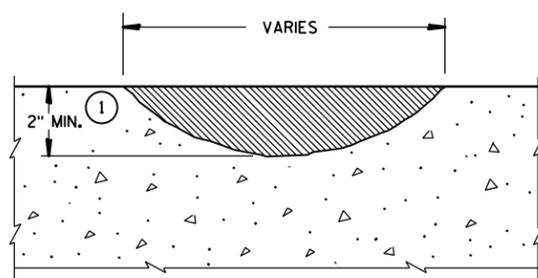
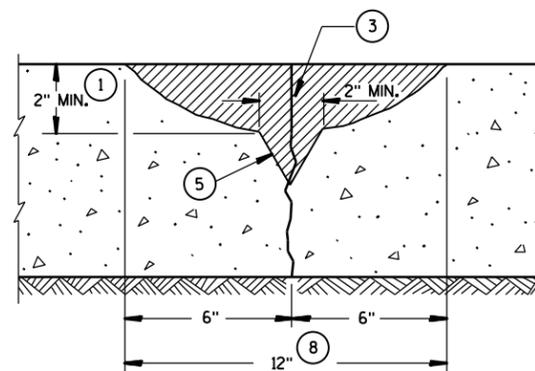




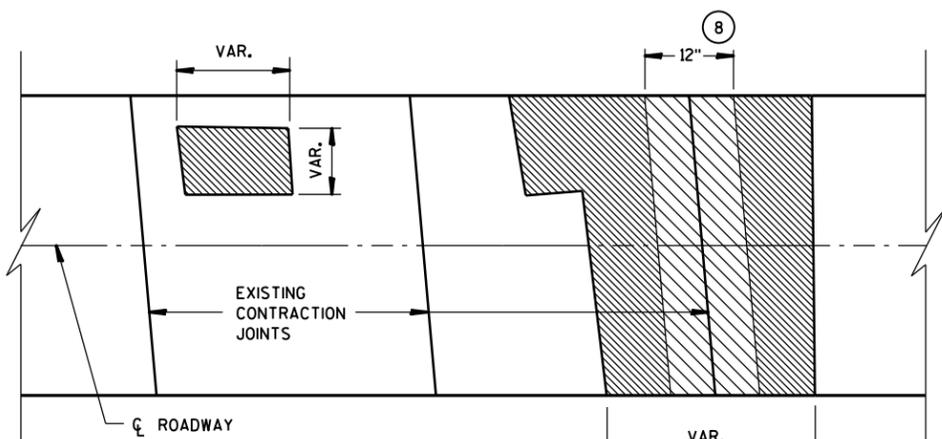
# 13C8: Concrete Pavement Partial Depth Repair



