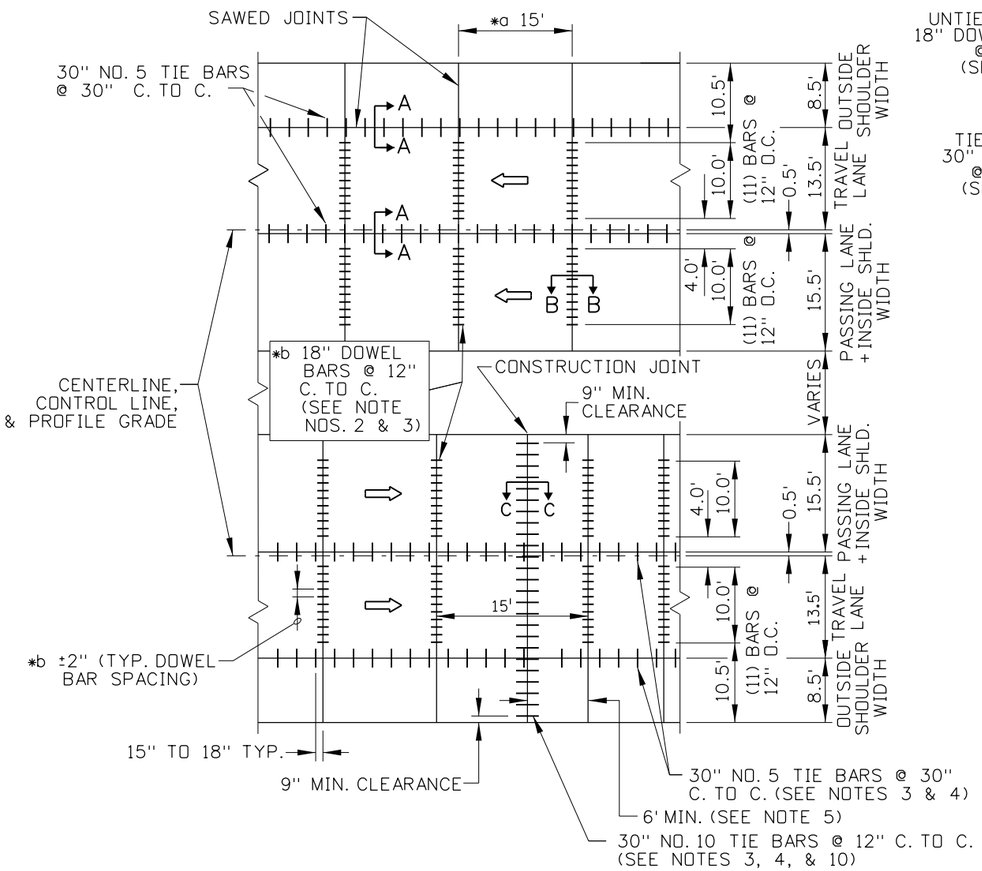
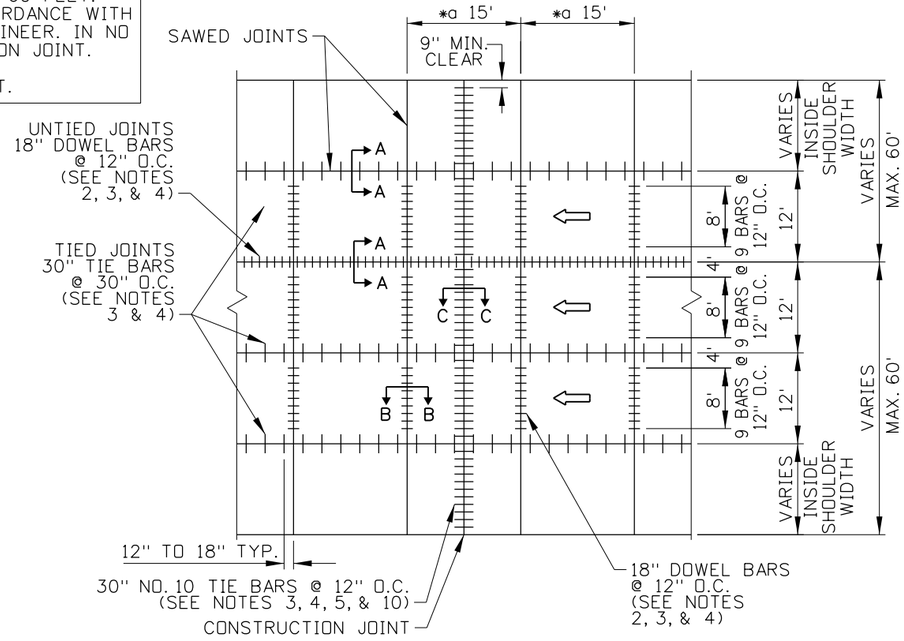
THE MAXIMUM TIED TRANSVERSE WIDTH SHALL BE 60 FEET. LONGITUDINAL JOINTS THAT ARE UN-TIED IN ACCORDANCE WITH THE FOREGOING SHALL BE APPROVED BY THE ENGINEER. IN NO CASE SHALL AN UN-TIED JOINT BE A CONSTRUCTION JOINT.

