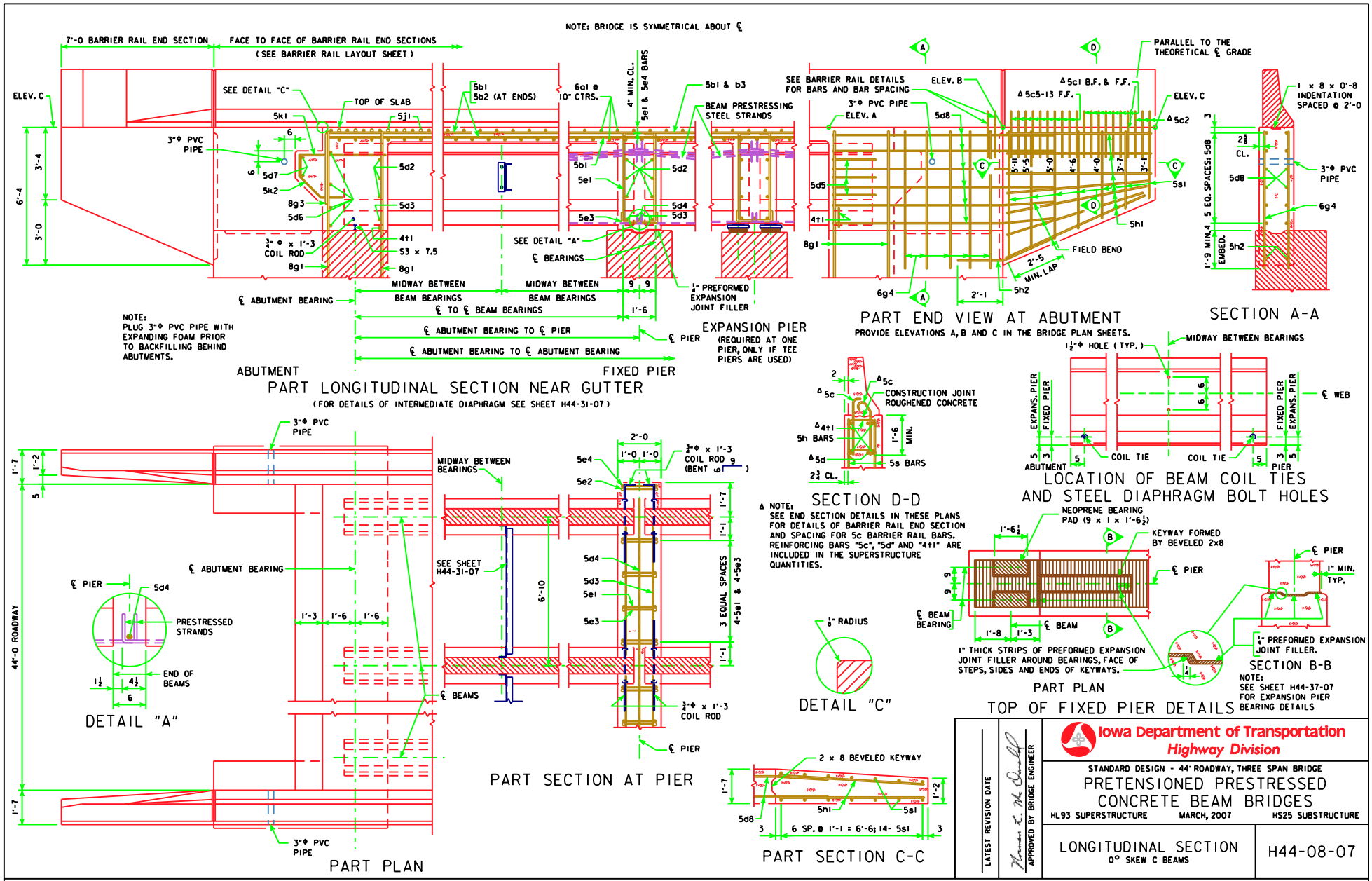
NOTE: BRIDGE IS SYMMETRICAL ABOUT ℄
7'-0 BARRIER RAIL END SECTION
FACE TO FACE OF BARRIER RAIL END SECTIONS
(SEE BARRIER RAIL LAYOUT SHEET)
ELEV. C
SEE DETAIL "C"
TOP OF SLAB
3"Φ PVC PIPE
5k1
5j1
5d7
5k2
8g3
5d6
5d2
5d3
4t1
S3 x 7.5
8g1
¾"Φ x 1'-3 COIL ROD
5b1
5b2 (AT ENDS)
6a1 @ 10" CTRS.
