	1,156	10	34'-0	1,156
5a2	CAP, LONGITUDINAL, SIDES	8	VARIES	244	8	VARIES	244	8	VARIES	244
5a3	CAP, CANTILEVER - END	14	5'-9	84	14	5'-9	84	14	5'-9	84
8b1	CAP, LONGITUDINAL, BOT.	10	26'-8	712	10	26'-8	712	10	26'-8	712
7b2	CAP, LONGITUDINAL, BOT., ENDS	8	9'-11	162	8	9'-11	162	8	9'-11	162
5c1	CAP, STIRRUP	58	14'-6	877	58	14'-6	877	58	14'-6	877
5c2	CAP, STIRRUP, CANTILEVER, ENDS	16	VARIES	144	16	VARIES	144	16	VARIES	144
9d1	COLUMN, VERTICAL	28	21'-9	2,071	--	--	--	--	--	--
10d1	COLUMN, VERTICAL	--	--	--	28	26'-4	3,173	--	--	--
11d1	COLUMN, VERTICAL	--	--	--	--	--	--	36	29'-4	5,611
9d2	FOOTING TO COLUMN DOWEL	28	9'-2	873	--	--	--	--	--	--
10d2	FOOTING TO COLUMN DOWEL	--	--	--	28	12'-0	1,446	--	--	--
11d2	FOOTING TO COLUMN DOWEL	--	--	--	--	--	--	36	13'-10	2,646
5f1	FOOTING, LONGITUDINAL, TOP	18	11'-6	216	18	11'-6	216	18	11'-6	216
5f2	FOOTING, TRANSVERSE, TOP	24	8'-6	213	24	8'-6	213	24	8'-6	213
8g1	FOOTING, LONGITUDINAL, BOT.	34	11'-6	1,044	34	11'-6	1,044	34	11'-6	1,044
8g2	FOOTING, TRANSVERSE, BOT.	24	8'-6	545	24	8'-6	545	24	8'-6	545
5m1	STEP, LONGITUDINAL	12	3'-2	40	12	3'-2	40	12	3'-2	40
5n1	STEP, TRANSVERSE	12	6'-6	81	12	6'-6	81	12	6'-6	81
	#4 COLUMN SPIRAL	2	206'	275	2	234'	313	2	262'	350
	SPIRAL SPACERS, $L\frac{7}{8} \times \frac{7}{8} \times \frac{1}{8} \times 0.75$	8	19'-0	114	8	22'-0	132	8	25'-0	150
	REINFORCING STEEL - NON-EPOXY COATED (LB)			8,851			10,582			14,275

