Iowa Department of Transportation

MINUTES
OF
IOWA D.O.T. SPECIFICATION COMMITTEE MEETING

April 10, 2008

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

Tom Reis, Specifications Engineer, opened the meeting. The following items were discussed in accordance with the agenda dated April 4, 2008:

1. Article 2102.12, Grading for Paving.

The Office of Construction requested a change to bring the specifications in line with the current industry practice of grading a crown and trimming to a uniform cross slope prior to placing base and paving.

2. Article 2111.09, Basis of Payment.

The Office of Construction requested a change to provide payment for fill required during the preparation of subgrade and that additional payment for preparation of subgrade will not be made when grading of the subgrade is included in the contract.

3. Article 2212.04, B, Base Repair.

The Office of Construction requested a change to clarify the specifications for composite patches versus full-depth PCC patches in composite pavements.

4. Article 2301.19, Curing and Protection of Pavement.
Article 2301.19, B, Cold Weather Protection.

The Office of Construction requested a change to delete language that should have been deleted when language originally included for fast track projects was deleted.

5. Article 2507.02, B, 3, Fine Aggregate.

The Office of Materials requested a change to correct a reference to Article 2506.02, C.

6. Article 2529.09, Placing Full Depth Portland Cement Concrete Finish Patches.

The Office of Construction requested a change to add language previously included in Article 2301.19 and to incorporate more generic language regarding sawing and sealing joints.

7. Article 2530.05, B, 3, b, Protection and Curing.
Article 2530.05, B, 3, c, Protection and Curing.

The Office of Construction requested a change to reflect the requirements for insulating blankets for patching being moved from Article 2301.19 to Article 2529.09.

8. DS-01106, Quality Management Concrete (QMC).

The Office of Construction requested a change to allow the Concrete Design Mixture (CDM) to be used for hand finished pavement in order to match current industry practice.

9. DS-01096, Water Main.
DS-01097, Sanitary Sewer.
DS-01098, Storm Sewer.

These Developmental Specifications have been rewritten to reflect recent changes in the SUDAS specifications that will become effective October 2008.

SPECIFICATION REVISION SUBMITTAL FORM

Submitted by: John Smythe / Kevin Merryman	**Office:** Construction	**Item 1**
Submittal Date: March 26, 2008	**Proposed Effective Date:** October 2008	
Article No.: 2102.12 **Title:** Grading for Paving	**Other:**	

Specification Committee Action: Approved as is.

Deferred:	**Not Approved:**	**Approved Date:** 4/10/08	**Effective Date:** 10/21/08

Specification Committee Approved Text: See Specification Section Recommended Text.

Comments: None.

Specification Section Recommended Text:

2102.12, Grading for Paving.

Replace the second sentence of the first paragraph:

The roadbed shall be constructed so that the surface elevation shall not be lower at any point than the elevation ~~of the corresponding pavement subgrade~~ shown in the project plans and shall not be above this elevation by more than 3 inches (75 mm), except at structures or when required by the contract documents.

Comments:

Member's Requested Change (Redline/Strikeout):

2102.12 GRADING FOR PAVING.

On contracts for grading work to be done immediately prior to paving work covered by a separate contract, the grading Contractor shall build the rough grade to the full width of roadbed and with sufficient crown to provide surface drainage. The roadbed shall be constructed so that the surface elevation shall not be lower at any point than the elevation ~~of the corresponding pavement subgrade~~ shown in the project plans and shall not be above this elevation by more than 3 inches (75 mm), except at structures or when required by the contract documents.

The operation of earth moving equipment with legal axle loads will be permitted on new pavements or resurfaced roads if the road is not open to general traffic. Operation of earth moving equipment will not be permitted on pavements or resurfaced roads open to general traffic.

The above restrictions will not be construed to prevent the Contractor from hauling across pavement with legal loads at locations designated by the Engineer, or to prohibit the Contractor from turning across pavement to the opposite shoulder when embankment height or ditch depth prevents turning in the opposite direction. All flaggers necessary for safe operations shall be furnished by the Contractor at no additional cost.

