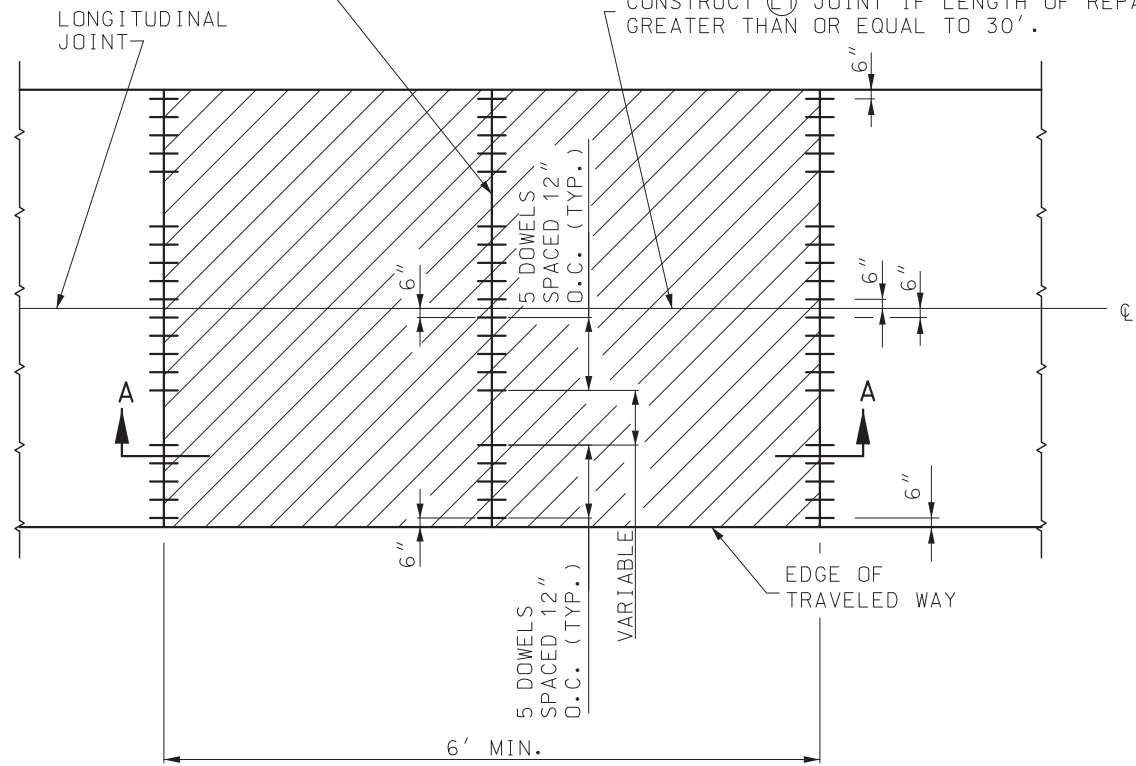
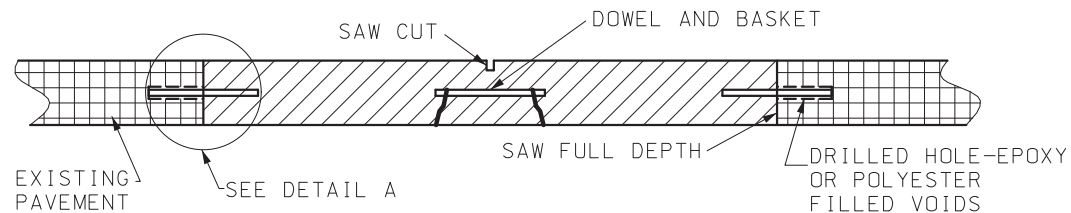


CONSTRUCT (C) JOINT(S) SPACED AT 15' ± 5' IF REPAIR LENGTH IS GREATER THAN OR EQUAL TO 30'. JOINTS SHALL BE AS EQUALLY SPACED AS POSSIBLE.

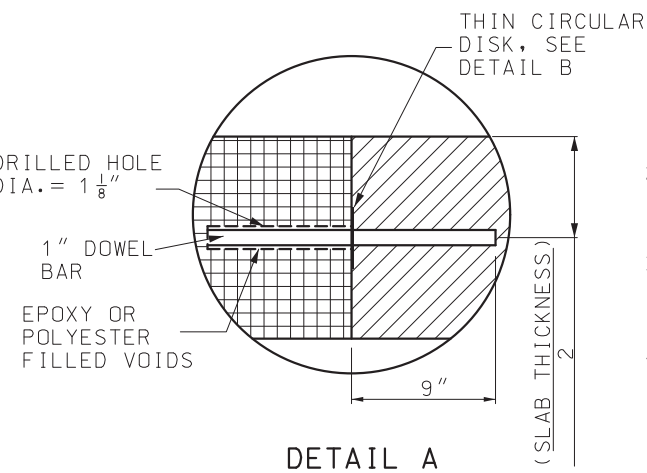
CONSTRUCT (L) JOINT IF LENGTH OF REPAIR IS GREATER THAN OR EQUAL TO 30'.



