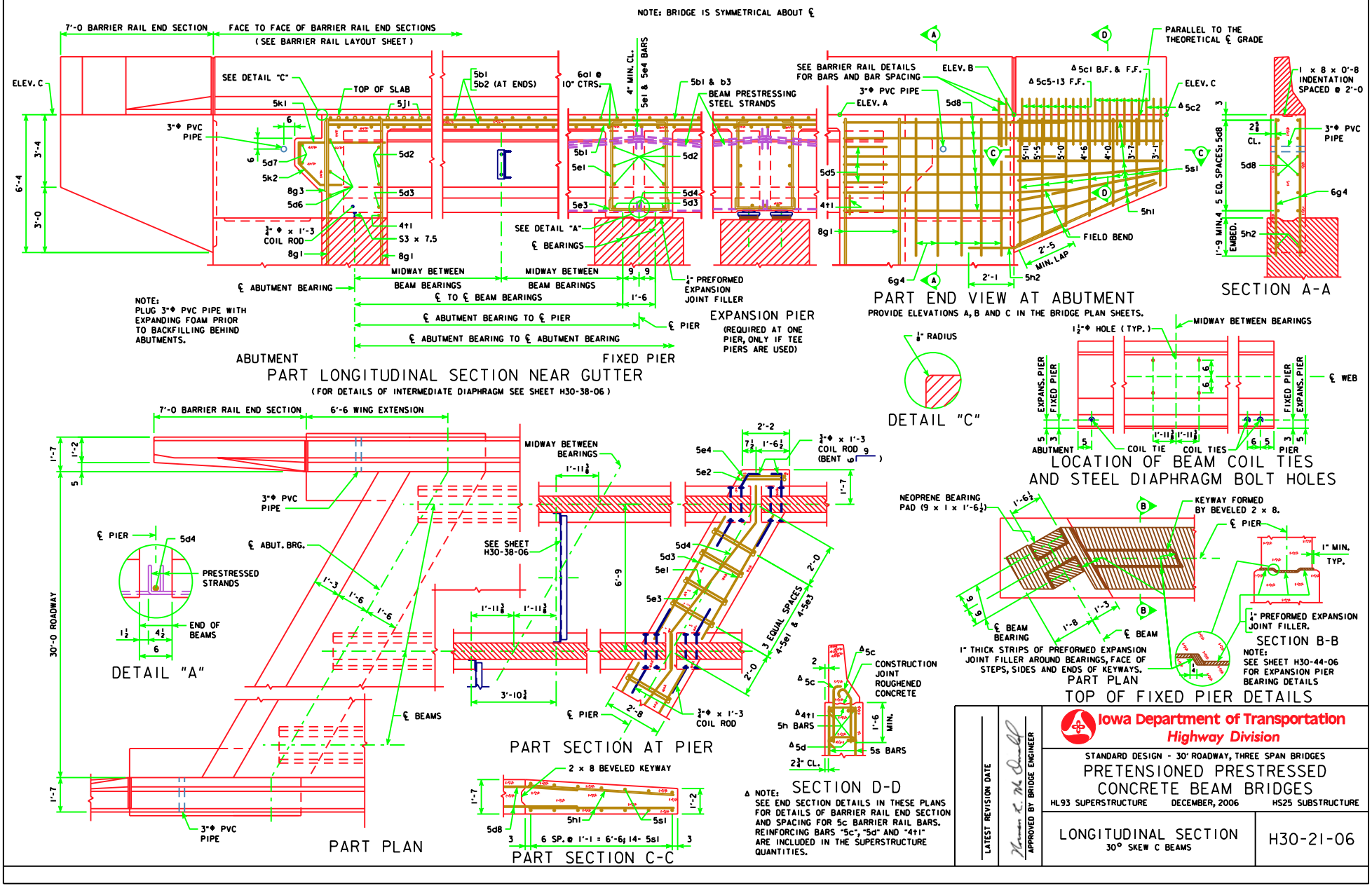
NOTE: BRIDGE IS SYMMETRICAL ABOUT ℄
7'-0 BARRIER RAIL END SECTION
FACE TO FACE OF BARRIER RAIL END SECTIONS
(SEE BARRIER RAIL LAYOUT SHEET)
ELEV. C
SEE DETAIL "C"
TOP OF SLAB
3"Ø PVC PIPE
5k1
5j1
5b1
5b2 (AT ENDS)
6a1 @ 10" CTRS.
4" MIN. CL.
5e1 & 5e4 BARS
5b1 & b3
BEAM PRESTRESSING STEEL STRANDS
5d7
5k2
8g3
5d6
5d2
5d3
4t1
S3 x 7.5
8g1
¾"Ø x 1'-3 COIL ROD
SEE DETAIL "A"
℄ BEARINGS
5e1
5e3
5d4
5d3
SEE BARRIER RAIL DETAILS FOR BARS AND BAR SPACING
ELEV. B
ELEV. A
3"Ø PVC PIPE
5d8
Δ5c1 B.F. & F.F.
