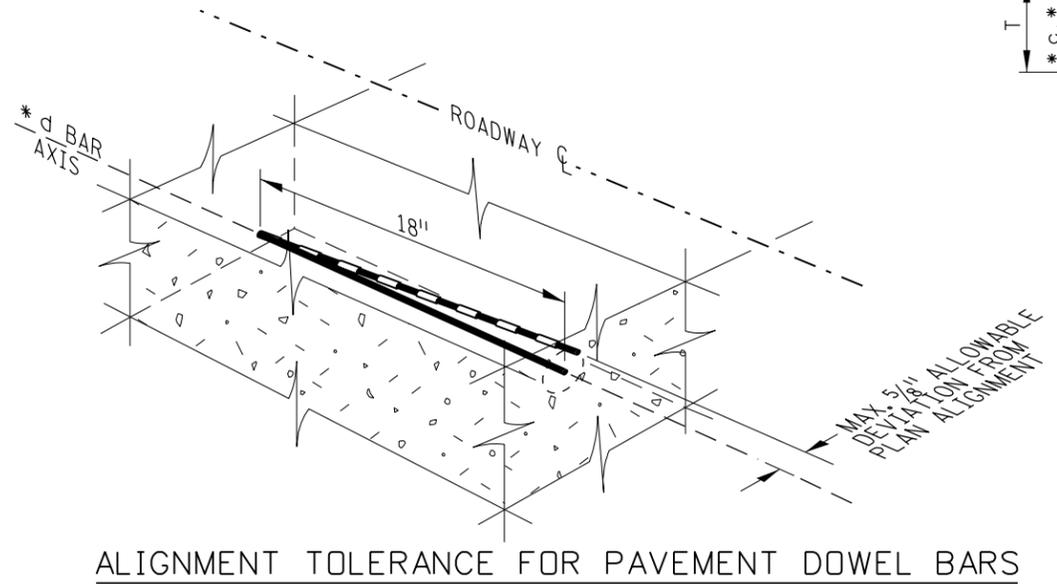
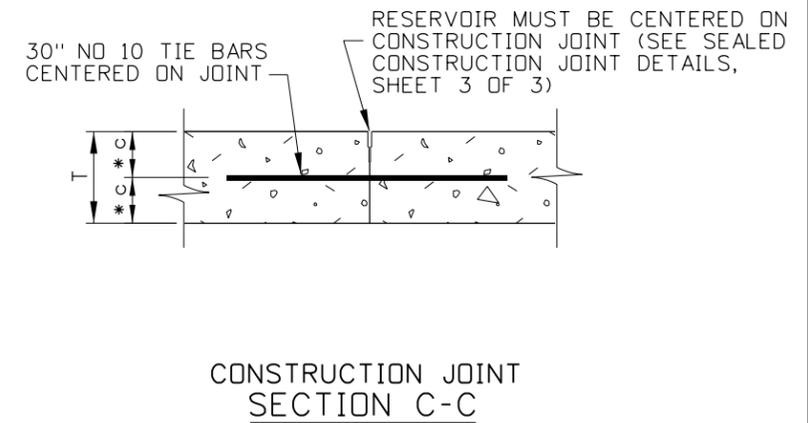