TWO OR MORE LANES



SECTION A-A



DETAIL A

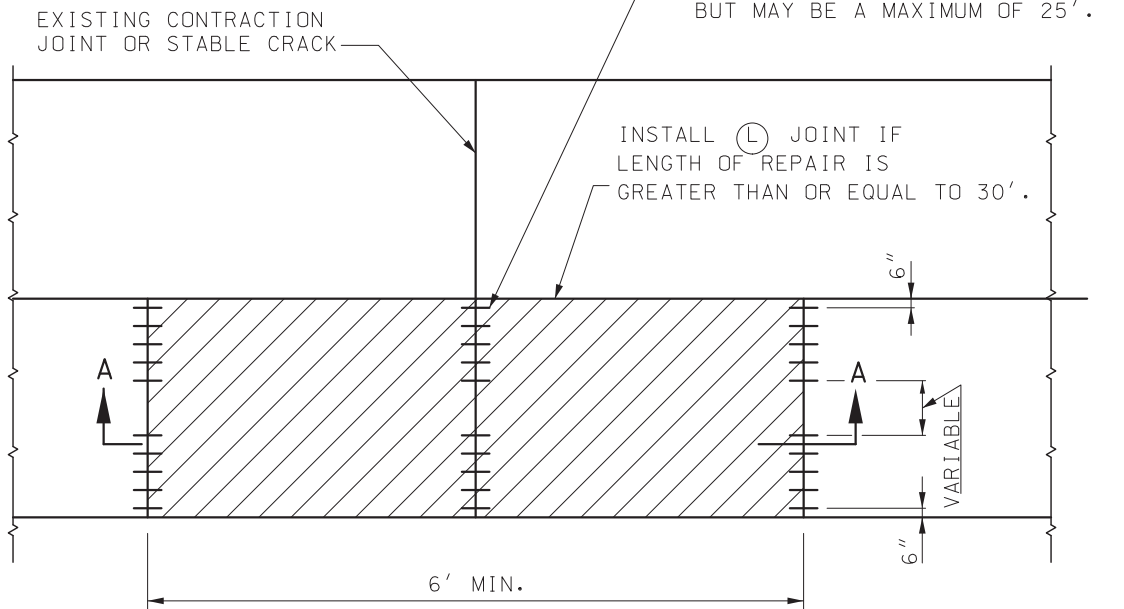
1. SMOOTH EPOXY COATED DOWELS SHALL BE USED IN ALL FULL DEPTH PAVEMENT REPAIR TRANSVERSE JOINTS.
2. THE ANCHORING MATERIAL (EPOXY OR POLYESTER) SHALL BE PLACED TO THE BACK OF THE PREDRILLED HOLE BEFORE INSERTING THE DOWEL BAR.
3. THE DOWEL IS INSERTED INTO THE HOLE WITH A TWISTING MOTION SO THAT THE MATERIAL IN THE BACK OF THE HOLE IS FORCED UP AND AROUND THE BAR.
4. EXPOSED END OF DOWEL SHALL BE COATED WITH A THIN UNIFORM COAT OF GRAPHITE GREASE. DOWEL BASKET ASSEMBLIES SHALL BE CONSTRUCTED IN ACCORDANCE WITH STANDARD PLAN 502.10. IN LIEU OF GRAPHITE GREASE, THE DOWEL BAR BASKET SUPPLIER MAY PROVIDE COMPLETED BASKET UNITS PRE-DIPPED IN AN APPROVED BONDBREAKER.

5. REPAIR ONLY ONE LANE AT A TIME.

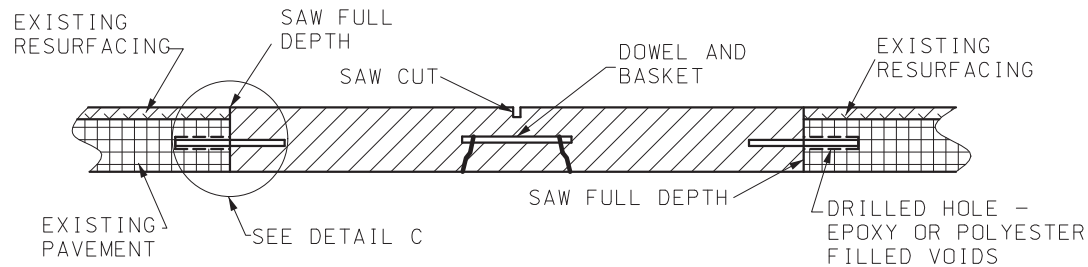
NON-REINFORCED AND REINFORCED PORTLAND CEMENT CONCRETE

CONSTRUCT (C1) JOINT(S) IF REPAIR LENGTH IS GREATER THAN OR EQUAL TO 30'. JOINTS SHALL BE CONSTRUCTED AT LOCATIONS OF EXISTING TRANSVERSE JOINTS OR CRACKS IN ADJACENT PAVEMENT AND EQUALLY SPACED AS MUCH AS POSSIBLE. THE PREFERRED JOINT SPACING IS 15' ± 5', BUT MAY BE A MAXIMUM OF 25'.

