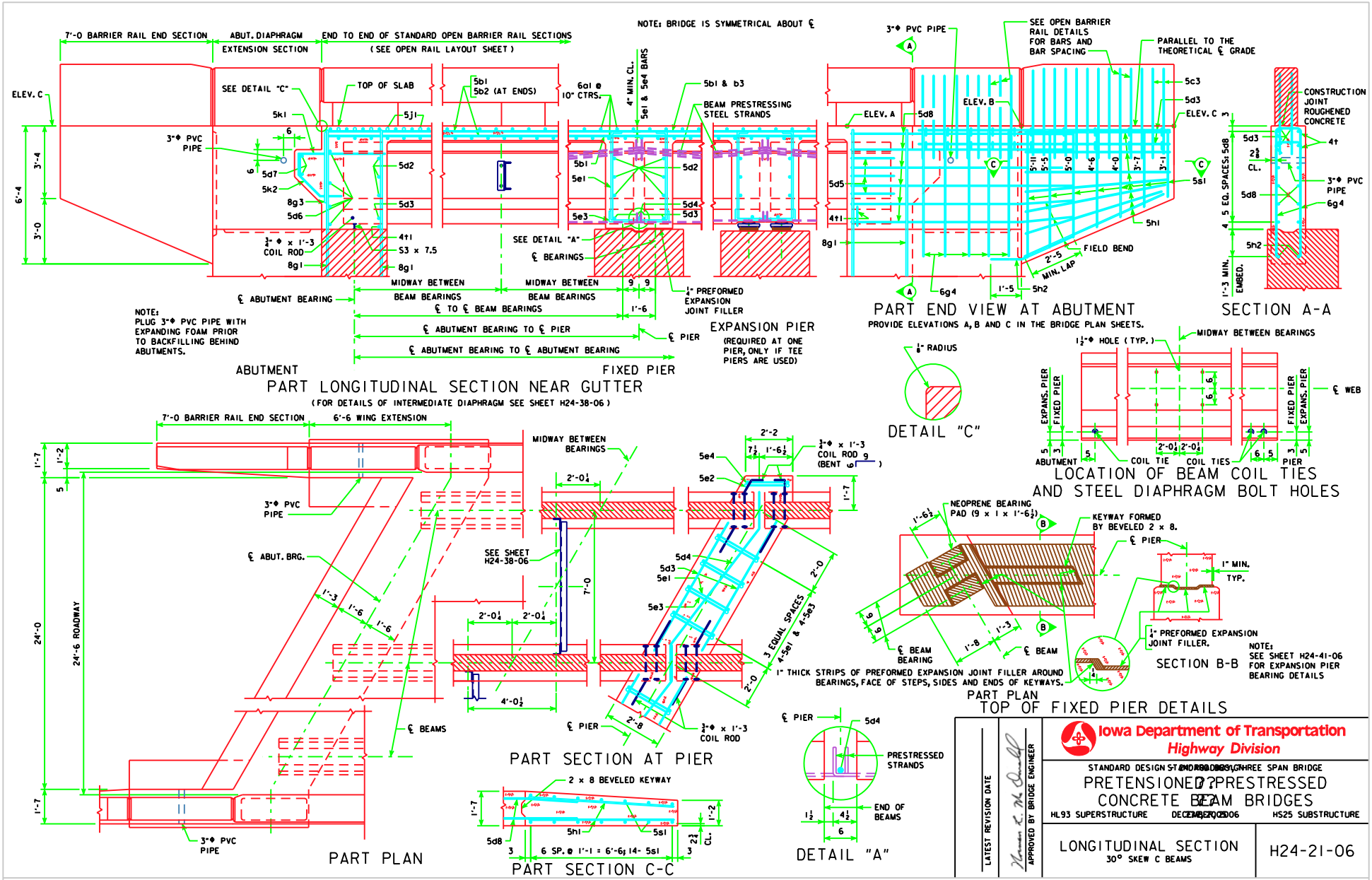

NOTE: BRIDGE IS SYMMETRICAL ABOUT ℄
7'-0 BARRIER RAIL END SECTION
ABUT. DIAPHRAGM EXTENSION SECTION
END TO END OF STANDARD OPEN BARRIER RAIL SECTIONS (SEE OPEN RAIL LAYOUT SHEET)
ELEV. C
SEE DETAIL "C"
TOP OF SLAB
5b1 5b2 (AT ENDS)
6a1 @ 10" CTRS.
