



## ABUTMENT NOTES:

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

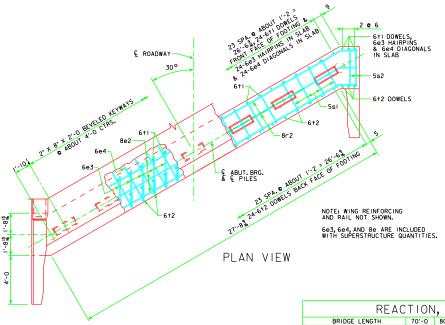
DETAILS ON THIS SHEET ARE TO BE USED ONLY WHEN ABUTMENTS ARE PLACED ON TIMBER PILES.

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

THE ABUTMENT PILES ARE TO 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, NOR TO MORE THAN 40 TONS PER BEARING PILE.

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.



DESIGN FOR HL-93 LOADING

NOTCH AND

PAVING

SHEET FOR

12-08

REACTION, PILE NUMBER & BEARING 70'-0 80'-0 90'-0 100'-0 110'-0 120'-0 130'-0 140'-0 150'-0 REACTION - KIPS 265 279 293 311 328 347 366 Δ421 Δ443 BEARING - TONS 19 20 19 20 19 20 19 20 PILING - NUMBER 10 STRENGTH | REACTION - KIPS | 358 | 379 | 400 | 427 | 452 | 481 | 510 | \( \Delta \) 601 | \( \Delta \) 632

Δ INCLUDES IMPACT



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APPROVED BY E

I2-08 REVISION D

LATEST

## lowa Department of Transportation Highway Division

STANDARD DESIGN - 24' ROADWAY, 3 SPAN BRIDGES CONTINUOUS CONCRETE SLAB BRIDGES NOVEMBER, 2006

ABUTMENT DETAILS 30° SKEW - TIMBER PILING

J24-29-06