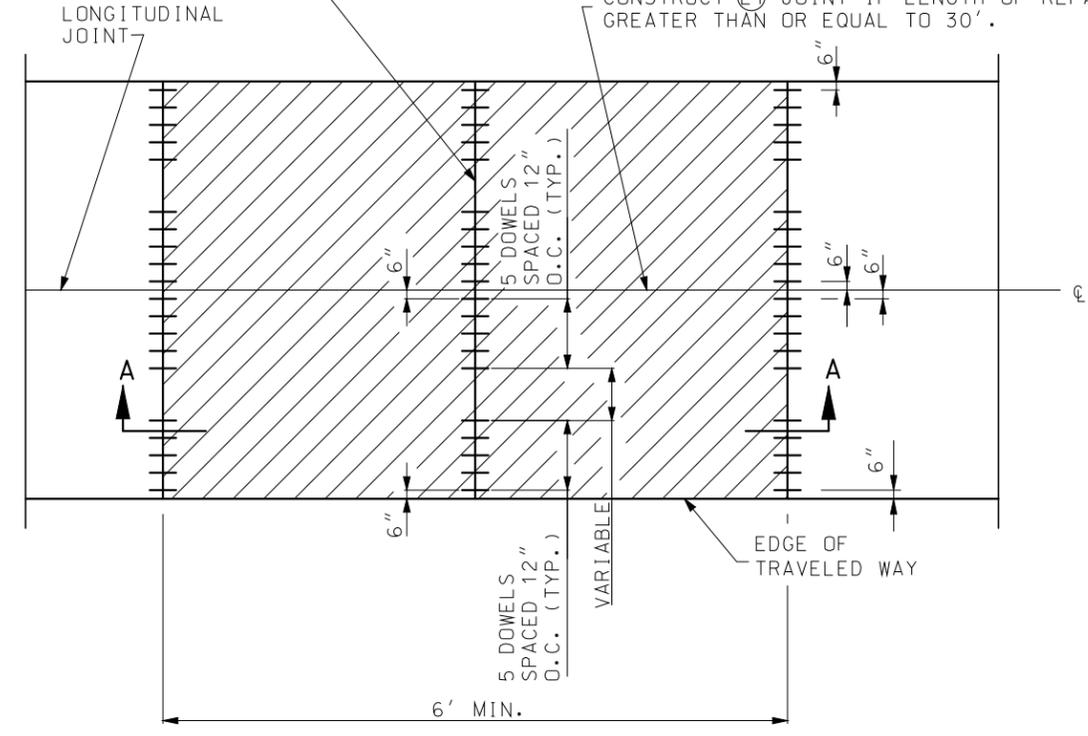


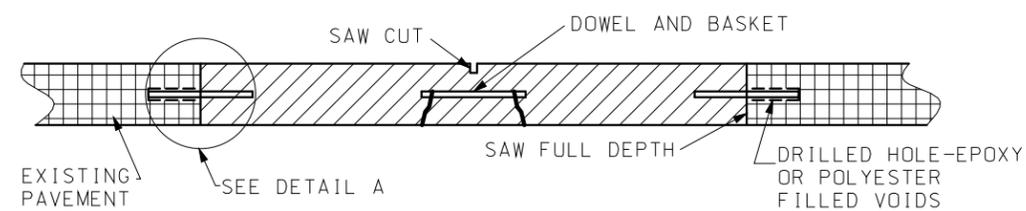
IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

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.

