



**MINUTES  
OF  
IOWA DOT SPECIFICATION COMMITTEE MEETING**

**March 12, 2026**

<b>Members Present:</b>	Christy Vanbuskirk	Fairfield RCE
	Mark Dunn	Contracts & Specifications Bureau
	Eric Johnsen, Chair	Contracts & Specifications Bureau
	Scott Nixon	Construction & Materials Bureau
	Frank Leong	Grimes RCE
	Michael Nop	Bridges & Structures Bureau
	Willy Sorenson	Traffic & Safety Bureau
	Dillon Feldmann	Local Systems Bureau
	Shane Neuhaus	District 6 – Materials
	Ben Hucker	Maintenance Bureau
<b>Members Not Present:</b>	Tony Gustafson	Chief Engineer
<b>Advisory Members Present:</b>	Luke Bowdish	Fayette County
	Andy Case	Dallas County
	Bryan Horesowsky	Muscatine County
	David Carney	SUDAS
	Nate Thede	Project Management
	Elijah Gansen	Construction & Materials Bureau
	Scott Sommers	Construction & Materials Bureau
	Jeff Brinkman	Contracts & Specifications Bureau

The Specification Committee met on Thursday, March 12, 2026, at 9:00 a.m. Eric Johnsen, Specifications Engineer, opened the meeting. The items were discussed in accordance with the agenda dated March 2, 2026.

The agenda is as follows:

1. [Article 2412.03, D, 4, a,1, Surface Finish \(Concrete Bridge Decks\).](#)  
[Article 2412.04, B, Method of Measurement \(Concrete Bridge Decks\).](#)  
[Article 2412.05, F, Basis of Payment \(Concrete Bridge Decks\).](#)  
[Article 2557.05, Basis of Payment \(Portland Cement Concrete Pavement Grooving\).](#)

The Specifications Section requested to clarify that Section 2412 should be used for grooving bridge approaches as well as decks and also that removal of slurry and residue is included in the contract unit price for grooving.

2. [Article 2426.02, B, 2, Regular Repair \(Structural Concrete Repair\).](#)  
[Article 2426.03, D, Curing \(Structural Concrete Repair\).](#)

The Construction and Materials Bureau requested to add rapid set patch materials for regular repairs.

3. [Article 2527.03, H, 1, Grooving for Pavement Markings \(Pavement Markings\).](#)

The Construction and Materials and Maintenance Bureaus requested to update the type of cutting heads necessary when grooving for pavement markings.

4. [DS-23060, Diamond Grinding Rumble Strips.](#)

Construction and Materials Bureau requested revisions to the Developmental Specifications for Diamond Grinding Rumble Strips.

Form 510130 (07-24)



**SPECIFICATION REVISION SUBMITTAL FORM**

<b>Submitted by:</b> Eric Johnsen		<b>Bureau/Office:</b> Specifications	<b>Item 1</b>
<b>Submittal Date:</b> 1/7/2026		<b>Proposed Effective Date:</b> Oct. 2026	
<b>Article No.:</b> 2412.03, D, 4, a, 1 <b>Title:</b> Surface Finish (Concrete Bridge Decks) <b>Article No.:</b> 2412.04, B <b>Title:</b> Method of Measurement (Concrete Bridge Decks) <b>Article No.:</b> 2412.05, F <b>Title:</b> Basis of Payment (Concrete Bridge Decks) <b>Article No.:</b> 2557.05 <b>Title:</b> Basis of Payment (Portland Cement Concrete Pavement Grooving)		<b>Other:</b>	
<b>Specification Committee Action:</b> Approved with changes.			
<b>Deferred:</b>	<b>Not Approved:</b>	<b>Approved Date:</b> 3/12/2026	<b>Effective Date:</b> 10/20/2026
<b>Specification Committee Approved Text:</b> <b>2412.03, D, 4, a, 1.</b>  <b>Replace the Article:</b> Transverse grooving or tining in plastic concrete of bridge decks <del>(and bridge approaches when included in the bridge project)</del> will not be allowed unless otherwise stated in the contract documents.			
<b>2412.04, B.</b>  <b>Replace the Article:</b> Square yards of Longitudinal Grooving in Concrete, <del>in square yards</del> Bridge Deck and/or Approaches, will be the plan quantity shown in the contract documents.			
<b>2412.05, F.</b>  <b>Replace the Article:</b> Payment for Longitudinal Grooving in Concrete, Bridge Deck and/or Approaches, will be the contract unit price <del>per</del> per square yard. This payment includes removal of slurry and residue during the grooving operation.			
<b>2557.05, Basis of Payment.</b>			