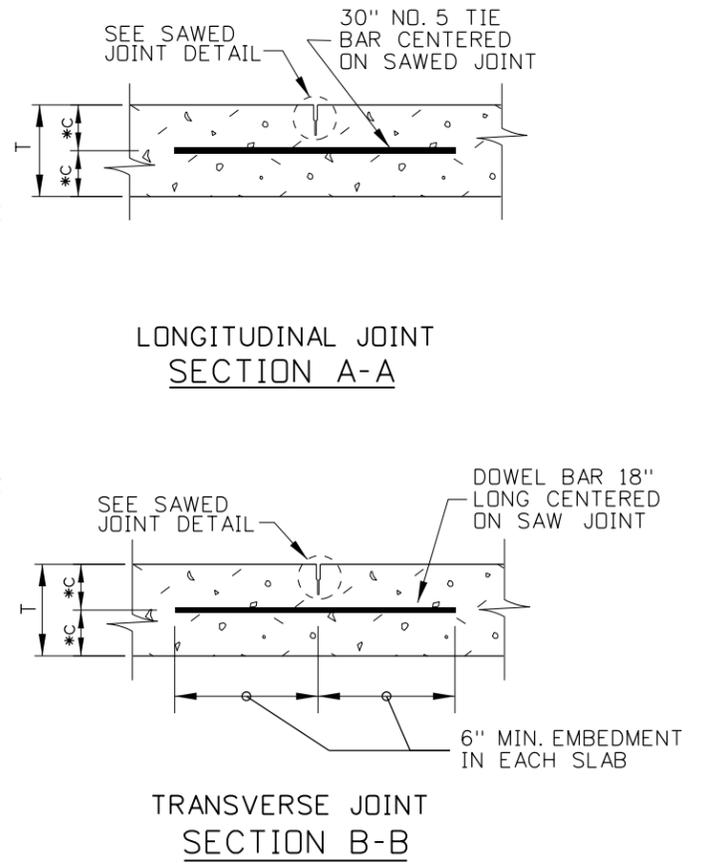