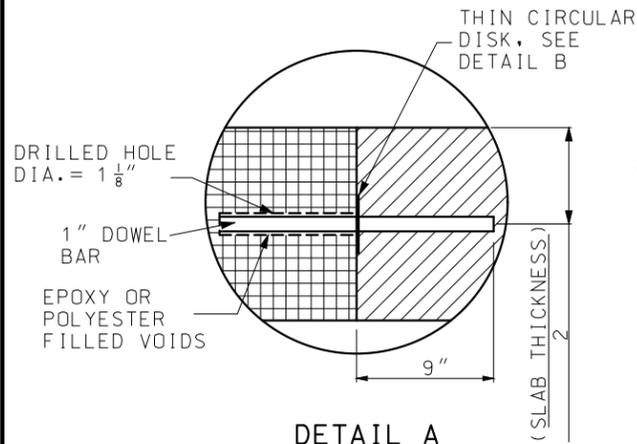
CONSTRUCT (L) JOINT IF LENGTH OF REPAIR IS GREATER THAN OR EQUAL TO 30'.



TWO OR MORE LANES



SECTION A-A



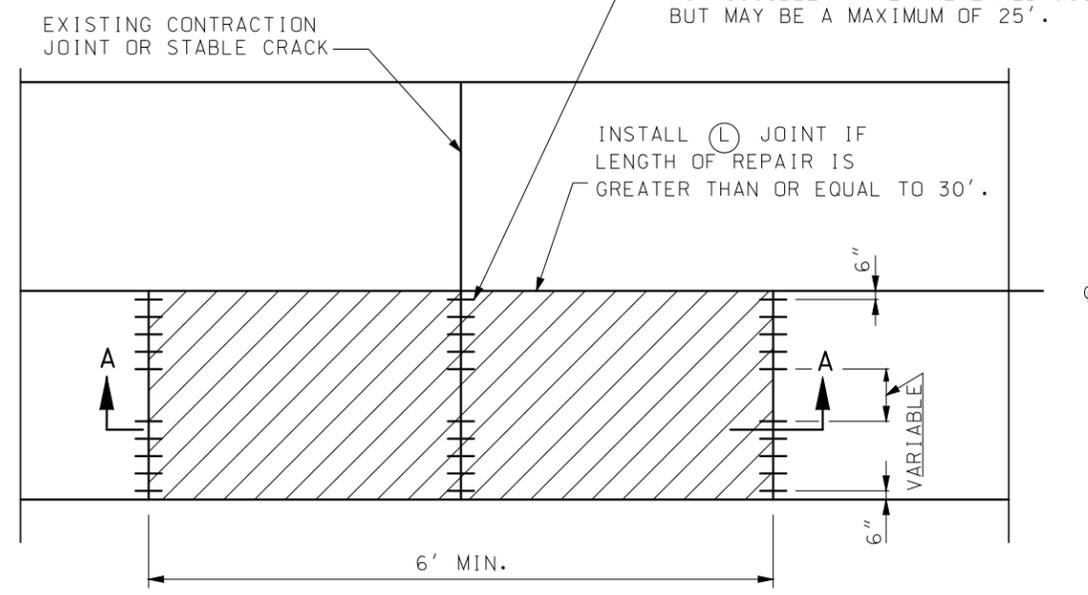
DETAIL A

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.

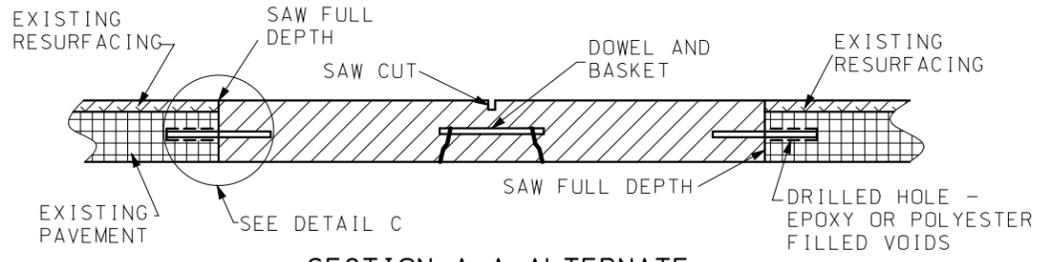
NON-REINFORCED AND REINFORCED PORTLAND CEMENT CONCRETE

CONSTRUCT (L1) 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'.

