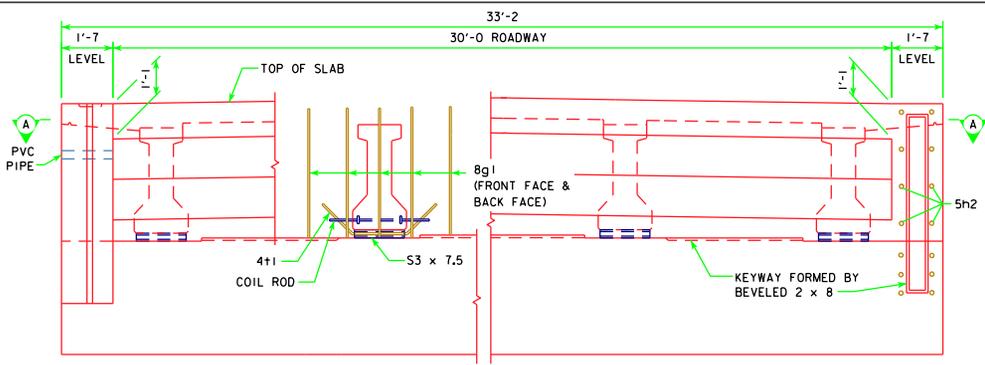
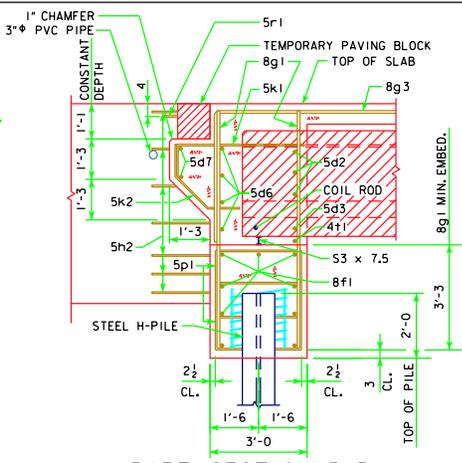


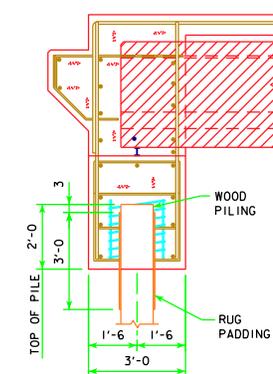
REVISED 07-10 - PILING NO. & DESIGN LOADS CHANGED TO LRFD. ABUT. WING SHAPE CHANGED.



PART REAR ELEVATION AT ABUTMENT
NOTE: TOP OF ABUTMENT SHOWN FOR SOLID BARRIER RAIL



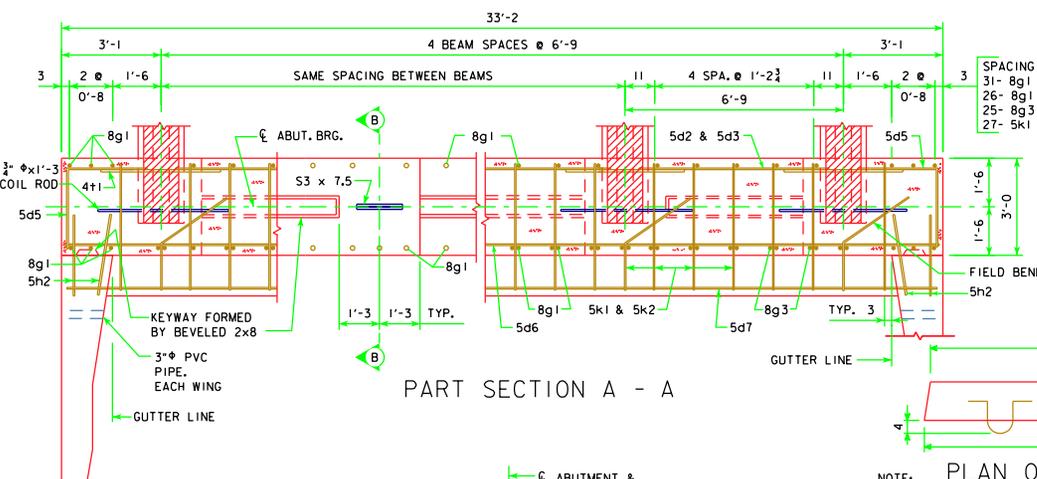
PART SECTION B-B
(FOR STEEL H-PILING)



PART SECTION B-B
(FOR WOOD PILING)

WOOD PILING NOTE:
AFTER PILES ARE CUT OFF, THE UPPER 3', EXCEPT AS SHOWN, IS TO BE WRAPPED WITH A DOUBLE THICKNESS OF RUG PADDING HELD IN PLACE BY TACKING WITH GALVANIZED ROOFING NAILS AND WRAPPED WITH #14 GAUGE GALVANIZED WIRE AT A 4" PITCH, CARE IS TO BE TAKEN NOT TO DAMAGE PADDING WHEN PLACING CONCRETE. RUG PADDING MAY BE EITHER OF THE FOLLOWING:

- (1) HAIR AND JUTE RUG PADDING, RUBBERIZED ON BOTH SIDES, AND WEIGHING NOT LESS THAN 47 OZ. PER SQ. YD.
- (2) BONDED URETHANE OR BONDED POLYFOAM WITH A MINIMUM DENSITY OF 5 LBS. PER CU. FT. AND SHALL BE AT LEAST 1/2 IN. THICK, (MATERIAL LESS THAN 1/2 IN. IN THICKNESS MAY BE USED, BUT WILL REQUIRE ADDITIONAL WRAPS FOR A TOTAL OF AT LEAST ONE INCH).



