THESE PIER BENTS ARE DESIGNED FOR USE IN LOCATIONS WHERE ICE AND DRIFT CONDITIONS ARE NOT SEVERE.

FOR DETAILS OF TRESTLE PILES, SEE STANDARD PIOL.

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

PIER PILES SHALL BE DRIVEN TO VALUES SHOWN IN DESIGN PLANS.

## REINFORCING BAR LIST AND ESTIMATED QUANTITIES PER PILE BENT

					8	PILE	BENT	9	PILE	BENT	10	PILE	BENT	Ш	PILE	BENT	12	PILE	BENT
	BAR	LENGTH		SHAPE	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT	ΝΟ.	SIZE	WEIGHT	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT
	al	51'-8			8	9	1405	8	9	1405	8	9	1405	8	9	1405	6	9	1054
	<b>a</b> 2	51'-8			4	8	552	4	8	552	4	8	552	4	8	552	4	8	552
	ы	51'-8			4	9	703	4	10	889	4	9	703	4	9	703	4	9	703
	5cl	13'-2			47	5	645	48	5	659	47	5	645	42	5	577	46	5	632
	8el	8'-4			4	8	89	4	8	89	4	8	89	4	8	89	4	8	89
①	REINFORCING STEEL (LB.)				3394			3594			3394		3326			3030			
	STRUCTURAL		PILE TYPE																
	CONCRETE (CY)		3	23.5		23.5			23.5			23.5			23.5				

BENT BAR DETAILS



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

FRICTION OR POINT BEARING PILING

	FRICTION OR	I OIN L	CANTING FILTING							
€-€ ABUTMENT	PIOL TYPE 3									
BEARING	NUMBER OF TRESTLE PILES	PILE SIZE	3 LRFD PU, STRENGTH I DES. BRG. (KIPS)							
138′-10	8	HP14×73	163							
136 -10	8	HP14×89	163							
151'-4	8	HP14×73	171							
131 -4	8	HP14×89	171							
163′-10	8	HP14×73	185							
163 -10	8	HP14×89	185							
176′-4	9	HP14×73	172							
110 4	8	HP14x89	194							
188′-10	9	HP14×73	180							
100 10	8	HP14×89	202							
201′-4	10	HP14×73	181							
201 4	8	HP14×89	226							
213′-10	H	HP14×73	173							
213-10	9	HP14×89	211							
226′-4	H	HP14×73	181							
220 -4	9	HP14×89	222							
243′-0	12	HP14×73	175							
243 -0	10	HP14×89	210							

- $(\cline{1})$  SEE SHEET H44-24-07 FOR STEP REINFORCING STEEL QUANTITIES AND DETAILS.
- 2 FOR DETERMINING ACTUAL PILE LENGTHS IN FIELD.
- 3 NOTE: PU, STRENGTH I DESIGN LOAD (KIPS) IS NOT THE VALUE USED IN THE FIELD FOR DRIVING PILES.

NOTE: FRICTION BEARING INCLUDES SIDE FRICTION AND END BEARING IN SOIL.
POINT BEARING INCLUDES SIDE FRICTION AND POINT BEARING IN ROCK.

Morney L. M. Duell APPROVED BY BRIDGE ENGINEER



lowa Department of Transportation Highway Division

STANDARD DESIGN - 44' ROADWAY, THREE SPAN BRIDGE

PRETENSIONED PRESTRESSED CONCRETE BEAM BRIDGES MARCH, 2007

PILE BENT PIERS **HPI4 PILES** 

H44-49-07