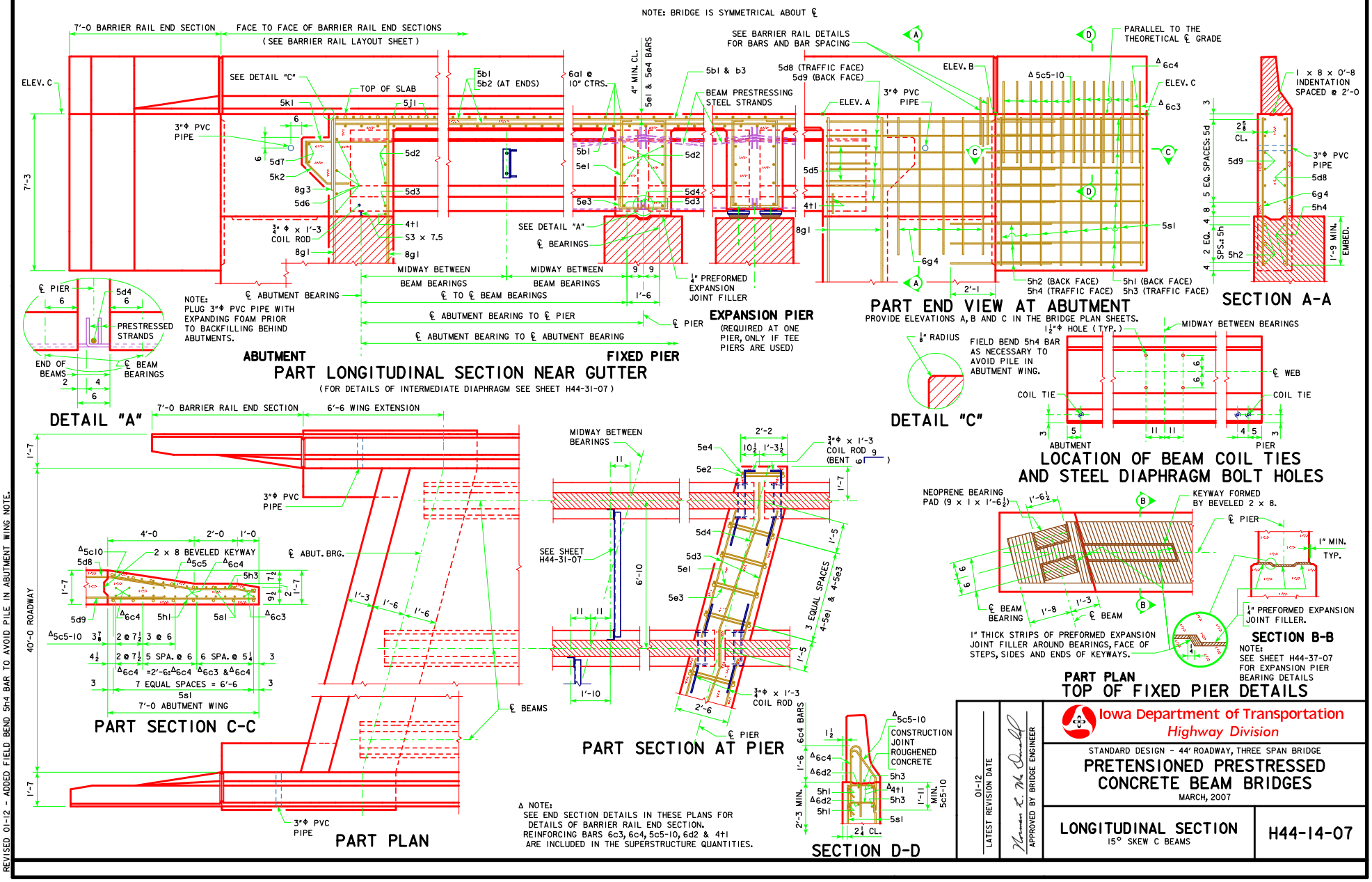
NOTE: BRIDGE IS SYMMETRICAL ABOUT ℄
7'-0 BARRIER RAIL END SECTION
FACE TO FACE OF BARRIER RAIL END SECTIONS
(SEE BARRIER RAIL LAYOUT SHEET)
SEE BARRIER RAIL DETAILS FOR BARS AND BAR SPACING
PARALLEL TO THE THEORETICAL ℄ GRADE
ELEV. C
SEE DETAIL "C"
TOP OF SLAB
5b1
5b2 (AT ENDS)
6a1 @ 10" CTRS.