THE MAXIMUM TRANSVERSE SLAB LENGTH IS 15 FT.

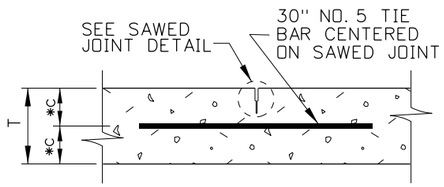


TYPICAL ROADWAY DETAIL

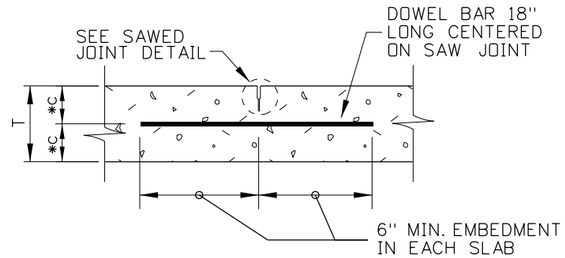


*a ALL JOINTS ARE PERPENDICULAR TO ℄

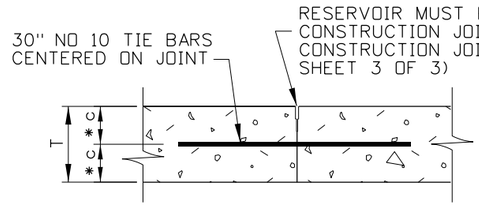
MULTIPLE LANE ROADWAY DETAIL



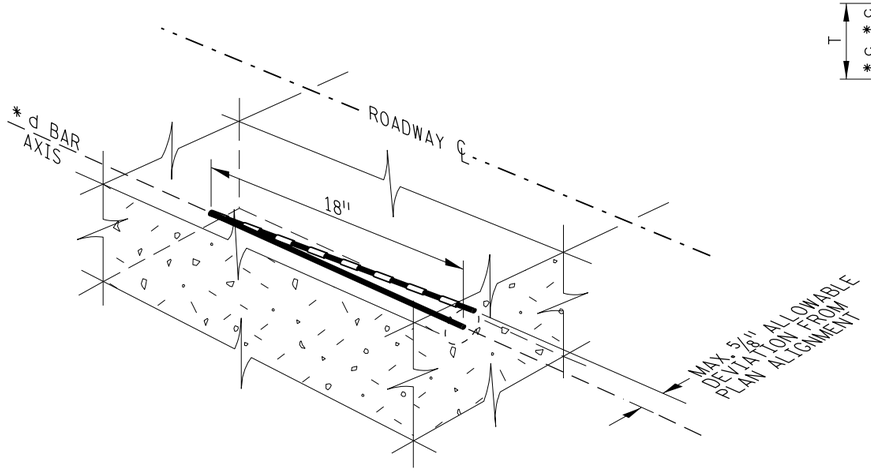
LONGITUDINAL JOINT
SECTION A-A



TRANSVERSE JOINT
SECTION B-B



CONSTRUCTION JOINT
SECTION C-C



ALIGNMENT TOLERANCE FOR PAVEMENT DOWEL BARS

SUB-NOTES
*a ALL JOINTS ARE PERPENDICULAR TO ℄
*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"