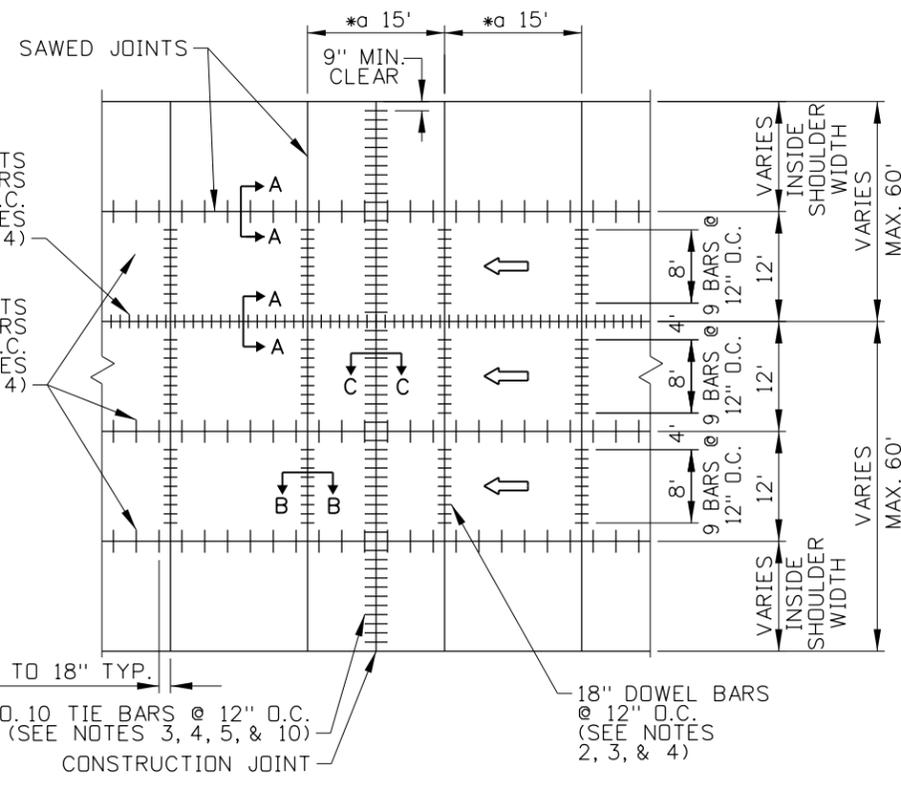
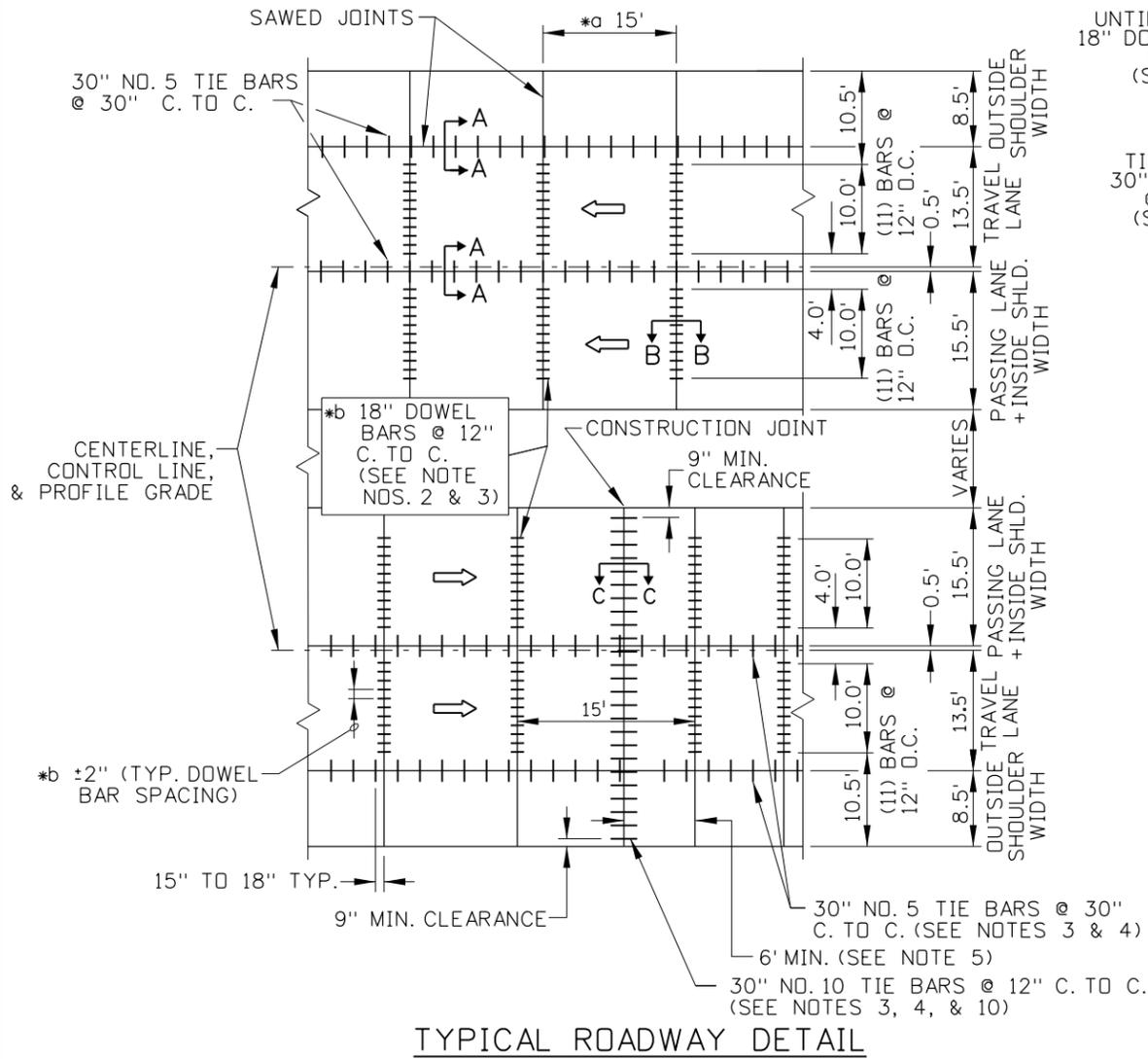


