Iowa Department of Transportation

MINUTES
OF
IOWA DOT SPECIFICATION COMMITTEE MEETING

January 10, 2008

Members Present:	Tom Reis, Chair	Specifications Section
	Daniel Harness, Secretary	Specifications Section
	Bruce Kuehl	District 6-District Construction
	Larry Jesse	Office of Local Systems
	Jim Berger	Office of Materials
	Gary Novey	Office of Bridges & Structures
	Dan Redmond	District 4-District Materials
Members Not Present:	John Adam	Statewide Operations Bureau
	John Smythe	Office of Construction
	Doug McDonald	District 1-Marshalltown RCE
	Roger Bierbaum	Office of Contracts
	Mike Kennerly	Office of Design
	Troy Jerman	Office of Traffic & Safety
Advisory Members Present:	Tom Parham	FHWA
	Larry Stevens	SUDAS
Others Present:	Deanna Maifield	Office of Design
	Wayne Sunday	Office of Construction
	Ed Kasper	Office of Contracts
	Tom Jacobson	Office of Construction
	Dave Claman	Office of Bridges and Structures

Tom Reis, Specifications Engineer, opened the meeting. The following items were discussed in accordance with the agenda sent January 3, 2008:

1. Article 1107.08, Public Convenience and Safety.

The Office of Construction requested a change to add a requirement for a written plan to ensure the means and methods used by the Contractor provide for the safety and protection of the public.

2. Article 2417.05, B, Deflection Testing for Polyethylene Pipes.

The Office of Construction and the Specifications Section requested a change that will modify the allowable deflection of polyethylene pipes to bring it into alignment with standard industry practice.

3. Article 2528. 12, A, 8, Monitoring with Incident Response.
Article 2528.13, A, 8, Monitoring with Incident Response.

The Specifications Section requested a change to clarify that additional personnel used for CMS operation are not incidental to Incident Response and to establish the bid item for such work.

4. Article 4109.02, Aggregate Gradation Table.

The Office of Materials requested a change to allow greater use of modified subbase for special backfill.

5. Article 4122.03, Quality.

The Office of Materials requested a change to allow greater use of approved sources of PCC aggregate for macadam.

6. Article 4151.03, F, Storage and Handling at the Job Site.

The Office of Materials requested a change to add text requiring fabricators to add padding if metal bands are used.

7. DS-01111, Bridge Floor Over-depth Repair and Overlay.

The Office of Local Systems requested changes to DS-01111 to address concerns brought forth by AGCI.

8. Section 2547, Temporary Stream Access.

The Office of Contracts requested a discussion concerning the use of RL-16 and whether or not Temporary Stream Crossings should be paid for as a separate bid item or incidental to Mobilization.

9. Status of New Specifications Manual.

The Specifications Section informed the Committee they are running behind schedule for an October 2008 release of a new book. The release date is being moved back to October of 2009. Since the Committee has already reviewed the new book, the Specifications Section won't ask Committee members to review the book again before it is published. The Specifications Section informed the Committee that changes to the Standard Specifications are being incorporated into the new book with the release of each GS. They will have the text for the new book ready by January of 2009 for Committee members to use for recommending changes to the new book in conjunction with the October 2009 GS.

SPECIFICATION REVISION SUBMITTAL FORM

Submitted by: John Smythe / Wayne Sunday	**Office:** Construction	**Item 1**
Submittal Date: December 14, 2007	**Proposed Effective Date:** October 21, 2008	
Article No.: 1107.08 **Title:** Public Convenience and Safety	**Other:**	

Specification Committee Action: Approved with changes as noted.

Deferred:	**Not Approved:**	**Approved Date:** 1/10/08	**Effective Date:** 10/21/08

Specification Committee Approved Text:

1107.08, Public Convenience and Safety.

Replace the twelfth paragraph and add as the thirteenth paragraph:

When the Contractor works on a ~~bridge approach or~~ bridge spanning a roadway or passageway, the Contractor shall take all necessary steps to protect the public using the facility below the bridge from falling debris, material, or construction equipment. The Contractor shall submit a safety procedure written plan to the Engineer prior to starting work. The plan shall include the following:

- Design of the means and methods used to provide protection.
- All assumptions used in the design.

Evaluation of the plan and design may require its preparation by a Professional Engineer licensed in the State of Iowa. If so, the costs will be paid for in accordance with Article 1109.03, B.

Comments: Before the meeting, the Specifications Section and the Office of Construction agreed the third item in the bulleted list should actually be a separate paragraph. The Office of Construction noted the change is to the twelfth paragraph of Article 1107.08, not 1107.08, B. The Office of Construction requested "bridge approach" be removed from the first sentence of the twelfth paragraph.

