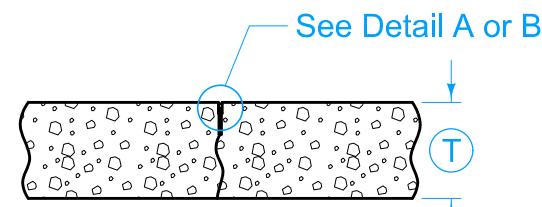
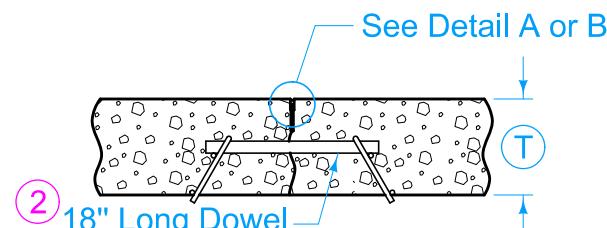


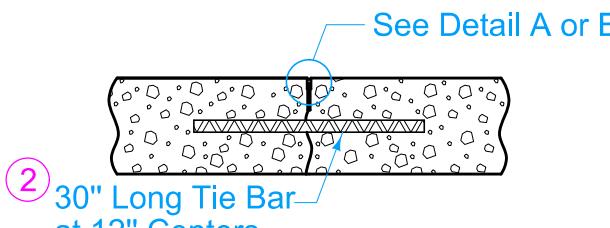
'B' (5)
PLAIN JOINT
(Abutting Pavement Slabs)



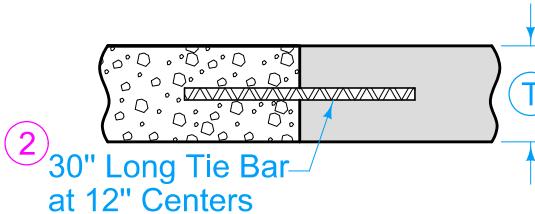
'C' (6)
CONTRACTION JOINT



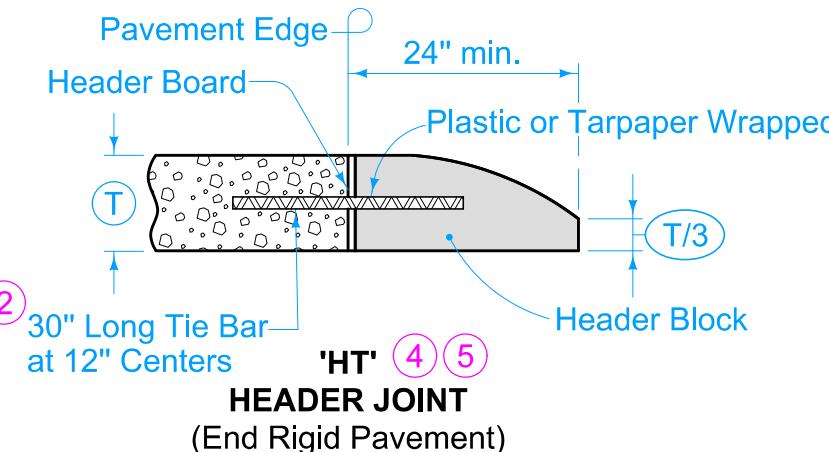
'CD' (1) (4) (6)
DOWELED CONTRACTION JOINT



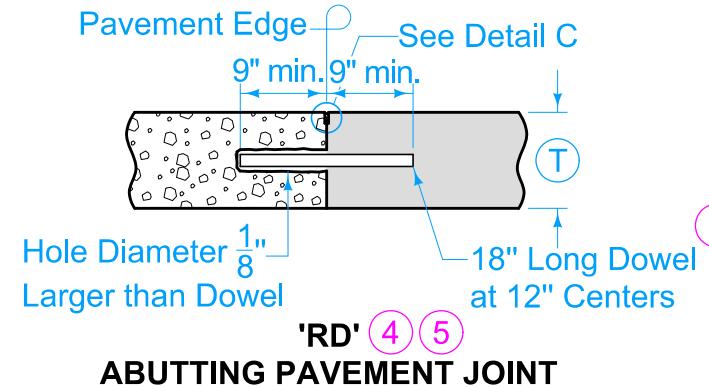
'CT' (4)
TIED CONTRACTION JOINT



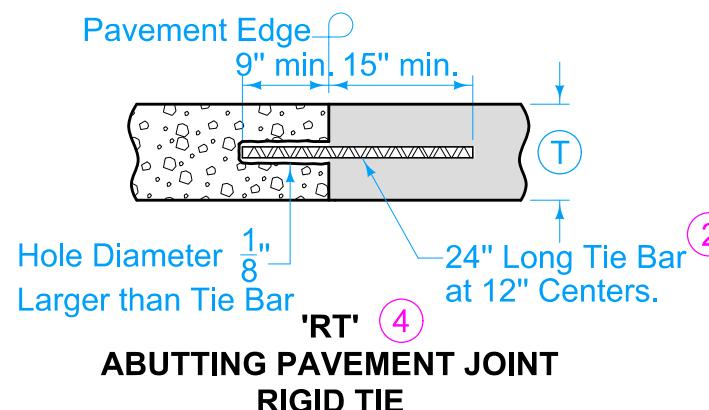
'DW' (3) (4) (7)
DAY'S WORK JOINT (Non-working)



'HT' (4) (5)
HEADER JOINT
(End Rigid Pavement)



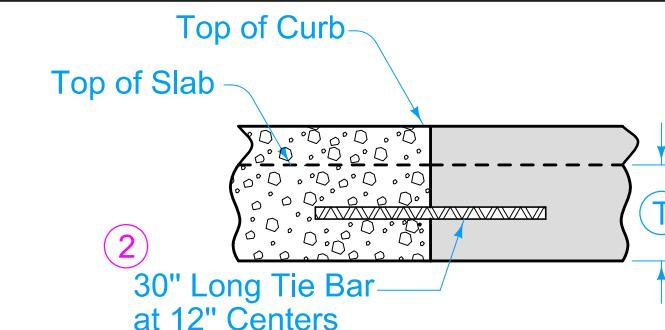
'RD' (4) (5)
ABUTTING PAVEMENT JOINT



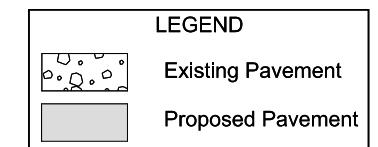
'RT' (4)
ABUTTING PAVEMENT JOINT
RIGID TIE