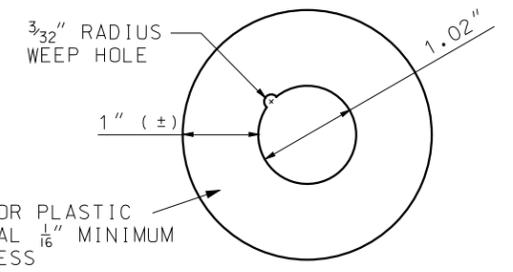
INSTALL (L) JOINT IF LENGTH OF REPAIR IS GREATER THAN OR EQUAL TO 30'.



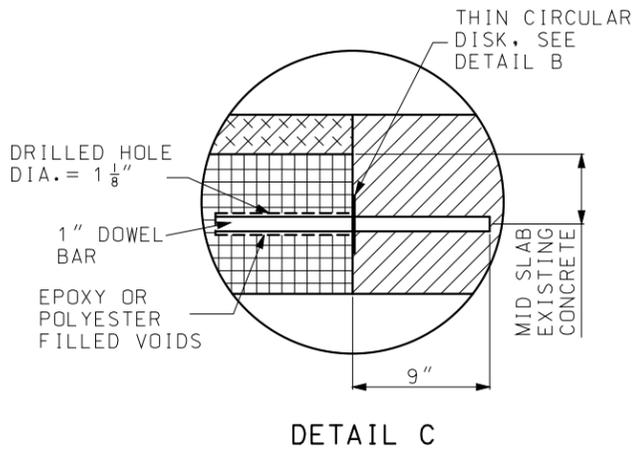
ONE LANE



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.

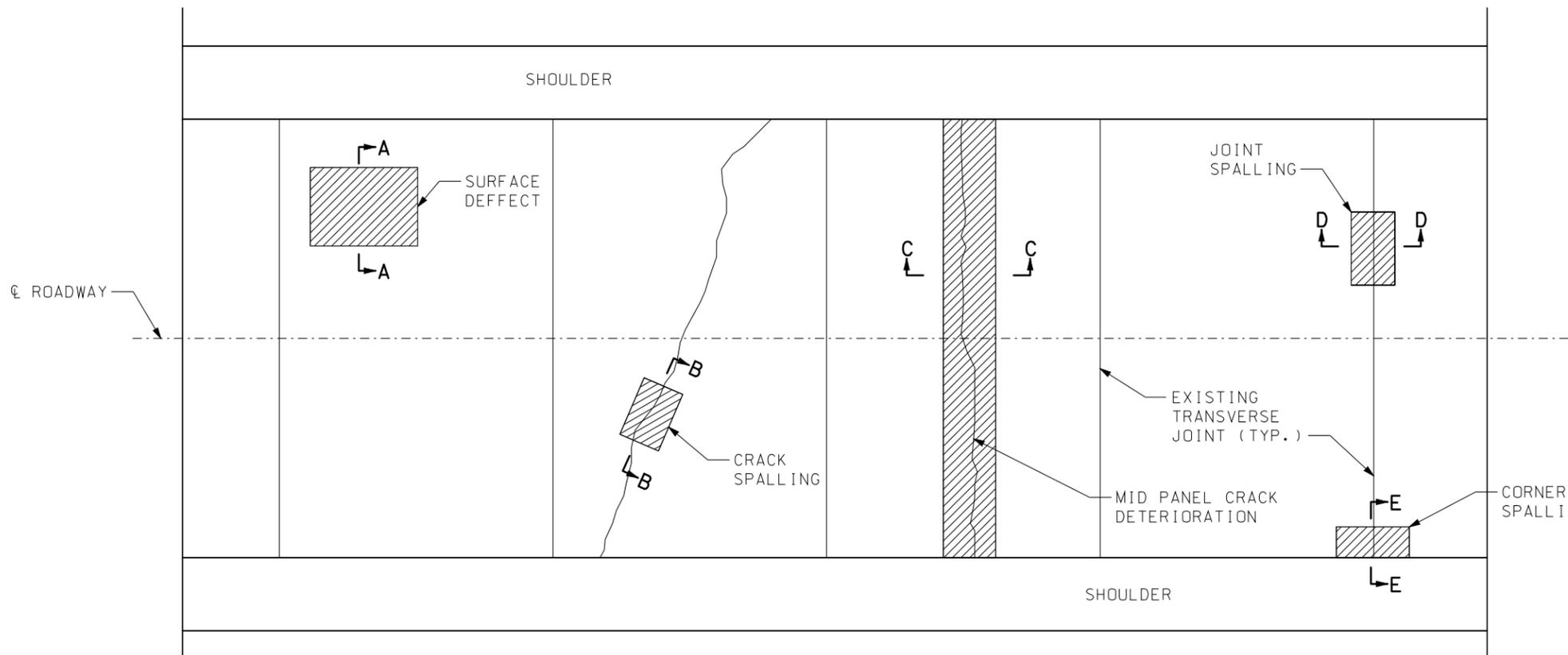
MoDOT MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
 105 WEST CAPITOL
 JEFFERSON CITY, MO 65102
 1-888-ASK-MODOT (1-888-275-6636)