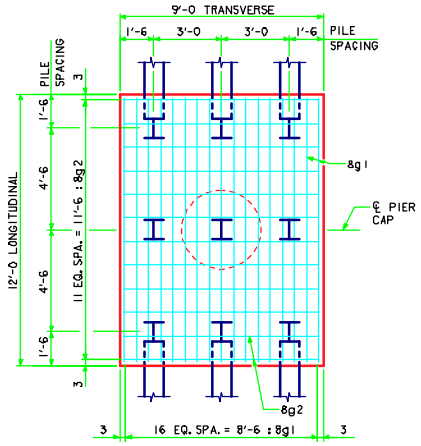
BAR	LOCATION	242'-0 BTD120 19'-0 NO.	LENGTH	WEIGHT	242'-0 22'-0 NO.	LENGTH	WEIGHT	242'-0 25'-0 NO.	LENGTH	WEIGHT
9a1	CAP, LONGITUDINAL, TOP	10	34'-0	1,156	10	34'-0	1,156	10	34'-0	1,156
5a2	CAP, LONGITUDINAL, SIDES	8	VARIES	244	8	VARIES	244	8	VARIES	244
5a3	CAP, CANTILEVER - END	14	5'-9	84	14	5'-9	84	14	5'-9	84
8b1	CAP, LONGITUDINAL, BOT.	10	26'-8	712	10	26'-8	712	10	26'-8	712
7b2	CAP, LONGITUDINAL, BOT., ENDS	8	9'-11	162	8	9'-11	162	8	9'-11	162
5c1	CAP, STIRRUP	58	14'-6	877	58	14'-6	877	58	14'-6	877
5c2	CAP, STIRRUP, CANTILEVER, ENDS	16	VARIES	144	16	VARIES	144	16	VARIES	144
9d1	COLUMN, VERTICAL	28	21'-9	2,071	--	--	--	--	--	--
10d1	COLUMN, VERTICAL	--	--	--	28	26'-4	3,173	--	--	--
11d1	COLUMN, VERTICAL	--	--	--	--	--	--	36	29'-4	5,611
9d2	FOOTING TO COLUMN DOWEL	28	9'-2	873	--	--	--	--	--	--
10d2	FOOTING TO COLUMN DOWEL	--	--	--	28	12'-0	1,446	--	--	--
11d2	FOOTING TO COLUMN DOWEL	--	--	--	--	--	--	36	13'-10	2,646
5f1	FOOTING, LONGITUDINAL, TOP	18	11'-6	216	18	11'-6	216	18	11'-6	216
5f2	FOOTING, TRANSVERSE, TOP	24	8'-6	213	24	8'-6	213	24	8'-6	213
8g1	FOOTING, LONGITUDINAL, BOT.	34	11'-6	1,044	34	11'-6	1,044	34	11'-6	1,044
8g2	FOOTING, TRANSVERSE, BOT.	24	8'-6	545	24	8'-6	545	24	8'-6	545
5m1	STEP, LONGITUDINAL	12	3'-2	40	12	3'-2	40	12	3'-2	40
5n1	STEP, TRANSVERSE	12	6'-6	81	12	6'-6	81	12	6'-6	81
	#4 COLUMN SPIRAL	2	206'	275	2	234'	313	2	262'	350
	SPIRAL SPACERS, $L\frac{7}{8} \times \frac{7}{8} \times \frac{1}{8} \times 0.75$	8	19'-0	114	8	22'-0	132	8	25'-0	150
	REINFORCING STEEL - NON-EPOXY COATED (LB)			8,851			10,582			14,275

STRUCTURAL CONCRETE QUANTITIES (CU. YDS.)	222'-0	232'-0	242'-0
CAP	23.4	23.4	23.4
COLUMNS	13.5	13.5	13.5
FOOTINGS	32.0	32.0	32.0
TOTAL	68.9	68.9	68.9
NO. OF PILES, DRIVE STEEL BEARING, HP 10x57 (1)	18	18	18
NO. OF PILES, FURNISH STEEL BEARING, HP 10x57 (1)	18	18	18
DESIGN BEARING (TONS)	50	50	50

STRUCTURAL CONCRETE QUANTITIES (CU. YDS.)	222'-0	232'-0	242'-0
CAP	23.4	23.4	23.4
COLUMNS	15.7	15.7	15.7
FOOTINGS	32.0	32.0	32.0
TOTAL	71.1	71.1	71.1
NO. OF PILES, DRIVE STEEL BEARING, HP 10x57 (1)	18	18	18
NO. OF PILES, FURNISH STEEL BEARING, HP 10x57 (1)	18	18	18
DESIGN BEARING (TONS)	50	50	50

STRUCTURAL CONCRETE QUANTITIES (CU. YDS.)	222'-0	232'-0	242'-0
CAP	23.4	23.4	23.4
COLUMNS	17.8	17.8	17.8
FOOTINGS	32.0	32.0	32.0
TOTAL	73.2	73.2	73.2
NO. OF PILES, DRIVE STEEL BEARING, HP 10x57 (1)	18	18	18
NO. OF PILES, FURNISH STEEL BEARING, HP 10x57 (1)	18	18	18
DESIGN BEARING (TONS)	50	50	50

(1) THIS QUANTITY REPRESENTS THE NUMBER OF PILES. PILE LENGTH SHALL BE DETERMINED BASED ON SOIL INFORMATION AND TO BE INCLUDED ON THE "ESTIMATED PROJECT QUANTITIES" SHEET.