<p><b>Replace the Article:</b>  <del>Contract unit price per square yard</del> Payment for Longitudinal Grooving of Concrete, Pavement, will be the contract unit price for per square yard. This payment includes removal of slurry and residue during the grooving operation.</p>		
<p><b>Comments:</b> The Design Bureau noted that “residue” was misspelled in two of the revisions. This has been corrected.</p>		
<p><b>Specification Section Recommended Text:</b>  <b>2412.03, D, 4, a, 1.</b></p> <p><b>Replace the Article:</b>          Transverse grooving or tining in plastic concrete of bridge decks <del>(and bridge approaches when included in the bridge project)</del> will not be allowed unless otherwise stated in the contract documents.</p> <p><b>2412.04, B.</b></p> <p><b>Replace the Article:</b>          Square yards of Longitudinal Grooving in Concrete, <del>in square yards</del> Bridge Deck and/or Approaches, will be the plan quantity shown in the contract documents.</p> <p><b>2412.05, F.</b></p> <p><b>Replace the Article:</b>          Payment for Longitudinal Grooving in Concrete, Bridge Deck and/or Approaches, will be the contract unit price <del>for</del> per square yard. This payment includes removal of slurry and residue during the grooving operation.</p> <p><b>2557.05, Basis of Payment.</b></p> <p><b>Replace the Article:</b>  <del>Contract unit price per square yard</del> Payment for Longitudinal Grooving of Concrete, Pavement, will be the contract unit price for per square yard. This payment includes removal of slurry and residue during the grooving operation.</p>		
<p><b>Comments:</b></p>		
<p><b>Member’s Requested Change: (Do not use ‘Track Changes’, or ‘Mark-Up’. Use Strikeout and Highlight.)</b></p>		
<p><b>Reason for Revision:</b> Clarify that Section 2412 should always be used for grooving bridge approaches as well as decks. There had been confusion when the approaches were constructed separately from the bridge deck whether Section 2412 or Section 2557 should be used.          Also clarify that removal of slurry and residue is included in the contract unit price for grooving.</p>		
<b>New Bid Item Required (X one)</b>	<b>Yes</b>	<b>No X</b>
<b>Bid Item Modification Required (X one)</b>	<b>Yes X</b>	<b>No</b>
<b>Bid Item Obsolescence Required (X one)</b>	<b>Yes</b>	<b>No X</b>

<b>Comments:</b> Bid item name will be changed to add "and/or Approaches".
<b>County or City Comments:</b>
<b>Industry Comments:</b>

Form 510130 (08-15)