THE MAXIMUM TIED TRANSVERSE WIDTH SHALL BE 60 FEET.  
 LONGITUDINAL JOINTS THAT ARE UN-TIED IN ACCORDANCE WITH  
 THE FOREGOING SHALL BE APPROVED BY THE ENGINEER. IN NO  
 CASE SHALL AN UN-TIED JOINT BE A CONSTRUCTION JOINT.  
 THE MAXIMUM TRANSVERSE SLAB LENGTH IS 15 FT.



TYPICAL ROADWAY DETAIL

MULTIPLE LANE ROADWAY DETAIL

LONGITUDINAL JOINT SECTION A-A

TRANSVERSE JOINT SECTION B-B

CONSTRUCTION JOINT SECTION C-C

ALIGNMENT TOLERANCE FOR PAVEMENT DOWEL BARS

**SUB-NOTES**

- \*a ALL JOINTS ARE PERPENDICULAR TO  $\epsilon$
- \*b ALL DOWEL BAR SPACING TOLERANCE IS TO 2" (ALSO SEE "ALIGNMENT TOLERANCE FOR PAVEMENT DOWEL BARS" DETAIL).
- \*c T/2±1"
- \*d THE PLAN ALIGNMENT IS FOR THE BAR AXIS TO BE PARALLEL TO CENTERLINE AND PARALLEL TO PAVEMENT SURFACE.

**BAR DIAMETER TABLE  
 DOWEL BAR  
 IN TRANSVERSE JOINTS  
 (UNLESS OTHERWISE NOTED  
 ON PROJECT)**

T = PAVEMENT THICKNESS	BAR DIAMETER
T < 11"	1 1/4"
11" ≤ T ≤ 13"	1 1/2"
T > 13"	1 3/4"

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4	08-86	GB	9	01-97	AS	14	04-13	RDL
5	11-89	GB	10	11-01	MSM			

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**IDAHO TRANSPORTATION DEPARTMENT**



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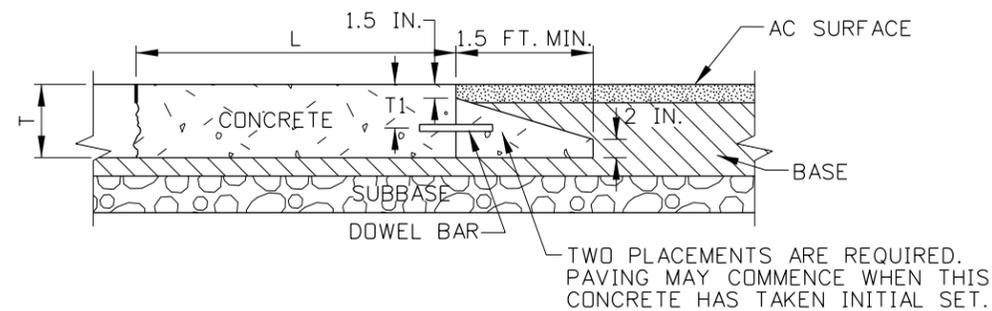
ORIGINAL SIGNED BY: LOREN THOMAS  
 HIGHWAYS PROGRAM OVERSIGHT ENGINEER

ORIGINAL SIGNED BY: TOM COLE  
 CHIEF ENGINEER

STANDARD DRAWING  
**PORTLAND CEMENT CONCRETE PAVEMENT**  
 REQUIRES SHEETS 2 OF 3 & 3 OF 3

**English**  
 STANDARD DRAWING NO.  
**409-1**  
 SHEET 1 OF 3

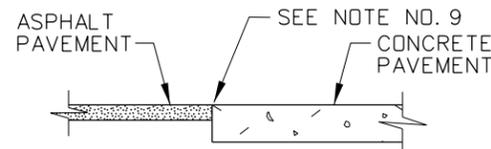
ORIGINAL SIGNED BY:  
 MICHAEL J. SANTI  
 DATE ORIGINAL SIGNED:  
 MAY 9, 2013



- NOTES:
1. T = THICKNESS OF CONCRETE PAVEMENT (I.E. DEPTH)
  2. L = PANEL LENGTH (I.E. JOINT SPACING)
  3.  $T_1 = (T + 1.5") / 2$
  4. FOR RECOMMENDED DOWEL SIZES, SEE JOINT TYPES SHEET.

**ELEVATION - IMPACT SLAB, HIGHWAYS/STREETS/ROADS**

FOR TRANSVERSE JOINTS ABUTTING ASPHALT PAVEMENT IN RECONSTRUCTION OR NEW CONSTRUCTION PROJECTS WHERE  $T > 7$  IN.

