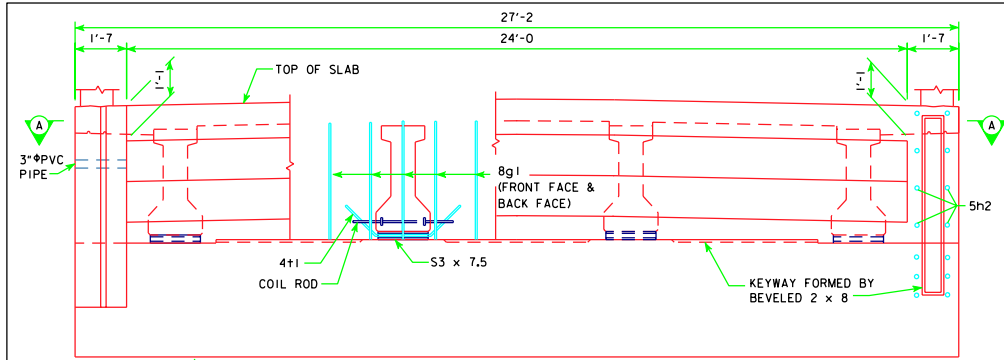
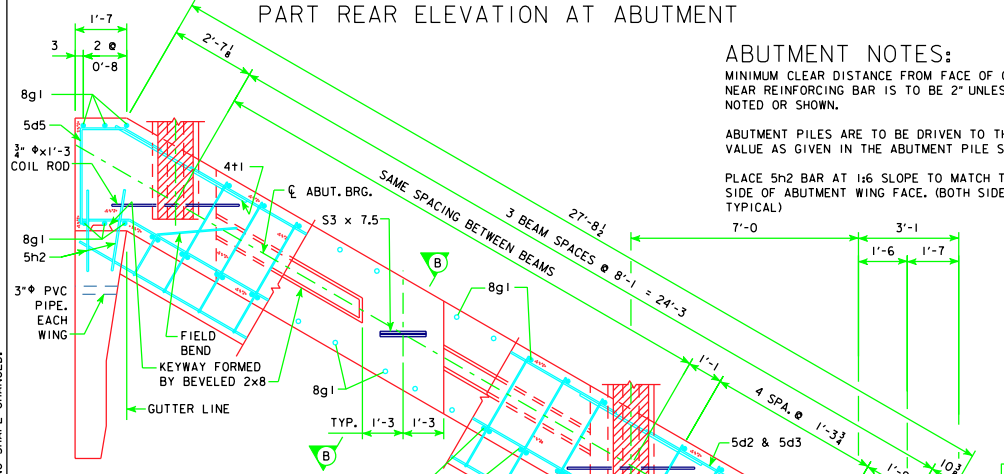


REVISED 01-10 - PILING NO. & DESIGN LOADS CHANGED TO LRFD. ABUT. WING SHAPE CHANGED.



PART REAR ELEVATION AT ABUTMENT



PART SECTION A - A

ABUTMENT PILE SPACING		ℰ-ℰ _{ABUT. BRG.}	138'-10	151'-4	163'-10	176'-4	188'-10
WITH WOOD PILES	"A" PILE SPACES		9	10	11	11	11
	"B" (FT. - IN.)		3'-1	2'-9	2'-6	2'-6	2'-6
	"C" (FT. - IN.)		1'-9 ¹¹ ₁₆	1'-11 ¹¹ ₁₆	1'-11 ¹¹ ₁₆	1'-11 ¹¹ ₁₆	1'-11 ¹¹ ₁₆
	"D" EQUAL SPACES		1	1	1	1	1
	NO. OF PILES PER ABUT.		10	11	12	12	12
	① PILE BEARING (TONS)		20	19	19	20	20
②	STRENGTH I DESIGN LOAD (KIPS)		58	55	54	56	57
WITH STEEL H-PILES	"A" PILE SPACES		4	4	4	4	5
	"B" (FT. - IN.)		6'-6	6'-6	6'-6	6'-6	5'-2
	"C" (FT. - IN.)		2'-8 ³ ₈	2'-8 ³ ₈	2'-8 ³ ₈	2'-8 ³ ₈	2'-9 ³ ₈
	"D" EQUAL SPACES		4	4	4	4	3
	NO. OF PILES PER ABUT.		5	5	5	5	6
	① PILE BEARING (TONS)		44	46	49	50	43
②	STRENGTH I DESIGN LOAD (KIPS)		128	132	141	146	126