TRANSVERSE CONTRACTION

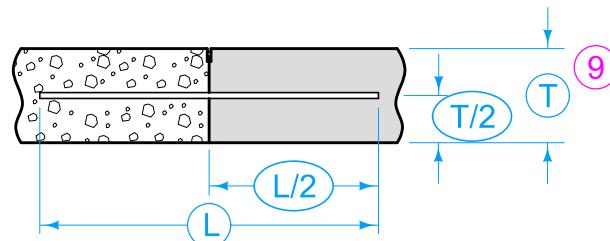
- ① See dowel assemblies for fabrication details.
- ② See Bar Size Table for Contraction Joints on Sheet 2.
- ③ Locate 'DW' joint at a mid-panel location between future 'C' or 'CD' joints. Place no closer than 5 feet to a 'C' or 'CD' joint.
- ④ Place bars within the limits shown under dowel assemblies.
- ⑤ Edge with 1/8 inch tool for length of joint. For HT joint, remove header block and board when second slab is placed.
- ⑥ Unless specified otherwise, use 'CD' transverse contraction joints in mainline pavement when T is greater or equal to 8 inches. Use 'C' joints when T is less than 8 inches.
- ⑦ 'RT' joint may be used in lieu of 'DW' joint at the end of the days work. Remove any pavement damaged due to the drilling at no additional cost to the Contracting Authority.



'DW - CG' (3) (4)
DAY'S WORK JOINT
CURB AND GUTTER UNIT

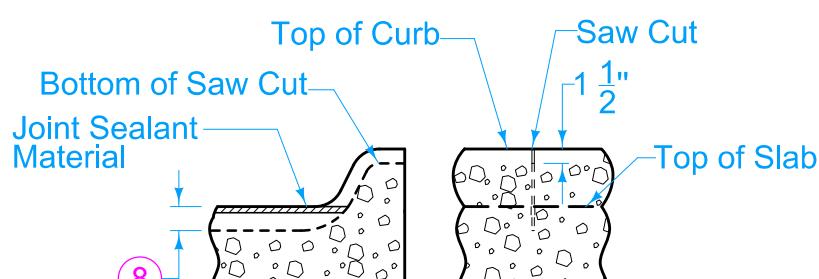


REVISION	
13 01-01-26	
SUDAS	
INTERIM	
FIGURE 7010.101	STANDARD ROAD PLAN
SHEET 1 of 8	
REVISIONS: Updated SUDAS and IDOT Logo.	
J.P. [Signature]	
SUDAS DIRECTOR	
L. [Signature]	
DESIGN METHODS ENGINEER	
JOINTS	



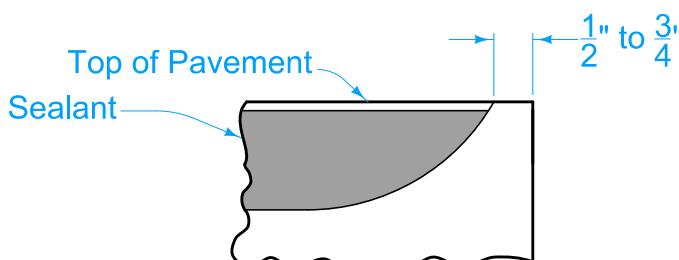
BAR PLACEMENT

(Applies to all joints unless otherwise detailed.)



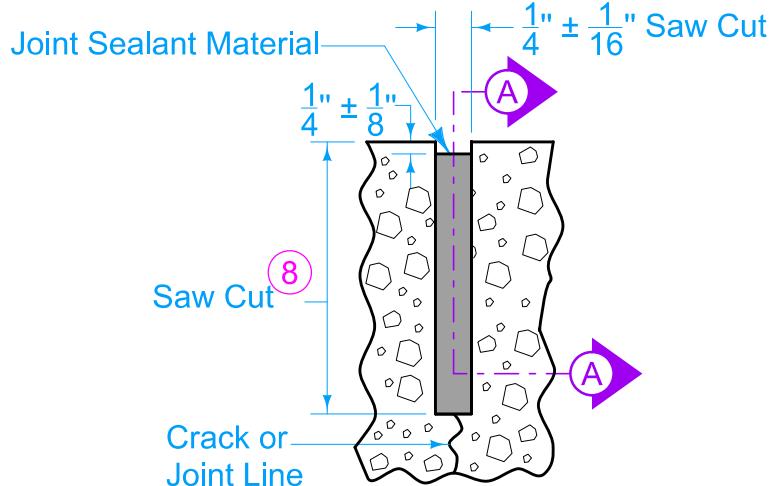
'C' JOINT IN CURB

(Match 'CT', 'CD', or 'C' joint in pavement.)