Specification Section Recommended Text:

1107.08, B, Granular Shoulders.

Replace the second sentence of the twelfth paragraph:

The Contractor shall submit a written safety procedure to the Engineer prior to starting work. The plan shall include the following:

- Design of the means and methods used to provide protection.
- All assumptions used in the design.
- Evaluation of the plan and design may require its preparation by a Professional Engineer licensed in the State of Iowa. If so, the costs will be paid for in accordance with Article 1109.03, B.

Comments:

Member's Requested Change: **(DO NOT USE "Track Changes," or "Mark-Up". Use ~~Strikeout~~/Highlight)**

1107.08 PUBLIC CONVENIENCE AND SAFETY.

If traffic is to be maintained through the project, the Contractor shall conduct the work to assure the

least possible obstruction to access by the residents along the project. The Contractor shall schedule and conduct the work in such a way as to provide for their safety and convenience. Work and materials required by the Engineer for public convenience and safety in excess of that provided for in the contract documents will be paid for as extra work.

Whenever it is practical to do so, the Contracting Authority will close the portion of the road under construction, provide a detour, and cause suitable detour signs to be erected to mark such detour.

When it is not practical for the Contracting Authority to close the road for construction, the Contractor will be expected to perform the work under traffic. The contract documents will indicate this fact and provide instruction for handling traffic through the work. Unless otherwise stated in the contract documents, all work shall be performed by the Contractor between the hours of 30 minutes after sunrise to 30 minutes before sunset.

Except when the contract documents indicate the road is to be closed, during all pavement widening, base widening, and HMA resurfacing work, traffic will be permitted to use the routes involved at all times and shall not be delayed unnecessarily. Where a pavement or base is being widened, the machine depositing material shall operate within the designated work area. Construction equipment may be stored within the right-of-way, as far from the traveled way as is practical, but the roadbed shall be free of Contractor's equipment during non-working hours. The work shall be planned and conducted to cause a minimum delay or interference with traffic.

When work on a traveled way necessitates diverting traffic from a work lane to another lane, material, mobile equipment, and vehicles shall occupy the work lane to the minimum extent and for the minimum time necessary, and non-mobile equipment shall be removed from the work lane promptly after its operation is completed in that lane.

On two-lane two-way roadways, a work area shall be established only on one side of the roadway and there shall be no parking of vehicles or equipment on the opposite shoulder within 500 feet (150 m) of the work area.

The location for storage of equipment by the Contractor during nonworking hours shall be as reviewed and approved by the Engineer prior to use.

Parking of private vehicles on Interstate right-of-way will not be allowed. Parking of unattended equipment within the median or storage of equipment within 50 feet (15 m) of the edge of pavement will not be allowed.

Materials stored within the highway right-of-way shall be placed to cause a minimum obstruction to traffic. Sidewalks, gutters, sewer inlets, and portions of highway adjoining the roadway under construction shall not be obstructed more than is necessary.

When the shoulder work is a part of the contract for work on a project open to public traffic during construction, the Contractor shall coordinate the operations so that the length and degree of pavement edge drop-off caused or partly caused by the operations are minimized.

Shoulder construction in conjunction with PCC overlay or HMA resurfacing shall meet the following:

A. Paved Shoulders (Partial or Full Width).
Construction shall be staged so no drop-offs exist at the pavement or shoulder edge when the adjacent lane is to be opened to traffic. The pavement edge drop-off requirement shall be satisfied with an HMA shoulder fillet. This fillet shall extend into the shoulder area a minimum of six times the thickness of the drop-off and shall be placed prior to the adjacent lane being

opened to traffic. Compaction of the HMA fillet shall be a minimum of one coverage with a pneumatic tired roller per 1 inch (25 mm) of thickness. The fillet shall be removed prior to start of shoulder paving. The shoulder edge drop-off requirement shall be satisfied with a granular fillet, meeting the requirements of the following paragraph.

B. Granular Shoulders.
Construction shall be staged so no drop-offs exist at the pavement edge when the adjacent lane is to be opened to traffic. The drop-off requirements shall be satisfied with a shoulder fillet or full shoulder width of granular material according to Article 2121.07. The fillet shall extend into the shoulder area a minimum of six times the thickness of the drop-off and shall be placed prior to the adjacent lane being opened to traffic. Compaction of the fillet shall be a minimum of one coverage with a pneumatic tired roller per 1 inch (25 mm) of thickness.