REVISIONS								
NO.	DATE	BY	NO.	DATE	BY	NO.	DATE	BY
1	04-84	GB	6	01-91	GB	11	09-08	JRV
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5	11-89	GB	10	11-01	MSM			

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY

CADD FILE NAME: 409-1_0513.dgn

DRAWING DATE: APRIL, 1984

IDAHO TRANSPORTATION DEPARTMENT

BOISE IDAHO

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

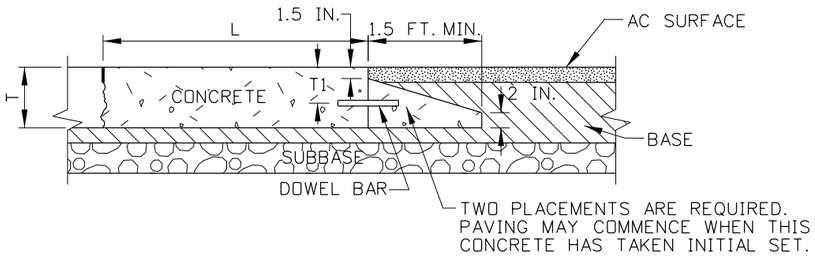
ORIGINAL STORED AT: ITD, Headquarters 3311 West State Boise, Idaho

English

STANDARD DRAWING NO. 409-1

SHEET 1 OF 3

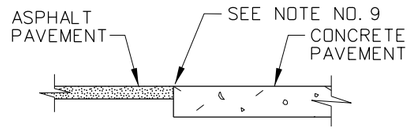
PROFESSIONAL ENGINEER REGISTERED STATE OF IDAHO 6390 ORIGINAL SIGNED BY MICHAEL J. SANTI MAY 9, 2013 MICHAEL J. SANTI



NOTES:
1. T = THICKNESS OF CONCRETE PAVEMENT (I.E. DEPTH)
2. L = PANEL LENGTH(I.E. JOINT SPACING)
3. T1 = (T + 1.5") / 2
4. FOR RECOMMENDED DOWEL SIZES, SEE JOINT TYPES SHEET.

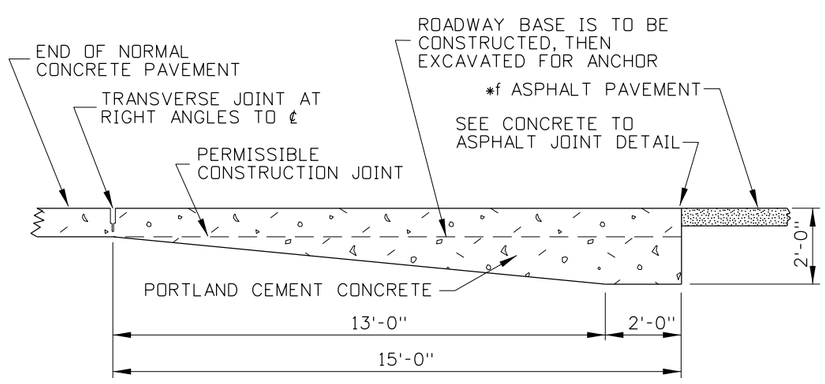
ELEVATION - IMPACT SLAB, HIGHWAYS/STREETS/ROADS

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.



ELEVATION - ANCHOR FOR END OF CONCRETE

OPTIONAL

SUB-NOTES
*f THIS ANCHOR IS NOT TO BE USED IN CONJUNCTION WITH CONCRETE PAVEMENT.

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.