Δ5c5-13 F.F.
PARALLEL TO THE THEORETICAL ℄ GRADE
Δ5c2
5s1
5h1
5d5
4t1
8g1
6g4
FIELD BEND
2'-5 MIN. LAP
2'-1
5h2
1 x 8 x 0'-8 INDENTATION SPACED @ 2'-0
5 EQ. SPACES @ 5d8
2⅛ CL.
6g4
1'-9 MIN. EMBED.
5h2
MIDWAY BETWEEN BEARINGS
℄ ABUTMENT BEARING
℄ TO ℄ BEAM BEARINGS
1'-6
¼" PREFORMED EXPANSION JOINT FILLER
℄ ABUTMENT BEARING TO ℄ PIER
℄ ABUTMENT BEARING TO ℄ ABUTMENT BEARING
℄ PIER
NOTE:
PLUG 3"Ø PVC PIPE WITH EXPANDING FOAM PRIOR TO BACKFILLING BEHIND ABUTMENTS.
ABUTMENT
FIXED PIER
EXPANSION PIER
(REQUIRED AT ONE PIER, ONLY IF TEE PIERS ARE USED)
PART LONGITUDINAL SECTION NEAR GUTTER
(FOR DETAILS OF INTERMEDIATE DIAPHRAGM SEE SHEET H30-38-06)
PART END VIEW AT ABUTMENT
PROVIDE ELEVATIONS A, B AND C IN THE BRIDGE PLAN SHEETS.
SECTION A-A
⅛" RADIUS
DETAIL "C"
1½"Ø HOLE (TYP.)
MIDWAY BETWEEN BEARINGS
℄ WEB
EXPANS. PIER
FIXED PIER
ABUTMENT
COIL TIE
COIL TIES
PIER
LOCATION OF BEAM COIL TIES AND STEEL DIAPHRAGM BOLT HOLES
7'-0 BARRIER RAIL END SECTION
6'-6 WING EXTENSION
1'-7
1'-2
5
3"Ø PVC PIPE
30'-0 ROADWAY
℄ PIER
5d4
PRESTRESSED STRANDS
END OF BEAMS
DETAIL "A"
℄ ABUT. BRG.
1'-3
1'-6
1'-6
℄ BEAMS
SEE SHEET H30-38-06
MIDWAY BETWEEN BEARINGS
1'-11⅞
1'-11⅞
6'-9
3'-10¾
2'-2
7½
1'-6½
¾"Ø x 1'-3 COIL ROD (BENT 6)
9
5e4
5e2
5d4
5d3
5e1
5e3
2'-0
3 EQUAL SPACES @ 4-5e1 & 4-5e3
2'-0
℄ PIER
2'-8
¾"Ø x 1'-3 COIL ROD
PART PLAN
PART SECTION AT PIER
NEOPRENE BEARING PAD (9 x 1 x 1'-6½)
KEYWAY FORMED BY BEVELED 2 x 8.
℄ PIER
1" MIN. TYP.
1'-6½
1'-3
1'-8
℄ BEAM BEARING
℄ BEAM
1" THICK STRIPS OF PREFORMED EXPANSION JOINT FILLER AROUND BEARINGS, FACE OF STEPS, SIDES AND ENDS OF KEYWAYS.
¼" PREFORMED EXPANSION JOINT FILLER.
SECTION B-B
NOTE:
SEE SHEET H30-44-06 FOR EXPANSION PIER BEARING DETAILS
PART PLAN
TOP OF FIXED PIER DETAILS
Δ5c
CONSTRUCTION JOINT ROUGHENED CONCRETE
Δ4t1
5h BARS
Δ5d
5s BARS
2¾ CL.
1'-6 MIN.
SECTION D-D
2 x 8 BEVELED KEYWAY
1'-7
1'-2
5d8
5h1
5s1
3
6 SP. @ 1'-1 = 6'-6; 14- 5s1
3
PART SECTION C-C
Δ NOTE:
SEE END SECTION DETAILS IN THESE PLANS FOR DETAILS OF BARRIER RAIL END SECTION AND SPACING FOR 5c BARRIER RAIL BARS. REINFORCING BARS "5c", "5d" AND "4t1" ARE INCLUDED IN THE SUPERSTRUCTURE QUANTITIES.
LATEST REVISION DATE
APPROVED BY BRIDGE ENGINEER
Iowa Department of Transportation
Highway Division
STANDARD DESIGN - 30' ROADWAY, THREE SPAN BRIDGES
PRETENSIONED PRESTRESSED CONCRETE BEAM BRIDGES
HL93 SUPERSTRUCTURE
DECEMBER, 2006
HS25 SUBSTRUCTURE
LONGITUDINAL SECTION
30° SKEW C BEAMS
H30-21-06