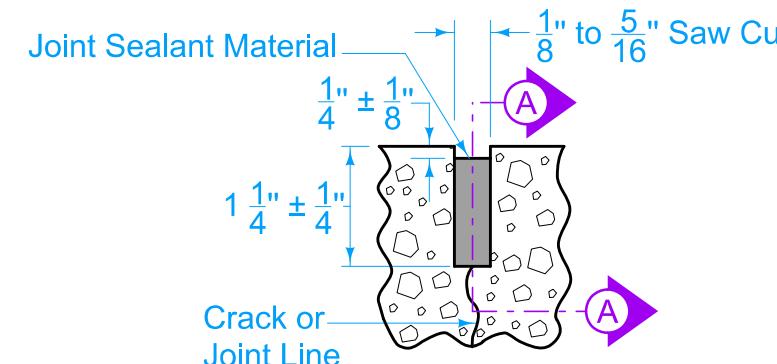


SECTION A-A

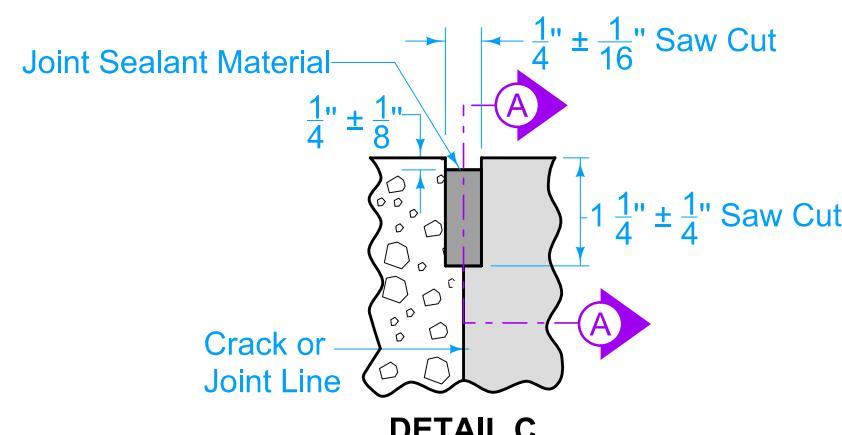
(Detail at Edge of Pavement)



(Saw cut formed by conventional concrete sawing equipment.)



(Saw cut formed by approved early concrete sawing equipment.)

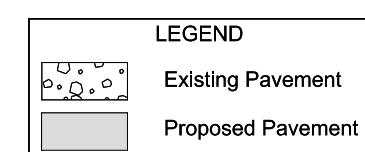


TRANSVERSE CONTRACTION

- ⑧ Saw 'CD' joint to a depth of $T/3 \pm 1/4"$; saw 'C' joint to a depth of $T/4 \pm 1/4"$.
- ⑨ When tying into old pavement, \textcircled{T} represents the depth of sound PCC.

BAR SIZE TABLE FOR CONTRACTION JOINTS				
\textcircled{T}	Solid Dowel Diameter	Tubular Dowel Diameter	Elliptical	Tie Bar Size
< 8"	$\frac{3}{4}$ "	$\frac{7}{8}$ "	N/A	#6
$\geq 8"$ but $< 10"$	$1\frac{1}{4}$ "	$1\frac{3}{8}$ "	Small	#10
$\geq 10"$	$1\frac{1}{2}$ "	$1\frac{5}{8}$ "	Medium	#11

Tubular and Elliptical Dowel Bars will not be allowed for RD joints.



REVISION
13 01-01-26

FIGURE 7010.101 STANDARD ROAD PLAN PV-101

SHEET 2 of 8

REVISIONS: Updated SUDAS and IDOT Logo.

INTERIM PV-101
SUDAS DIRECTOR DESIGN METHODS ENGINEER

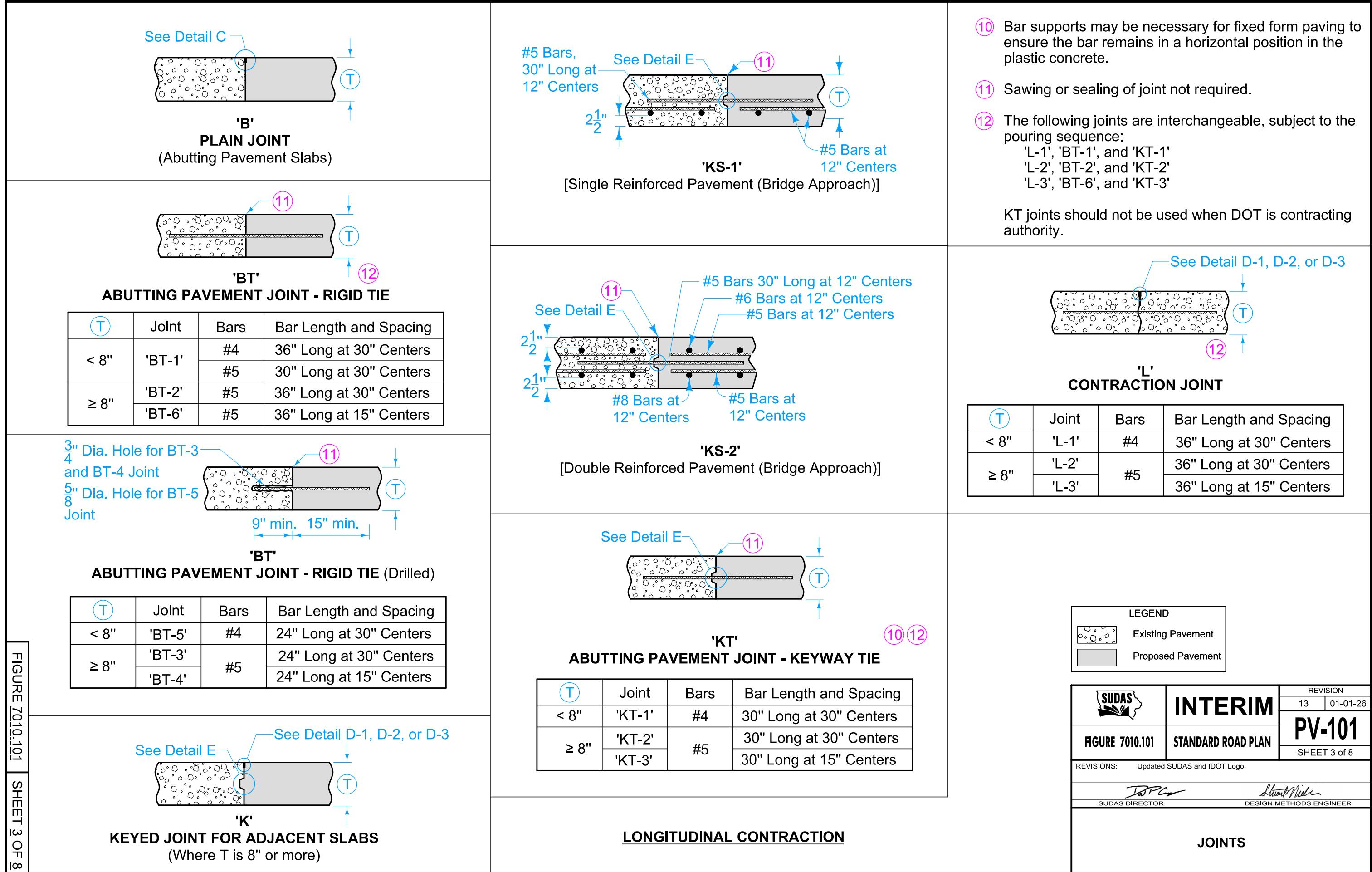
FIGURE 7010.101 STANDARD ROAD PLAN PV-101

