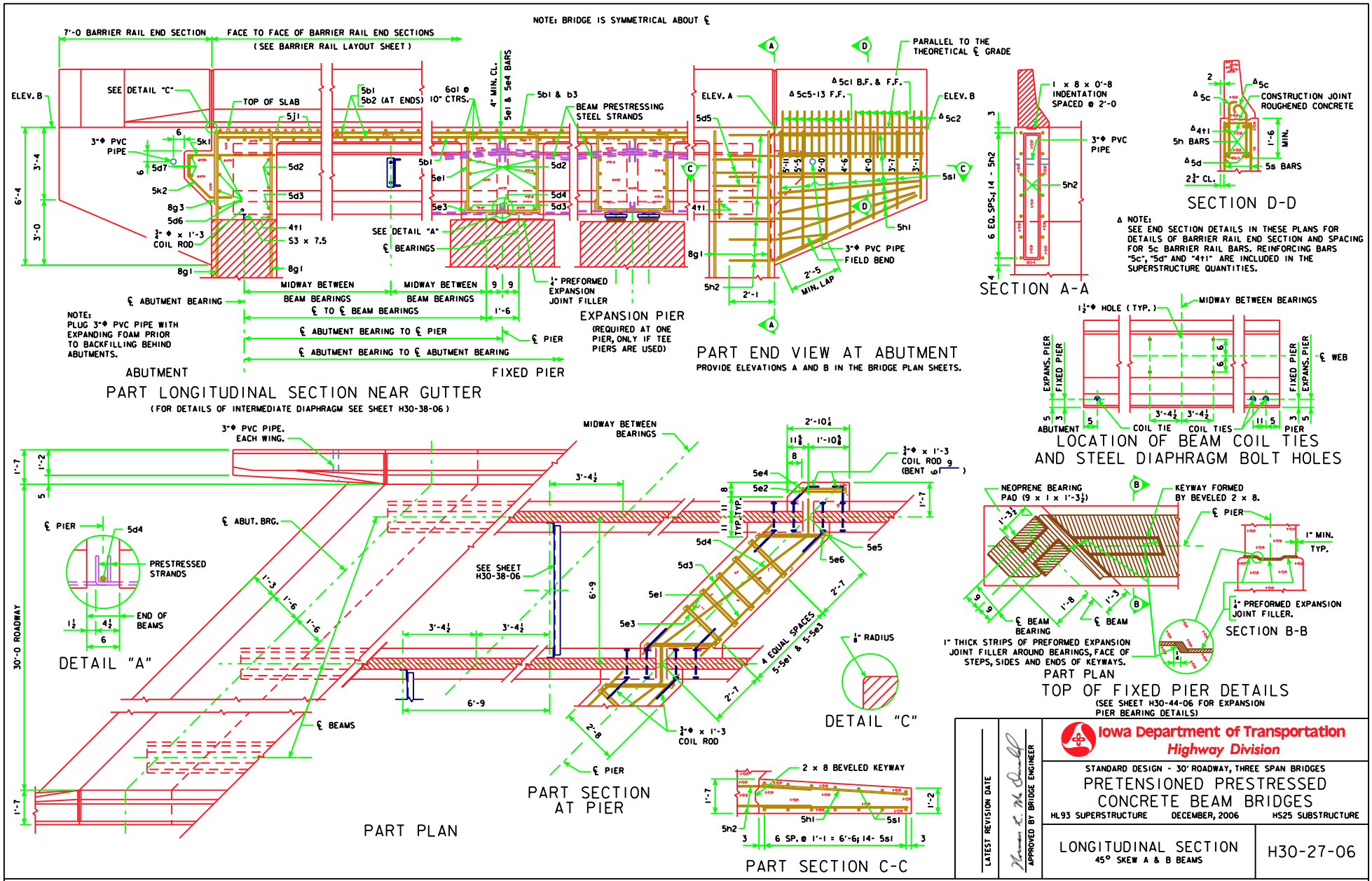
NOTE: BRIDGE IS SYMMETRICAL ABOUT ℄
7'-0 BARRIER RAIL END SECTION
FACE TO FACE OF BARRIER RAIL END SECTIONS
(SEE BARRIER RAIL LAYOUT SHEET)
ELEV. B
SEE DETAIL "C"
TOP OF SLAB
5j1
5b1
5b2 (AT ENDS)
6a1 @ 10" CTRS.