Reason for Revision: This change brings the specification language in line with the current grading practice of grading a crown and trimming to a uniform cross slope prior to placing base and paving. Current grading practice always results in the surface being more than 3 inches above the top of

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

SPECIFICATION REVISION SUBMITTAL FORM

Submitted by: John Smythe / Kevin Merryman	**Office:** Construction	**Item 2**
Submittal Date: March 26, 2008	**Proposed Effective Date:** October 2008	
Article No.: 2111.09 **Title:** Basis of Payment	**Other:**	

Specification Committee Action: Approved with the change noted.

Deferred:	**Not Approved:**	**Approved Date:** 4/10/08	**Effective Date:** 10/21/08

Specification Committee Approved Text: For the third and fifth paragraphs, see the Specification Section Recommended Text. See the following for the fourth paragraph:

When adjustments to profile grades cannot be made, fill required for preparation of subgrade at locations other than structures or existing pavements will be paid for according to Article 2102.14, or, if no contract unit price is provided, Article 1109.03, B.

Comments: Local Systems noted a comma is needed after the word "or" in the last line of the fourth paragraph.

Specification Section Recommended Text:

2111.09, Basis of Payment.

Replace the third paragraph:

Excavation ~~or filling~~ in excess of 3 inches (75 mm) for preparation of subgrade at locations other than structures or existing pavements will be paid for according to Article 2102.14, or if no contract unit price is provided, ~~as extra work~~ Article 1109.03, B~~, except where grading is a part of the contract~~.

Add as the fourth and fifth paragraphs:

When adjustments to profile grades can not be made, fill required for preparation of subgrade at locations other than structures or existing pavements will be paid for according to Article 2102.14, or if no contract unit price is provided, Article 1109.03, B.

When grading of the subgrade is a part of the contract, additional payment will not be made for excavation or fill necessary for preparation of subgrade.

Comments:

Member's Requested Change (Redline/Strikeout):

2111.09 BASIS OF PAYMENT.

The Contractor will be paid the contract unit price per square yard (square meter) for each specified design thickness of granular subbase as measured above. The contract will have a separate item for Granular Subbase, Place Only, in square yards (m^2), when the Contracting Authority is providing the material or if the material is available from mandatory crushing on the contract. The cost of crushing should be included in the Contractor's price for granular subbase if recycling is not required but the Contractor chooses to crush the pavement removed for granular subbase.

This payment shall be full compensation for furnishing all materials, water, preparation of subgrade, and

for doing all work necessary to complete the granular subbase in compliance with the contract documents.

Excavation ~~or filling~~ in excess of 3 inches (75 mm) for preparation of subgrade at locations other than structures or existing pavements will be paid for according to Article 2102.14, or if no contract unit price is provided, as extra work~~, except where grading is a part of the contract~~.

When adjustments to profile grades can not be made, fill required for preparation of subgrade at locations other than structures or existing pavements will be paid for according to Article 2102.14, or if no contract unit price is provided, as extra work.

When grading of the subgrade is a part of the contract, additional payment will not be made for excavation or fill necessary for preparation of subgrade.

Reason for Revision: It is reasonable to expect a contractor to excavate up to 3 inches of material during subgrade preparation without claim for added compensation since they are already trimming the material and the material can be used for haul road construction and earth shoulder construction. It is not reasonable to expect a contractor to furnish any fill material since this is an unknown at the time of bid and can be a very costly incidental on large projects. The change provides for payment, either by bid item or by extra work for all fill required for preparation of subgrade. The change also clarifies that additional payment for preparation of subgrade will not be made when the grading of the subgrade is included in the contract. This issue has come up on several projects where there were grading bid items but the grading items were not used for construction of the subgrade.

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

SPECIFICATION REVISION SUBMITTAL FORM

Submitted by: John Smythe / Kevin Merryman	**Office:** Construction	**Item 3**
Submittal Date: March 26, 2008	**Proposed Effective Date:** October 2008	
Article No.: 2212.04, B **Title:** Base Repair	**Other:**	

Specification Committee Action: Approved with change as noted.