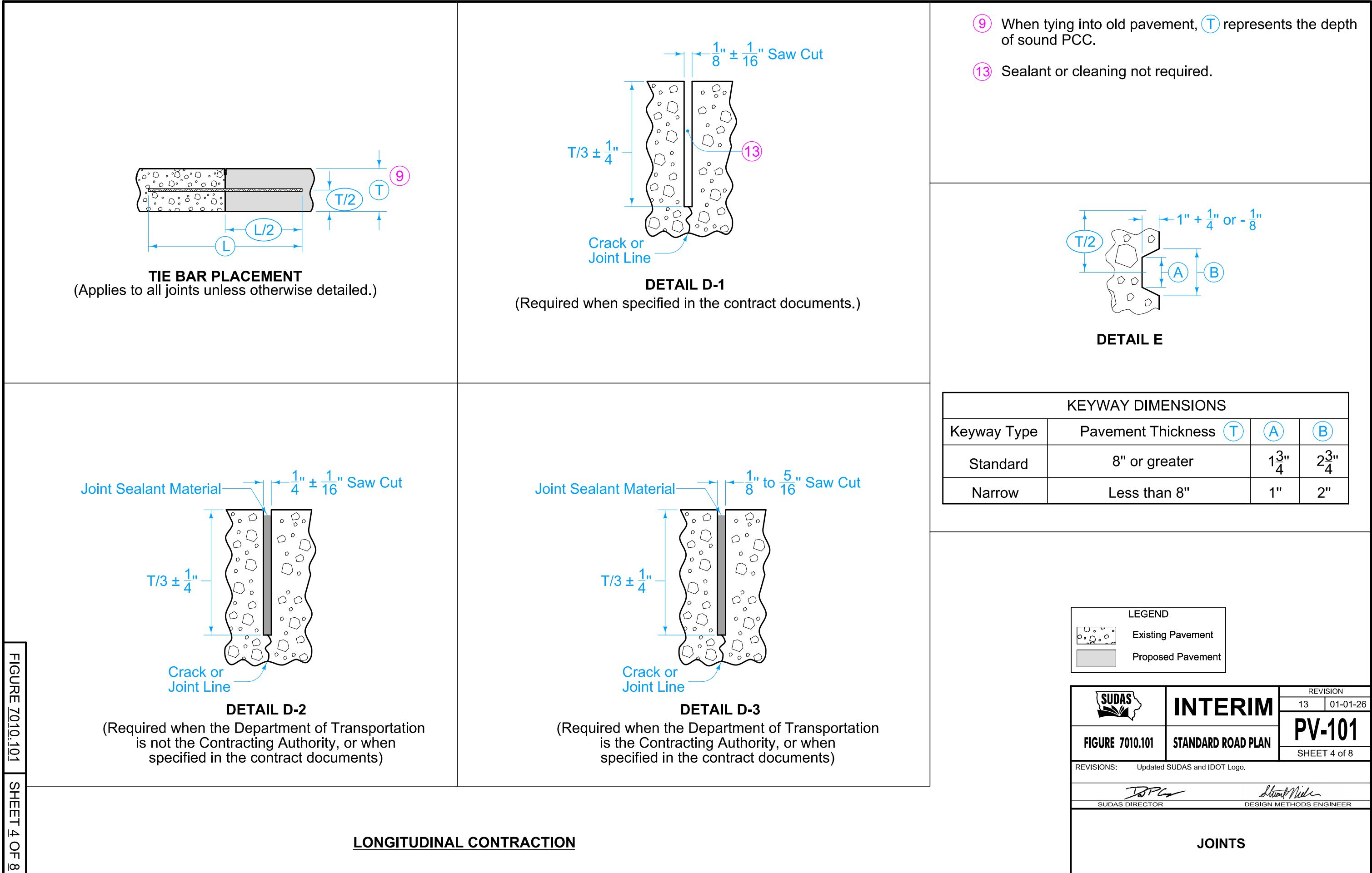
SHEET 2 of 8

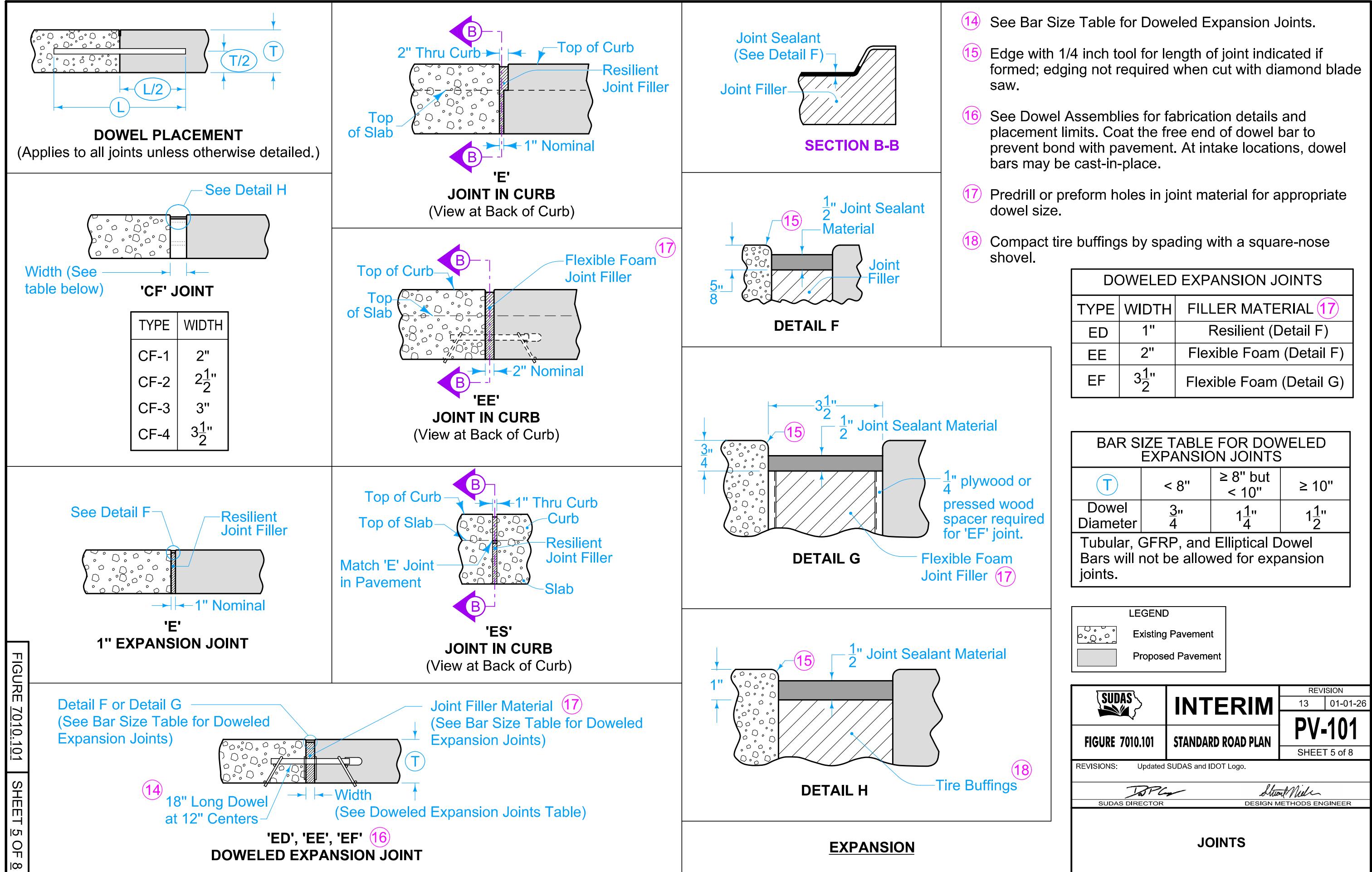
REVISIONS: Updated SUDAS and IDOT Logo.

INTERIM PV-101
SUDAS DIRECTOR DESIGN METHODS ENGINEER

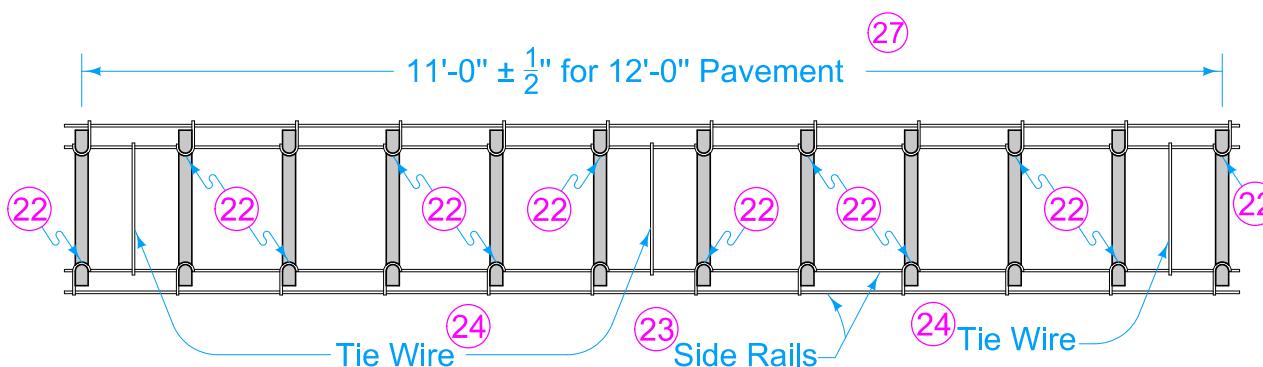