When the Contractor works on a bridge approach or bridge spanning a roadway or passageway, the Contractor shall take all necessary steps to protect the public using the facility below the bridge from falling debris, material, or construction equipment. The Contractor shall submit a safety procedure written plan to the Engineer prior to starting work. The written plan shall include the following:

1. Design of the means and methods used to provide protection.

2. Provide information for all design assumptions used in the design.

3. Evaluation of submitted written plan and design may necessitate that the design be prepared by a Professional Engineer licensed in the State of Iowa. If required, the costs will be paid for in accordance with Article 1109.03.

Reason for Revision: There are many situations where the means and methods used by a contractor in the performance of work on a bridge involve the installation of some type of temporary structure that is not included in the original design or identified in the plans. These temporary structures can vary greatly and need oversight review prior to installation to ensure that what is proposed will perform for the application intended. The addition of these revisions to this specification will ensure that this oversight occurs.

County or City Input Needed (X one)			**Yes**	**No** X	
Comments:					
Industry Input Needed (X one)			**Yes**	**No** X	
Industry Notified:	**Yes**	**No**	**Industry Concurrence:**	**Yes**	**No**

Comments: Requiring a written plan and details from the contractor relative to their means and methods is consistent with past industry practice. Formalizing this requirement is to ensure the means and methods used by the contractor provides for the safety and protection of the public.

SPECIFICATION REVISION SUBMITTAL FORM

Submitted by: John Smythe / Tom Reis	**Office:** Construction / Specifications	**Item 2**
Submittal Date: 11.30.2007	**Proposed Effective Date:** October 21, 2008	
Article No.: 2417.05, B **Title:** Deflection Testing for Polyethylene Pipes	**Other:**	

Specification Committee Action: Approved as is.

Deferred:	**Not Approved:**	**Approved Date:** 1/10/08	**Effective Date:** 10/21/08

Specification Committee Approved Text: See Specification Section Recommended Text.

Comments: District 6 Construction asked where the 6.5% came from. The Office of Construction explained the 6.5% came from pipe manufacturers. The Office of Bridges and Structures further clarified that although ASTM/AASHTO call for 5%, pipe manufacturers wanted a 1.5% tolerance, thus their recommendation for 6.5%.

Specification Section Recommended Text:

2417.05, B, Deflection Testing for Polyethylene Pipes.

Replace the second sentence of the first paragraph:

The internal diameter of a pipe shall not be reduced by more than ~~6.5~~ 5.0% of its nominal inside diameter.

Comments:

Member's Requested Change: (Do not use '**Track Changes**', or '**Mark-Up**'. Use **~~Strikeout~~** and **Highlight**.

2417.05, Installation.

Replace the entire article:

2417.05 INSTALLATION.

Installation of corrugated metal pipe or polyethylene pipe for roadway culverts shall be with a Class A bedding.

A. Class A Bedding.

Class A bedding shall consist of a uniform uncompacted cushion of sand as detailed in the contract documents and meeting the gradation requirements of Gradation No. 1 or 32 of the Aggregate Gradation Table referenced in Section 4109.

B. Deflection Testing for Polyethylene Pipes.

No sooner than 30 calendar days following compaction of pipe installation and backfilling, or before paving, the Contractor shall perform deflection testing on at least 10% of the pipe locations along their entire length at locations as determined by the Engineer. The internal diameter of a pipe shall not be reduced by more than ~~6.5~~ 5.0% of its nominal inside diameter. If any pipe fails post installation testing, the Engineer may require the Contractor to perform post installation testing on any additional pipes or all of the remaining pipes. Pipes failing post installation testing shall be considered unacceptable. New pipe or pipe that is not damaged shall be reinstalled. The reinstalled pipe shall be tested for deflection.

1. Pipe Diameter of 30 Inches (750 mm) or Less.

Deflection testing shall be performed using a properly sized nine-point mandrel test.

2. Pipe Diameter Greater than 30 Inches (750 mm).
A measurement by the Contractor shall be made to insure the internal diameter of the entire length of the pipe is not reduced by more than 6.5% of its nominal inside diameter.

Reason for Revision: Article 2417.05, B requires the contractor perform deflection testing of installed PE pipes using a properly sized nine-point mandrel on pipes with diameter of 30 inches or less. The current allowable deflection is 6.5% of the nominal inside diameter.

Currently the only testing mandrels available are various diameters for either 5% or 7.5% deflection, but not 6.5%.

County or City Input Needed (X one)			**Yes**	**No** x	
Comments:					
Industry Input Needed (X one)			**Yes**	**No** x	
Industry Notified:	**Yes**	**No**	**Industry Concurrence:**	**Yes**	**No**
Comments:					

SPECIFICATION REVISION SUBMITTAL FORM

Submitted by: Tom Reis	**Office:** Specifications	**Item 3**
Submittal Date: 01.03.2008	**Proposed Effective Date:** October 21, 2008	
Article No.: 2528.12 **Title:** Method of Measurement (Traffic Control) **Article No.:** 2528.13 **Title:** Basis of Payment (Traffic Control)	**Other:**	

Specification Committee Action: Approved as is.