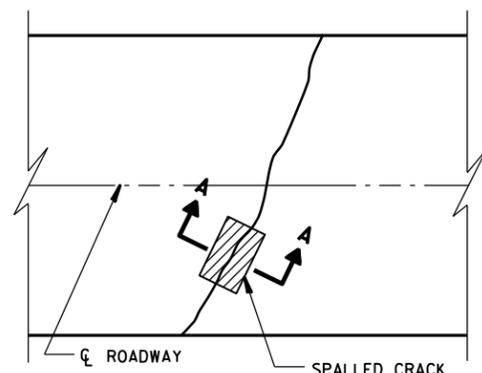
PROFILE VIEW



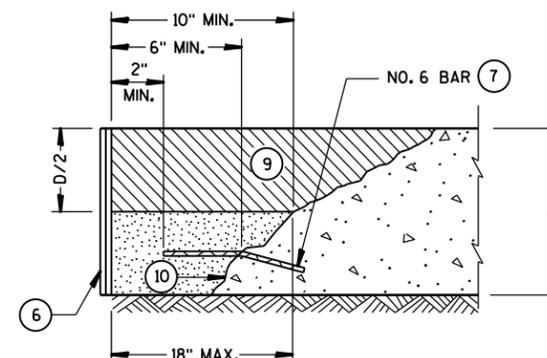
SECTION A-A



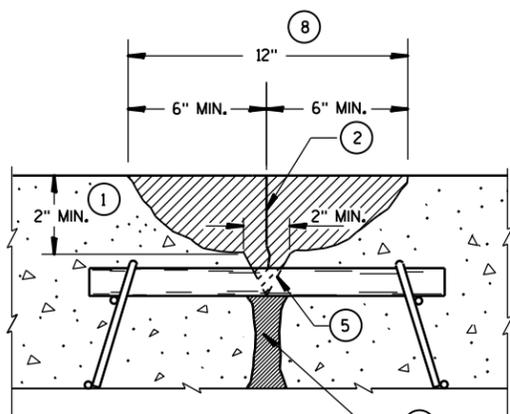
PLAN VIEW  
SURFACE REPAIR



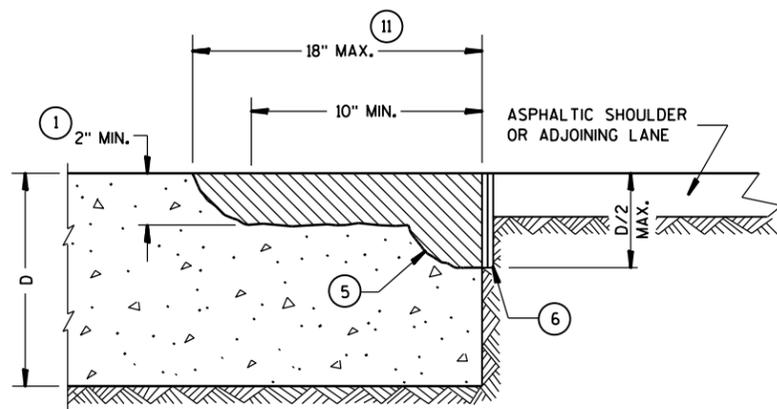
PLAN VIEW  
CRACK REPAIR



PROFILE VIEW

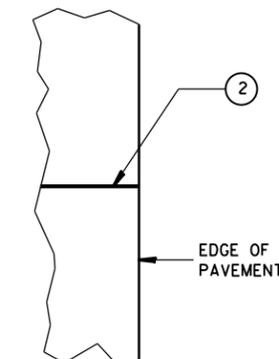


PROFILE VIEW  
JOINT REPAIR



PROFILE VIEW

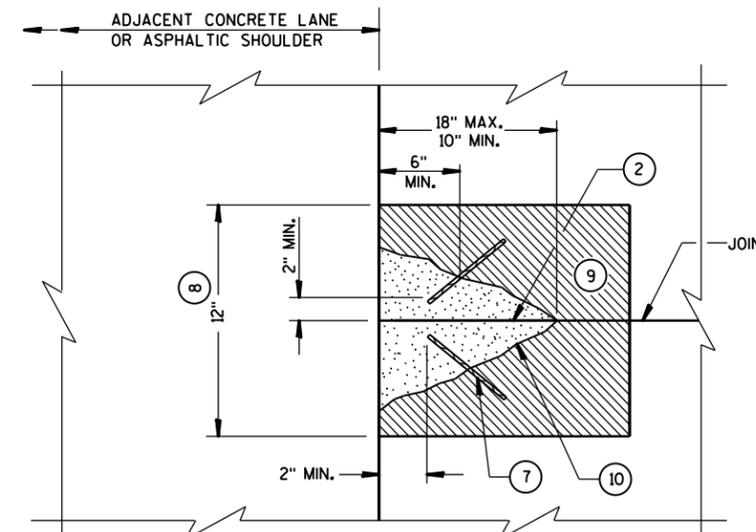
EDGE REPAIR



PLAN VIEW

## GENERAL NOTES

- 1 REMOVE ALL CONCRETE, TO LIMITS SHOWN, TO A MAXIMUM OF 1/2 THE PAVEMENT DEPTH OR TOP OF DOWELS.
- 2 IF REPAIR IS DEEPER THAN ANTICIPATED SAWCUT, COMPRESSION RELIEF MATERIAL MUST BE USED. THE THICKNESS OF COMPRESSION RELIEF MATERIAL MUST BE EQUAL TO OR GREATER THAN THE WIDTH OF THE JOINT OR CRACK (1/4"). THIS MATERIAL SHOULD EXTEND FULL DEPTH OF THE REPAIR.
- 3 COMPRESSION RELIEF MATERIAL MUST BE USED. THE THICKNESS OF COMPRESSION RELIEF MATERIAL MUST BE EQUAL TO OR GREATER THAN THE WIDTH OF THE JOINT OR CRACK (1/4"). THIS MATERIAL SHOULD EXTEND FULL DEPTH OF THE REPAIR.
- 4 CLEAN, DRY SAND WHEN NECESSARY.
- 5 REMOVE UNSOUND MATERIAL BY CHIPPING AT 1:1 SLOPE.
- 6 1/4" MINIMUM PREFORMED JOINT FILLER IF ADJACENT TO CONCRETE. EDGING REQUIRED. FULLY FORMED EDGE IF ADJACENT TO SHOULDER.
- 7 PAVEMENT TIES AS SHOWN. ALL EMBEDMENTS 6" MINIMUM AND INSTALLED WITH GROUT.
- 8 OVER 12" (NOMINAL WIDTH) WILL BE PAID AS SURFACE REPAIR.
- 9 PAID AS JOINT OR CRACK REPAIR.
- 10 FULL-DEPTH ADJUSTMENT SHALL BE CHIPPED TO BOTTOM OF PCC PAVEMENT AT 1:1 SLOPE.
- 11 BEYOND 18" WILL BE PAID AS SURFACE REPAIR.



PLAN VIEW  
FULL DEPTH REPAIR ADJUSTMENT

CONCRETE PAVEMENT  
PARTIAL DEPTH REPAIR

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED  
3-21-2003  
DATE  
/S/ Bill Ducker  
PAVEMENT ENGINEER  
FHWA

Concrete Pavement Partial Depth Repair

References:

FDM procedure is pending.

Bid items associated with this drawing:

<u>ITEM NUMBER</u>	<u>DESCRIPTION</u>	<u>UNIT</u>
416.0750.S	Concrete Pavement Partial Depth Repair Joint Repair .....	LF