STATE OF MISSOURI
 ERIC E. SCHROETER
 NUMBER PE-28411
 PROFESSIONAL ENGINEER
 THIS SHEET HAS BEEN SIGNED SEALED AND DATED ELECTRONICALLY.

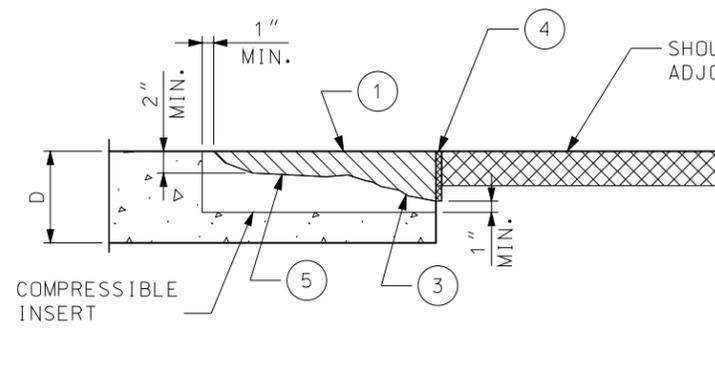
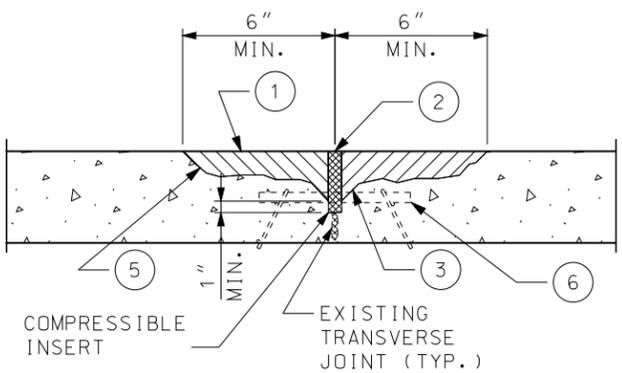
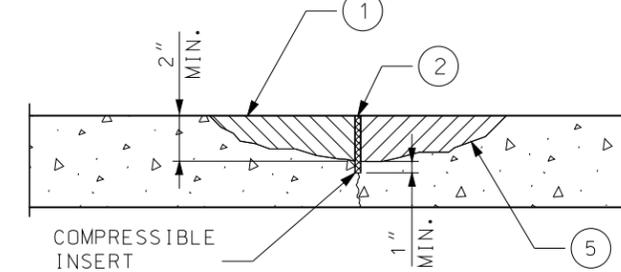
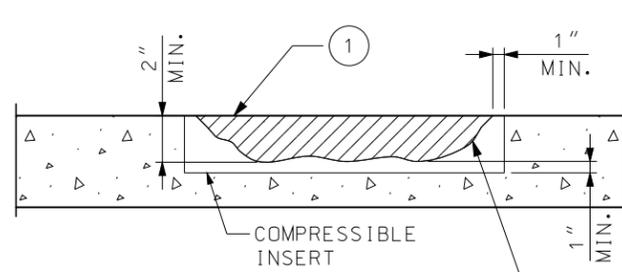
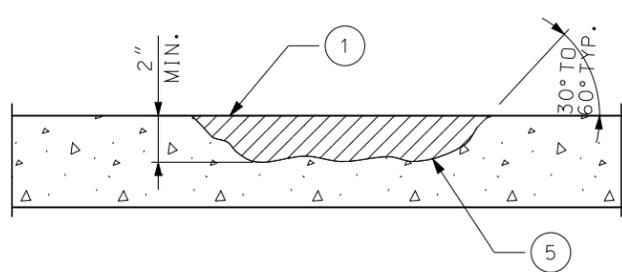
PAVEMENT REPAIR FULL DEPTH