Deferred:	**Not Approved:**	**Approved Date:** 1/10/08	**Effective Date:** 10/21/2008

Specification Committee Approved Text: See Specification Section Recommended Text.

Comments: The Office of Design asked if the District would make the decision whether or not the item is needed. District 6 noted the Districts would need to make the decision since a number of factors will be involved.

Specification Section Recommended Text: See Member's Requested Change.

Comments:

Member's Requested Change: **(Do not use 'Track Changes', or 'Mark-Up'. Use ~~Strikeout~~ and Highlight.**

2528.12, A, 8, Monitoring With Incident Response.

Replace the first paragraph and **Add** as the second paragraph:

Monitoring with Incident Response will be measured in calendar days based on the contract quantity. ~~Additional personnel required by the Engineer to provide additional traffic monitoring of CMS operation will be measured in calendar days per person needed.~~

Additional Incident Response Personnel required by the Engineer to provide CMS operation will be measured in calendar days per person needed.

2528.13, A, 8, Monitoring With Incident Response.

Replace the first sentence of the second paragraph:

For the number of calendar days that Monitoring With Incident Response is used, the Contractor will be paid the contract unit price per calendar day. This payment shall be full compensation for furnishing the necessary vehicle (including operation, maintenance, and supplies); furnishing the operator; documentation of any events that restrict the normal flow of traffic including responses to an emergency situation; re-erecting, repairing, or replacing traffic control devices; providing assistance to persons with vehicle problems; moving stalled vehicles; and summoning further assistance when needed.

For the number of calendar days that Additional Incident Response Personnel ~~additional personnel~~, such as for CMS operation, required by the Engineer are used, the Contractor will be paid the contract unit price per person per calendar day. This payment shall be full compensation for furnishing the required personnel and necessary support vehicles.

Reason for Revision: To clarify in the Standard Specifications that additional personnel are not incidental to Incident Response and to establish the bid item for such work.					
County or City Input Needed (X one)			**Yes**	**No** x	
Comments:					
Industry Input Needed (X one)			**Yes**	**No** x	
Industry Notified:	**Yes**	**No**	**Industry Concurrence:**	**Yes**	**No**
Comments:					

SPECIFICATION REVISION SUBMITTAL FORM

Submitted by: Jim Berger	**Office: Materials**	**Item 4**
Submittal Date: 12-06-2007	**Proposed Effective Date:** October 2008	
Article No.: 4109.02 **Title:** Aggregate Gradation Table.	**Other:**	

Specification Committee Action: Approved as is.

Deferred:	**Not Approved:**	**Approved Date:** 1/10/08	**Effective Date:** 10/21/08

Specification Committee Approved Text: See Specification Section Recommended Text.

Comments: The Office of Materials explained this change was requested by industry and approved by the District Materials Engineers.

Specification Section Recommended Text:

4109.02, Aggregate Gradation Table.

Change the percent passing the #8 (2.36 mm) sieve for Gradation No. 30 from 15-45 to 10-40.

Comments:

Member's Requested Change (Redline/Strikeout):

Section 4109.02. Aggregate gradation Table

Change #8 sieve for gradation 30, Special Backfill.

Grad. No.	#8
30	~~15-45~~10-40

Reason for Revision: Allows greater use of modified subbase for special backfill.

County or City Input Needed (X one)			**Yes**	**No** X	
Comments:					
Industry Input Needed (X one)			**Yes**	**No** X	
Industry Notified:	**Yes** X	**No**	**Industry Concurrence:**	**Yes** x	**No**
Comments: Has industry support.					

SPECIFICATION REVISION SUBMITTAL FORM

Submitted by: Jim Berger	**Office:** Materials	**Item 5**
Submittal Date: 12-06-2007	**Proposed Effective Date:** October 2008	
Article No.: 4122.03 **Title:** Quality.	**Other:**	

Specification Committee Action: Approved as is.

Deferred:	**Not Approved:**	**Approved Date:** 1/10/08	**Effective Date:** 10/21/08

Specification Committee Approved Text: See Specification Section Recommended Text.

Comments: The Office of Materials explained that this change was requested by industry and approved by the District Materials Engineers. The Office of Bridges and Structures asked if this would result in better stone or worse stone. They noted a situation that arose as a result of stone breaking apart. The Office of Construction explained that was related to freeze/thaw rather than abrasion.

Specification Section Recommended Text:

4122.03, Quality.