Deferred:	**Not Approved:**	**Approved Date:** 4/10/08	**Effective Date:** 10/21/08

Specification Committee Approved Text: For the second paragraph, see the Specification Section Recommended Text. See the following for the seventh paragraph:

> PCC full depth and partial depth repair patches shall be ~~covered immediately with an insulating blanket-type cover~~ cured as specified in Article ~~2301.19~~ 2529.09. ~~The blanket-type cover shall be covered with insulation board. The board shall be cellulosic fiber sheathing with a nominal 3/4 inch (20 mm) thickness, similar to that specified in ASTM C 208. The board may be wrapped with plastic film to protect it from rain. The board shall be placed over the patch and adjacent surface and held tightly in place with weights to retain all possible heat in the concrete.~~

Comments: The Office of Construction noted that "shall be" in the first paragraph is struck out but shouldn't be. The Specifications Section will correct the error.

District 6 asked if the patching specifications have been rewritten. They explained that because of all the references between the patching specifications, and the references to Section 2301, the patching specifications are confusing. Different personnel are interpreting them differently. The Specifications Section explained that they have been rewritten, but not yet combined.

The Office of Construction asked if the drafts could be sent out to the Committee to review. The Specifications Section will follow up on that request.

Specification Section Recommended Text:

2212.04, B, Base Repair.

Replace the second sentence of the sixth paragraph:

> For ~~PCC pavements that have been previously resurfaced with HMA~~ composite patches, the surface of the repair patch shall be finished at approximately the level of the old PCC surface.

Replace the seventh paragraph:

> PCC full depth and partial depth repair patches ~~shall be covered immediately with an insulating blanket type cover~~ cured as specified in Article ~~2301.19~~ 2529.09. ~~The blanket type cover shall be covered with insulation board. The board shall be cellulosic fiber sheathing with a nominal 3/4 inch (20 mm) thickness, similar to that specified in ASTM C 208. The board may be wrapped with plastic film to protect it from rain. The board shall be placed over the patch and adjacent surface and held tightly in place with weights to retain all possible heat in the concrete.~~

Comments:

Member's Requested Change (Redline/Strikeout):

2212.04 B. Base Repair.
Repairing pavement for base repair shall consist of the following:

1. Surface Patches.
2. Partial Depth Repair Patches.
3. Full Depth Repair Patches.

The Engineer will identify the areas to be repaired.

On two-way roadways, pavement shall not be disturbed for full depth or partial depth repair patches or surface patches unless the patch can be completed before the end of the working day.

When specified in the contract documents, full depth or partial depth repair patches may be PCC, HMA, or a combination; however, the Engineer may require HMA patches where sight distance is restricted.

For HMA repair patches, the final surface of the patch shall be level with, or not more than approximately 1/4 inch (5 mm) above the surrounding pavement.

For PCC full depth and partial depth repair patches, the concrete shall be finished level with, or not more than approximately 1/4 inch (5 mm) above the existing surface for repair of PCC pavements that are to be resurfaced. For ~~PCC pavements that have been previously resurfaced with HMA~~ composite patches, the surface of the repair patch shall be finished at approximately the level of the old PCC surface. The patch shall then be finished to the surface of the surrounding pavement with HMA at the direction of the Engineer.

PCC full depth and partial depth repair patches shall be ~~covered immediately with an insulating blanket-type cover~~ cured as specified in ~~Article 2301.19~~ Article 2529.09. ~~The blanket-type cover shall be covered with insulation board. The board shall be cellulosic fiber sheathing with a nominal 3/4 inch (20 mm) thickness, similar to that specified in ASTM C 208. The board may be wrapped with plastic film to protect it from rain. The board shall be placed over the patch and adjacent surface and held tightly in place with weights to retain all possible heat in the concrete.~~

Reason for Revision: Clarification of process for composite patch application versus full-depth PCC patches in composite pavements.

Requirements for insulating blankets for patching were moved from Section 2301.19 to Section 2529.09. Section 2529.09 includes the deleted language.

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

SPECIFICATION REVISION SUBMITTAL FORM

Submitted by: John Smythe / Kevin Merryman	**Office:** Construction	**Item 4**
Submittal Date: March 26, 2008	**Proposed Effective Date:** October 2008	
Article No.: 2301.19 **Title:** Curing and Protection of Pavement. **Article No.:** 2301.19, B **Title:** Cold Weather Protection.	**Other:**	

Specification Committee Action: Approved as is.

Deferred:	**Not Approved:**	**Approved Date:** 4/10/08	**Effective Date:** 10/21/08

Specification Committee Approved Text: See Specification Section Recommended Text.