DATE EFFECTIVE: 04/01/2017	613.00S	SHEET NO. 1 OF 4
DATE PREPARED: 1/30/2017		

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



- 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, SHOTBLASTING, OR HIGH PRESSURE WATER BLASTING.
- ⑥ EXPOSED SURFACE OF DOWEL BARS SHALL BE COATED WITH AN APPROVED BONDBREAKER.



AREA TO BE REMOVED

MoDOT MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

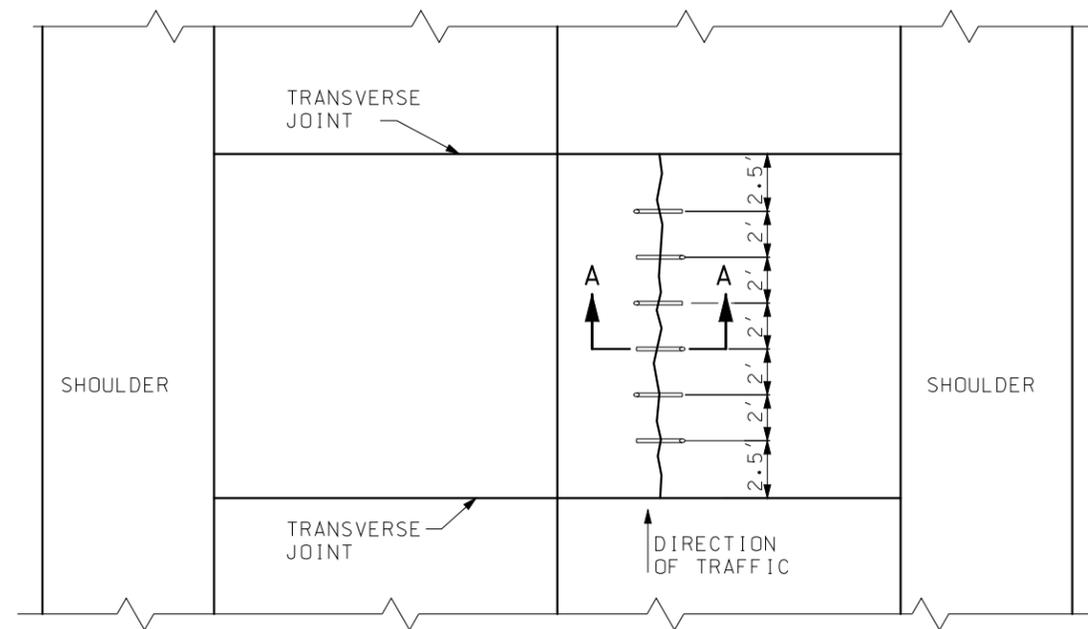
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JEFFERSON CITY, MO 65102
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STATE OF MISSOURI
ERIC E. SCHROETER
NUMBER PE-28411
PROFESSIONAL ENGINEER

