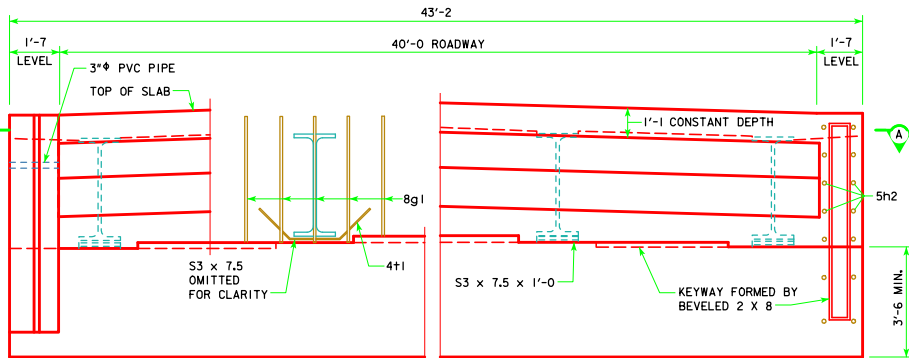
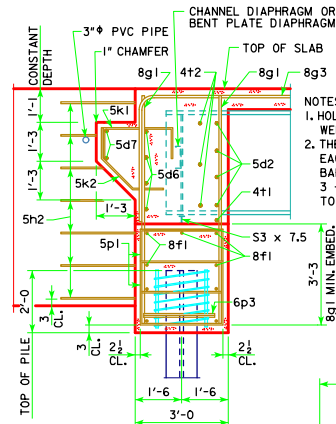


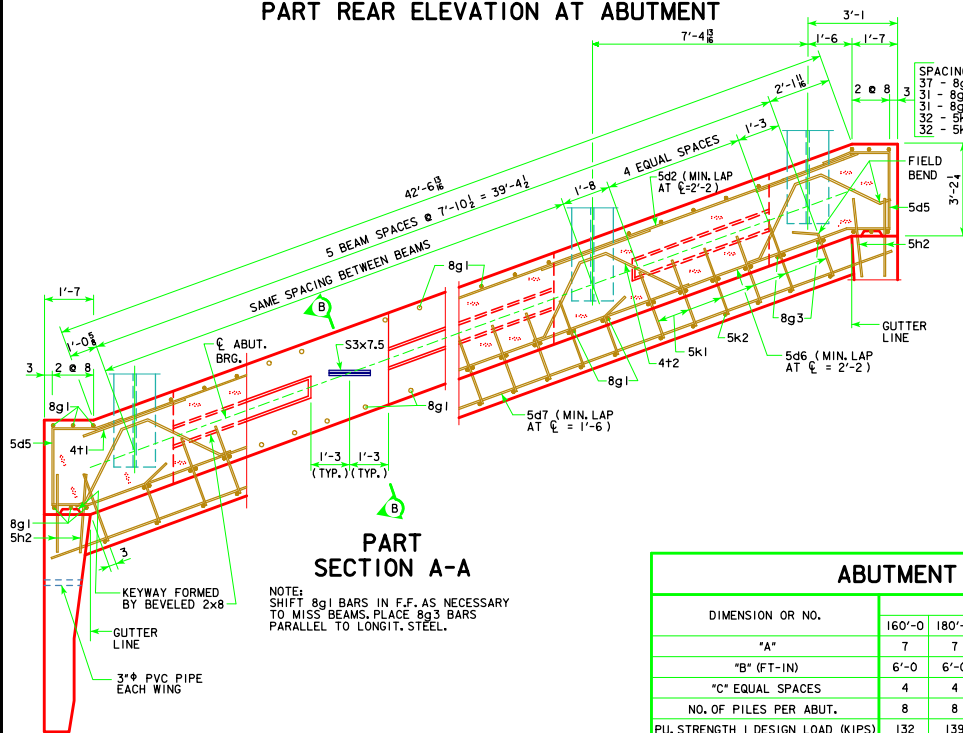
REVISED 10-14 - THE REFERENCE TO THE ABUTMENT STEP DIAGRAM SHEET WAS CHANGED TO GENERAL INFORMATION SHEET INSTEAD OF THE ESTIMATED BRIDGE QUANTITIES SHEET.



