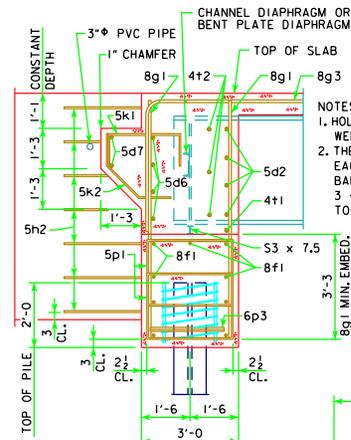


PART REAR ELEVATION AT ABUTMENT



PART SECTION B-B

ABUTMENT NOTES:

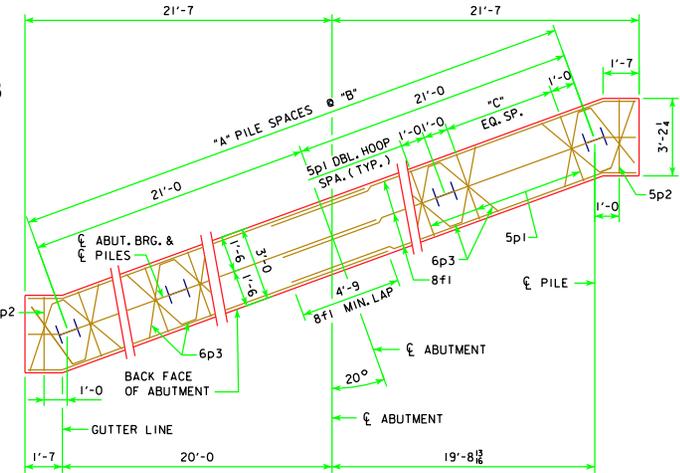
MINIMUM CLEAR DISTANCE FROM FACE OF CONCRETE TO NEAR REINFORCING BAR IS TO BE 2" UNLESS OTHERWISE NOTED OR SHOWN.

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

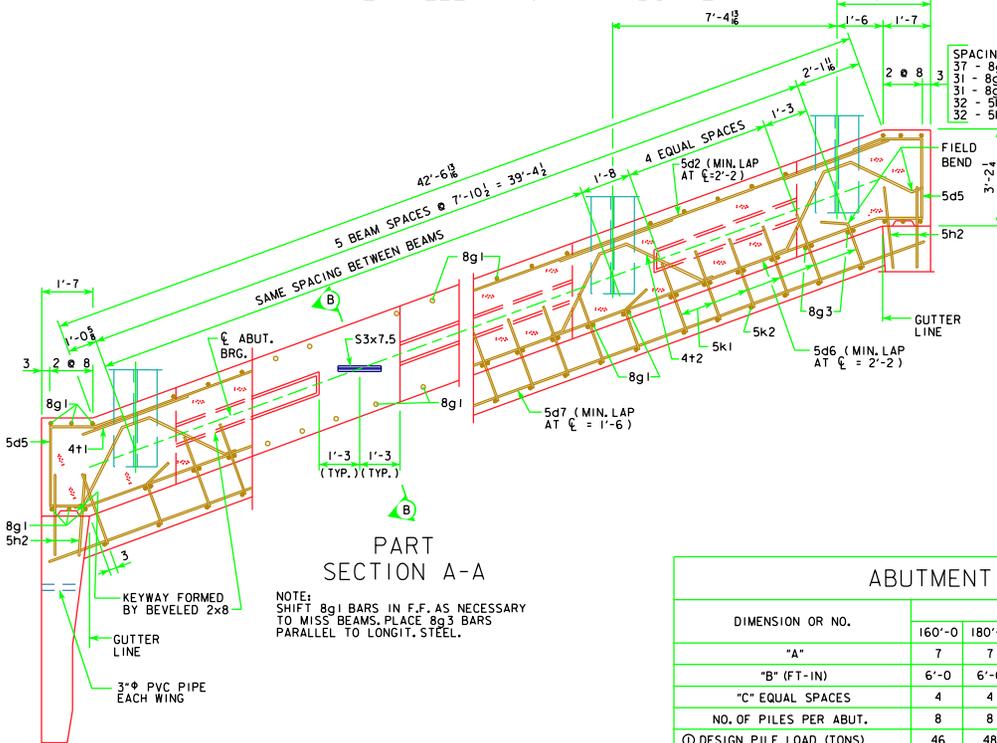
PLACE 5h2 BAR AT 1:6 SLOPE TO MATCH TRAFFIC SIDE OF ABUTMENT WING FACE. (BOTH SIDES TYPICAL)

BARRIER RAIL NOT SHOWN IN DETAILS.



ABUTMENT PILE PLAN

NOTE:
ABUTMENT STEP DIAGRAM PROVIDED BY DESIGNER, SEE "ESTIMATED BRIDGE QUANTITIES" SHEET.



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.	̑ TO ̑ ABUTMENT BEARING							
	160'-0	180'-0	200'-0	220'-0	240'-0	260'-0	300'-0	320'-0
"A"	7	7	7	8	8	8	9	9
"B" (FT-IN)	6'-0	6'-0	6'-0	5'-3	5'-3	5'-3	4'-8	4'-8
"C" EQUAL SPACES	4	4	4	3	3	3	3	3
NO. OF PILES PER ABUT.	8	8	8	9	9	9	10	10
⓪ DESIGN PILE LOAD (TONS)	46	48	50	46	48	50	46	48
⓪ STRENGTH I DESIGN LOAD (KIPS)	132	139	145	133	138	144	132	139

NOTE: HP 10 x 57 STEEL BEARING PILING REQUIRED.
⓪ FOR DETERMINING ACTUAL PILE LENGTHS IN FIELD.
⓪ FOR ESTIMATING PILE LENGTHS USING AASHTO LRFD SPECIFICATIONS.

LATEST REVISION DATE	 APPROVED BY BRIDGE ENGINEER	 Iowa Department of Transportation Highway Division	
		STANDARD DESIGN - 40' ROADWAY, 3 SPAN BRIDGES ROLLED STEEL BEAM BRIDGES JUNE, 2010	
		ABUTMENT DETAILS 20° SKEW	RS40-011-10