Replace the first row of Table 4122.03 - 1:

Abrasion	~~45~~ 50	AASHTO T 96

Comments:

Member's Requested Change (Redline/Strikeout):

Table 4122.03-1: Macadam Quality.

Change Macadam abrasion from 45 to 50.

Table 4122.03-1: Macadam Quality.

Macadam Quality	Maximum Percent Allowed	Test Method
Abrasion	~~45~~ 50	AASHTO T 96
C Freeze	10	Iowa DOT Materials Laboratory Test Method 211, Method C

Reason for Revision: Allows greater use approved sources of PCC aggregate for macadam.

County or City Input Needed (X one)	**Yes**	**No** X
Comments:		

Industry Input Needed (X one)			**Yes**	**No** X	
Industry Notified:	**Yes** X	**No**	**Industry Concurrence:**	**Yes** X	**No**

Comments: Has industry support.

SPECIFICATION REVISION SUBMITTAL FORM

Submitted by: Jim Berger	**Office:** Materials	**Item 6**
Submittal Date: December 20, 2007	**Proposed Effective Date:** October 2008	
Article No.: 4151.03, F **Title:** Storage, Handling, and Placement at the Job Site	**Other:**	

Specification Committee Action: This item was deferred to the next meeting so the Office of Materials can add language to specify what type of padding is allowed.

Deferred: X	**Not Approved:**	**Approved Date:**	**Effective Date:**

Specification Committee Approved Text:

Comments: The Office of Construction asked what type of material can be used as padding. The Office of Materials explained that any material that prevents metal to metal contact would suffice. The Office of Construction expressed concern that materials such cardboard, which could break down if it gets wet, may not provide the necessary padding if exposed to the elements. The Office of Materials asked to defer this item to the next meeting to give them a chance to add language specifying the type of material allowed.

Specification Section Recommended Text:

4151.03, F, Storage, Handling, and Placement at the Job Site.

Add as the third item to the bulleted list:

- All bundling bands shall be suitable banding to prevent damage to coating. If metal bands are used, then all contact areas shall be properly padded. Plain steel wire shall not be used for binding epoxy coated steel.

Comments:

Member's Requested Change: **(Do not use 'Track Changes', or 'Mark-Up'.Use ~~Strikeout~~ and Highlight.**

F. Storage, Handling, and Placement at the Job Site

- Coated bars or bundles shall be stored above ground on wooden or padded supports with padded timbers placed between bundles when stacking is necessary. Supports shall be placed to prevent sags in the bundles.
- All systems for handling (loading, unloading, storing) the coated bars at the job site shall have padded contact areas. Coated bars or bundles shall not be dropped or dragged.
- All bundling bands shall be suitable banding to prevent damage to coating. If metal bands are used, then all contact areas shall be properly padded. Plain steel wire cannot be used for binding epoxy coated steel.
- Coated and uncoated steel reinforcing bars shall be stored separately.
- Handling and re-handling of the coated bars shall be minimized.
- Coated bars shall be tied with tie wire coated with epoxy, plastic, Nylon, or other Non-Conductive Materials that will not damage or cut the coating.
- Bar supports or spacers shall be coated with or made of a non-conductive Materials compatible

with concrete.					
Reason for Revision: Inspectors in the field are finding bundles of epoxy coated rebar coming from fabrication shops bundled with metal bands or metal wires without any padding in between, damaging the coating.					
County or City Input Needed (X one)			**Yes**	**No**	
Comments:					
Industry Input Needed (X one)			**Yes**	**No**	
Industry Notified:	**Yes**	**No**	**Industry Concurrence:**	**Yes**	**No**
Comments:					

SPECIFICATION REVISION SUBMITTAL FORM

Submitted by: Larry Jesse	**Office:** Local Systems	**Item 7**
Submittal Date: January 2, 2008	**Proposed Effective Date:** February 2008	
Article No.: **Title:**	**Other:** DS-01111, Developmental Specifications for Bridge Floor Over-Depth Repair and Overlay	

Specification Committee Action: Approved with changes as noted. The Specifications Section worked with the Offices of Bridges & Structures and Construction to finalize the changes.

Deferred:	**Not Approved:**	**Approved Date:** 1/10/08	**Effective Date:** 1/16/08

Specification Committee Approved Text: See attached DS-01114.

Comments: District 6 Construction questioned the tolerance of 0 inch to 1/2 inch. They wanted to know what 0 inches represents. The Office of Construction explained that 0 inches would represent the top of the top mat of steel. District 6 Construction suggested changing the wording to state the tolerance as +/- 1/4 inch. The Committee agreed.

