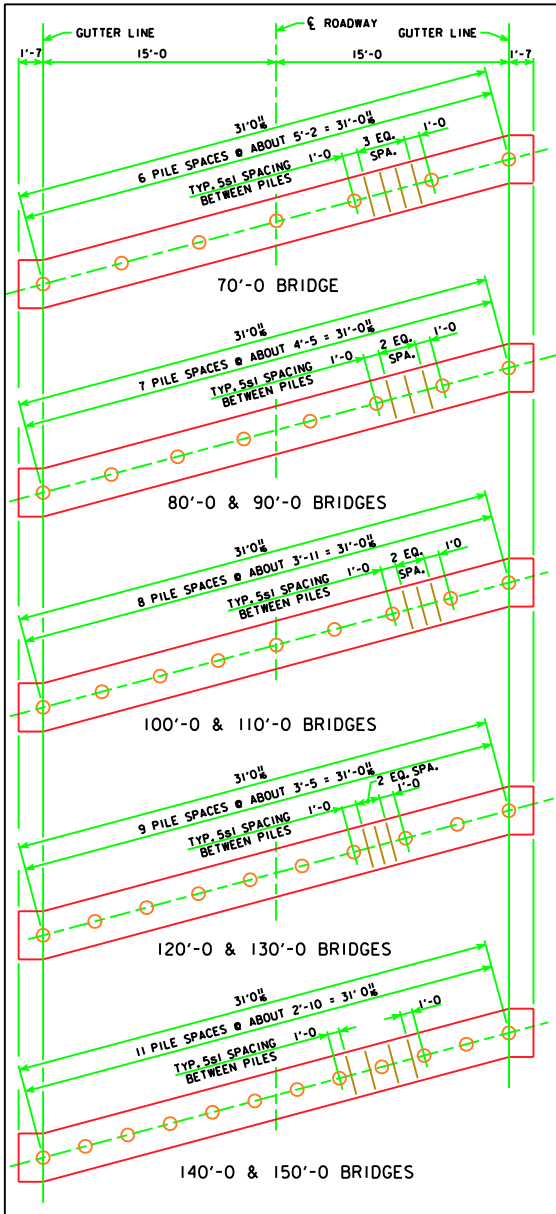
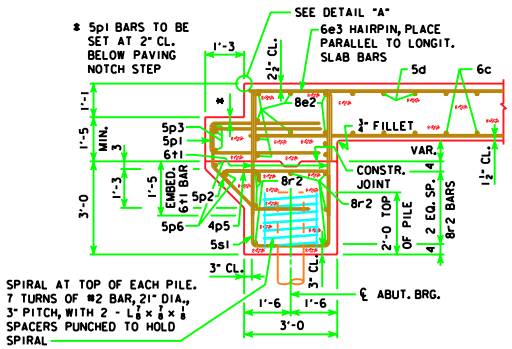
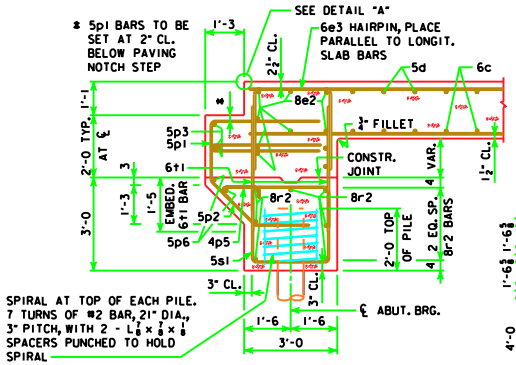