4" MIN. CL.
5e1 & 5e4 BARS
5b1 & b3
BEAM PRESTRESSING STEEL STRANDS
3"Φ PVC PIPE
5k1
5d7
5k2
5d2
5d3
8g3
5d6
3/4"Φ x 1'-3 COIL ROD
4t1
S3 x 7.5
8g1
SEE DETAIL "A"
℄ BEARINGS
5e1
5e3
5d4
1/4" PREFORMED EXPANSION JOINT FILLER
℄ ABUTMENT BEARING
MIDWAY BETWEEN BEAM BEARINGS
℄ 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
PART LONGITUDINAL SECTION NEAR GUTTER
(FOR DETAILS OF INTERMEDIATE DIAPHRAGM SEE SHEET H30-38-06)
EXPANSION PIER
(REQUIRED AT ONE PIER, ONLY IF TEE PIERS ARE USED)
ELEV. A
5d5
PARALLEL TO THE THEORETICAL ℄ GRADE
Δ5c1 B.F. & F.F.
Δ5c5-13 F.F.
Δ5c2
5s1
5h1
3"Φ PVC PIPE FIELD BEND
2'-5 MIN. LAP
5h2
2'-1
PART END VIEW AT ABUTMENT
PROVIDE ELEVATIONS A AND B IN THE BRIDGE PLAN SHEETS.
1 x 8 x 0'-8 INDENTATION SPACED @ 2'-0
3"Φ PVC PIPE
5h2
6 EQ. SPS; 14 - 5h2
SECTION A-A
Δ5c
CONSTRUCTION JOINT ROUGHENED CONCRETE
Δ4t1
5h BARS
Δ5d
5s BARS
2 3/4" 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.
1 1/2"Φ HOLE (TYP.)
MIDWAY BETWEEN BEARINGS
EXPANS. PIER
FIXED PIER
℄ WEB
ABUTMENT
COIL TIE
COIL TIES
PIER
LOCATION OF BEAM COIL TIES AND STEEL DIAPHRAGM BOLT HOLES
3"Φ PVC PIPE. EACH WING.
MIDWAY BETWEEN BEARINGS
3/4"Φ x 1'-3 COIL ROD (BENT 6")
℄ PIER
5d4
PRESTRESSED STRANDS
END OF BEAMS
DETAIL "A"
℄ ABUT. BRG.
SEE SHEET H30-38-06
30'-0 ROADWAY
℄ BEAMS
PART PLAN
5e4
5e2
5e6
5e5
5d3
5e1
5e3
4 EQUAL SPACES 5-5e1 & 5-5e3
3/4"Φ x 1'-3 COIL ROD
℄ PIER
PART SECTION AT PIER
1/8" RADIUS
DETAIL "C"
2 x 8 BEVELED KEYWAY
5h1
5s1
5h2
6 SP. @ 1'-1 = 6'-6; 14- 5s1
PART SECTION C-C
NEOPRENE BEARING PAD (9 x 1 x 1'-3 1/2)
KEYWAY FORMED BY BEVELED 2 x 8.
℄ PIER
℄ BEAM BEARING
℄ BEAM
1" THICK STRIPS OF PREFORMED EXPANSION JOINT FILLER AROUND BEARINGS, FACE OF STEPS, SIDES AND ENDS OF KEYWAYS.
PART PLAN
1" MIN. TYP.
1/4" PREFORMED EXPANSION JOINT FILLER.
SECTION B-B
TOP OF FIXED PIER DETAILS
(SEE SHEET H30-44-06 FOR EXPANSION PIER BEARING DETAILS)
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
45° SKEW A & B BEAMS
H30-27-06