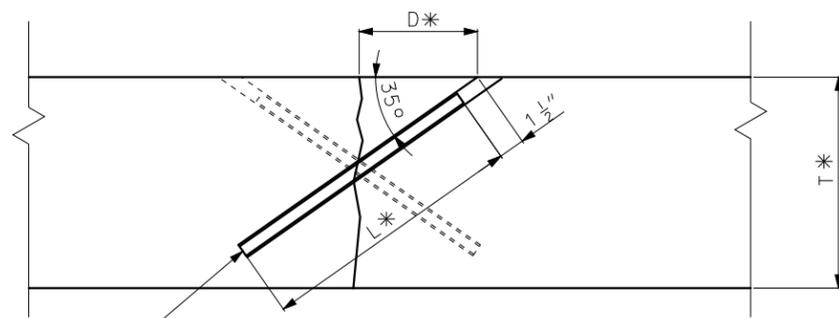
THIS SHEET HAS BEEN SIGNED SEALED AND DATED ELECTRONICALLY.

PAVEMENT REPAIR
PARTIAL DEPTH
CLASS A

DATE EFFECTIVE: 04/01/2017	613.00S	SHEET NO. 2 OF 4
DATE PREPARED: 1/30/2017		



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
 ERIC E. SCHROETER
 NUMBER PE-28411
 PROFESSIONAL ENGINEER

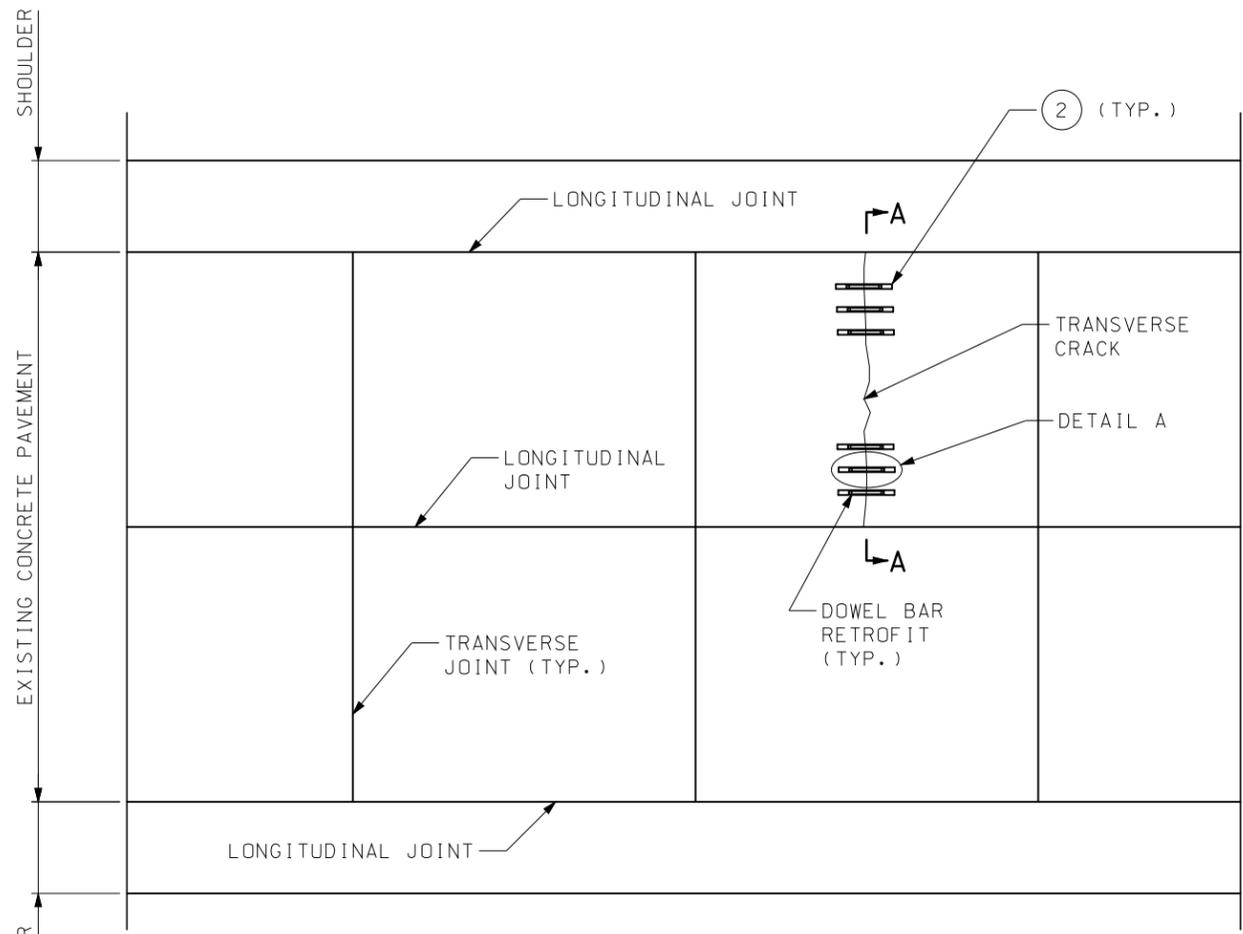
**PAVEMENT REPAIR
CROSS STITCHING**

DATE EFFECTIVE: 04/01/2017
 DATE PREPARED: 1/30/2017

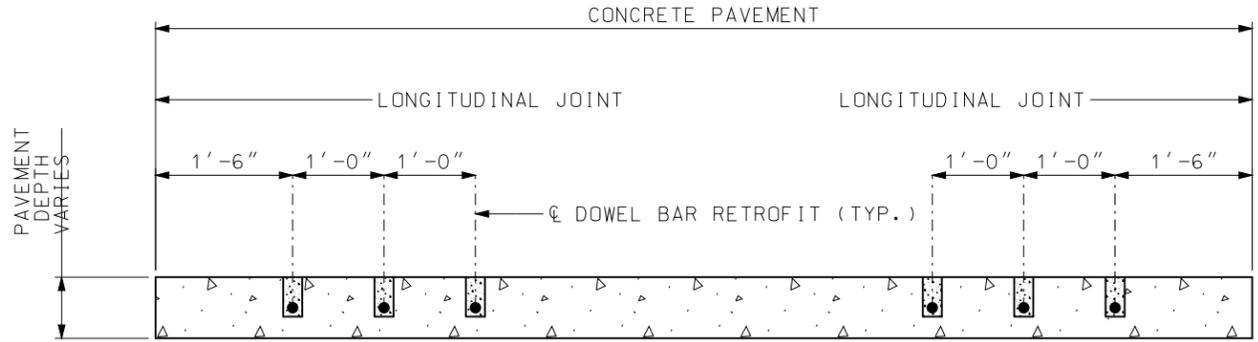
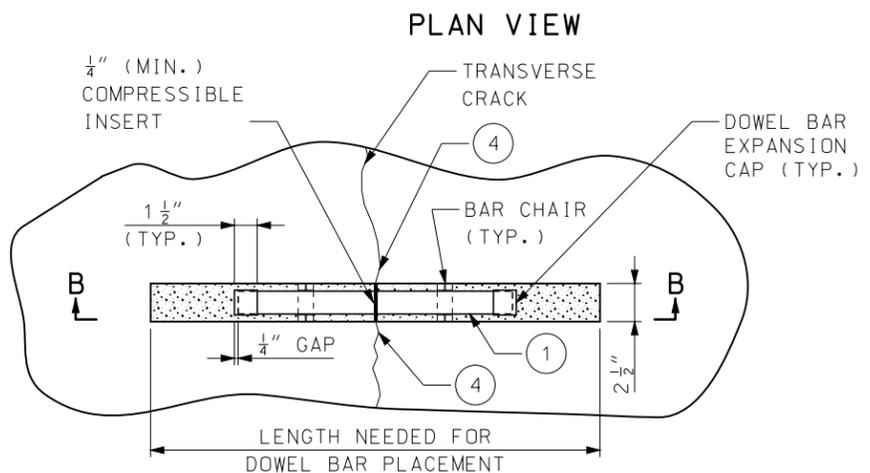
613.00S