4" MIN. CL.
5e1 & 5e4 BARS
5b1 & b3
BEAM PRESTRESSING STEEL STRANDS
5d8 (TRAFFIC FACE)
5d9 (BACK FACE)
ELEV. B
ELEV. A
3"Φ PVC PIPE
Δ 5c5-10
Δ 6c4
Δ 6c3
5k1
5j1
5d7
5k2
8g3
5d6
5d2
5d3
5e1
5e3
5d4
5d5
4t1
8g1
6g4
5s1
3/4"Φ x 1'-3 COIL ROD
S3 x 7.5
SEE DETAIL "A"
℄ BEARINGS
MIDWAY BETWEEN BEAM BEARINGS
℄ ABUTMENT BEARING
℄ TO ℄ BEAM BEARINGS
℄ ABUTMENT BEARING TO ℄ PIER
℄ ABUTMENT BEARING TO ℄ ABUTMENT BEARING
1/4" PREFORMED EXPANSION JOINT FILLER
℄ PIER
5h2 (BACK FACE)
5h4 (TRAFFIC FACE)
5h1 (BACK FACE)
5h3 (TRAFFIC FACE)
2'-1
1 x 8 x 0'-8 INDENTATION SPACED @ 2'-0
2 5/8 CL.
5 EQ. SPACES: 5d
2 EQ. SPS.: 5h
1'-9 MIN. EMBED.
SECTION A-A
PART END VIEW AT ABUTMENT
PROVIDE ELEVATIONS A, B AND C IN THE BRIDGE PLAN SHEETS.
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)
℄ PIER
PRESTRESSED STRANDS
END OF BEAMS
℄ BEAM BEARINGS
DETAIL "A"
1/8" RADIUS
FIELD BEND 5h4 BAR AS NECESSARY TO AVOID PILE IN ABUTMENT WING.
DETAIL "C"
1 1/2"Φ HOLE (TYP.)
MIDWAY BETWEEN BEARINGS
℄ WEB
COIL TIE
ABUTMENT
PIER
LOCATION OF BEAM COIL TIES AND STEEL DIAPHRAGM BOLT HOLES
7'-0 BARRIER RAIL END SECTION
6'-6 WING EXTENSION
40'-0 ROADWAY
2 x 8 BEVELED KEYWAY
℄ ABUT. BRG.
7 EQUAL SPACES = 6'-6
7'-0 ABUTMENT WING
PART SECTION C-C
℄ BEAMS
PART PLAN
MIDWAY BETWEEN BEARINGS
SEE SHEET H44-31-07
3/4"Φ x 1'-3 COIL ROD (BENT 9)
3 EQUAL SPACES 4-5e1 & 4-5e3
PART SECTION AT PIER
NEOPRENE BEARING PAD (9 x 1 x 1'-6 1/2)
KEYWAY FORMED BY BEVELED 2 x 8.
℄ PIER
℄ BEAM BEARING
℄ BEAM
1" MIN. TYP.
1/4" PREFORMED EXPANSION JOINT FILLER.
1" THICK STRIPS OF PREFORMED EXPANSION JOINT FILLER AROUND BEARINGS, FACE OF STEPS, SIDES AND ENDS OF KEYWAYS.
SECTION B-B
NOTE: SEE SHEET H44-37-07 FOR EXPANSION PIER BEARING DETAILS
PART PLAN
TOP OF FIXED PIER DETAILS
Δ NOTE: SEE END SECTION DETAILS IN THESE PLANS FOR DETAILS OF BARRIER RAIL END SECTION. REINFORCING BARS 6c3, 6c4, 5c5-10, 6d2 & 4t1 ARE INCLUDED IN THE SUPERSTRUCTURE QUANTITIES.
CONSTRUCTION JOINT ROUGHENED CONCRETE
SECTION D-D
01-12
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
MARCH, 2007
LONGITUDINAL SECTION
15° SKEW C BEAMS
H44-14-07
REVISED 01-12 - ADDED FIELD BEND 5h4 BAR TO AVOID PILE IN ABUTMENT WING NOTE.