ORIGINAL STORED AT: ITD, Headquarters 3311 West State Boise, Idaho

PROFESSIONAL ENGINEER REGISTERED ORIGINAL SIGNED BY MICHAEL J. SANTI STATE OF IDAHO 6390 MAY 9, 2013 MICHAEL J. SANTI

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CHIEF ENGINEER

STANDARD DRAWING

PORTLAND CEMENT CONCRETE PAVEMENT

REQUIRES SHEETS 1 OF 3 & 3 OF 3

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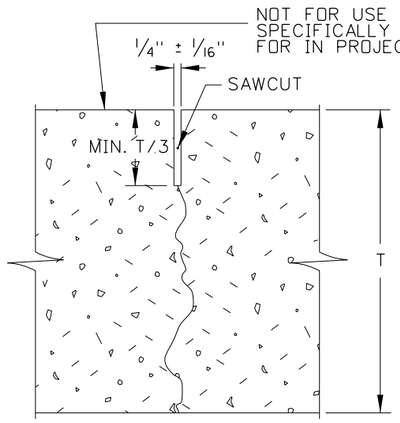
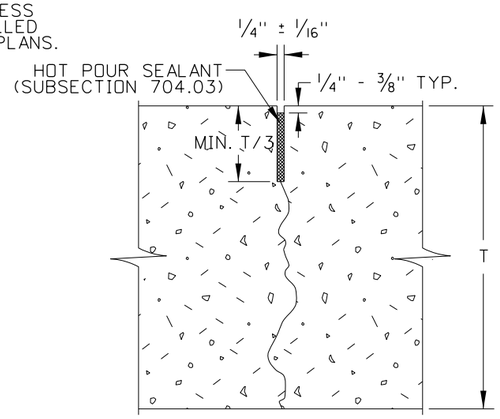
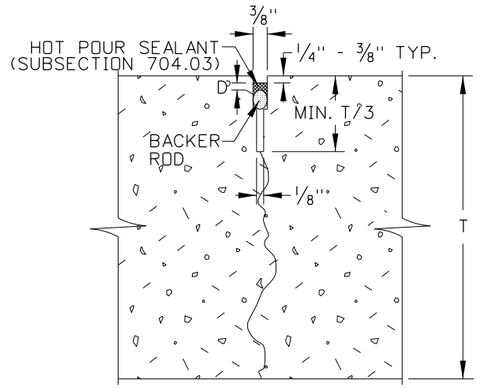


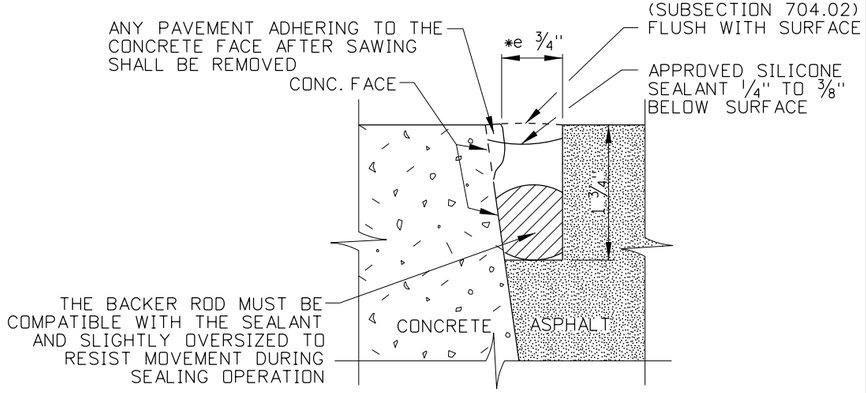
SINGLE CUT
(NO SEALANT)



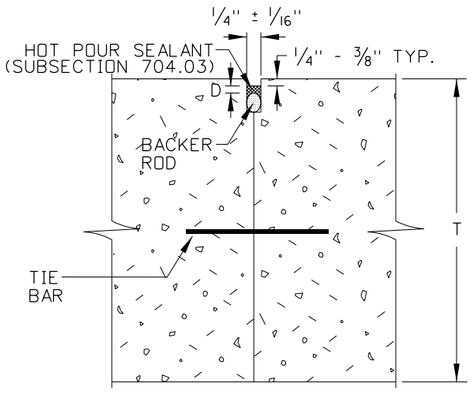
SINGLE CUT
(FIELD-INSTALLED SEALANT)



