DWG REGION NO.	STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
7	KANSAS	87 ER-164(1)	1974	23	28

DAKB 574005

NOTES:

ALL WELDS SHALL BE 1/4" CONTINUOUS FILLET WELDS UNLESS OTHERWISE INDICATED.

ALL BEARING PLATES, SELF LUBRICATING BRONZE BEARING PLATES, BEARING SHOES, AND ANCHOR BOLTS SHALL BE INCLUDED IN BEARING DEVICE BID ITEM.

SIDEWALK EXPANSION DEVICES ARE INCLUDED IN THE STRUCTURAL STEEL BID ITEM.

BEAM INSERT PLATES AND ASSEMBLIES ARE SUBSIDIARY TO THE ITEM OF PRESTRESSED CONCRETE BEAMS.

ALL PARTS OF BEARING DEVICES, EXPANSION DEVICES AND BEAM INSERTS SHALL BE A36 STEEL, EXCEPT THAT SELF-LUBRICATING BRONZE PLATES (CAST BRONZE ALLOY) SHALL BE ASTM B22, ALLOY B.

STEEL PLATE FRAMEWORK, BOLTS, WASHERS AND THREADED INSERTS ARE SUBSIDIARY TO THE ITEM OF ELASTOMERIC EXPANSION DEVICE (22 3/4").

TAKE SPECIAL CARE THAT ALL BASE PLATES ARE EXACTLY LEVEL BOTH DIRECTIONS, WITH FULL BEARING ON GROUT, ONLY (NO SHIMS OR WEDGES), AND ALL 3/4" STUDS IN EXACT ALIGNMENT ACROSS EACH END OF EACH BEAM; SET ALL CAST BRONZE ALLOY PLATES AT EACH END OF EACH BEAM WITH THE SAME CLEARANCE IN SLOTS BEFORE SETTING BEAMS.

ELASTOMERIC BEARING PADS SHALL CONTAIN POLYCLOROPRENE AS THE RAW POLYMER. HARDNESS SHALL BE DUROMETER, SHORE A, 55 ± 5. STEEL LAMINATES SHALL BE ROLLED MILD STEEL CONFORMING TO ASTM A-36 OR A-570, GRADE C.

5/8"x 1" Countersunk Mach. Bolts with Hex nuts @ 12" ctrs. 11/16"ø hole in 8"x 3/8" ℄ 4"x4"L Weld nuts to 4"x4"L

*2" @ 60° F

Temp. erection bolts 5/8"x 1 1/2" Mach. Bolts with Hex heads & cut washers @ 2' ctrs. 11/16"x 1 3/4" slots in 8"x 3/8" ℄ 11/16"ø holes in G 4"x4"L Weld nuts to G 4"x4"L

Bar 3/8"x1" · Bar 3/8"x1" · Bars 2"x 3/8"x 1'-6" · L 4"x4"x 3/8" · ℄ 3/8"x 8" · L G 4"x4"x 3/8"

SECTION THRU SIDEWALK EXP. DEVICE

6 Spcs. @ 1'-0" = 6'-8"

PLAN OF SIDEWALK EXP. DEVICE

℄ 10 5/8"x 1/2" · 1'-11 1/4" · 3/4" Std. Hex Head Bolts · 13/16"ø holes · Steel Plates · ℄ 10 5/8"x 1/2" American Std. Plain Wshrs. & Spring Lock Washers · ℄ 2 3/4"x 3/8" · Elastomeric Exp. Device (22 3/4") · 2 @ 40°F · Threaded Inserts · 14" Latex Surf. Course

SECTION THRU ROADWAY EXPANSION DEVICE

27'-0" Roadway · 4'-3 7/8" · 5'-4 1/16" · 5'-4 1/16" · 3 Std. Sections @ 6'-0" = 18'-0" · 4'-3 7/8" · 2'-0 5/8" · A

PLAN OF ELASTOMERIC EXPANSION DEVICE

7/16" Holes for 3/8" Bolts tack weld to ℄

SECTION A-A (Median Side)

7/16" Holes for 3/8" Bolts tack weld to ℄

SECTION B-B (Walk Side)