SHEET NO.
3 OF 4

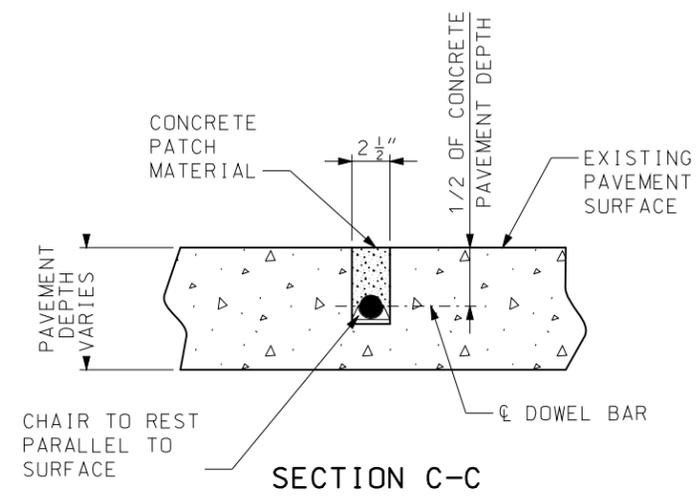
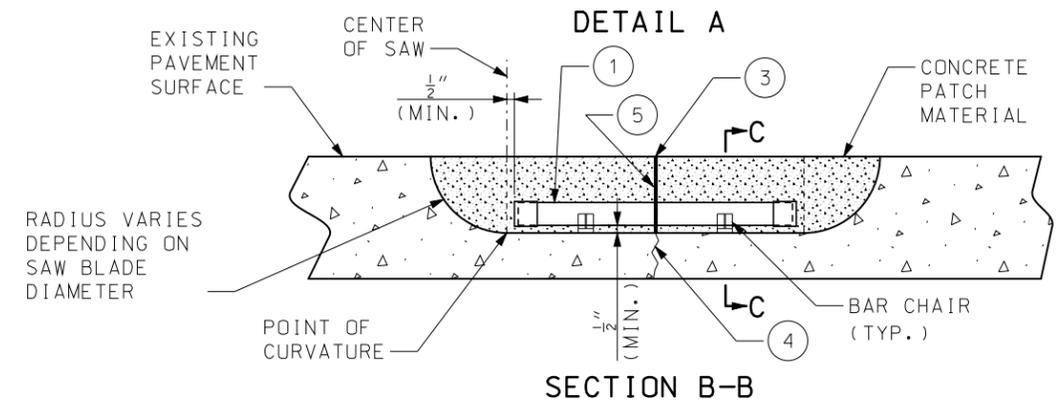
IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.



- 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



<p>MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION</p> <p>105 WEST CAPITOL JEFFERSON CITY, MO 65102 1-888-ASK-MODOT (1-888-275-6636)</p>	
	<p>PAVEMENT REPAIR</p> <p>DOWEL BAR RETROFIT</p>
<p>DATE EFFECTIVE: 04/01/2017</p> <p>DATE PREPARED: 1/30/2017</p>	<p>613.00S</p> <p>SHEET NO. 4 OF 4</p>

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