4" MIN. CL.
5e1 & 5e4 BARS
5b1 & b3
BEAM PRESTRESSING STEEL STRANDS
3"Φ PVC PIPE
5k1
5j1
5d7
5k2
8g3
5d6
5d2
5d3
4t1
S3 x 7.5
8g1
3/4"Φ x 1'-3 COIL ROD
SEE DETAIL "A"
℄ BEARINGS
℄ ABUTMENT BEARING
MIDWAY BETWEEN BEAM BEARINGS
℄ TO ℄ BEAM BEARINGS
1/4" PREFORMED EXPANSION JOINT FILLER
℄ 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 H24-38-06)
3"Φ PVC PIPE
SEE OPEN BARRIER RAIL DETAILS FOR BARS AND BAR SPACING
PARALLEL TO THE THEORETICAL ℄ GRADE
ELEV. A
ELEV. B
ELEV. C
5c3
5d3
5d8
5d5
4t1
8g1
5s1
5h1
FIELD BEND
2'-5 MIN. LAP
6g4
5h2
PART END VIEW AT ABUTMENT
PROVIDE ELEVATIONS A, B AND C IN THE BRIDGE PLAN SHEETS.
CONSTRUCTION JOINT ROUGHENED CONCRETE
4t
3"Φ PVC PIPE
6g4
5h2
4 5 EQ. SPACES: 5d8
1'-3 MIN. EMBED.
SECTION A-A
1/8" RADIUS
DETAIL "C"
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
7'-0 BARRIER RAIL END SECTION
6'-6 WING EXTENSION
24'-0
24'-6 ROADWAY
3"Φ PVC PIPE
℄ ABUT. BRG.
℄ BEAMS
PART PLAN
MIDWAY BETWEEN BEARINGS
SEE SHEET H24-38-06
3/4"Φ x 1'-3 COIL ROD (BENT)
5e4
5e2
5d4
5d3
5e1
5e3
3 EQUAL SPACES 4-5e1 & 4-5e3
℄ PIER
3/4"Φ x 1'-3 COIL ROD
PART SECTION AT PIER
2 x 8 BEVELED KEYWAY
5h1
5s1
5d8
6 SP. @ 1'-1 = 6'-6; 14- 5s1
PART SECTION C-C
NEOPRENE BEARING PAD (9 x 1 x 1'-6 1/2)
KEYWAY FORMED BY BEVELED 2 x 8.
℄ PIER
1" MIN. TYP.
1/4" PREFORMED EXPANSION JOINT FILLER.
℄ BEAM BEARING
℄ BEAM
1" THICK STRIPS OF PREFORMED EXPANSION JOINT FILLER AROUND BEARINGS, FACE OF STEPS, SIDES AND ENDS OF KEYWAYS.
PART PLAN
SECTION B-B
NOTE: SEE SHEET H24-41-06 FOR EXPANSION PIER BEARING DETAILS
TOP OF FIXED PIER DETAILS
℄ PIER
5d4
PRESTRESSED STRANDS
END OF BEAMS
DETAIL "A"
LATEST REVISION DATE
APPROVED BY BRIDGE ENGINEER
Iowa Department of Transportation
Highway Division
STANDARD DESIGN STANDARD DESIGN
THREE SPAN BRIDGE
PRETENSIONED PRESTRESSED CONCRETE BEAM BRIDGES
HL93 SUPERSTRUCTURE
HS25 SUBSTRUCTURE
LONGITUDINAL SECTION
30° SKEW C BEAMS
H24-21-06