PART SECTION A - A

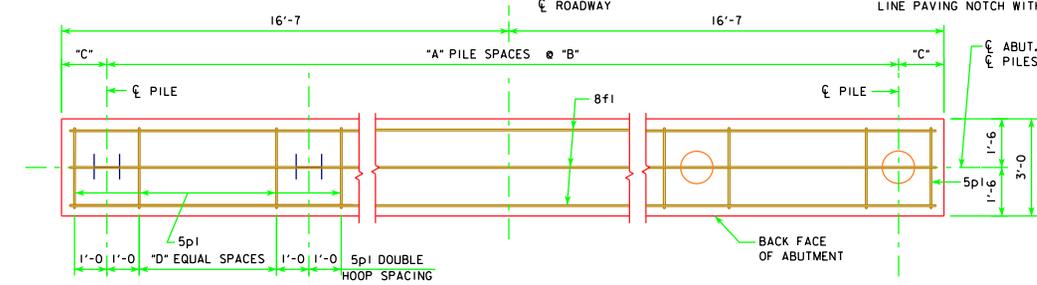
SPACING FOR:
31- 8g1 BACK FACE
26- 8g1 FRONT FACE
25- 8g3 BACK FACE
27- 5k1 & 5k2 BACK FACE

NOTE:
THE SPIRAL AT THE TOP OF EACH PILE TO BE 7 TURNS OF NO. 2 BAR, 2 1/2\"/>

NOTE: **PLAN OF TEMPORARY PAVING BLOCK**
LINE PAVING NOTCH WITH TAR PAPER BEFORE PLACING THE TEMPORARY PAVING BLOCK.

ABUTMENT PILE SPACING		℄-℄ ABUT. BRG.	138'-10	151'-4	163'-10	176'-4	188'-10
WITH WOOD PILES	"A" PILE SPACES		10	11	11	12	12
	"B" (FT. - IN.)		3'-0	2'-8	2'-8	2'-6	2'-6
	"C" (FT. - IN.)		1'-7	1'-11	1'-11	1'-7	1'-7
	"D" EQUAL SPACES		1	1	1	1	1
NO. OF PILES PER ABUT.			11	12	12	13	13
WITH STEEL H-PILES	① PILE BEARING (TONS)		20	19	20	19	20
	② STRENGTH I DESIGN LOAD (KIPS)		56	54	58	55	57
WITH STEEL H-PILES	"A" PILE SPACES		4	4	5	5	5
	"B" (FT. - IN.)		7'-2	7'-2	5'-8	5'-8	5'-8
	"C" (FT. - IN.)		2'-3	2'-3	2'-5	2'-5	2'-5
	"D" EQUAL SPACES		5	5	3	3	3
NO. OF PILES PER ABUT.			5	5	6	6	6
WITH STEEL H-PILES	① PILE BEARING (TONS)		47	49	44	45	47
	② STRENGTH I DESIGN LOAD (KIPS)		136	141	126	131	135

- ① FOR DETERMINING ACTUAL PILE LENGTHS IN FIELD.
- ② FOR ESTIMATING PILE LENGTHS USING AASHTO LRFD SPECIFICATIONS.



ABUTMENT PILE PLAN

ABUTMENT NOTES:
MINIMUM CLEAR DISTANCE FROM FACE OF CONCRETE TO NEAR REINFORCING BAR IS TO BE 2" UNLESS OTHERWISE NOTED OR SHOWN.
ABUTMENT PILES ARE TO BE DRIVEN TO THE DESIGN BEARING VALUE AS GIVEN IN THE ABUTMENT PILE SPACING TABLE.
PLACE 5h2 BAR AT 1:6 SLOPE TO MATCH TRAFFIC SIDE OF ABUTMENT WING FACE. (BOTH SIDES TYPICAL)
BARRIER RAIL NOT SHOWN IN DETAILS.

LATEST REVISION DATE 07-10 APPROVED BY BRIDGE ENGINEER 	 Iowa Department of Transportation Highway Division
	STANDARD DESIGN - 30' ROADWAY, THREE SPAN BRIDGES PRETENSIONED PRESTRESSED CONCRETE BEAM BRIDGES DECEMBER, 2006
	ABUTMENT DETAILS 0° SKEW A & B BEAMS