**SPECIFICATION REVISION SUBMITTAL FORM**

<b>Submitted by:</b> Scott Nixon		<b>Office:</b> Construction & Materials	<b>Item 2</b>
<b>Submittal Date:</b> 2/23/2026		<b>Proposed Effective Date:</b> October 2026	
<b>Article No.:</b> 2426.02, B, 2 <b>Title:</b> Regular Repair (Structural Concrete Repair) <b>Article No.:</b> 2426.03, D <b>Title:</b> Curing (Structural Concrete Repair)		<b>Other:</b>	
<b>Specification Committee Action:</b> Approved as recommended.			
<b>Deferred:</b>	<b>Not Approved:</b>	<b>Approved Date:</b> 3/12/2026	<b>Effective Date:</b> 10/20/2026
<b>Specification Committee Approved Text:</b> See Specification Section Recommended Text.			
<b>Comments:</b> None.			
<b>Specification Section Recommended Text:</b> <b>2426.02, B, 2, Regular Repair.</b>  <b>Replace</b> the first paragraph: Use approved material from <a href="#">Materials I.M. 491.20, Appendix B</a> , in accordance with manufacturer's recommendations or Class O PCC meeting the requirements of <a href="#">Materials I.M. 529</a> and the following. Class O PCC batched in accordance with these requirements need not classify as low slump concrete.  <b>2426.03, D, Curing.</b>  <b>Replace</b> the third sentence: Use manufacturer's recommendations for curing products from <a href="#">Materials I.M. 491.08</a> and <a href="#">Materials I.M. 491.20</a> .			
<b>Comments:</b>			
<b>Member's Requested Change: (Do not use 'Track Changes', or 'Mark-Up'. Use Strikeout and Highlight.)</b>			
<b>2426.02 MATERIALS.</b>  <b>2. Regular Repair.</b>  Use approved material from <a href="#">Materials I.M. 491.20, Appendix B</a> , in accordance with manufacturer's recommendations or <del>Use</del> Class O PCC meeting the requirements of <a href="#">Materials I.M. 529</a> and the following. Class O PCC batched in accordance with these requirements need not classify as low slump concrete. a. Limit maximum water-to-cement ratio to 0.400. b. Use 3 inches as the target slump, with a variation not to exceed ± 1 inch. For placements requiring higher slump, a mid range water reducer may be used with a target slump of 5 inches, or a high range water reducer may be used with a target slump of 7 inches. c. Desired air entrainment of the finished concrete is typically 6%. Unless noted otherwise, ensure the air content of fresh, unvibrated concrete at the time of placement, as determined by <a href="#">Materials</a>			

[I.M. 318](#), is 6.5% with a maximum variation of plus 2.0% and minus 1.0%. Air entrainment and air testing are waived for the following applications:

- Repairs to precast and prestressed concrete bridge beams.
- Repairs which are proportioned and batched on site with individual batch volumes not exceeding 0.75 cubic yard.
- Repairs which use pre-packaged, dry, combined materials for Class O PCC in accordance with [Materials I.M. 447](#).

**2426.03 CONSTRUCTION.**

**D. Curing.**

For Class O concrete, apply white pigmented curing compound to the concrete immediately following concrete finishing or immediately after removing forms, if used. Apply curing compound according to [Article 2403.03.E](#), except use an application rate of 100 square feet per gallon. Use manufacturer's recommendations for curing products from [Materials I.M. 491.08](#) and Materials I.M. 491.20.

**Reason for Revision:** Add rapid set patch materials from IM 491.20, appendix B, for regular repairs. Contactors are already using for regular repairs. Materials from IM 491.08 are typically used for shallow depth and vertical repairs.

<b>New Bid Item Required (X one)</b>	<b>Yes</b>	<b>No X</b>
<b>Bid Item Modification Required (X one)</b>	<b>Yes</b>	<b>No X</b>
<b>Bid Item Obsolescence Required (X one)</b>	<b>Yes</b>	<b>No X</b>

**Comments:**

**County or City Comments:**

**Industry Comments:** Sent to ICPA/IRMCA

Form 510130 (08-24)



