

140'-0 & 150'-0 BRIDGES

PILE PLAN - 0° SKEW STEEL PILING

ABUTMENT NOTES:

ALL PILING ARE HP 10 X 42.

THE CONCRETE AND REINFORCING STEEL FOR THE WINGS IS INCLUDED WITH THE SUPERSTRUCTURE.

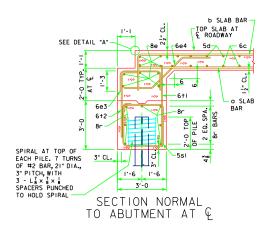
DETAILS ON THIS SHEET ARE TO BE USED ONLY WHEN ABUTMENTS ARE PLACED ON STEEL PILES. IF ROCK IS ENCOUNTERED CLOSER THAN 12' BELOW ABUTMENT FOOTING, SPECIAL ANALYSIS MAY BE REQUIRED.

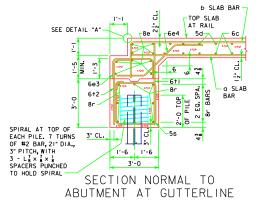
THE MINIMUM CLEAR DISTANCE FROM THE FACE OF THE CONCRETE TO NEAR REINFORCING BAR IS TO BE 2 INCHES UNLESS OTHERWISE NOTED OR SHOWN.

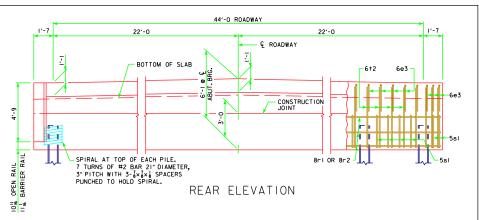
STEEL PILING USED AS FRICTION PILE SHALL BE DRIVEN TO FULL PENETRATION IF PRACTICABLE BUT IN NO CASE TO A BEARING VALUE LESS THAN THE PILE BEARING REQUIRED FOR EACH BRIDGE LENGTH AS SHOWN ON THIS SHEET.

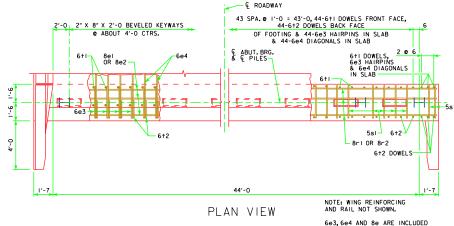
ALL REINFORCING STEEL IS TO BE GRADE 60.

ABUTMENT PILING WAS DESIGNED FOR HL-93 LOADING WITH AN ALLOWANCE FOR 20 LBS.PER SQ.FT.FUTURE WEARING SURFACE.











REACTION, PILE NUMBER & BEARING									
BRIDGE LENGTH	70'-0	80'-0	90'-0	100′-0	110'-0	120'-0	130'-0	140'-0	150'-0
REACTION - KIPS	381	405	427	455	482	514	545	Δ 622	Δ 659
BEARING - TONS	28	29	31	33	35	37	35	35	37
PILING - NUMBER	7	7	7	7	7	7	8	9	9
STRENGTH REACTION - KIPS	504	539	571	613	653	699	744	Δ 869	Δ 922

ΔINCLUDES IMPACT



Iowa Department of Transportation Highway Division

WITH SUPERSTRUCTURE QUANTITIES.

STANDARD DESIGN - 44' ROADWAY, 3 SPAN BRIDGES
CONTINUOUS CONCRETE
SLAB BRIDGES
NOVEMBER, 2006

ABUTMENT DETAILS O° SKEW - STEEL PILING J44-39-06