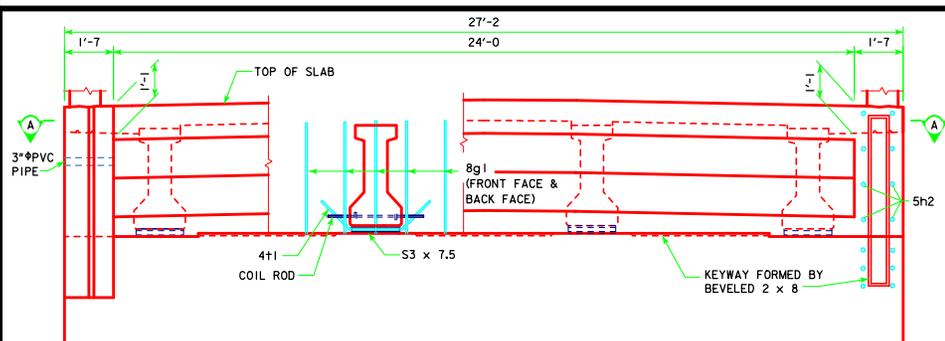
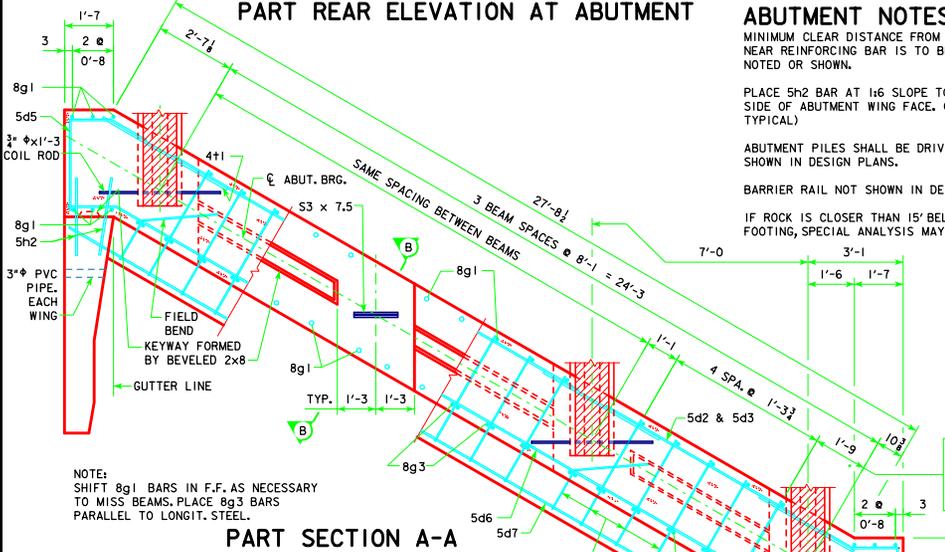


REVISED 05-13 - REVISION FOR IRED PILE DESIGN.



**PART REAR ELEVATION AT ABUTMENT**

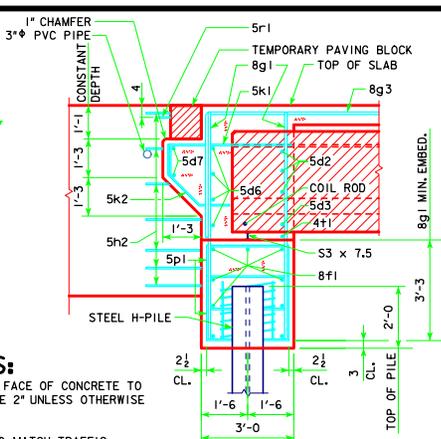
**ABUTMENT NOTES:**  
 MINIMUM CLEAR DISTANCE FROM FACE OF CONCRETE TO NEAR REINFORCING BAR IS TO BE 2" UNLESS OTHERWISE NOTED OR SHOWN.  
 PLACE 5h2 BAR AT 1:6 SLOPE TO MATCH TRAFFIC SIDE OF ABUTMENT WING FACE. (BOTH SIDES TYPICAL)  
 ABUTMENT PILES SHALL BE DRIVEN TO VALUES SHOWN IN DESIGN PLANS.  
 BARRIER RAIL NOT SHOWN IN DETAILS.  
 IF ROCK IS CLOSER THAN 15' BELOW ABUTMENT FOOTING, SPECIAL ANALYSIS MAY BE REQUIRED.



