

**STEP REINFORCING BAR LIST
ONE TEE PIER**

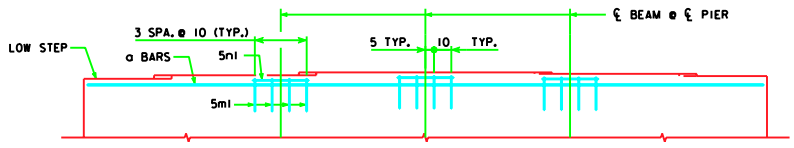
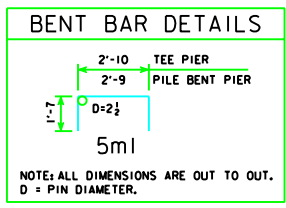
BAR	LENGTH	SHAPE	G ≤ 1.9%			1.9% < G ≤ 5.0%		
			NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT
5m1	6'-0"		12	5	75	16	5	100
5n1	2'-8"		12	5	33	16	5	45
TOTAL (L.B.)					108			145

G = GRADE (%)

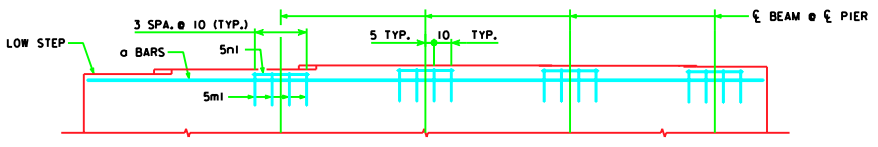
**STEP REINFORCING BAR LIST
ONE PILE BENT PIER**

BAR	LENGTH	SHAPE	G ≤ 1.9%			1.9% < G ≤ 5.0%		
			NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT
5m1	5'-11"		12	5	74	16	5	99
5n1	2'-8"		12	5	33	16	5	45
TOTAL (L.B.)					107			144

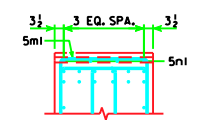
G = GRADE (%)



PART ELEVATION VIEW OF PIER CAP
GRADE (G) $G \leq 1.9\%$



PART ELEVATION VIEW OF PIER CAP
GRADE (G) $1.9\% < G \leq 5.0\%$



TYPICAL SECTION

NOTES:

THE TABLE BELOW LISTS THE ADDITIONAL CONCRETE VOLUME REQUIRED IN EACH ABUTMENT FOOTING/PIER CAP BASED ON THE ROADWAY GRADE AT EACH ABUTMENT FOOTING/PIER CAP. ADDITIONAL CONCRETE SHOULD BE ADDED TO THE PLANS FOR EACH ABUTMENT FOOTING/PIER CAP THAT HAS 0.5 CU. YDS. OR MORE OF ADDITIONAL CONCRETE. VALUES IN THE TABLE BELOW HAVE BEEN EXCLUDED FOR SCENARIOS THAT HAVE LESS THAN 0.5 CU. YDS. OF ADDITIONAL CONCRETE PER SUBSTRUCTURE UNIT. VALUES MAY BE INTERPOLATED FOR GRADES BETWEEN THE VALUES SHOWN IN THE TABLE.

**ADDITIONAL CONCRETE VOLUME
PER SUBSTRUCTURE UNIT (C.Y.)**

	ROADWAY GRADE AT SUBSTRUCTURE UNIT				
	1%	2%	3%	4%	5%
EACH ABUTMENT FOOTING					
A, B BEAMS	-----	-----	-----	0.5	0.7
C BEAMS	-----	-----	-----	0.6	0.8
EACH TEE PIER CAP - ALL BEAMS	-----	-----	-----	0.5	0.7
EACH PILE BENT PIER - ALL BEAMS	-----	-----	-----	0.5	0.6

LATEST REVISION DATE	<i>Thomas E. M. Donnell</i>	APPROVED BY BRIDGE ENGINEER			
	STANDARD DESIGN - 30' ROADWAY, THREE SPAN BRIDGES				
	PRETENSIONED PRESTRESSED CONCRETE BEAM BRIDGES				
		HL93 SUPERSTRUCTURE DECEMBER, 2006 HS25 SUBSTRUCTURE			
ADDITIONAL QUANTITIES 15° SKEW			H30-17-06		