Comments: The Office of Construction explained that the higher R-value blanket required for cold weather protection (compared to patching, which specifies an R-value of 0.5) is justified by the fact that the Contractor will start with colder mix.

Specification Section Recommended Text:

2301.19, Curing and Protection of Pavement.

Delete the second and third paragraphs:

~~When an insulation blanket is required, this cover shall consist of a layer of closed cell polystyrene foam protected by at least one layer of plastic film, rated by the manufacturer with an R-value of at least 0.5, or two layers of burlap between 4 mil (100 µm) thick sheets of plastic or an approved alternate.~~

~~Placement of the insulating cover may be delayed for up to 4 hours to accommodate initial sawing of joints. The cover may be temporarily removed to perform sawing or sealing. The cover may be permanently removed when the concrete has attained the flexural strength required for opening.~~

2301.19, B, Cold Weather Protection.

Replace the third row of the table:

Below 25ºF (-4ºC)	Four layers of burlap between layers of 4 mil (100 µm) plastic, insulation blankets meeting the requirements below, or equivalent commercial insulating material approved by the Engineer.

Add as the second paragraph:

When insulation blankets are used, they shall consist of a layer of closed cell polystyrene foam protected by at least one layer of plastic film, rated by the manufacturer with a minimum R-value of 1.0 (0.1761 for metric units).

Replace the second, third, and fourth sentences of the fourth paragraph:

~~In good weather, the header shall be placed at least 45 minutes before sunset. During cold weather, more time must be allowed for finishing and protection. All finishing and covering~~

~~operations shall be performed prior to darkness. Temperature restrictions and protection requirements may be modified by the Engineer~~ The cover may be temporarily removed to perform sawing or sealing.

Comments:

Member's Requested Change (Redline/Strikeout):

2301.19 CURING AND PROTECTION OF PAVEMENT.
After finishing operations have been completed, concrete pavement shall be cured in accordance with Article 2301.19, A.

~~When an insulation blanket is required, this cover shall consist of a layer of closed cell polystyrene foam protected by at least one layer of plastic film, rated by the manufacturer with an R-value of at least 0.5, or two layers of burlap between 4 mil (100 µm) thick sheets of plastic or an approved alternate.~~

~~Placement of the insulating cover may be delayed for up to 4 hours to accommodate initial sawing of joints. The cover may be temporarily removed to perform sawing or sealing. The cover may be permanently removed when the concrete has attained the flexural strength required for opening.~~

Vertical edges of pavement and backs of curbs shall be cured by the same method used for curing the surface.

Bridge approaches, medians, curbs, widening, and ramps shall be cured in accordance with Article 2301.19, A.

A. Curing with White Pigmented Liquid Curing Compound.
Curing compound shall be applied in a fine spray to form a continuous, uniform film on the surface and vertical edges of the pavement slab as soon as the free water has appreciably disappeared, but no later than 30 minutes after finishing. With approval of the Engineer, the timing of cure application may be adjusted due to varying weather conditions and concrete mix properties to ensure acceptable macrotexture is achieved. The rate of application shall be not less than 0.067 gallon per square yard covering 15 square yards per gallon (0.3 L/m^2 covering 3 m^2/L).

Care shall be taken to ensure that liquid curing materials shall be well agitated in the supply drum or tank immediately before transfer to the distributor, and kept thoroughly agitated during application. Application shall be by means of power spraying equipment capable of producing a fine spray which will not damage the surface of the concrete. Hand operated sprayers may be used for spraying the sides and irregular areas.

If forms are used, within 30 minutes after their removal, the vertical edges of the pavement shall be coated with curing material, applied at the same rate as on the surface.

If the coating is damaged within 72 hours after being applied, due to other operations, the affected areas shall be re-coated without delay. Coating of the sawed surface with curing compound will not be permitted on joints that are to be sealed. When pavement is opened to traffic prior to 72 hours after application of the curing coating, a re-coating will not be required.

Curing shall be with a white pigmented curing compound meeting requirements of Section 4105.

B. Cold Weather Protection.
All concrete pavement, including exposed edges of the slab, shall be cured according to Article 2301.19, A, prior to applying protection. In addition, concrete less than 36 hours old shall be protected as follows, and

payment will be made as provided in Article 2301.35.