416.0752.S	Concrete Pavement Partial Depth Repair Crack Repair .....	LF
416.0754.S	Concrete Pavement Partial Depth Repair Surface Repair .....	SF
416.0756.S	Concrete Pavement Partial Depth Repair Edge Repair .....	LF
416.0758.S	Concrete Pavement Partial Depth Repair Full Depth Adjustment .....	SF

Standardized Special Provisions associated with this drawing:

<u>STSP NUMBER</u>	<u>TITLE</u>
416 - 015	Concrete Pavement Partial Depth Repair

Other SDDs associated with this drawing:

[SDD 13c9](#) Concrete Pavement Repair sheet "b"

Design Notes:

This SDD should be used on Jointed Reinforced Concrete Pavement (JRCP), Jointed Plain Concrete Pavement without dowels (JPCP), and on Jointed Plain Concrete Pavement with dowels (JPCP/d). Partial depth repair is not recommended for repair of Continuously Reinforced Concrete Pavement (CRCP).

Partial depth repair should be used where cracks and joints exhibit failure primarily in the upper one-half of the pavement. When D-cracking or another materials-related distress is present at joints and cracks, cores should be taken as part of the scoping process to determine if the distress is propagating top-down or bottom-up. Partial depth repair techniques are not recommended for bottom-up failures.

In areas where Partial Depth Repair, Full-Depth Adjustment extends beyond 18 inches along the joint, other methods such as full-depth Concrete Pavement Repair should be used.

More severely distressed cracks or joints should be repaired using other methods such as full-depth Concrete Pavement Repair. If more work is needed, it is an indication that the project may not be a cost effective candidate for partial depth repair.

Use appropriate repair techniques for longitudinal cracks.

For projects with faulting greater than 1/4-inch, retrofitting with dowels, followed by continuous diamond grinding to restore rideability, may be required, in conjunction with any partial depth repairs.

When preparing plans, all five items should be included.

Contact Person:

Myungook Kang (MK) (608) 246-7957