JOINTS





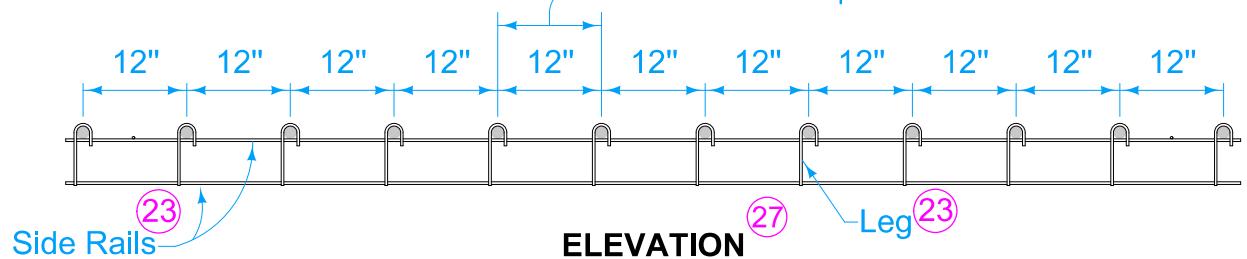


CONTRACTION JOINTS

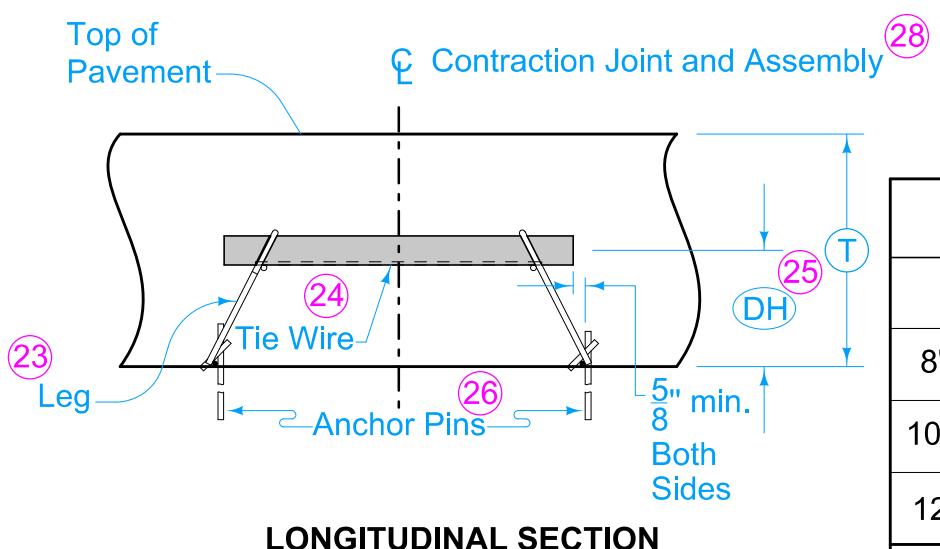


PLAN

Spaces between dowel bars are nominal dimensions with a $\frac{1}{4}$ " allowable tolerance.