Night Temperature Forecast	Type of Protection [1]
35°F to 32°F (2°C to 0°C)	One layer of burlap for concrete.
31°F to 25°F (-1°C to -4°C)	Two layers of burlap or one layer of plastic on one layer of burlap.
Below 25°F (-4°C)	Four layers of burlap between layers of 4 mil (100 µm) plastic, insulation blankets meeting the requirements below, or equivalent commercial insulating material approved by the Engineer.

[1] The protection shall remain until one of the following conditions is met:
a. The pavement is 5 calendar days old.
b. Opening strength is attained.
c. Forecasted low temperatures exceed 35°F (2°C) for the next 48 hours.
d. Forecasted high temperatures exceed 55°F (13°C) for the next 24 hours and subgrade temperatures are above 40°F (4°C).

When insulation blankets are used, they shall consist of a layer of closed cell polystyrene foam protected by at least one layer of plastic film, rated by the manufacturer with a minimum R-value of 1.0 (°F·hr·ft²)/Btu (0.1761 [K·m²]/W).

Paving operations shall be shut down in time to comply with protection requirements outlined above. ~~In good weather, the header shall be placed at least 45 minutes before sunset. During cold weather, more time must be allowed for finishing and protection. All finishing and covering operations shall be performed prior to darkness.~~ The cover may be temporarily removed to perform sawing or sealing. Temperature restrictions and protection requirements may be modified by the Engineer.

When the pavement is placed directly on natural subgrade, Section 2109, earth check dams shall be constructed immediately after passage of the slip forms or removal of the forms to prevent water from flowing along the edge of the pavement and undermining the slab. They shall not be spaced or be of a width to provide an approach over which a vehicle may be driven onto the pavement.

C. Rain Protection.
For protection against the effects of rain on paving, the Contractor shall have available, near the site of the work, materials for proper protection of the edges and surface of concrete. Protective material may consist of sheets of burlap, paper, or plastic film. Planks or other material with suitable stakes that can be used as temporary forms shall also be on hand.

It shall be the Contractor's responsibility to protect the pavement from damage due to rain. Failure to properly protect concrete may constitute cause for removal and replacement of defective pavement.

Reason for Revision: The insulation blanket language that is being deleted is language that was placed in the specifications when the Department was building fast track projects. When the fast track language was deleted from the specifications this language was not deleted (most likely because the patching specifications refer to this for curing requirements). This language is not intended to apply to normal slip form paving operations. Therefore it is proposed to delete this language and add applicable portions of it in to the patching specifications (Section 2529).

Many contractors now use insulation blankets as cold weather protection as it is much more economical for them to place blankets rather than multiple layers of burlap and plastic. While insulation blankets are allowed, and language is included in the Construction Manual that addresses requirements for use of insulation blankets, it is appropriate to include this option in the specification since blankets are commonly used.

The language about finishing and covering of headers is being deleted since certain project requirements, such as traffic control, may dictate that paving operations be performed during off-peak and overnight hours.

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

SPECIFICATION REVISION SUBMITTAL FORM

Submitted by: Jim Berger	**Office:** Materials	**Item 5**
Submittal Date: March 27, 2008	**Proposed Effective Date:** October 2008	
Article No.: 2507.02, B, 3 **Title:** Concrete and Stone Revetment.	**Other:**	

Specification Committee Action: Approved as is.

Deferred:	**Not Approved:**	**Approved Date:** 4/10/08	**Effective Date:** 10/21/08

Specification Committee Approved Text: See Specification Section Recommended Text.

Comments: None.

Specification Section Recommended Text:

2507.02, B, 3, Fine Aggregate.

Replace the entire article:

Fine Aggregate shall meet requirements of ~~Article 2506.02, C~~ Section 4110. 2100 pounds (surface dry weight) per cubic yard (1246 kg (surface dry weight) per cubic meter).

Comments:

Member's Requested Change (Redline/Strikeout):

3. Fine Aggregate.

Fine Aggregate shall meet requirements of Article 4110 ~~Article 2506.02, C~~. 2100 pounds (surface dry weight) per cubic yard (1246 kg (surface dry weight) per cubic meter).