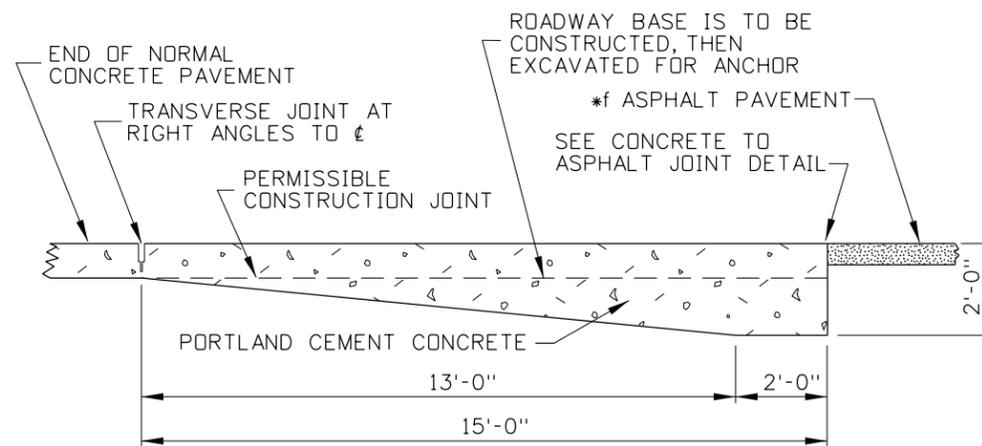


**ASPHALT & CONCRETE PAVEMENT JOINT DETAIL**

NOT FOR USE UNLESS SPECIFICALLY CALLED OUT IN PLANS.

**NOTES**

1. THE PAVEMENT EDGE IS TO BE PLACED APPROXIMATELY VERTICAL.
2. THE DOWEL BAR DIAMETERS SHALL BE DETERMINED BY THE BAR DIAMETER TABLE.
3. THE TIE BARS SHALL BE EPOXY COATED AND MEET THE REQUIREMENTS OF AASHTO M 284. THE DOWEL BARS SHALL BE COATED TO MEET THE REQUIREMENTS OF AASHTO M 254.
4. THE MAXIMUM TIED TRANSVERSE WIDTH SHALL BE 60 FEET. LONGITUDINAL JOINTS THAT ARE UN-TIED IN ACCORDANCE WITH THE FOREGOING SHALL BE APPROVED BY THE ENGINEER. IN NO CASE SHALL AN UN-TIED JOINT BE A CONSTRUCTION JOINT.
5. A CONSTRUCTION JOINT SHALL BE AT LEAST 6 FEET FROM A SAWED JOINT.
6. TRANSVERSE AND LONGITUDINAL JOINTS SHALL BE SAWED JOINTS.
7. SEALANTS AND PREFORMED SEALS SHALL BE APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S REQUIREMENTS.
8. THE ANCHOR IS TO BE USED AT RAILROAD GRADE CROSSINGS ADJACENT TO FLEXIBLE PAVEMENTS AND SIMILAR INTERRUPTIONS TO THE CONCRETE PAVEMENT.
9. MAKE A VERTICAL SAW CUT IN THE ASPHALT TO SERVE AS A FORM FOR THE END OF THE CONCRETE PAVEMENT.
10. PREFERRED PRACTICE IS TO PLACE THE CONSTRUCTION JOINT AT THE LOCATION OF A PLANNED CONTRACTION JOINT AND USE DOWEL BARS PER STD. TRANSVERSE JOINT DETAILS.
11. NOT TO SCALE
12. ALL LONGITUDINAL CONCRETE TO ASPHALT JOINTS SHALL BE SAWED AND SEALED.



**ELEVATION - ANCHOR FOR END OF CONCRETE**  
OPTIONAL

**SUB-NOTES**

\*f THIS ANCHOR IS NOT TO BE USED IN CONJUNCTION WITH CONCRETE PAVEMENT.