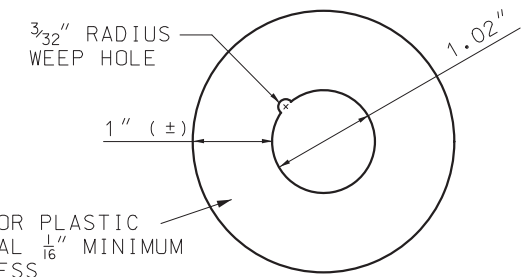
INSTALL (L) JOINT IF LENGTH OF REPAIR IS GREATER THAN OR EQUAL TO 30'.



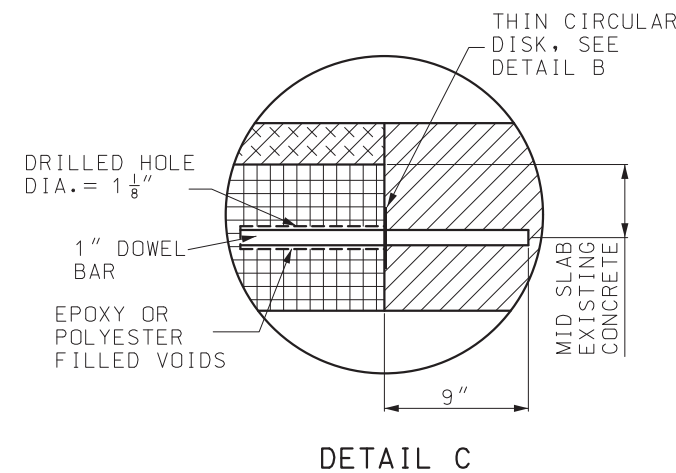
ONE LANE



SECTION A-A ALTERNATE WITH ASPHALT OVERLAY



DETAIL B THIN CIRCULAR DISK





DETAIL C

GENERAL NOTES:

ALL SAW CUTS SHALL BE MADE WITH A DIAMOND SAW EXCEPT THE CENTER RELIEF CUT.

FOR DETAILS OF TYPE (C), (L) AND (L1) JOINTS. SEE STANDARD PLAN 502.05.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