Reason for Revision:

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: The reference to flowable mortar makes the spec unclear. Does it have to meet the informational gradation limits? If not, is a flow test required? Flow is not as critical for revetment as it is for flowable mortar. The practice in the field is to use 4110 concrete sand. Also, note DS-01083 (new Section 2550) Fabric Formed Concrete Structure Revetment refers to Article 4110.

SPECIFICATION REVISION SUBMITTAL FORM

Submitted by: John Smythe / Kevin Merryman	**Office:** Construction	**Item 6**
Submittal Date: March 26, 2008	**Proposed Effective Date:** October 2008	
Article No.: 2529.09 **Title:** Placing Full Depth Portland Cement Concrete Finish Patches	**Other:**	

Specification Committee Action: Approved with changes as noted.

Deferred:	**Not Approved:**	**Approved Date:** 4/10/08	**Effective Date:** 10/21/08

Specification Committee Approved Text: For the sixth and seventh paragraphs, see the Specification Section Recommended Text. See below for the third paragraph:

After the concrete has been finished and surface water has disappeared, the concrete shall be cured. Placement of curing materials shall occur no later than 20 minutes after completion of finishing operations. Concrete shall be cured by completely covering with an insulating blanket type cover ~~as specified in Article 2301.19~~. This cover shall consist of a layer of closed cell polystyrene foam protected by at least one layer of plastic film, rated by the manufacturer with a minimum R-value of 0.5 (0.08805 for metric units). The blanket-type cover shall be completely covered with insulation board. The board shall be cellulosic fiber sheathing with a nominal 3/4 inch (19 mm) thickness~~, similar to that specified in ASTM C 208~~. The board may be wrapped with plastic film to protect it from rain. The board shall be placed over the patch and adjacent surface and held tightly in place with weights to retain all possible heat in the concrete.

Comments: In the discussion for Item 4, the Office of Construction noted that units for the R-value were included in this item, but not Item 4. The Specifications Section will remove the units.

Specification Section Recommended Text:

2529.09, Placing Full Depth Portland Cement Concrete Finish Patches.

Replace the third paragraph:

After the concrete has been finished and surface water has disappeared, the concrete shall be cured. Placement of curing materials shall occur no later than 20 minutes after completion of finishing operations. Concrete shall be cured by completely covering with an insulating blanket type cover ~~as specified in Article 2301.19~~. This cover shall consist of a layer of closed cell polystyrene foam protected by at least one layer of plastic film, rated by the manufacturer with an R-value of at least 0.5 (°F·hr·ft²)/Btu (0.08805 (K·m²)/W). The blanket-type cover shall be completely covered with insulation board. The board shall be cellulosic fiber sheathing with a nominal 3/4 inch (19 mm) thickness~~, similar to that specified in ASTM C 208~~. The board may be wrapped with plastic film to protect it from rain. The board shall be placed over the patch and adjacent surface and held tightly in place with weights to retain all possible heat in the concrete.

Delete the sixth and seventh paragraphs:

~~C and CD joints shall be sawed. Timing is critical for this operation. It shall be done as soon as possible without excessive raveling of the saw cut edges.~~

~~For patches finished flush with the adjacent pavement, and not to be covered with HMA, C and CD joints and the edged reservoir formed by edging or sawing shall be sealed in accordance with Article 2301.25, except sand cleaning will not be required.~~

Comments:

Member's Requested Change (Redline/Strikeout):

2529.09 PLACING FULL DEPTH PORTLAND CEMENT CONCRETE FINISH PATCHES.

After the concrete has been finished and surface water has disappeared, the concrete shall be cured. Placement of curing materials shall occur no later than 20 minutes after completion of finishing operations. Concrete shall be cured by completely covering with an insulating blanket type cover ~~as specified in Article 2301.19~~. This cover shall consist of a layer of closed cell polystyrene foam protected by at least one layer of plastic film, rated by the manufacturer with an R-value of at least 0.5 (°F·hr·ft²)/Btu (0.08805 [K·m²]/W). The blanket-type cover shall be completely covered with insulation board. The board shall be cellulosic fiber sheathing with a nominal 3/4 inch (19 mm) thickness~~, similar to that specified in ASTM C 208~~. The board may be wrapped with plastic film to protect it from rain. The board shall be placed over the patch and adjacent surface and held tightly in place with weights to retain all possible heat in the concrete.

