

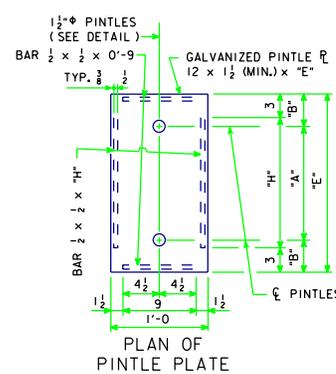
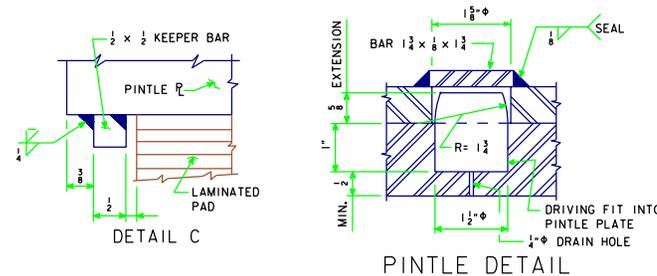
SLOPE_{SPAN 1} = 100% | P/G ELEV. @ NEAR ABUT. - P/G ELEV. @ PIER 1 | SPAN 1 LENGTH

SLOPE_{SPAN 2} = 100% | P/G ELEV. @ PIER 1 - P/G ELEV. @ PIER 2 | SPAN 2 LENGTH

SLOPE_{SPAN 3} = 100% | P/G ELEV. @ PIER 2 - P/G ELEV. @ FAR ABUT. | SPAN 3 LENGTH

SLOPE CALCULATION FORMULA

FIXED PIER BEARING NOTES:
 IF CALCULATED SLOPE FOR A GIVEN SPAN EXCEEDS 1.4%, THE NEOPRENE BEARING PADS AT THE FIXED PIER FOR THAT SPAN SHALL BE TAPERED. REFER TO TABLE FOR DIMENSIONS OF TAPERED PADS.
 COST OF NEOPRENE PADS SHALL BE INCLUDED IN THE PRICE BID FOR "PRETENSIONED PRESTRESSED CONCRETE BEAMS".



EXPANSION PIER BEARING NOTES:
 SURFACES MARKED "V" SHALL BE FINISHED ANSI 250.
 PINTLE PLATES ARE A PART OF THE SUPERSTRUCTURE "STRUCTURAL STEEL QUANTITY". COSTS OF ANCHORED CURVED SOLE PLATES AND NEOPRENE PADS ARE TO BE INCLUDED IN THE PRICE BID FOR "PRETENSIONED PRESTRESSED CONCRETE BEAMS".
 THE SOLE PLATES AND PINTLE PLATES SHALL BE GALVANIZED. ALL WELDING SHALL BE COMPLETED PRIOR TO GALVANIZING. THE SURFACE OF THE PINTLE PLATE IN CONTACT WITH THE LAMINATED NEOPRENE PADS SHALL BE FREE OF PROJECTIONS DUE TO THE GALVANIZING.
 SOLE PLATES ARE TO BE SET IN FORMS WHEN BEAMS ARE CAST AND THE BOTTOM OF BEAMS FORMED OUT AS SHOWN TO EXCLUDE CONCRETE.
 SOLE PLATES SHALL COMPLY WITH ONE OF THE FOLLOWING :
 ASTM A 852
 ASTM A 514 GRADE B
 ASTM A 709 GRADE HPS 70W

EXPANSION PIER

VARIABLE DIMENSIONS

	BEAM BOTTOM FLANGE WIDTH	
	A & B BEAMS 1'-5	C BEAMS 1'-8
"A"	0'-6	1'-0
"B"	0'-5 1/2	0'-4
"C"	1'-3 1/2	1'-6 1/2
"E"	1'-5	1'-8
"F"	1'-3	1'-6
"G"		0'-6
"H"	0'-11	1'-2

10-09
 LATEST REVISION DATE
 Approved by: *Mark A. D...
 APPROVED BY BRIDGE ENGINEER*

**Iowa Department of Transportation
 Highway Division**

STANDARD DESIGN - 40' ROADWAY, THREE SPAN BRIDGE
**PRETENSIONED PRESTRESSED
 CONCRETE BEAM BRIDGES**
 AUGUST, 2009

PIER BEARING DETAILS | H40-44-06

REVISED 10-09 - EXPANSION PIER DETAILS WERE UPDATED TO AGREE WITH CURRENT STANDARDS.