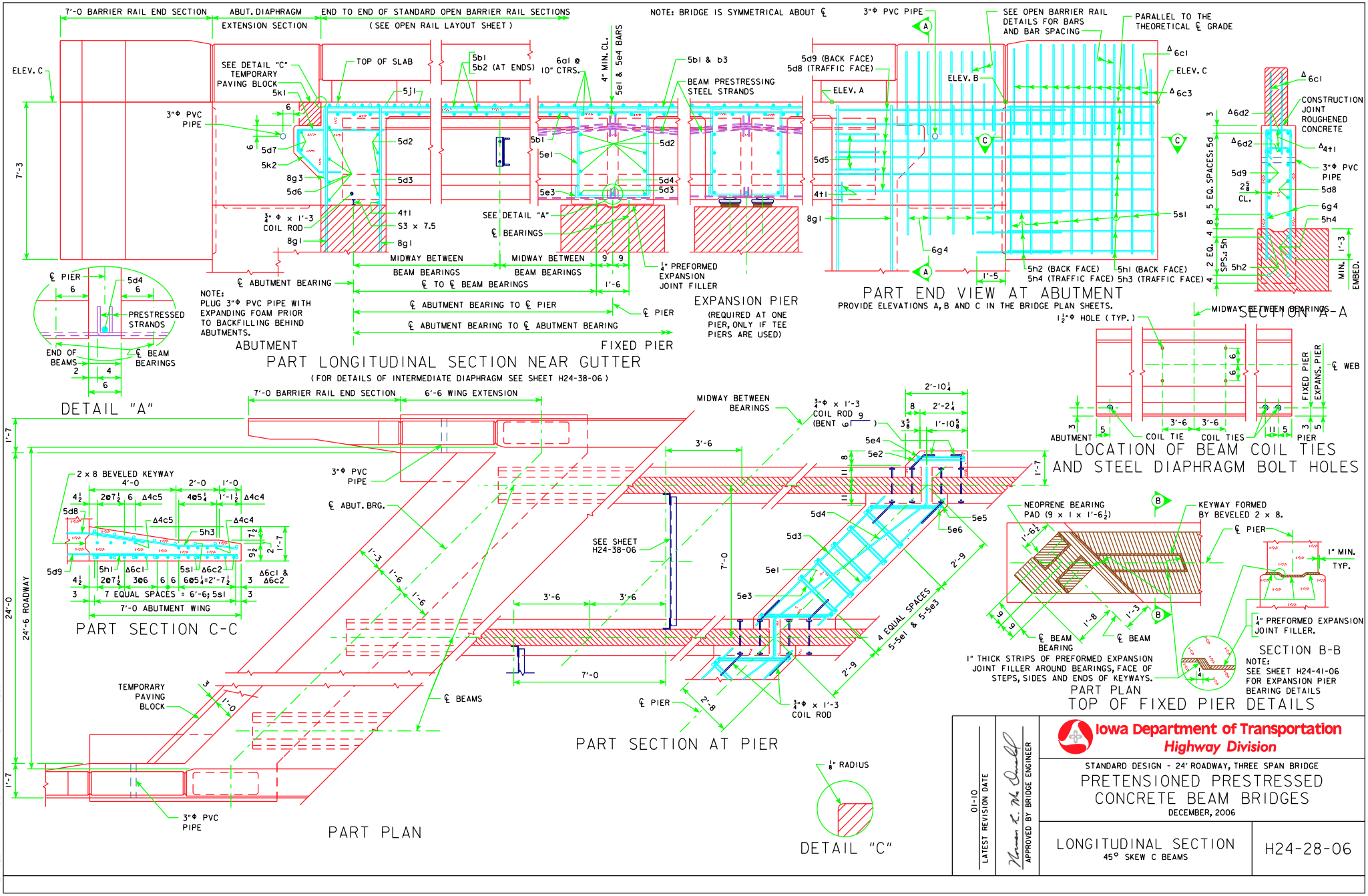
7'-0 BARRIER RAIL END SECTION
ABUT. DIAPHRAGM EXTENSION SECTION
END TO END OF STANDARD OPEN BARRIER RAIL SECTIONS
(SEE OPEN RAIL LAYOUT SHEET)
NOTE: BRIDGE IS SYMMETRICAL ABOUT ℄
3"Φ PVC PIPE
SEE OPEN BARRIER RAIL DETAILS FOR BARS AND BAR SPACING
PARALLEL TO THE THEORETICAL ℄ GRADE
ELEV. C
SEE DETAIL "C" TEMPORARY PAVING BLOCK
TOP OF SLAB
5b1 5b2 (AT ENDS)
6a1 @ 10" CTRS.