PCC patches placed on multi-lane sections shall be cured a minimum of 10 hours before opening to traffic. PCC patches placed on two-lane sections shall be cured a minimum of 5 hours before opening to traffic. These restrictions may be modified in the plans or by the Engineer for specific situations.

Patches that are damaged in any manner during the curing period shall be replaced by the Contractor at no additional cost.

~~C and CD joints shall be sawed. Timing is critical for this operation. It shall be done as soon as possible without excessive raveling of the saw cut edges.~~

~~For patches finished flush with the adjacent pavement, and not to be covered with HMA, C and CD joints and the edged reservoir formed by edging or sawing shall be sealed in accordance with Article 2301.25, except sand cleaning will not be required.~~ When required, saw and seal joints in accordance with Article 2301.25. Sawing shall be done as soon as possible without excessive raveling of the saw cut edges.

Reason for Revision: This change adds specific information about insulating blankets that was previously included in Section 2301.19 and referred to by this section. The reference to ASTM C 208 is being deleted since it does not add any value to the fiber board requirement for patching applications.

The change to the sawing and sealing language is intended to make the specification language more generic since the Road Standards address sawing and sealing of joints for patching.

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

SPECIFICATION REVISION SUBMITTAL FORM

Submitted by: John Smythe / Kevin Merryman	**Office:** Construction	**Item 7**
Submittal Date: March 26, 2008	**Proposed Effective Date:** October 2008	
Article No.: 2530.05, B, 3, b **Title:** Protection and Curing. **Article No.:** 2530.05, B, 3, c **Title:** Protection and Curing.	**Other:**	

Specification Committee Action: Approved as is.

Deferred:	**Not Approved:**	**Approved Date:** 4/10/08	**Effective Date:** 10/21/08

Specification Committee Approved Text: See Specification Section Recommended Text.

Comments: None.

Specification Section Recommended Text:

2530.05, B, 3, b, Protection and Curing.

Replace the first paragraph:

Class B patching material shall be ~~covered immediately with an insulating blanket-type cover~~ cured as specified in Article 2529.09 ~~2301.19~~. ~~The blanket-type cover shall be covered with insulation board. The board shall be cellulosic fiber sheathing with a nominal 3/4 inch (19 mm) thickness, similar to that specified in ASTM C 208. The board may be wrapped with plastic film to protect it from rain. The board shall be placed over the patch and adjacent surface and held tightly in place with weights to retain all possible heat in the concrete.~~

2530.05, B, 3, c, Protection and Curing.

Replace the first sentence of the first paragraph:

Class C patching material shall be cured according to Article 2529.09 ~~Paragraph b, above~~.

Comments:

Member's Requested Change (Redline/Strikeout):

2530.05 B. Portland Cement Concrete Patches.

3. Protecting and Curing.

a. Class A patching material shall be cured in accordance with the manufacturer's recommendations. The minimum curing time shall be in accordance with Materials I.M. 491.20, Appendix A.

b. Class B patching material shall be ~~covered immediately with an insulating blanket-type cover~~ cured as specified in ~~Article 2301.19~~ Article 2529.09. ~~The blanket-type cover shall be covered with insulation board. The board shall be cellulosic fiber sheathing with a nominal 3/4 inch (19 mm) thickness, similar to that specified in ASTM C 208. The board may be wrapped with plastic film to protect it from rain. The board shall be placed over the patch and adjacent surface and held tightly in place with weights to retain all~~

~~possible heat in the concrete.~~

These patches shall be cured for the minimum time specified in Article 2529.02 for the mixture used.

c. Class C patching material shall be cured according to ~~Paragraph b~~ Article 2529.09~~, above~~. Patches may be covered immediately with white pigmented curing compound; then the specified cure may be delayed as much as 2 hours.

Patches with Class M concrete shall be cured a minimum of 36 hours or as directed by the Engineer.

After the required curing period, the insulation blanket and the joint forming board may be removed in a manner that does not damage the patch, or removal may be delayed until the sealing is to be done provided no damage results from the delay.

Reason for Revision: Requirements for insulating blankets for patching were moved from Section 2301.19 to Section 2529.09. Section 2529.09 includes the deleted language.