 105 WEST CAPITOL
 JEFFERSON CITY, MO 65102
 1-888-ASK-MODOT (1-888-275-6636)

STATE OF MISSOURI

 TRAVIS D. KOESTNER
 NUMBER PE-30042
 PROFESSIONAL ENGINEER
 THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

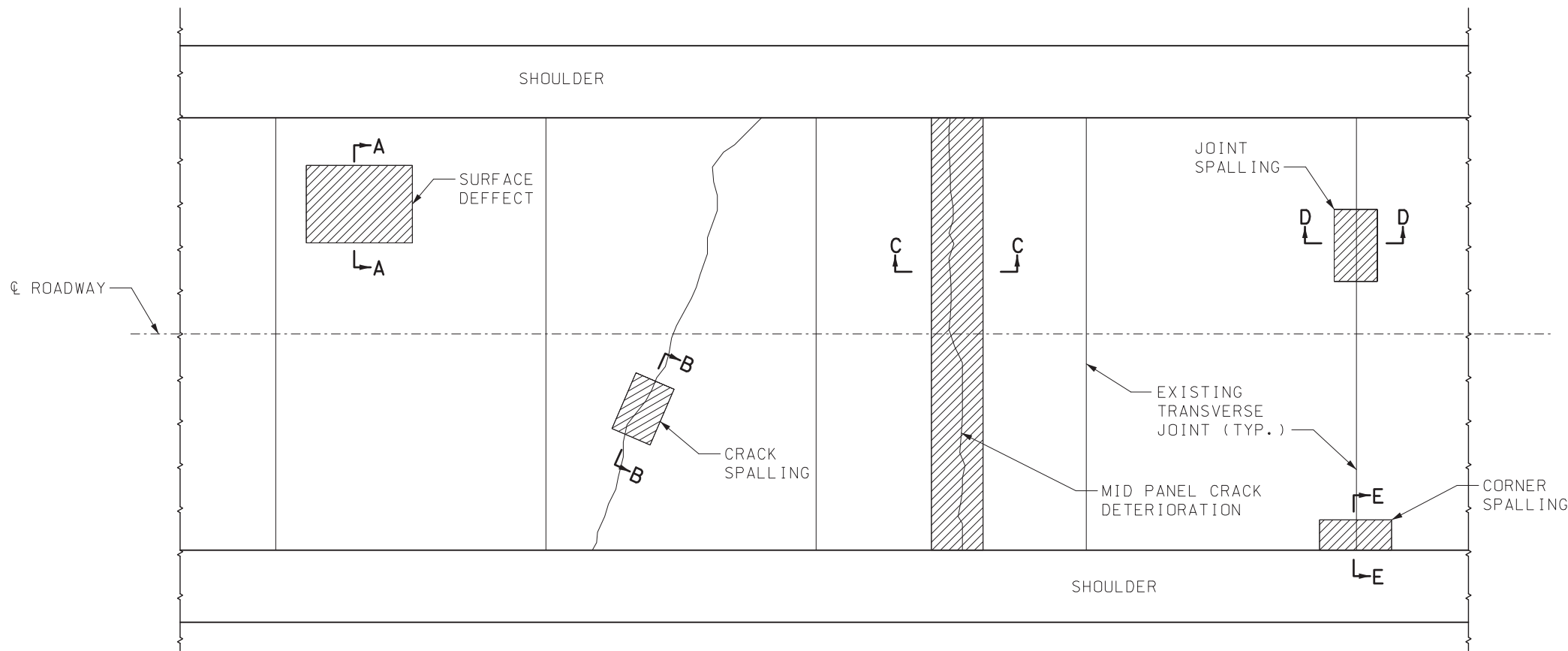
**PAVEMENT REPAIR
 FULL DEPTH**

DATE EFFECTIVE: 01/01/2020
 DATE PREPARED: 10/17/2019

613.00T

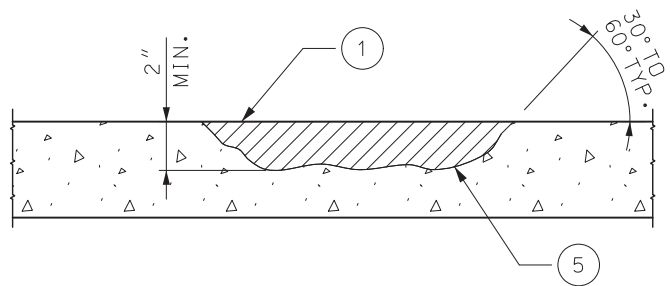
SHEET NO.
 1 OF 4

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

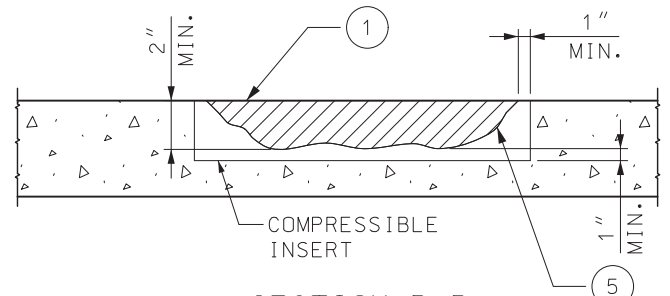


PLAN VIEW

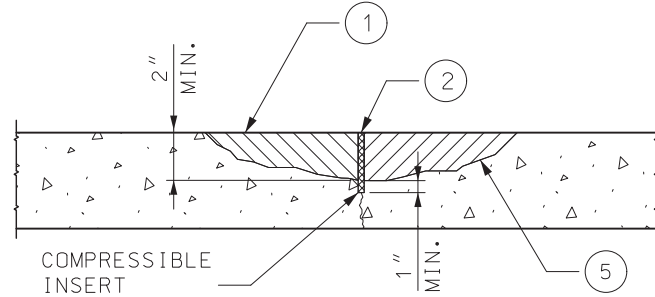
- 1 REMOVE ALL CONCRETE, TO LIMITS SHOWN, TO MAX. OF $\frac{1}{2}$ THE PAVEMENT DEPTH OR TOP OF DOWELS BY MILLING.
- 2 PLACE COMPRESSIBLE INSERT IN JOINT OR CRACK. INSERT SHALL BE THICKNESS OF JOINT OR CRACK WIDTH, BUT NOT LESS THAN $\frac{1}{4}$ ".
- 3 CHIP VERTICAL REPAIR EDGES AT APPROXIMATE 1:1 SLOPE.
- 4 PLACE $\frac{1}{8}$ " MIN. COMPRESSIBLE INSERT ADJACENT TO LONGITUDINAL LANE OR SHOULDER JOINT.
- 5 EXPOSED SURFACE SHALL BE CLEANED BY SANDBLASTING OR SHOTBLASTING.
- 6 EXPOSED SURFACE OF DOWEL BARS SHALL BE COATED WITH AN APPROVED BONDBREAKER.