ABUTMENT NOTES:

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

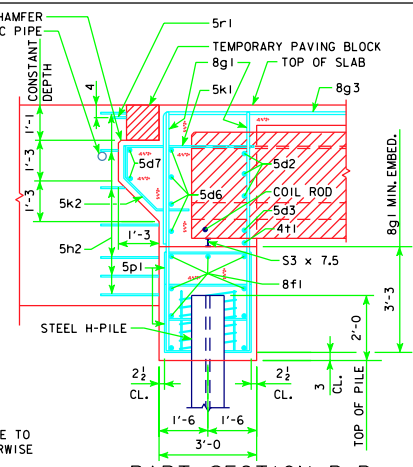
ABUTMENT PILES ARE TO BE DRIVEN TO THE DESIGN BEARING VALUE AS GIVEN IN THE ABUTMENT PILE SPACING TABLE.

PLACE 5h2 BAR AT 1:6 SLOPE TO MATCH TRAFFIC SIDE OF ABUTMENT WING FACE. (BOTH SIDES TYPICAL)

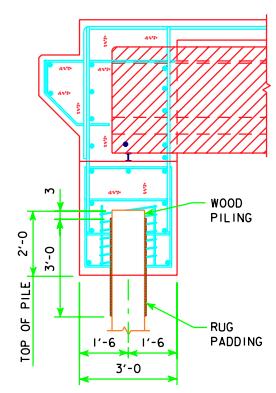
SPACING FOR:
25'- 8g1 BACK FACE
21'- 8g1 FRONT FACE
19'- 8g3 BACK FACE
20'- 5k1 & 5k2 BACK FACE

PLAN OF TEMPORARY PAVING BLOCK

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



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



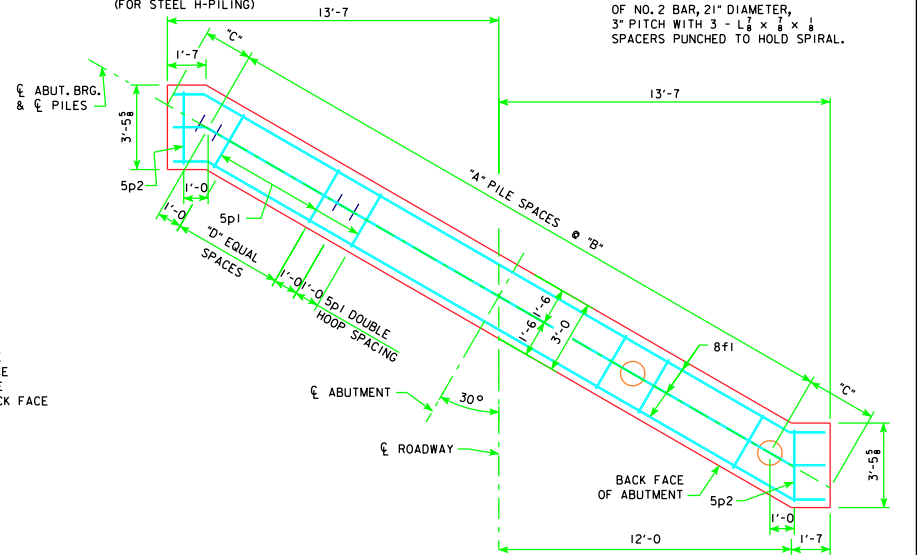
PART SECTION B-B (FOR WOOD PILING)

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.

NOTE:
THE SPIRAL AT THE TOP OF EACH PILE TO BE 7 TURNS OF NO. 2 BAR, 21" DIAMETER, 3" PITCH WITH 3 - L 8 x 8 x 1/8 SPACERS PUNCHED TO HOLD SPIRAL.



ABUTMENT PILE PLAN

Iowa Department of Transportation
Highway Division

STANDARD DESIGN - 24' ROADWAY, THREE SPAN BRIDGE
PRETENSIONED PRESTRESSED
CONCRETE BEAM BRIDGES
DECEMBER, 2006

ABUTMENT DETAILS
30° SKEW A & B BEAMS

H24-18-06

LATEST REVISION DATE
APPROVED BY BRIDGE ENGINEER