ELEVATION



LONGITUDINAL SECTION

DOWEL ASSEMBLIES (19)(20)(21)

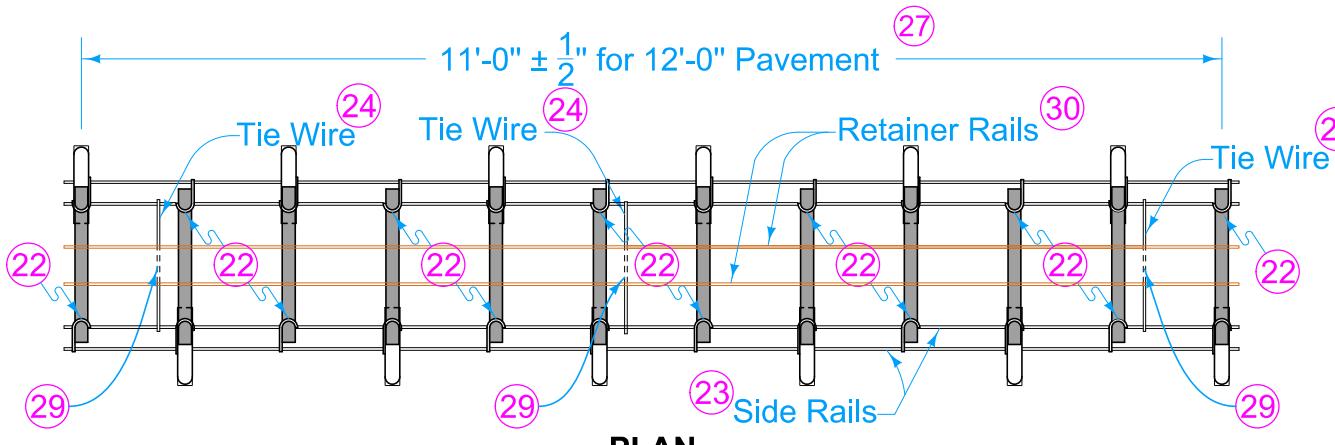
DOWEL HEIGHT AND DIAMETER FOR DOWELED CONTRACTION JOINTS

(T)	(DH) (25)	Diameter (Solid)	Diameter (Tubular)	Elliptical
8" to 9 $\frac{1}{2}$ "	4 $\frac{1}{4}$ "	1 $\frac{1}{4}$ "	1 $\frac{3}{8}$ "	Small
10" to 11 $\frac{1}{2}$ "	5 $\frac{1}{4}$ "	1 $\frac{1}{2}$ "	1 $\frac{5}{8}$ "	Medium
12" to 13"	6 $\frac{1}{4}$ "	1 $\frac{1}{2}$ "	1 $\frac{5}{8}$ "	Medium

Tubular, Elliptical Dowel Bars will not be allowed for RD joints.

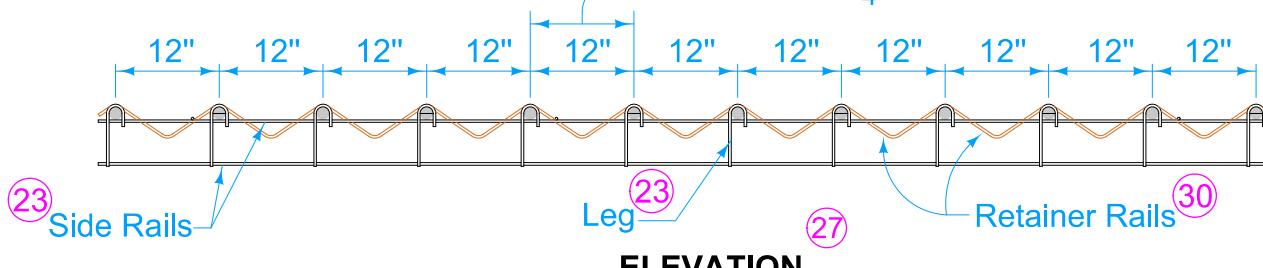
- (19) Use 18 inch long dowel bars with a tolerance of $\pm 1/8$ inch. Ensure the centerlines of individual dowels are parallel to the other dowels in the assembly within $\pm 1/8$ inch.
- (20) Use wires with a minimum tensile strength of 50 ksi.
- (21) Details apply to both transverse contraction and expansion joints.
- (22) Weld alternately throughout.
- (23) 0.306 inch diameter wire. Wire sizes shown are the minimum required.
- (24) Maximum 0.177 inch diameter wire, welded or friction fit to upper side rail, both sides.
- (25) Measured from the centerline of dowel bar to bottom of lower side rail + 1/4 inch.
- (26) Per lane width, install a minimum of 8 anchor pins evenly spaced (4 per side), to prevent movement of assembly during construction. Anchor assemblies placed on pavement or PCC base with devices approved by the Engineer.
- (27) If dowel basket assemblies are required for curbed pavements, the assembly length is based on the jointing layout. See PV-101, sheet 8.
- (28) Ensure dowel basket assembly centerline is within 2 inches of the intended joint location longitudinally and has no more than 1/4 inch horizontal skew from end of basket to end of basket.