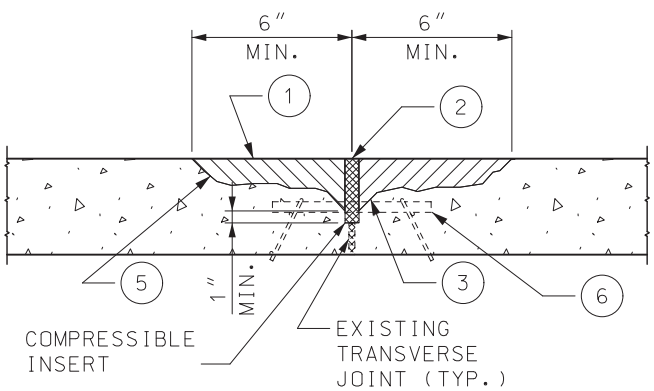
SECTION A-A



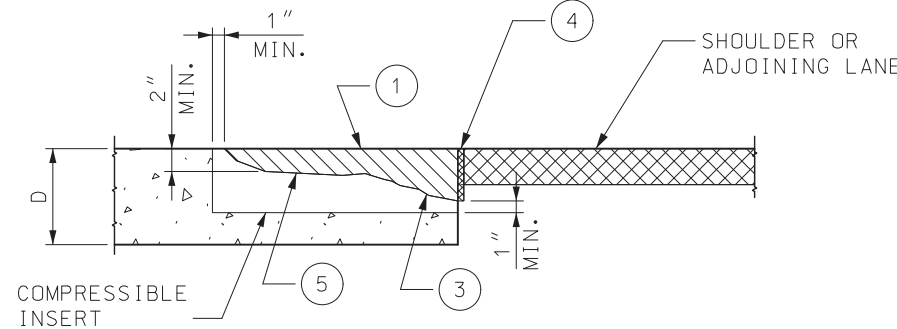
SECTION B-B



SECTION C-C



SECTION D-D



SECTION E-E

AREA TO BE REMOVED

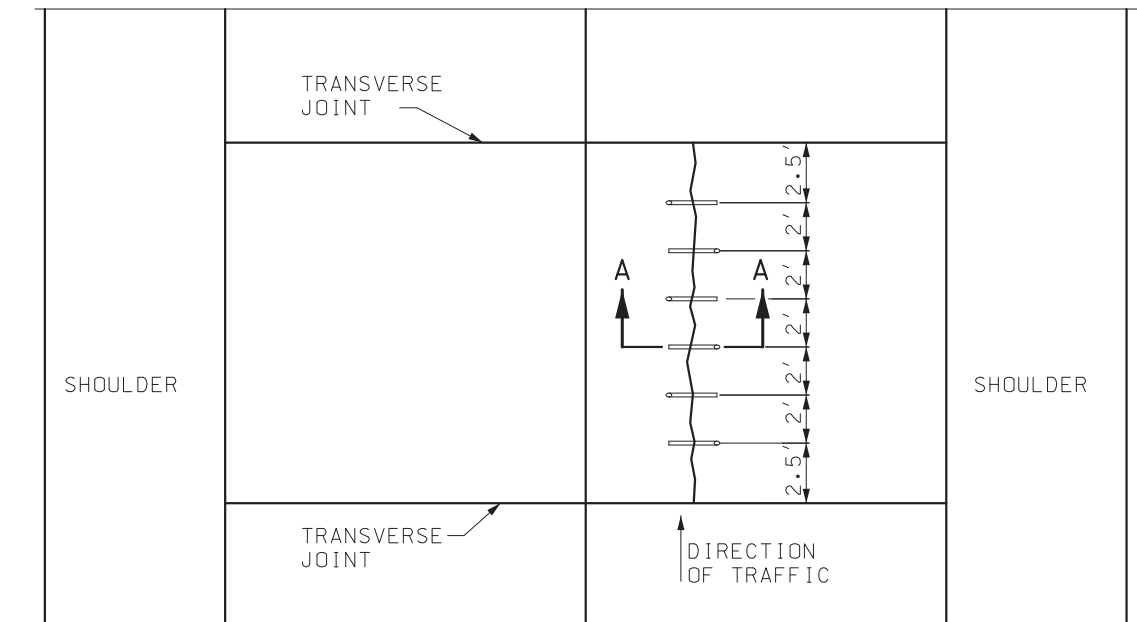
MoDOT MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
 105 WEST CAPITOL JEFFERSON CITY, MO 65102
 1-888-ASK-MODOT (1-888-275-6636)