**PART REAR ELEVATION AT ABUTMENT**



**PART SECTION B-B**



**PART SECTION A-A**

NOTE: SHIFT 8g1 BARS IN F.F. AS NECESSARY TO MISS BEAMS. PLACE 8g3 BARS PARALLEL TO LONGIT. STEEL.

**ABUTMENT PILE SPACING**

DIMENSION OR NO.	CL TO CL ABUTMENT BEARING									
	160'-0	180'-0	200'-0	220'-0	240'-0	260'-0	280'-0	300'-0	320'-0	
*A*	7	7	7	8	8	8	9	9	9	
*B* (FT-IN)	6'-0	6'-0	6'-0	5'-3	5'-3	5'-3	4'-8	4'-8	4'-8	
*C* EQUAL SPACES	4	4	4	3	3	3	3	3	3	
NO. OF PILES PER ABUT.	8	8	8	9	9	9	10	10	10	
P <sub>U</sub> STRENGTH I DESIGN LOAD (KIPS)	132	139	145	133	138	144	132	137	139	

NOTE: HP 10 x 57 STEEL BEARING PILING REQUIRED.  
NOTE: P<sub>U</sub> STRENGTH I DESIGN LOAD (KIPS) IS NOT THE VALUE USED IN THE FIELD FOR DRIVING PILES.

**ABUTMENT NOTES:**

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

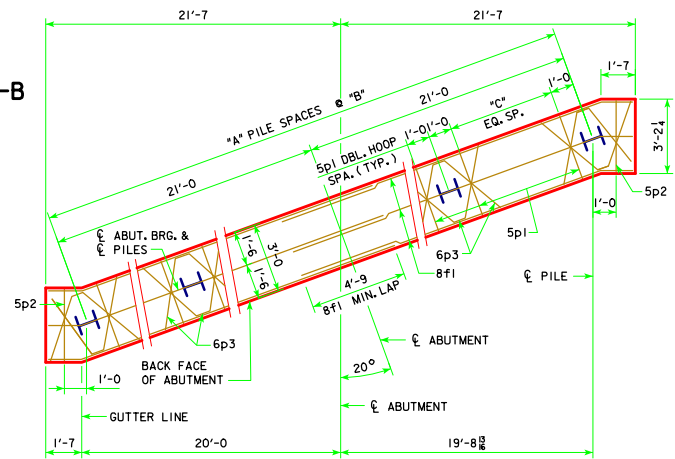
IF NECESSARY TO PREVENT DAMAGE TO THE END OF THE BRIDGE DECK OR BACKWALL FROM CONSTRUCTION EQUIPMENT, AN APPROPRIATE METHOD OF PROTECTION APPROVED BY THE ENGINEER SHALL BE PROVIDED BY THE BRIDGE CONTRACTOR AT NO EXTRA COST TO THE COUNTY OR STATE.

ABUTMENT PILES SHALL BE DRIVEN TO VALUES SHOWN IN DESIGN PLANS.

PLACE 5h2 BAR AT H6 SLOPE TO MATCH TRAFFIC SIDE OF ABUTMENT WING FACE. (BOTH SIDES TYPICAL)

BARRIER RAIL NOT SHOWN IN DETAILS.

IF ROCK IS CLOSER THAN 15' BELOW ABUTMENT FOOTING, SPECIAL ANALYSIS MAY BE REQUIRED.



**ABUTMENT PILE PLAN**

NOTE: ABUTMENT STEP DIAGRAM PROVIDED BY DESIGNER, SEE "GENERAL INFORMATION" SHEET (WORKING STANDARD 5251).

LATEST REVISION DATE  
10-14  
APPROVED BY BRIDGE ENGINEER  
*Norman E. McQuinn*

**IOWADOT** Highway Division

STANDARD DESIGN - 40' ROADWAY, 3 SPAN BRIDGES  
**ROLLED STEEL BEAM BRIDGES**

JUNE, 2010

**ABUTMENT DETAILS**  
20° SKEW

RS40-011-10