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ORIGINAL SIGNED BY: MICHAEL J. SANTI DATE ORIGINAL SIGNED: MAY 9, 2013

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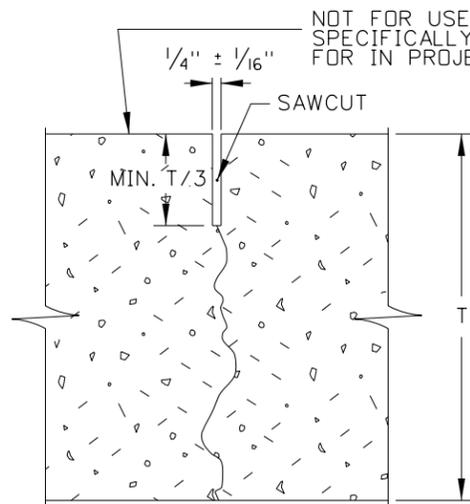


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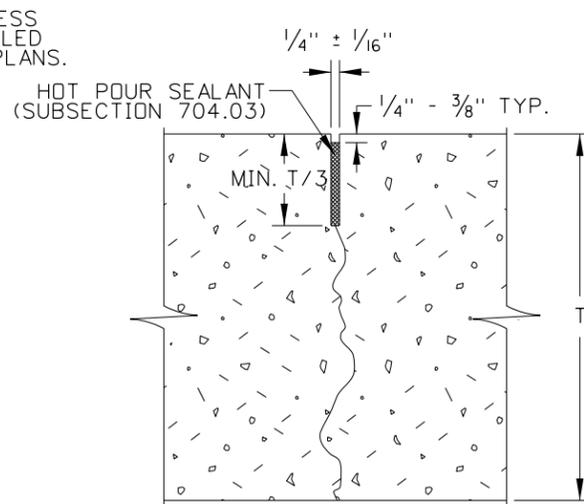
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HIGHWAYS PROGRAM OVERSIGHT ENGINEER  
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CHIEF ENGINEER

STANDARD DRAWING  
**PORTLAND CEMENT CONCRETE PAVEMENT**  
REQUIRES SHEETS 1 OF 3 & 3 OF 3

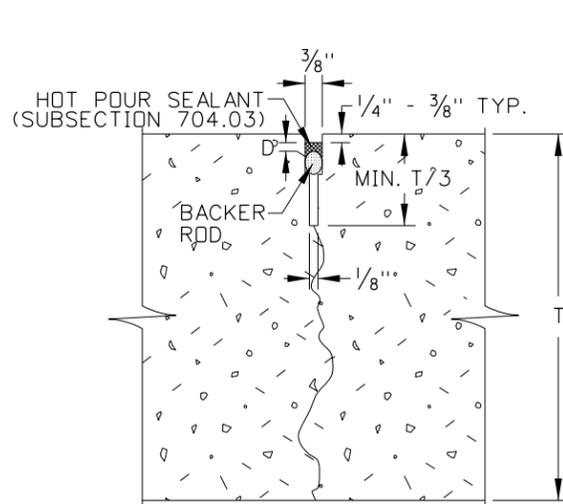
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SHEET 2 OF 3