**SPECIFICATION REVISION SUBMITTAL FORM**

<b>Submitted by:</b> Scott Nixon / Brian Worrel / Ben Hucker		<b>Bureau/Office:</b> Construction & Materials and Maintenance	<b>Item 3</b>
<b>Submittal Date:</b> 02/17/2026		<b>Proposed Effective Date:</b> 10/20/2026	
<b>Article No.:</b> 2527.03, H, 1 <b>Title:</b> Grooving for Pavement Markings (Pavement Markings)		<b>Other:</b>	
<b>Specification Committee Action:</b> Approved as recommended.			
<b>Deferred:</b>	<b>Not Approved:</b>	<b>Approved Date:</b> 3/12/2026	<b>Effective Date:</b> 10/20/2026
<b>Specification Committee Approved Text:</b> See Specification Section Recommended Text.			
<b>Comments:</b> The Traffic and Safety Bureau asked why we need to specify the type of cutting heads. The Maintenance Bureau indicated that the stacked diamond heads use water, which requires drying time before placing the pavement markings. Also, milling heads can cause too much damage to the pavement joints, which is less with the PCD heads.			
<b>Specification Section Recommended Text:</b> <b>2527.03, H, 1.</b>  <b>Replace</b> the second sentence: Dry or wet cut the groove in a single pass, using <del>stacked diamond</del> polycrystalline disk cutting heads mounted on a floating head with controls capable of providing uniform depth and alignment.			
<b>Comments:</b>			
<b>Member's Requested Change: (Do not use 'Track Changes', or 'Mark-Up'. Use Strikeout and Highlight.)</b>			
<b>H. Grooving for Pavement Markings.</b>			
1. When specified, place pavement markings in a groove cut into the pavement surface. Dry or wet cut the groove in a single pass, using <del>stacked diamond</del> polycrystalline disk cutting heads mounted on a floating head with controls capable of providing uniform depth and alignment. If dry cutting, use equipment that is self-vacuuming. Use the equipment according to the manufacturer's recommendations.			
<b>Reason for Revision:</b> Stacked diamond blades require water when cutting to keep them cool, which leaves behind a wet surface. This is problematic for pavement marking grooving, as pavement markings need to be applied to a dry surface. Removing the requirement for stacked diamond blades and replacing it with polycrystalline disk (PCD) cutting heads better aligns with the needs of the operation.			
<b>New Bid Item Required (X one)</b>	<b>Yes</b>	<b>No X</b>	
<b>Bid Item Modification Required (X one)</b>	<b>Yes</b>	<b>No X</b>	

<b>Bid Item Obsolescence Required (X one)</b>	<b>Yes</b>	<b>No X</b>
<b>Comments:</b>		
<b>County or City Comments:</b>		
<p><b>Industry Comments:</b> This specification revision was presented to Iowa ATSSA Chapter members at their meeting on February 3, 2026, and only positive feedback in support of this change was voiced. No Iowa contractors currently use stacked diamond blades for this operation; all use PCD.</p>		

Form 510130 (07-24)



**SPECIFICATION REVISION SUBMITTAL FORM**

<b>Submitted by:</b> Scott Nixon/Elijah Gansen		<b>Bureau/Office:</b> Construction and Materials	<b>Item 4</b>
<b>Submittal Date:</b> 2/12/2026		<b>Proposed Effective Date:</b> March 2026	
<b>Article No.:</b> <b>Title:</b>		<b>Other:</b> DS-23060 Diamond Grinding Rumble Strips	
<b>Specification Committee Action:</b> Approved as recommended.			
<b>Deferred:</b>	<b>Not Approved:</b>	<b>Approved Date:</b> 3/12/2026	<b>Effective Date:</b> 6/16/2026
<b>Specification Committee Approved Text:</b> See attached Developmental Specifications for Diamond Grinding Rumble Strips.			
<b>Comments:</b> PCD heads cause more damage the deeper you grind; water left behind is not a concern with rumble strips like it is when grinding for pavement markings.			
<b>Specification Section Recommended Text:</b> See attached Draft Developmental Specifications for Diamond Grinding Rumble Strips.			
<b>Comments:</b> The attachments need to be included with the final version of the DS.			
<b>Member's Requested Change: (Do not use 'Track Changes', or 'Mark-Up'. Use Strikeout and Highlight.)</b>			
<b>23060.03, A, 2</b>			
2. Allow PCC to cure for a minimum of 14 days prior to placing diamond ground rumble strips. When maturity is used for opening, placement of diamond ground rumble strips may begin when 350psi flexural strength is achieved.			
<b>23060.03, B, 1</b>			
1. Perform grinding using stacked diamond blades mounted on a self propelled machine that has been designed for grinding PCC or HMA surfaces. Polycrystalline diamond (PCD) heads are not considered an approved equal for stacked diamond blades. Ensure the equipment will not cause strain or damage to the underlying pavement.			
<b>Reason for Revision:</b> The addition of the 350psi flexural strength will allow for more flexibility with scheduling for the installation of rumble strips. There has been confusion as to if polycrystalline diamond heads are considered an approved equal to stacked diamond blades since they both use diamond in the cutting edges. This revision is to clarify the type of equipment that is to be used.			
<b>New Bid Item Required (X one)</b>	<b>Yes</b>	<b>No</b> X	
<b>Bid Item Modification Required (X one)</b>	<b>Yes</b>	<b>No</b> X	
<b>Bid Item Obsolescence Required (X one)</b>	<b>Yes</b>	<b>No</b> X	
<b>Comments:</b>			
<b>County or City Comments:</b> Not circulated to local systems due to them not using this process for rumble strips			
<b>Industry Comments:</b> No comments from ICPA or ATSSA			