EXPANSION JOINTS

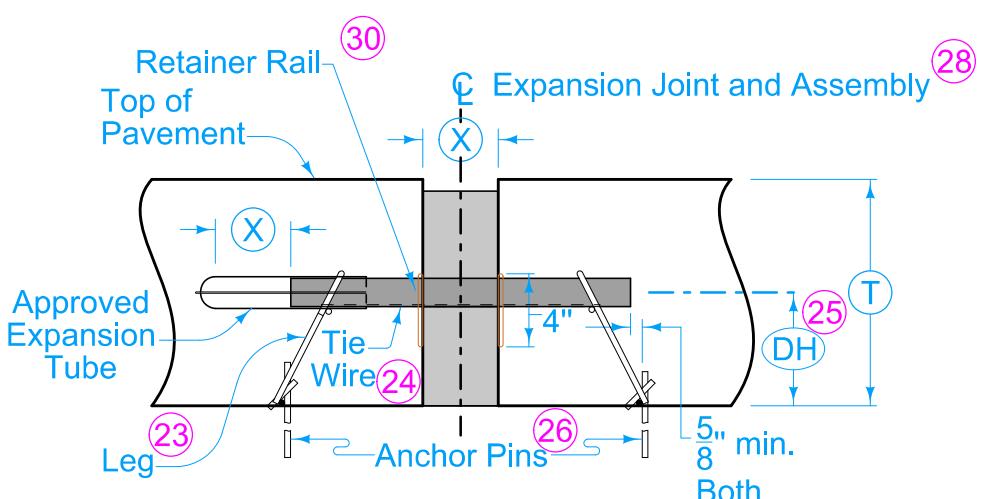


PLAN

Spaces between dowel bars are nominal dimensions with a $\frac{1}{4}$ " allowable tolerance.



ELEVATION



SECTION THRU EXPANSION JOINT

JOINT OPENING AND EXPANSION TUBE EXTENSION		
Joint Type		Minimum Tube Length
"ED"	1"	6"
"EE"	2"	7"
"EF"	$3\frac{1}{2}$ "	9"

DOWEL ASSEMBLIES

19 20 21

DOWEL HEIGHT AND DIAMETER FOR DOWELED EXPANSION JOINTS

T	DH ²⁵	Diameter
8" to $9\frac{1}{2}$ "	$4\frac{1}{4}$ "	$1\frac{1}{4}$ "
10" to $11\frac{1}{2}$ "	$5\frac{1}{4}$ "	$1\frac{1}{2}$ "
12" to 13"	$6\frac{1}{4}$ "	$1\frac{1}{2}$ "

Tubular, GFRP, and Elliptical Dowel Bars will not be allowed for expansion joints.

(19) Use 18 inch long dowel bars with a tolerance of $\pm 1/8$ inch. Ensure the centerlines of individual dowels are parallel to the other dowels in the assembly within $\pm 1/8$ inch.

(20) Use wires with a minimum tensile strength of 50 ksi.

(21) Details apply to both transverse contraction and expansion joints.

(22) Weld alternately throughout.

(23) 0.306 inch diameter wire. Wire sizes shown are the minimum required.

(24) Maximum 0.177 inch diameter wire, welded or friction fit to upper side rail, both sides.

(25) Measured from the centerline of dowel bar to bottom of lower side rail + 1/4 inch.

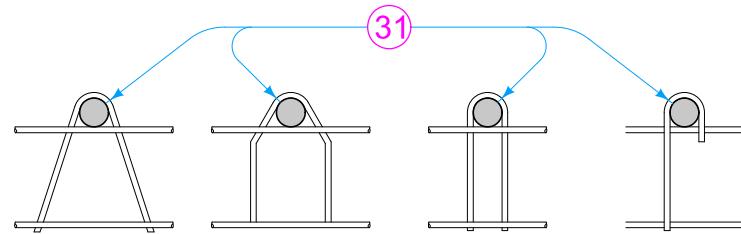
(26) Per lane width, install a minimum of 8 anchor pins evenly spaced (4 per side), to prevent movement of assembly during construction. Anchor assemblies placed on pavement or PCC base with devices approved by the Engineer.

(27) If dowel basket assemblies are required for curbed pavements, the assembly length is based on the jointing layout. See PV-101, sheet 8.

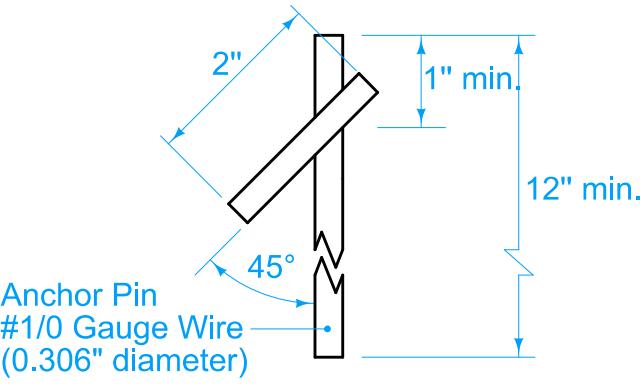
(28) Ensure dowel basket assembly centerline is within 2 inches of the intended joint location longitudinally and has no more than 1/4 inch horizontal skew from end of basket to end of basket.

(29) Clip and remove center portion of tie during field assembly.

(30) 1/4 inch diameter wire.