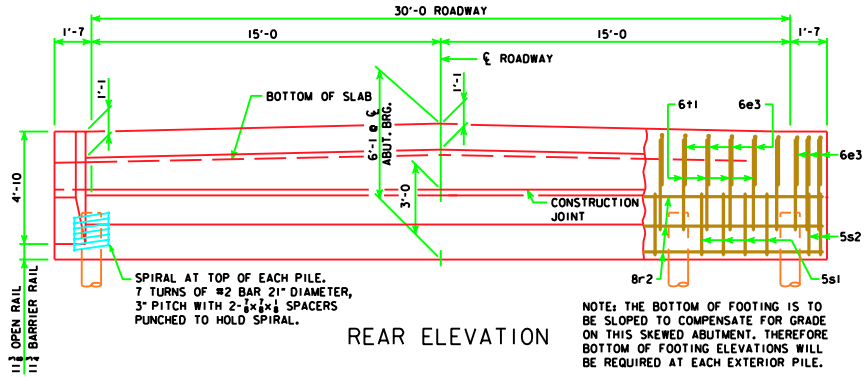

PILE PLAN - 15° SKEW WOOD PILING




SECTION NORMAL TO ABUTMENT AT GUTTERLINE

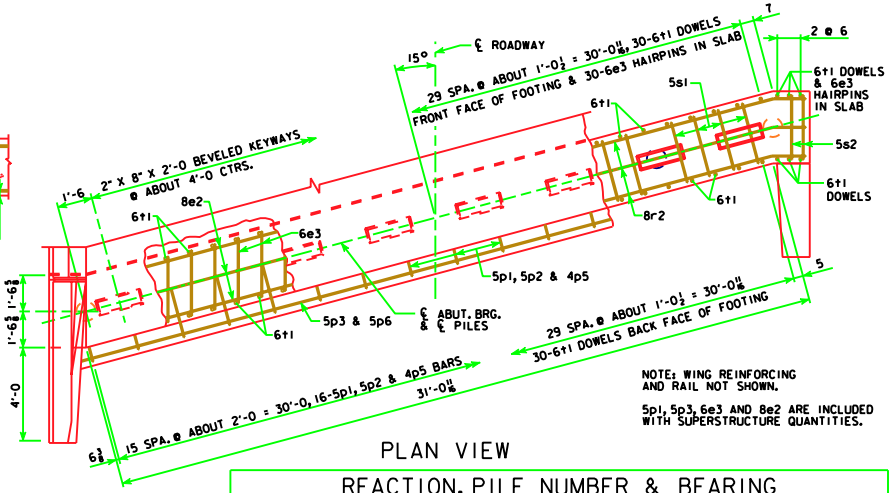



SECTION NORMAL TO ABUTMENT AT ℄




REAR ELEVATION

NOTE: THE BOTTOM OF FOOTING IS TO BE SLOPED TO COMPENSATE FOR GRADE ON THIS SKEWED ABUTMENT. THEREFORE BOTTOM OF FOOTING ELEVATIONS WILL BE REQUIRED AT EACH EXTERIOR PILE.




PLAN VIEW

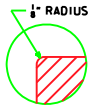
NOTE: WING REINFORCING AND RAIL NOT SHOWN.

5p1, 5p3, 6e3 AND 8e2 ARE INCLUDED WITH SUPERSTRUCTURE QUANTITIES.

## 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 | 269 | 291 | 309 | 329 | 348 | 369 | 390 | Δ 452 | Δ 477 |
| BEARING - TONS | 20 | 19 | 20 | 19 | 20 | 19 | 20 | 19 | 20 |
| PILING - NUMBER | 7 | 8 | 8 | 9 | 9 | 10 | 10 | 12 | 12 |

ΔINCLUDES IMPACT




DETAIL "A"

## 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 HS25 LOADING WITH AN ALLOWANCE FOR 20 LBS. PER SQ. FT. FUTURE WEARING SURFACE.

LATEST REVISION DATE

APPROVED BY BRIDGE ENGINEER

Iowa Department of Transportation
Highway Division

STANDARD DESIGN - 30' ROADWAY, 3 SPAN BRIDGES

# CONTINUOUS CONCRETE SLAB BRIDGES

NOVEMBER, 2006

ABUTMENT DETAILS
15° SKEW - TIMBER PILING

J30-28-06