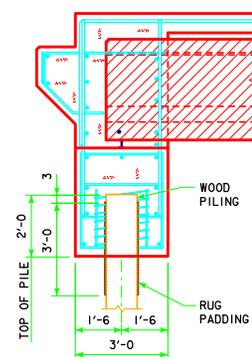
**PART SECTION A-A**

ABUTMENT PILE SPACING		CL-CL 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 1/2	1'-11 3/8	1'-11 3/8	1'-11 3/8	1'-11 3/8	
	"D" EQUAL SPACES	1	1	1	1	1	
	NO. OF PILES PER ABUT.	10	11	12	12	12	
	PU, 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 1/2	2'-8 1/2	2'-8 1/2	2'-8 1/2	2'-9 3/4	
	"D" EQUAL SPACES	4	4	4	4	3	
	NO. OF PILES PER ABUT.	5	5	5	5	6	
	PU, STRENGTH I DESIGN LOAD (KIPS)	128	132	141	146	126	

NOTE: PU, STRENGTH I DESIGN LOAD (KIPS) IS NOT THE VALUE USED IN THE FIELD FOR DRIVING PILES.

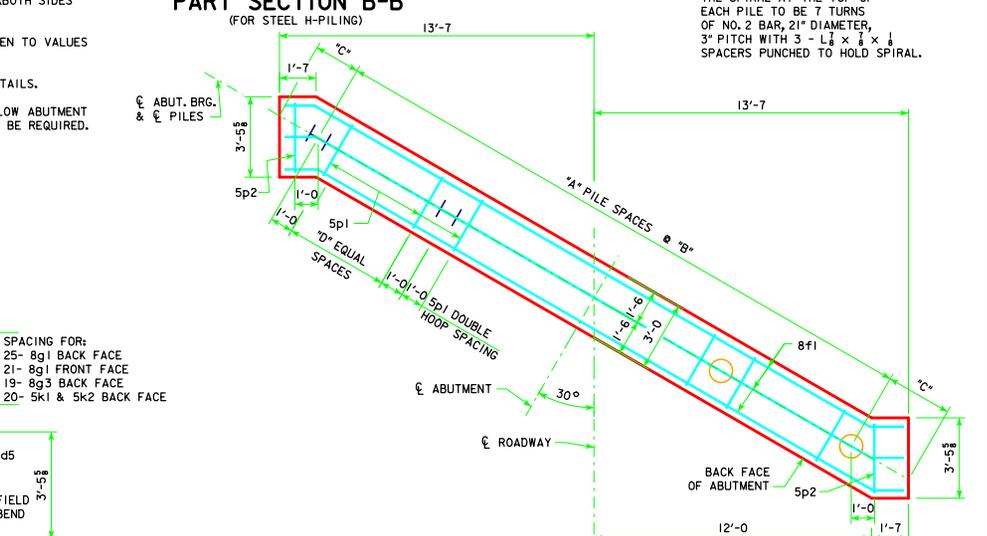


**PART SECTION B-B (FOR STEEL H-PIILING)**

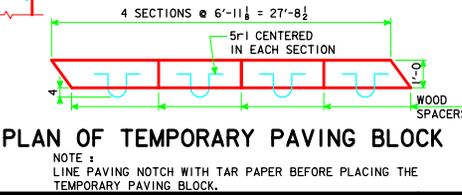


**PART SECTION B-B (FOR WOOD PILING)**

**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, 2" DIAMETER, 3" PITCH WITH 3 - 1/2 x 1/2 x 1/2 SPACERS PUNCHED TO HOLD SPIRAL.



**ABUTMENT PILE PLAN**



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

LATEST REVISION DATE  
 05-13  
 APPROVED BY BRIDGE ENGINEER  
*Thomas E. McQuill*

**Iowa Department of Transportation Highway Division**  
 STANDARD DESIGN - 24' ROADWAY, THREE SPAN BRIDGE  
**PRETENSIONED PRESTRESSED CONCRETE BEAM BRIDGES**  
 DECEMBER, 2006

<b>ABUTMENT DETAILS</b> 30° SKEW A & B BEAMS	<b>H24-18-06</b>
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