FOOTING PLAN FOR 110', 115', 120' SPANS
(ONLY BOTTOM REINFORCING SHOWN)

PIER NOTES:

MINIMUM CLEAR DISTANCE FROM FACE OF CONCRETE TO NEAR REINFORCING BAR SHALL BE 2 INCHES UNLESS OTHERWISE NOTED OR SHOWN.

THE d2 FOOTING TO COLUMN DOWELS ARE TO BE IN PLACE BEFORE FOOTING CONCRETE IS PLACED.

THE SPIRAL REINFORCING MAY BE SPLICED BY LAPPING 2'-2. THE LENGTH OF THE SPIRAL SHOWN DOES NOT INCLUDE THE LAPPED LENGTH OF THE SPLICES. THE COST OF THE LAPS AT SPLICES IS TO BE INCLUDED IN THE PRICE BID FOR OTHER REINFORCEMENT.

SPIRAL REINFORCING IS TO BE NO. 4 BAR WITH 3'-0 OUTSIDE DIAMETER, 1'-0 PITCH WITH 4 EQUALLY SPACED $L\frac{7}{8} \times \frac{7}{8} \times \frac{1}{8}$ SPACERS PUNCHED TO HOLD SPIRALS. SPIRALS ARE TO HAVE $1\frac{1}{2}$ EXTRA TURNS AT TOP AND BOTTOM OF COLUMNS.

CLASS 20 EXCAVATION TO BE CALCULATED AND TO BE INCLUDED ON THE "ESTIMATED PROJECT QUANTITIES" SHEET.

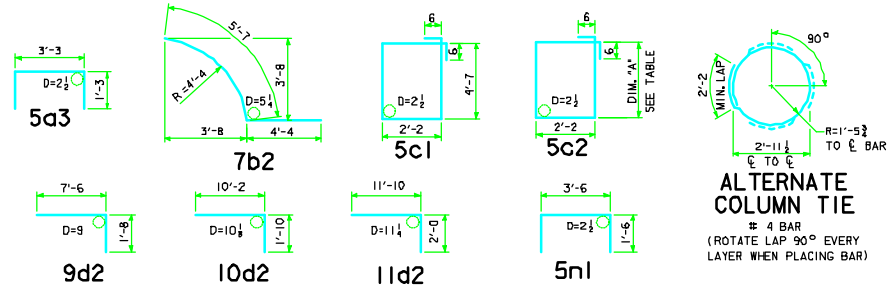
PILE DIMENSIONS SHOWN ARE AT THE BOTTOM OF THE FOOTING. BATTER PILES 1:4 IN DIRECTION SHOWN.

SEE BT30-ASI-04 FOR RUSTICATION DETAILS.

VARIABLE BARS

BAR	SETS	DIM. "A"	TOTAL LENGTH
5a2	1 SET OF 2	--	27'-4
5a2	1 SET OF 2	--	28'-2
5a2	1 SET OF 2	--	29'-6
5a2	1 SET OF 2	--	32'-0
5c2	1 SET OF 4	0'-11	7'-2
5c2	1 SET OF 4	1'-3	7'-10
5c2	1 SET OF 4	1'-9	8'-10
5c2	1 SET OF 4	2'-8	10'-8

BENT BAR DETAILS



NOTE: ALL DIMENSIONS ARE OUT TO OUT UNLESS OTHERWISE NOTED. D= PIN DIAMETER.

LATEST REVISION DATE

APPROVED BY BRIDGE ENGINEER

Iowa Department of Transportation
Highway Division

STANDARD DESIGN - 30' ROADWAY, 2 SPAN BRIDGES

PRETENSIONED PRESTRESSED BULB TEE CONCRETE BEAM BRIDGES

110'-0, 115'-0, 120'-0 SPANS — JULY, 2004

PIER FOOTING & PIER BAR LISTS
ALL SKEWS

BT30-PR5-04