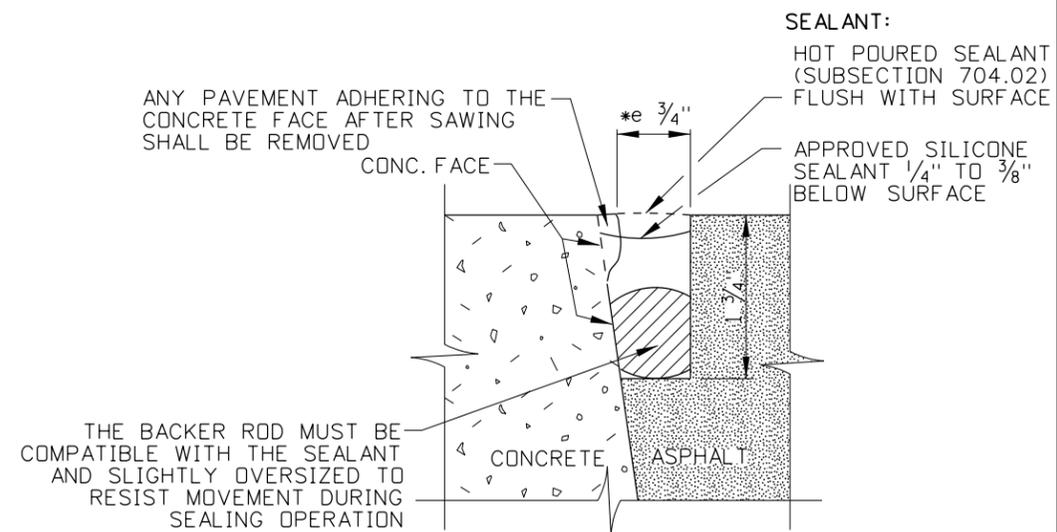
**SINGLE CUT  
(NO SEALANT)**



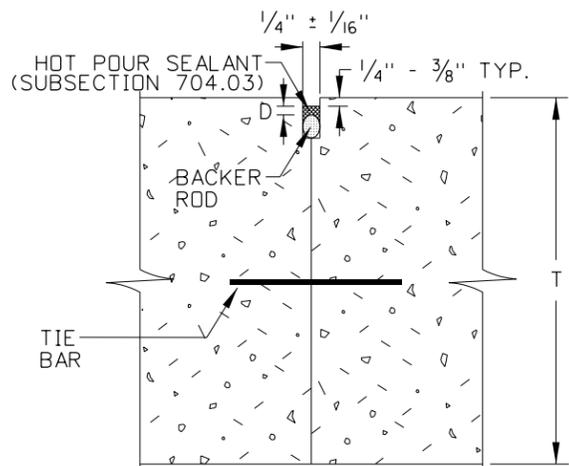
**SINGLE CUT  
(FIELD-INSTALLED SEALANT)**



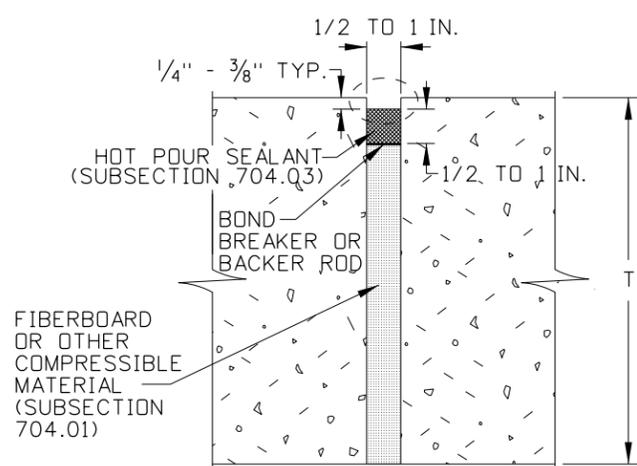
**WIDENED CUT  
(FIELD-INSTALLED SEALANT)**