4" MIN. CL.
5e1 & 5e4 BARS
5b1 & b3
BEAM PRESTRESSING STEEL STRANDS
5e1
5e3
5d4
SEE DETAIL "A"
℄ BEARINGS
¼" PREFORMED EXPANSION JOINT FILLER
MIDWAY BETWEEN BEAM BEARINGS
℄ ABUTMENT BEARING
℄ TO ℄ BEAM BEARINGS
℄ ABUTMENT BEARING TO ℄ PIER
℄ ABUTMENT BEARING TO ℄ ABUTMENT BEARING
℄ PIER
NOTE: PLUG 3"Φ 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 H44-31-07)
SEE BARRIER RAIL DETAILS FOR BARS AND BAR SPACING
ELEV. B
ELEV. A
3"Φ PVC PIPE
5d8
5c1 B.F. & F.F.
5c5-13 F.F.
PARALLEL TO THE THEORETICAL ℄ GRADE
ELEV. C
5c2
5s1
5h1
5d5
4t1
8g1
FIELD BEND
2'-5 MIN. LAP
6g4
2'-1
5h2
PART END VIEW AT ABUTMENT
PROVIDE ELEVATIONS A, B AND C IN THE BRIDGE PLAN SHEETS.
1 x 8 x 0'-8 INDENTATION SPACED @ 2'-0
2⅝ CL.
5 EQ. SPACES: 5d8
1'-9 MIN. 4 EMBED.
3"Φ PVC PIPE
6g4
5h2
SECTION A-A
2
5c
CONSTRUCTION JOINT ROUGHENED CONCRETE
4t1
5h BARS
5d
5s BARS
2¾ CL.
1'-6 MIN.
SECTION D-D
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.
1½"Φ HOLE (TYP.)
MIDWAY BETWEEN BEARINGS
EXPANS. PIER
FIXED PIER
℄ WEB
COIL TIE
ABUTMENT
PIER
LOCATION OF BEAM COIL TIES AND STEEL DIAPHRAGM BOLT HOLES
3"Φ PVC PIPE
1'-7
1'-2
5
44'-0 ROADWAY
℄ ABUTMENT BEARING
℄ PIER
5d4
PRESTRESSED STRANDS
END OF BEAMS
1½
4½
6
DETAIL "A"
1'-3
1'-6
1'-6
℄ BEAMS
3"Φ PVC PIPE
PART PLAN
MIDWAY BETWEEN BEARINGS
SEE SHEET H44-31-07
6'-10
2'-0
1'-0
1'-0
5e4
5e2
¾"Φ x 1'-3 COIL ROD (BENT 9 6)
5d4
5d3
5e1
5e3
3 EQUAL SPACES 4-5e1 & 4-5e3
1'-7
1'-1
1'-1
¾"Φ x 1'-3 COIL ROD
℄ PIER
PART SECTION AT PIER
⅛" RADIUS
DETAIL "C"
2 x 8 BEVELED KEYWAY
1'-7
1'-2
5d8
5h1
5s1
6 SP. @ 1'-1 = 6'-6; 14- 5s1
PART SECTION C-C
NEOPRENE BEARING PAD (9 x 1 x 1'-6½)
1'-6½
KEYWAY FORMED BY BEVELED 2x8
℄ PIER
℄ BEAM BEARING
℄ BEAM
1'-8
1'-3
1" THICK STRIPS OF PREFORMED EXPANSION JOINT FILLER AROUND BEARINGS, FACE OF STEPS, SIDES AND ENDS OF KEYWAYS.
PART PLAN
℄ PIER
1" MIN. TYP.
¼" PREFORMED EXPANSION JOINT FILLER.
SECTION B-B
NOTE: SEE SHEET H44-37-07 FOR EXPANSION PIER BEARING DETAILS
TOP OF FIXED PIER DETAILS
LATEST REVISION DATE
APPROVED BY BRIDGE ENGINEER
Iowa Department of Transportation
Highway Division
STANDARD DESIGN - 44' ROADWAY, THREE SPAN BRIDGE
PRETENSIONED PRESTRESSED CONCRETE BEAM BRIDGES
HL93 SUPERSTRUCTURE
MARCH, 2007
HS25 SUBSTRUCTURE
LONGITUDINAL SECTION
0° SKEW C BEAMS
H44-08-07