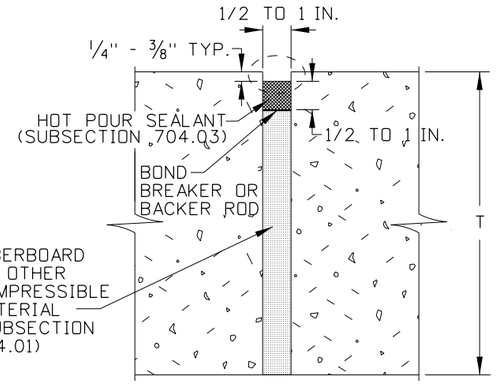
WIDENED CUT
(FIELD-INSTALLED SEALANT)



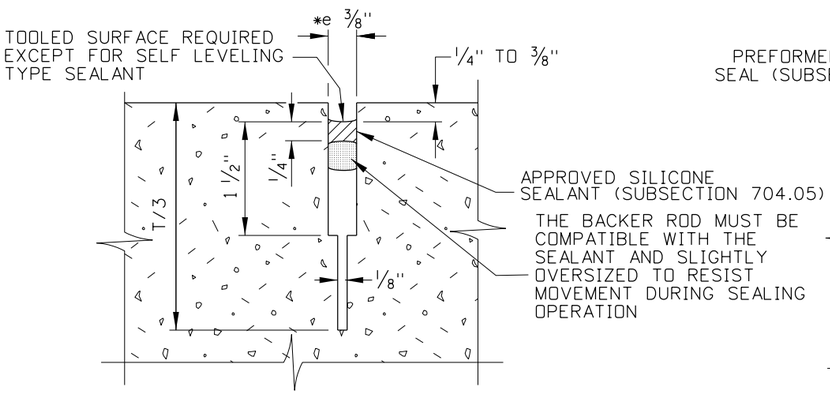
CONCRETE TO ASPHALT



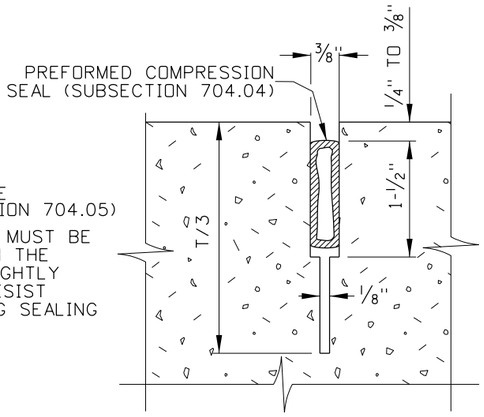
SEALED CONSTRUCTION JOINT
(FIELD-INSTALLED SEALANT)



ISOLATION JOINT
(FIELD-INSTALLED SEALANT)



SILICONE SEALANT

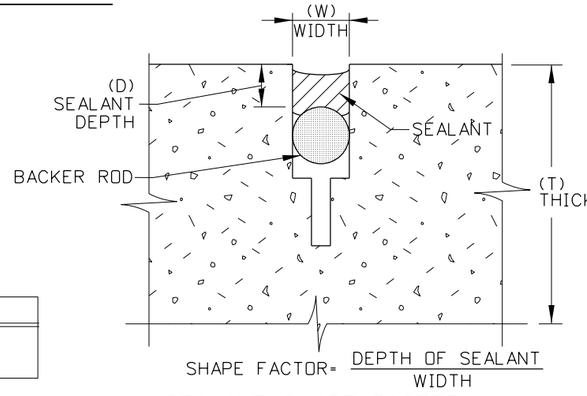


COMPRESSION SEAL

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:



SEALANT SHAPE FACTOR

SUB-NOTES
*e DIMENSIONING REFERS TO SEALANT RESERVOIR ONLY.

ORIGINAL STORED AT: ITD, Headquarters 3311 West State Boise, Idaho

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SHEET 3 OF 3