4" MIN. CL.
5e1 & 5e4 BARS
5b1 & b3
BEAM PRESTRESSING STEEL STRANDS
5d9 (BACK FACE) 5d8 (TRAFFIC FACE)
ELEV. B
ELEV. A
6c1
6c3
CONSTRUCTION JOINT ROUGHENED CONCRETE
6d2
4t1
5 EQ. SPACES = 5d
2 EQ. SPACES = 5h
SPS. = 5h
2⅝ CL.
6g4
5h4
1'-3 MIN. EMBED.
SECTION A-A
3/4" Φ x 1'-3 COIL ROD
S3 x 7.5
8g1
MIDWAY BETWEEN BEAM BEARINGS
℄ TO ℄ BEAM BEARINGS
℄ ABUTMENT BEARING
℄ ABUTMENT BEARING TO ℄ PIER
℄ ABUTMENT BEARING TO ℄ ABUTMENT BEARING
1/4" PREFORMED EXPANSION JOINT FILLER
℄ 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 H24-38-06)
EXPANSION PIER
(REQUIRED AT ONE PIER, ONLY IF TEE PIERS ARE USED)
PART END VIEW AT ABUTMENT
PROVIDE ELEVATIONS A, B AND C IN THE BRIDGE PLAN SHEETS.
5h2 (BACK FACE) 5h4 (TRAFFIC FACE)
5h1 (BACK FACE) 5h3 (TRAFFIC FACE)
DETAIL "A"
PRESTRESSED STRANDS
END OF BEAMS
℄ BEAM BEARINGS
1 1/2"Φ HOLE (TYP.)
MIDWAY BETWEEN BEARINGS
℄ WEB
FIXED PIER
EXPANS. 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
MIDWAY BETWEEN BEARINGS
3/4"Φ x 1'-3 COIL ROD (BENT ⊂)
2 x 8 BEVELED KEYWAY
℄ ABUT. BRG.
SEE SHEET H24-38-06
24'-0
24'-6 ROADWAY
7 EQUAL SPACES = 6'-6; 5s1
7'-0 ABUTMENT WING
PART SECTION C-C
TEMPORARY PAVING BLOCK
℄ BEAMS
℄ PIER
4 EQUAL SPACES 5-5e1 & 5-5e3
3/4"Φ x 1'-3 COIL ROD
PART SECTION AT PIER
PART PLAN
1/8" RADIUS
DETAIL "C"
NEOPRENE BEARING PAD (9 x 1 x 1'-6 1/2)
KEYWAY FORMED BY BEVELED 2 x 8.
℄ BEAM BEARING
℄ BEAM
1" THICK STRIPS OF PREFORMED EXPANSION JOINT FILLER AROUND BEARINGS, FACE OF STEPS, SIDES AND ENDS OF KEYWAYS.
1" MIN. TYP.
1/4" PREFORMED EXPANSION JOINT FILLER.
SECTION B-B
NOTE: SEE SHEET H24-41-06 FOR EXPANSION PIER BEARING DETAILS
PART PLAN
TOP OF FIXED PIER DETAILS
REVISED 01-10 - ABUT. WINGS SHAPE CHANGED.
01-10
LATEST REVISION DATE
APPROVED BY BRIDGE ENGINEER
Iowa Department of Transportation
Highway Division
STANDARD DESIGN - 24' ROADWAY, THREE SPAN BRIDGE
PRETENSIONED PRESTRESSED CONCRETE BEAM BRIDGES
DECEMBER, 2006
LONGITUDINAL SECTION
45° SKEW C BEAMS
H24-28-06