STATE OF MISSOURI
 TRAVIS D. KOESTNER
 NUMBER PE-30042
 PROFESSIONAL ENGINEER
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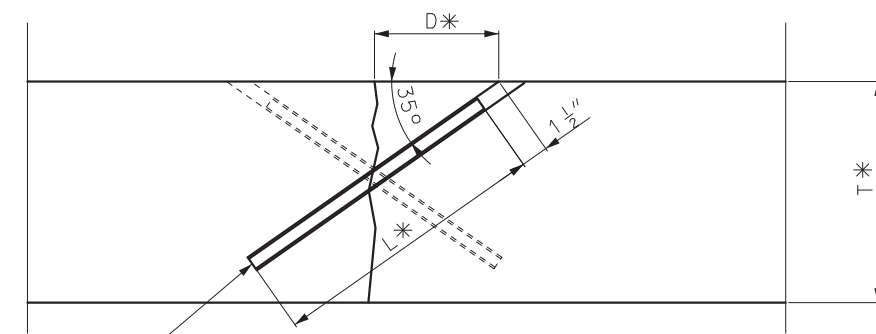
PAVEMENT REPAIR
 PARTIAL DEPTH
 CLASS A

DATE EFFECTIVE: 01/01/2020	613.00T	SHEET NO. 2 OF 4
DATE PREPARED: 10/17/2019		

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.



CROSS STITCHING PLAN



#6 EPOXY REBAR
CROSS STITCH
BAR

* SEE TABLE

T	SLAB THICKNESS (IN)	8	9	10	11	12
D	DISTANCE TO HOLE (IN)	5 ³ / ₄	6 ¹ / ₂	7 ¹ / ₄	8 ¹ / ₂	8 ¹ / ₂
L	LENGTH OF BAR (IN)	8 ¹ / ₂	11	12 ¹ / ₂	14	16

SECTION A-A

GENERAL NOTES:

AT EACH REPAIR LOCATION, HOLES SHALL BE DRILLED AT 35° ANGLES TO THE PAVEMENT SURFACE, PERPENDICULAR TO THE CRACK. THE DRILL BIT DIAMETER SHALL NOT EXCEED 1 ¹/₈".

DRILLING SHALL ALTERNATE BACK AND FORTH ON EITHER SIDE OF THE LONGITUDINAL JOINT FROM HOLE TO HOLE.

DRILLED HOLES SHALL NOT PENETRATE THROUGH THE SLAB BOTTOM.

DRILLED HOLES SHALL BE CLEANED OF LOOSE DEBRIS AND DUST. EPOXY OR POLYESTER BONDING AGENTS FOR DOWELS, MEETING THE MATERIAL REQUIREMENTS OF SECTION 1039, SHALL BE INJECTED OR POURED INTO EACH HOLE. A CROSS-STITCH BAR SHALL BE INSERTED IN EACH HOLE SUCH THAT THE EPOXY MATERIAL IS EVENLY DISTRIBUTED AROUND THE BAR AND EXTRUDING FROM THE SURFACE OPENING. EACH BAR SHALL BE INSERTED FAR ENOUGH TO ALLOW 1 ¹/₂" OF COVER AS SHOWN IN THE PROFILE DETAIL.

THE SURFACE SHALL HAVE ALL EXCESS EPOXY REMOVED AND HAVE A FLUSH FINISH.

GENERAL NOTES:

MoDOT MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
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STATE OF MISSOURI
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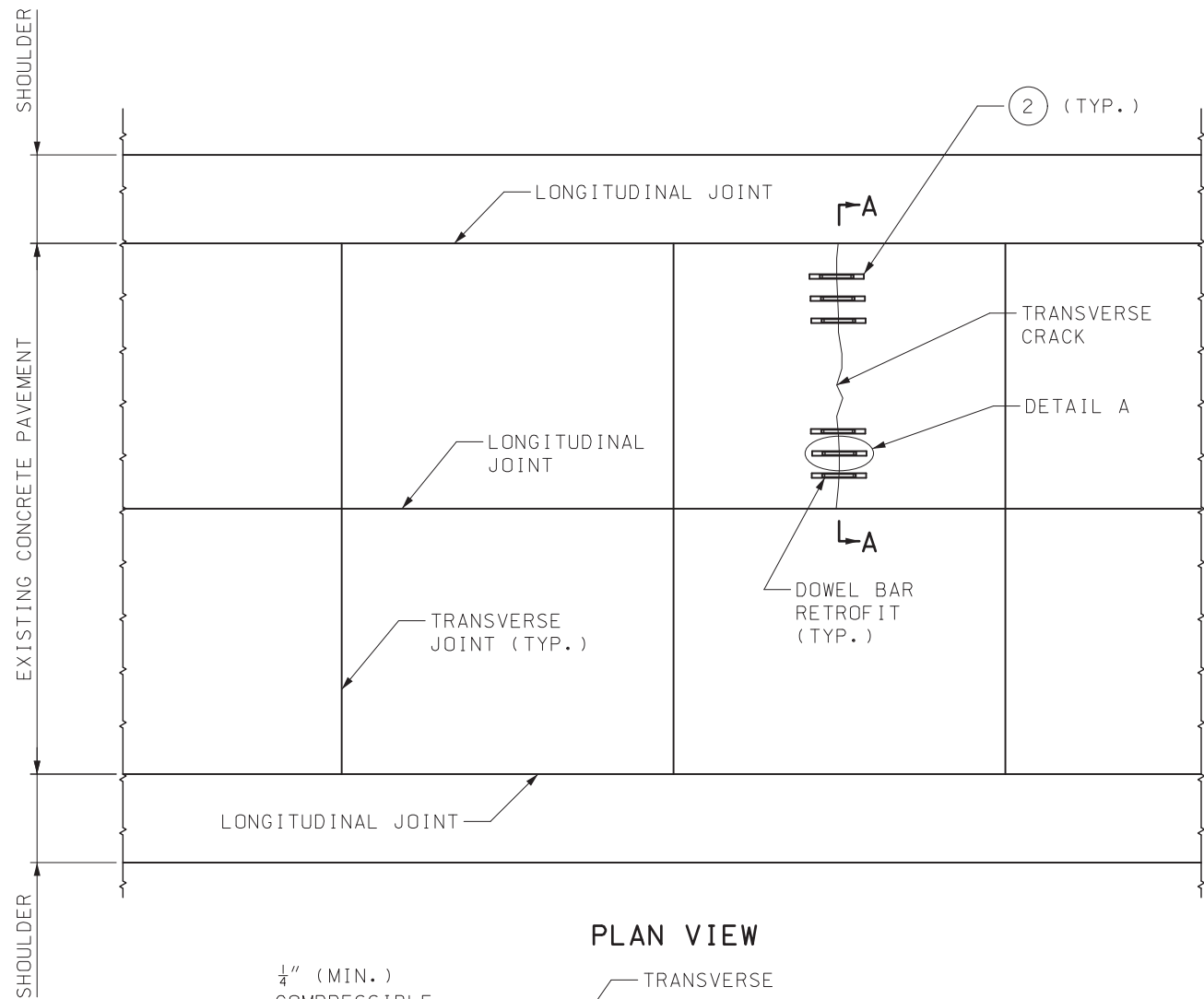
**PAVEMENT REPAIR
CROSS STITCHING**

DATE EFFECTIVE: 01/01/2020
 DATE PREPARED: 10/17/2019

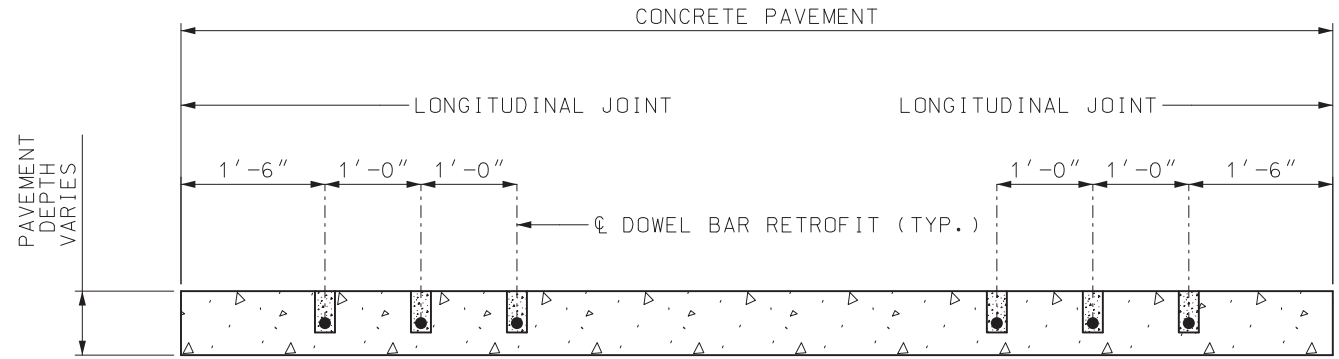
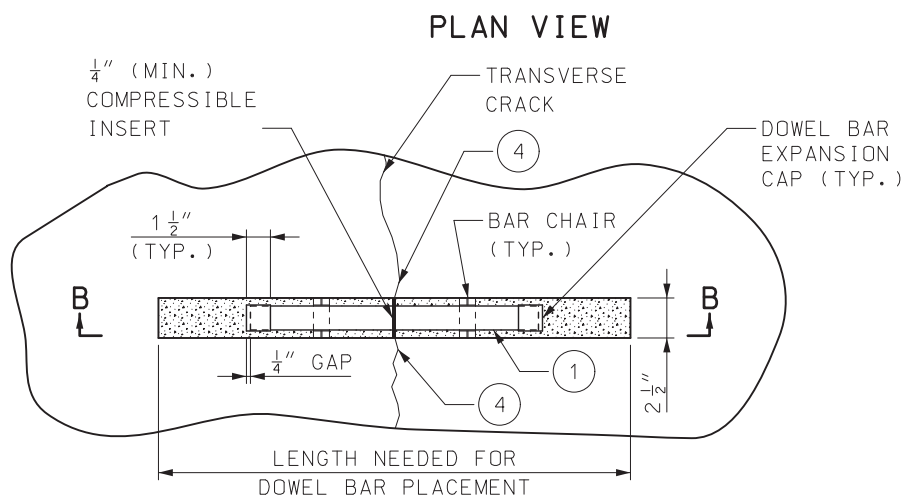
613.00T