DS-23085  
(Replaces DS-23060)



**DEVELOPMENTAL SPECIFICATIONS  
FOR  
DIAMOND GRINDING RUMBLE STRIPS**

**Effective Date  
June 16, 2026**

**THE STANDARD SPECIFICATIONS, SERIES 2023, ARE AMENDED BY THE FOLLOWING MODIFICATIONS AND ADDITIONS. THESE ARE DEVELOPMENTAL SPECIFICATIONS AND THEY PREVAIL OVER THOSE PUBLISHED IN THE STANDARD SPECIFICATIONS.**

**23085.01 DESCRIPTION.**

Provide equipment, furnish all necessary labor and materials, and perform all operations necessary for diamond grinding standard or sinusoidal rumble strips in HMA or PCC surfaces. Diamond grind rumble strips to the dimensions and spacing shown in the contract documents. Apply diluted asphalt emulsion to the diamond ground shoulder rumble strips on HMA surfaces by means of a bituminous distributor.

**23085.02 MATERIALS.**

- A. Use asphalt emulsion Grade CSS-1, CSS-1h, SS-1, or SS-1h meeting requirements of [Section 4140 of the Standard Specifications](#).
- B. Dilute the asphalt emulsion with water prior to application to the milled shoulder rumble strip. The dilution rate is one part of asphalt emulsion to one part of water.

**23085.03 CONSTRUCTION.**

**A. General.**

- 1. Notify the Engineer if degraded areas are encountered that will not accommodate diamond ground rumble strips. Skip those sections.
- 2. Allow PCC to cure for a minimum of 14 days prior to placing diamond ground rumble strips. When maturity is used for opening, placement of diamond ground rumble strips may begin when 350psi flexural strength is achieved.

**B. Equipment.**

- 1. Perform grinding using stacked diamond blades mounted on a self propelled machine that has been designed for grinding PCC or HMA surfaces. Polycrystalline diamond heads are not considered an approved equal for stacked diamond blades. Ensure the equipment will not cause strain or damage to the underlying pavement.

2. Do not use grinding equipment that causes excessive ravels, aggregate fractures, spalls, or excessive disturbance of the transverse and/or longitudinal joints. The finished surface after grinding the rumble strips should have a corduroy like texture.
3. For standard rumble strips use grinding equipment with a minimum effective head width suitable for grinding the entire width of the rumble strip in one pass. For centerline rumble strips use a grinding head equipped to grind the rumble strip on each side of the centerline in one pass.
4. Select the blade type and number of blades per foot to provide proper surface texture based on the material being ground, in particular, the coarse aggregate type.

**C. Test Strip.**

Demonstrate to the Engineer on an initial 500 foot test section that the equipment and method will provide the desired diamond ground rumble strip and surface inside each depression without damaging the adjacent pavement. If the desired results are not being provided, as determined by the Engineer, provide different equipment or methods, or make necessary adjustments to provide the desired results. If the initial 500 foot section results are unsatisfactory, repair or replace the section as determined by the Engineer, at no additional cost to the Contracting Authority.