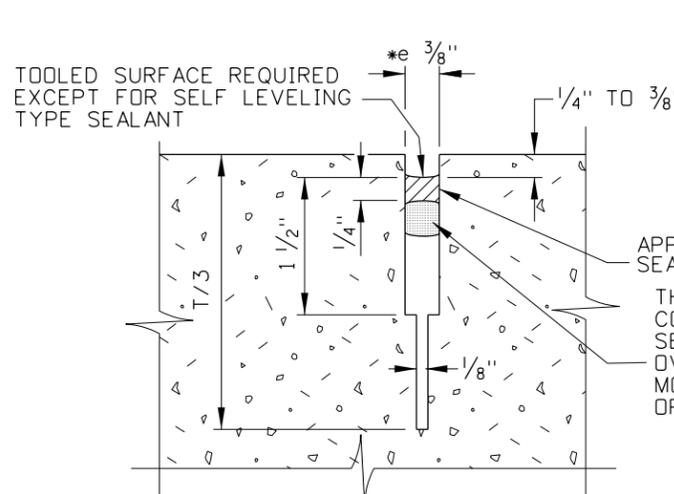
**CONCRETE TO ASPHALT**



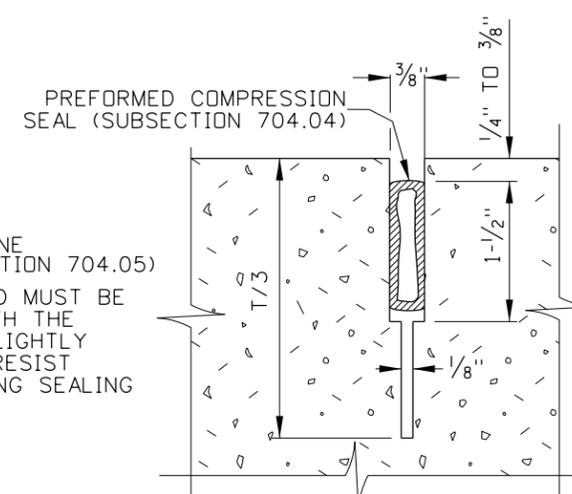
**SEALED CONSTRUCTION JOINT  
(FIELD-INSTALLED SEALANT)**



**ISOLATION JOINT  
(FIELD-INSTALLED SEALANT)**



**SILICONE SEALANT**

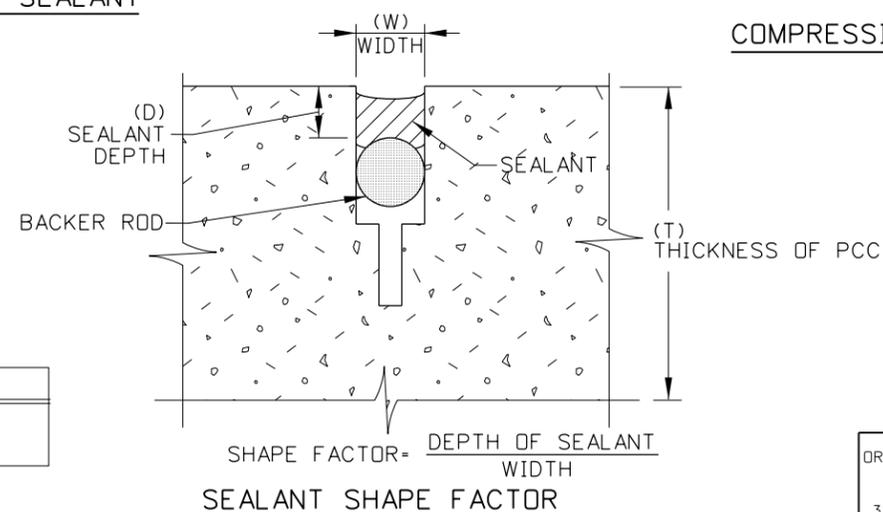


**COMPRESSION SEAL**

**NOTES:**

1. FOR HOT-POURED SEALANT, SHAPE FACTOR D/W = 1 (TYPICAL, ONLY IF BACKER ROD USED)
2. FOR SILICONE SEALANT, D/W = 0.5 (TYPICAL)
3. FOR TWO-COMPONENT COLD-POURED SEALANT, D/W = 0.5 (TYPICAL)
4. FOR PREFORMED COMPRESSION SEAL, W IS SIZED FOR SLAB & CLIMATE
5. SUBSECTION REFERENCES ARE ITD STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.
6. SEALANTS AND PREFORMED SEALS SHALL BE APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S REQUIREMENTS.
7. SAW CUT TO CONTROL SLAB CRACKING SHALL BE T/3 DEEP. "T" EQUALS DESIGN THICKNESS OF CONC. PAVEMENT.

**CROSS-SECTIONS:**



**SUB-NOTES**

\*e DIMENSIONING REFERS TO SEALANT RESERVOIR ONLY.

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