The Office of Contracts expressed concern with language requiring a minimum of three equally spaced transverse locations. Field people may demand more. The Office of Construction explained they wanted the spacing between transverse locations to be no more than 10 feet. The Committee agreed that since staging may result in a Contractor doing half the bridge at a time, the best solution is to have transverse spacing be 10 feet, with a minimum of two locations per placement.

The Office of Bridges and Structures noted Class A removal starts at 1/4 inch below existing surface, and Class A Special starts at a target of 1/4 inch above the top of the steel mat. They noted they had several other clarifications they want to incorporate. The Office of Bridges & Structures agreed to work with the Specifications Section and the Office of Construction after the meeting to finalize the wording. The Committee agreed. These changes will be added to the January 2008 letting by addendum.

Specification Section Recommended Text:

Comments:

Member's Requested Change: **(Do not use 'Track Changes', or 'Mark-Up'. Use ~~Strikeout~~ and Highlight.**

Reason for Revision: Wayne Sunday was contacted by Robert Cramer regarding the removal and the requirement of 1/4 inch above the top mat of reinforcing in DS-01111. Robert suggested the need for a tolerance and Wayne discussed a reasonable tolerance with Curtis Monk. Wayne also discussed the requirements that the contractor determine depth of top mat of reinforcing before concrete surface removal.

County or City Input Needed (X one)	**Yes**	**No** X
Comments:		

Industry Input Needed (X one)			**Yes**	**No** X	
Industry Notified:	**Yes**	**No**	**Industry Concurrence:**	**Yes**	**No**
Comments:					

DS-01114
(Replaces DS-01111)

Iowa Department of Transportation

DEVELOPMENTAL SPECIFICATIONS
FOR
BRIDGE FLOOR OVER-DEPTH REPAIR AND OVERLAY

Effective Date
January 16, 2008

THE STANDARD SPECIFICATIONS, SERIES 2001, ARE AMENDED BY THE FOLLOWING MODIFICATIONS AND ADDITIONS. THESE ARE DEVELOPMENTAL SPECIFICATIONS AND THEY SHALL PREVAIL OVER THOSE PUBLISHED IN THE STANDARD SPECIFICATIONS.

This specification is intended for bridge floor repair and overlay contracts on non-primary and non-interstate route bridges where the Contractor is required to remove existing floor concrete to within a target of 1/4 inch (5 mm) of the top of the top mat of reinforcing steel rather than removing only the top 1/4 inch (5 mm) of the existing floor concrete. The following changes are made to the Section 2413 of the Standard Specifications:

2413.01, Description.

Add new articles:

D. Class A Bridge Floor Repair, Special.
Class A Bridge Floor Repair, Special, consists of: 1) removing existing floor concrete from a target of 1/4 inch (5 mm) above the top of the top mat of reinforcing steel, but less than full depth of the existing bridge deck; 2) transporting the existing concrete removed from the project; and 3) replacing the excavated volume with concrete to a level bounding the Bridge Floor Over-Depth Overlay classification. Lower limit for Class A Bridge Floor Repair, Special shall be to suitable existing concrete, as determined by the Engineer. Removal of floor concrete above the top of the top mat of reinforcing steel is included in Bridge Floor Over-Depth Overlay.

E. Bridge Floor Over-Depth Overlay.
~~Bridge Floor Over-Depth Overlay consists of: 1) removing existing floor concrete to within 1/4 inch (5 mm) of the top of the top mat of reinforcing steel; 2) transporting the existing concrete removed from the project; and 3) overlaying with a concrete course of a depth designated.~~
Bridge Floor Over-Depth Overlay consists of: 1) determining the concrete cover thickness over the top mat of reinforcing steel at locations spaced 10 foot (3 m) apart for the overall width of the bridge with a minimum of 2 per placement transversely and every 20 feet (6 m) longitudinally for the overall length of the bridge; 2) removing existing floor concrete to within a target of 1/4 inch +/- 1/4 inch (5 mm +/- 5 mm) above the top of the top mat of reinforcing steel; 3) acceptance of concrete surface removal will be based on the grid system described in Item 1) listed above; 4) transporting the existing concrete removed from the project; and 5) overlaying with a concrete course of a depth designated. Removal may be accomplished using equipment listed in Article 2413.03 or with scarification equipment. The process shall be accomplished in a manner that does not damage or loosen the concrete bond around the

reinforcing steel. The overlay may include a raise of the existing roadway surface elevation as shown in the project plans.

2413.04, Preparation of Surface for Bridge Floor Surfacing and Bridge Floor Overlays.

Replace the third sentence of the first paragraph:

On bridge floor overlays, Class A bridge floor repair and Class A bridge floor repair, special, removal areas may be used as test wells provided they meet the nominal dimensions and are located in the testing frequency areas.