**D. Grinding.**

1. Grind shoulder rumble strips in a straight line, offset from the painted edge line as shown in the contract documents. Do not deviate from that offset more than  $\pm 2$  inches. Ensure the depth of the rumble strips is as shown in the contract documents. The Engineer will randomly check the alignment and depth.
2. Grind centerline rumble strips in a straight line, on the centerline joint as shown in the contract documents. Do not deviate from that location more than  $\pm 1$  inch. Ensure the depth of the rumble strips is as shown in the contract documents. The Engineer will randomly check the alignment and depth.
3. Continuously remove all slurry or residue resulting from the grinding operations. Do not deposit on the slab or shoulder. Leave pavement and paved shoulders in a clean condition. Ensure residue from grinding operations does not flow across lanes occupied by public traffic. This residue may be spread on the foreslope or removed according to [Article 1104.08 of the Standard Specifications](#). When residue is deposited on the foreslope in areas where cable guardrail is present, spread the residue in a manner that prevents it from collecting in the sockets for the cable guardrail system. Take measures to prevent damage to vegetation during spreading of residue. If damage occurs, repair at no cost to the Contracting Authority. Do not allow discharge of slurry or residue into gutters, drainage facilities, or bodies of water.

**E. Asphalt Emulsion Fog Seal.**

Per [Article 2548.03, C of the Standard Specifications](#).

**F. Limitations.**

Do not disturb desirable grass areas and desirable trees outside the construction limits. Do not park or service vehicles and equipment or use these areas for storage of materials. Obtain the Engineer's approval for storage, parking, and service areas.

**23085.04 METHOD OF MEASUREMENT.**

Measurement will be as follows:

**A. Diamond Ground Shoulder Rumble Strips.**

Stations shown in the contract documents for each type, measured along each edge of mainline

pavement. Unless stated otherwise in the contract documents, no deduction will be made for gapped areas. The quantity will be adjusted for the length of degraded shoulders skipped, as defined in Article DS-23085.03 of this specification. The quantity will be adjusted for test sections that were deemed unsatisfactory.

**B. Diamond Ground Centerline Rumble Strips.**

Stations shown in the contract documents for each type, measured along the centerline of mainline pavement. Unless stated otherwise in the contract documents, no deduction will be made for gapped areas. The quantity will be adjusted for the length of degraded pavement skipped, as defined in Article DS-23085.03 of this specification. The quantity will be adjusted for test sections that were deemed unsatisfactory.

**C. Asphalt Emulsion for Fog Seal (Shoulder Rumble Strips).**

Gallons computed from field measurements of distributors or from tank cars or transport trucks as provided in [Article 4100.03 of the Standard Specifications](#). When quantities computed from field measurements check within 1.0% of the billed gallons, payment will be based on billed gallons. When quantities computed from field measurements differ from billed gallons by more than 1.0%, payment will be based on the quantity from field measurements. From these quantities, any amount used by the Contractor as fuel, left in cars, or otherwise not delivered to the road surface will be deducted. The Engineer will advise the Contractor promptly, in writing, of quantities deducted.

**23085.05 BASIS OF PAYMENT.**

Payment will be the contract unit price as follows:

**A. Diamond Ground Shoulder Rumble Strips.**

Per station for the type specified.

**B. Diamond Ground Centerline Rumble Strips.**

Per station for the type specified.

**C. Asphalt Emulsion for Fog Seal (Shoulder Rumble Strips).**

1. Per gallon for undiluted Asphalt Emulsion for Fog Seal (Shoulder Rumble Strips) that is mixed and used on the project. Diluted asphalt emulsion that is delivered to the project site, but not applied to the roadway surface will not be considered for payment.
2. Payment is full compensation for cleaning the shoulder surface, furnishing and applying diluted asphalt emulsion, mixing water, and protecting the adjacent pavement and edge lines.