SHEET NO.
3 OF 4

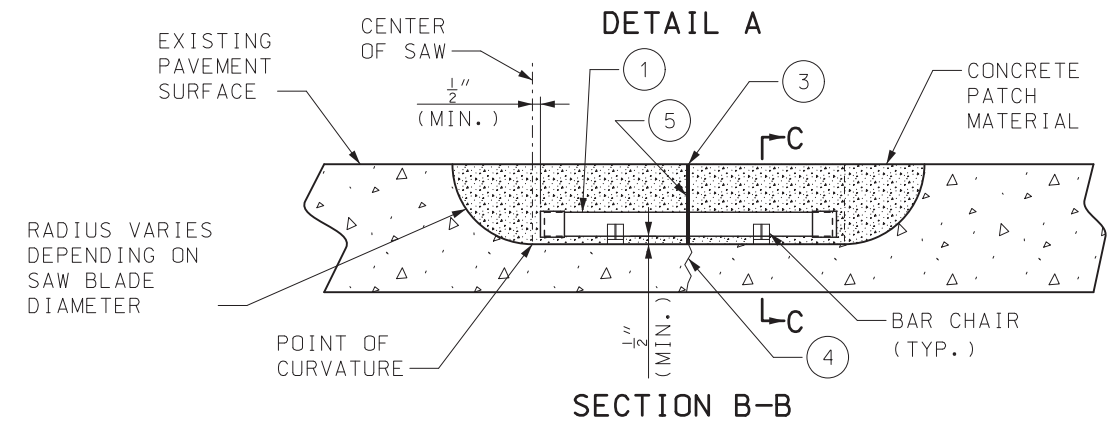
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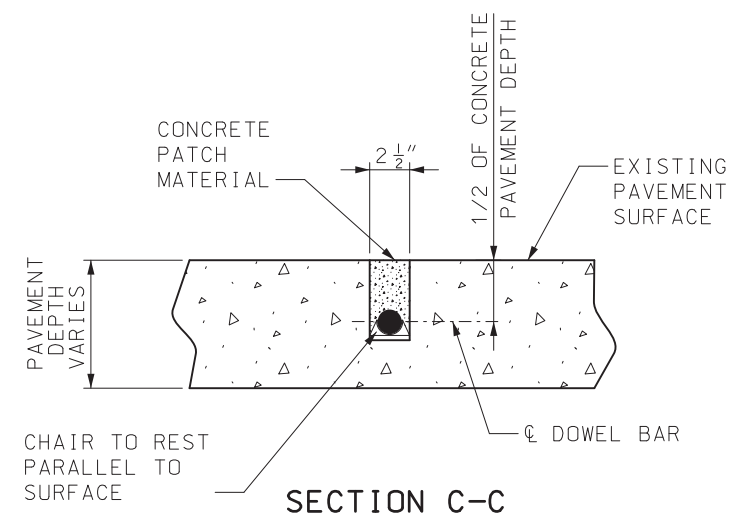
- ① 1 1/2" DIAMETER DOWEL BAR X 18" LENGTH.
- ② DOWEL BAR SLOTS SHALL BE PARALLEL TO ROADWAY.
- ③ TOP OF COMPRESSIBLE INSERT SHALL BE FLUSH WITH PAVEMENT SURFACE.
- ④ CRACK PERIMETER IN SLOT SHALL BE SEALED WITH SILICONE.
- ⑤ COMPRESSIBLE INSERT SHALL BE PLACED AT MIDDLE OF DOWEL BAR.



SECTION A-A



SECTION B-B



SECTION C-C

	MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION 105 WEST CAPITOL JEFFERSON CITY, MO 65102 1-888-ASK-MODOT (1-888-275-6636)	
	PAVEMENT REPAIR DOWEL BAR RETROFIT	
	DATE EFFECTIVE: 01/01/2020 DATE PREPARED: 10/17/2019	613.00T
		SHEET NO. 4 OF 4

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