Replace the first sentence of the second paragraph:

For bridge floor overlays, the entire existing concrete floor area shall be uniformly scarified or prepared to a depth of 1/4 inch (5 mm), or to a uniform depth to within a target of 1/4 inch (5 mm) of the top of the top mat of reinforcing steel for bridge floor over-depth overlay ~~except over~~. In areas of Class A, Class A Special, and Class B repair this surface preparation ~~where the overlay removal~~ may be coincidental with operations for repair removal.

2413.05, A, Class A Bridge Floor Repair.

Replace the second sentence of the first paragraph:

Class A repair removal shall be considered to start 1/4 inch (5 mm) below the existing surface for Class A and ~~at~~ from a target of 1/4 inch (5 mm) above the top of the top mat of reinforcing steel for Class A, Special, but this shall not preclude removal coincidental with preparation for overlay.

2413.05, A, Class A Bridge Floor Repair.

Replace the first sentence of the third paragraph:

For Class A and Class A, Special repair and in preparation for bridge deck overlay, the surface may also be prepared or partially prepared using a high pressure water system, at the Contractor's option.

2413.05, B, Class B Bridge Floor Repair.

Replace the first paragraph:

Within all areas designated for Class B repair, and any designated areas of Class A or Class A, Special, repair in which the depth of the remaining sound concrete is less than 50% of the original depth of the bridge floor, all concrete shall be removed. Designated Class A and Class A, Special, repair areas shall be measured as Class B Bridge Floor Repair when full depth removal is required. At the direction of the Engineer, limited areas of removal greater than 50% of the floor thickness, such as beneath reinforcing, may be allowed; these limited areas of excess depth will be measured as Class A Bridge Floor Repair or Class A Bridge Floor Repair, Special. Concrete shall be removed by jack hammer, chipping hammer, or by a combination of scarifying and chipping hammer, except that the final removal at the periphery of Class B repair areas shall be accomplished by 15 pound (7 kg) jack hammer, chipping hammer, or hand tools. Class B repair removal shall be considered to start 1/4 inch (5 mm) below the existing surface for Bridge Floor Overlay~~, Class A,~~ and at a target of 1/4 inch (5 mm) above the top of the top mat of reinforcing steel for Bridge Floor Over-Depth Overlay, ~~Class A, Special,~~ but this shall not preclude removal coincidental with preparation for overlay.

2413.07, A, Repairs.

Replace the first sentence of the second paragraph:

Although repair classes are considered to begin 1/4 inch (5 mm) below the original concrete surface for Class A and ~~the top of the top mat~~ from the target of 1/4 inch (5 mm) above the

top mat of reinforcing steel for Class A, Special, repair concrete shall be placed monolithically with the overlay course, except as described for larger areas of Class B repair.

2413.11 METHOD OF MEASUREMENT.

Replace the second paragraph:

Class A Bridge Floor Repair, Class A Bridge Floor Repair, Special; Class B Bridge Floor Repair, Bridge Floor Overlay (Class O PCC), Bridge Floor Overlay (Class HPC-O), Bridge Floor Over-Depth Overlay (Class O PCC), and Bridge Floor Over-Depth Overlay (Class HPC-O) will be computed by the Engineer in square yards (square meters) from measurements of the areas repaired or overlaid.

Add as the third paragraph:

Concrete removal for Class O PCC test wells may be required by the Engineer. This removal will not be measured for payment.

2413.12 BASIS OF PAYMENT.

Replace the first sentence of the ~~first~~ third indented paragraph:

For the number of square yards (square meters) of Class A Bridge Floor Repair, Class A Bridge Floor Repair, Special; Class B Bridge Floor Repair, Bridge Floor Overlay (Class O PCC), and Bridge Floor Overlay (Class HPC-O), Bridge Floor Over-Depth Overlay (Class O PCC), and Bridge Floor Over-Depth Overlay (Class HPC-O) constructed, the Contractor will be paid the respective contract unit price per square yard (square meters).

Replace the first sentence of the fourth indented paragraph:

When there is no item for Class B Bridge Floor Repair, but such work is required, payment for each square yard (square meter) for 5 square yards (~~square meter for~~ 4 m^2) or less will be at three times the contract unit price per square yard (square meter) for Class A Bridge Floor Repair or Class A Bridge Floor Repair, Special.

Replace the fifth indented paragraph:

The cost of sealing as required in Article 2413.09 shall be included in the contract unit price for Bridge Floor Overlay (Class O PCC), Bridge Floor Overlay (Class HPC-O), Bridge Floor Over-Depth Overlay (Class O PCC), or Bridge Floor Over-Depth Overlay (Class HPC-O).