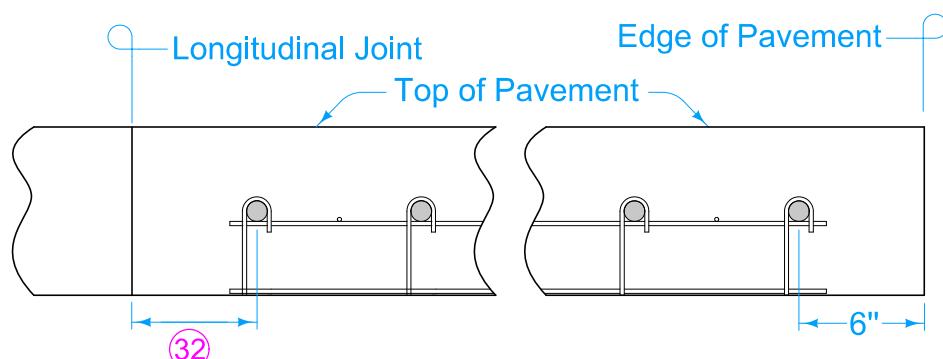


OPTIONAL LEG SHAPES

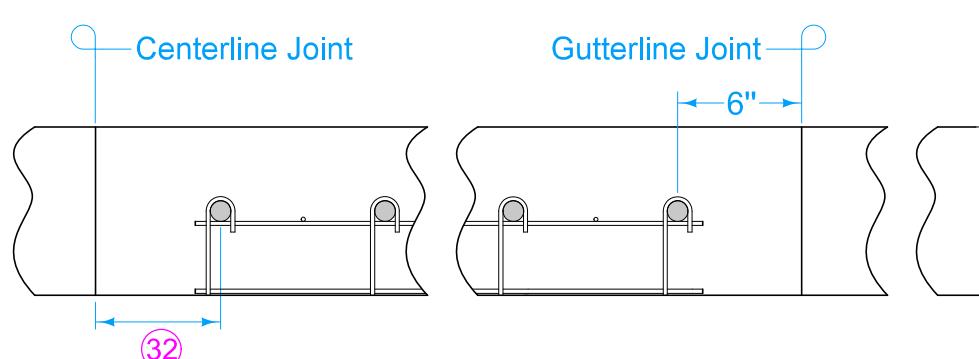


ANCHOR PIN

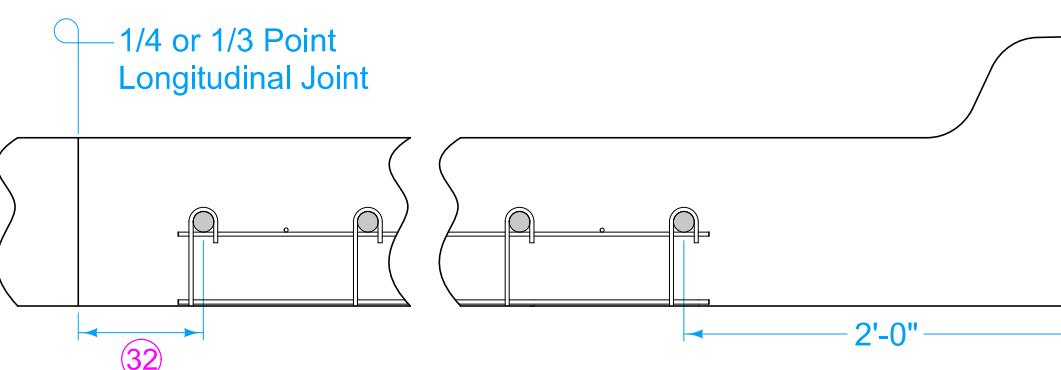
- 19 Use 18 inch long dowel bars with a tolerance of $\pm 1/8$ inch. Ensure the centerlines of individual dowels are parallel to the other dowels in the assembly within $\pm 1/8$ inch.
- 20 Use wires with a minimum tensile strength of 50 ksi.
- 21 Details apply to both transverse contraction and expansion joints.
- 31 Diameter of bend around dowel is dowel diameter + 1/8 to 3/16 inches.
- 32 For uniform lane widths: 3 to 6 inches. For taper and variable width pavements: 3 to 12 inches.



PLACEMENT LIMITS (Rural Section)

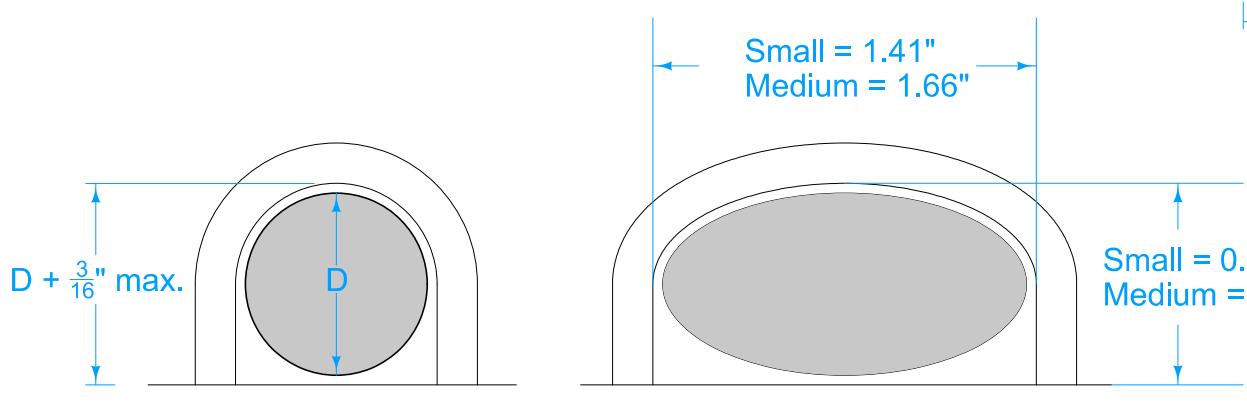


PLACEMENT LIMITS

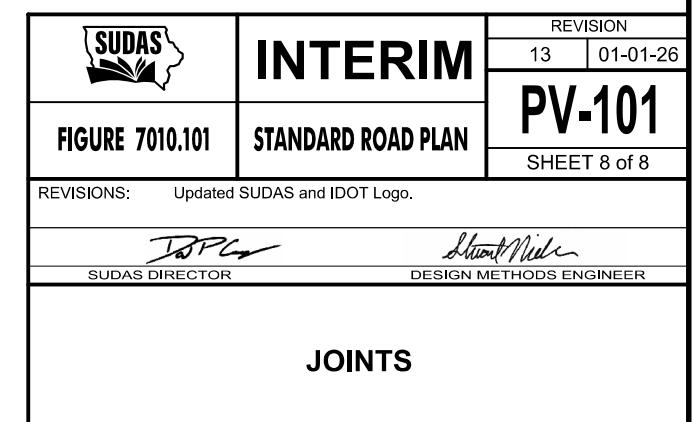


PLACEMENT LIMITS

(Curb and Gutter - 1/4 or 1/3 Point Jointing)



RFND AROUND DOWEL (31)



JOINTS