27'-0" Roadway · 27 Spcs. @ 1'-0" = 27'-0" · 13/16"ø Holes for 3/4" Anchor Bolts · 13/16"ø Vent Holes · Typ. · 5/16"ø Holes for 3/8" Bolts · 2'-0 5/8" · 1'-3 1/4" · 1'-9 1/4" · 2'-0 5/8" · 15 1/2" · 15 1/2" · B

Bars 2"x 3/8"x 1'-6" Spc. @ 1'-0" between anchor bolts

PART PLAN OF ROADWAY EXPANSION DEVICE

14" · 12" +0.05" -0.00" · 14" · ℄ 4"x 1/2"x 0'-9" · 64 · 2" · 1 3/4" · 12 7/8" · 14 1/2"

1/2" · 9" · 1/2" · 10" R · 12" R · 3/4"

13/16" · 6 5/8" +0.05" -0.00" · 13/16" · ℄ 4"x 1/2"x 0'-9" · 5 3/4" +0.05" -0.00" · 48 · 1 3/4" · 6 5/8" · 9" · 2"

3/8"x 5" Slotted Holes · Self-Lubricating Surfaces · 2 1/2" · 7" · 2 1/2" · 12"

1/4" · 8" · 12" R

Self-Lubricating Surfaces · 6"

Cast Bronze Alloy · 8" · 2 1/2" · 3/8" · 3/8"

8" · Cast Bronze Alloy · * Shop Fit to 1/16" clearance

21 1/2" · 7 1/4" · 7" · 7 1/4" · 3/4"x 24" Studs Driving Fit · 1/2" · 1 1/4"ø holes · 1/2"

12" · 6" · 6" · 1/2" · 1/2"

9 1/8" · 2 3/16" · 3" · 3" · 2 3/16" · 1" · 1" · 1 1/2" (Typ.) · 1/4" · 1/2" · 1 1/4"ø holes · 1/2" · 17 1/2"

12" · 6" · 6" · 1/2" · 1" · 1/2"

ROADWAY (20 Req'd)

1"ø x 2'-0" Swedged Anchor Bolts (3" Threads) · 1"± Grout · 5/8" · ℄ Beam

ASSEMBLED RDWY. UNIT

SIDEWALK (8 Req'd)

1"ø x 2'-0" Swedged Anchor Bolts (3" Threads) · 1"± Grout · 3/4" · ℄ Leg

ASSEMBLED SIDEWALK UNIT

BEARING DEVICE DETAILS
PIERS 1 & 6 Only

2 3/4" · 4" · 4" · 1 3/4" · #4 Rebars x 2'-0" · 6-1/2"ø x 0'-11" Beam Stirrups

BEAM INSERT DET. AT MID-SPAN * (20 Req'd)

12" · 2 1/2" · 7" · 2 1/2" · 2" · 4" · 1"ø holes

*Subsidiary to Prestressed Concrete Beams

5" · 10 7/8"

ROADWAY BEAM INSERT DETAILS * AT PIERS No. 1 & 6 (20 Req'd)

℄ 6"x 1/2"x 1'-0" · 1" · 1" · 1"

2-Bars 1"x 1/2"x 1'-0" · 4-1/2"ø bars · 2" · 9" · 2" · #4 Rebars x 2'-0" · Beam Stirrups

SIDEWALK BEAM INSERT DETAILS * AT PIERS No. 1 & 6 (8 Req'd)

℄ 6"x 1/2"x 1'-1" · 6 3/8" · 1 1/4" · 4" · 5 1/4" · 3/4"

2 sh. 10 1/2"x 4 5/8"x 14 Ga. · 2 ℄ 10 1/2"x 4 5/8"x 9/16" · 6" Min. · 1 1/2" · .23" Typ. · 3/16" Sealing Rib · 3/16" Sealing Rib

ELASTOMERIC BEARING PAD (16 Req'd)

Rev. 10/29/74

CITY OF WICHITA, KANSAS
R.W. LINN, P.E., CITY ENGINEER

FIRST STREET BRIDGE OVER THE ARKANSAS RIVER

STEEL DETAILS

DELAMATER, FREUND & SCHERER, P.A.
CONSULTING ENGINEERS
WICHITA, KANSAS

SCALE	DATE	DWG. NO.
	June, 1974	89-G-23