Item 8

Section 2547, Temporary Stream Access

The Office of Contracts requested a discussion concerning the use of Standard Road Plan RL-16 and whether or not Temporary Stream Crossings should be paid for as a separate bid item or incidental to Mobilization as follows:

1. Temporary Stream Crossings

When allowed must be in constructed according to RL-16 and the cost would be incidental to Mobilization if the temporary stream crossing is the option of the contractor. The Temporary Stream Crossing would be paid for when required by the designer as a design element of the project.

2. Floating silt curtains

RL-16 be changed to incorporate floating silt curtains and reference Standard Road Plan RC-18 for the curtains. The RC-18, when used for a temporary stream crossing, would be incidental to Mobilization. The RC-18 would be paid for separately if required by the designer as a design element of the project.

Discussion Synopsis.

The bid item for Temporary Stream Access was created to help the Office of Contracts track costs of stream crossings in order to improve estimates. Since it isn't always clear how the Contractor will accomplish stream crossing, neither is it always clear when the bid item should be used. The suggestion was made that the bid item should be included only when it is clear what the Contractor will be required to do.

The Office of Bridges and Structures indicated they would like a bid item for Temporary Stream Access included on every bridge and culvert project let separately from road projects. There was some concern expressed that local agencies may decide not to include the bid item since there is language in the specifications stating if there is no bid item for Temporary Stream Access, it is incidental to the bid item for Mobilization. This potentially could lead to inconsistency between plans developed by consultants, cities, counties, and the Department; and confusion for bidders. The Office of Bridges and Structures also stated they prefer to have the bid item since it alerts bidders that there are requirements they must follow.

The suggestion was made that temporary stream crossings could be included by plan note. There was concern expressed that Contractors may miss the plan note. There was another suggestion that the 404 permit drive the need for a bid item. The Office of Contracts explained that this could result in all projects along the corridor, even lighting projects, having a bid item for Temporary Stream Access.

A concern was brought up with how Contractors would be compensated for using methods other than RL-16 to cross the stream, for example using a crane or an existing crossing at another location. These options could involve costs for the Contractor, but it isn't clear how they would be compensated since they didn't actually build anything. The Contractor may be confused as to where to place the cost.

The point was brought up that maintaining a bid item for Temporary Stream Access accomplishes three goals: it allows the Department to track costs associated with temporary stream crossings, it helps to satisfy environmental concerns by giving Contractors requirements to follow, and it provides guidance for Contractors on how to accomplish a stream crossing in a manner that will satisfy environmental requirements. The Office of Location and Environment has contacted the AGCI regarding environmental requirements associated with temporary stream crossings.

The Office of Local Systems stated they would prefer a bid item for Temporary Stream Crossing either included in all plans, or just included in bridge and culvert plans with temporary stream crossings incidental to the bid item for Mobilization in all other plans. They are not concerned which option the Department chooses as long as there is consistency between all projects let through the Department.

Concern was expressed about eliminating the bid item if that direction is chosen. This could create issues with contractors since the Department would be taking away a bid item. The question was asked which is most advantageous for the Department: keeping the bid item, or going back to making temporary steam crossings incidental? The point was brought up that the bid item is set up so 75% is paid when the crossing is built and the remaining 25% is paid when it is removed. This indicates to the Contractor there are requirements to follow when removing temporary stream crossings. This is one advantage of maintaining the bid item.

The Office of Contracts restated their concern with the current language; namely, that if a bid item isn't included then temporary stream crossing will be incidental to Mobilization. Normally work that is required, but has not been included in the contract documents, is by paid for as extra work according to Article 1109.03, B of the Standard Specifications. The point was brought up that there are some traffic control items that are handled in a manner similar to temporary stream crossings: if the work isn't included in the contract documents, it is incidental.

The concern was brought up that if the Department chooses to maintain a bid item, they will need to determine how to compensate contractors who don't build a stream crossing, but still have costs associated with crossing the stream. Contractors need to know how to include this in their bids. The suggestion was made that this could be handled by the Value Engineering process.

The Office of Bridges and Structures stated they would like to include a bid item on all bridge and culvert projects. They noted it should also be included for riprap and countermeasure projects. They noted they have no issues with temporary stream crossings being incidental for grading projects. The Office of Design stressed they need guidance for their designers as soon as possible. The Committee agreed that designers should be conservative with their designs: if they think there may be a need for a stream crossing, go ahead and include it in the plans. The Office of Local Systems will emphasize to local units of government to include a bid item for temporary stream access on their bridge and culvert projects, but not on their grading projects.

The Committee decided that no specification language changes are needed at the present time.