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

SPECIFICATION REVISION SUBMITTAL FORM

Submitted by: John Smythe / Kevin Merryman	**Office:** Construction	**Item 8**
Submittal Date: March 26, 2008	**Proposed Effective Date:** October 2008	
Article No.: DS-01106 **Title:** Developmental Specification for Quality Management Concrete	**Other:**	

Specification Committee Action: Approved as is.

Deferred:	**Not Approved:**	**Approved Date:** 4/10/08	**Effective Date:** 7/15/08

Specification Committee Approved Text: See attached Draft DS-010XXX.

Comments: The Office of Contracts expressed concern that at the time of bidding, bidders won't know if the Engineer will approve of the use of the CDM for hand finished pavement. The situation could also arise where identical mixes used on adjacent projects could be approved on one project, but not the other. They asked about the possibility of always allowing the use of the CDM. The Office of Construction explained that District Materials Engineers aren't quite ready to allow the use of the CDM without the Engineer's approval. The Office of Contracts noted that for now, allowing the use of the CDM with the Engineer's approval is an acceptable solution. This informs the Contractor that the CDM may be allowed.

The Office of Design asked if these changes will affect pavement tabulations. The Office of Construction noted there won't be any changes needed to the plan tabulations.

The Committee decided to make the revised DS effective with the July 15, 2008 letting.

Specification Section Recommended Text:

Comments:

Member's Requested Change (Redline/Strikeout):

Reason for Revision: The current DS language does not allow the Concrete Design Mixture (CDM) to be used for hand finished pavement. However, the practice in the field has been to allow the CDM to be used. This change updates the specification language to match the current practice in the field.

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**	**No**

Comments: A copy of this change was sent to Gordon Smith with the Iowa Concrete Paving Association.

Draft DS-01XXX
(Replaces DS-01106)

Iowa Department of Transportation

DEVELOPMENTAL SPECIFICATIONS
FOR
QUALITY MANAGEMENT CONCRETE (QM-C)

Effective Date
July 15, 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.

01XXX.01 DESCRIPTION.
This ~~Supplemental S~~specification identifies a concrete mixture design with an optimum combined aggregate gradation and the Contractor's testing and quality control responsibilities. Optimization of the aggregates should produce concrete with low water requirement as well as with improved workability and finishing characteristics. While concrete strength is important and shall be measured, it is not the basis for optimization of the concrete mixture design.

Testing and quality control shall apply to all Contractor produced concrete, utilizing the Concrete Design Mixture (CDM). The CDM shall apply to mainline slip form pavement. At the Contractor's option, the CDM may apply to any other slip form paving.

01XXX.02 MATERIALS.
All materials shall meet the quality requirements for the respective items in Division 41 of the Standard Specifications. Compatibility of all material combinations shall be the responsibility of the Contractor based on acquired field experience with proposed materials.

A. Coarse and Fine Aggregate.
The Gradation Table in Article 4109.02 of the Standard Specifications will not apply to coarse aggregate. Fine aggregate sources shall meet the requirements of Section 4110 of the Standard Specifications. A coarse, uncrushed sand may be produced from an approved Class 2, Class 3, or Class 3I gravel source meeting the requirements of Section 4110 of the Standard Specifications and the following gradation limits:

Table 01XXX.02, A

Sieve	% Passing
1/2 inch (12.5 mm)	100
3/8 inch (9.5 mm)	90-100
No. 4 (4.75 mm)	75-95
No. 8 (2.36 mm)	60-90
No. 30 (600 µm)	10-60
No. 200 (75 µm)	0-1.5

B. Intermediate Aggregate.
Any limestone intermediate aggregate material shall be produced from approved beds and meet the

durability class required for the coarse aggregate. Intermediate aggregate shall be considered coarse aggregate for gradations and correlations.

Uncrushed pea gravel produced from an approved Class 2 or Class 3 gravel source and meeting the quality requirements of Section 4110 of the Standard Specifications shall not exceed 10% of the total aggregate for a Class 2 gravel source, or 15% of the total aggregate for a Class 3 gravel source.

01XXX.03 LABORATORY DESIGN MIXTURE.

The Contractor shall develop a CDM based on a unit volume of 1.000 according to industry standard practice. The CDM shall contain proportions of materials, including admixtures. Proportions shall be based upon saturated surface dry aggregates and shall produce a workable concrete mixture meeting the following constraints:

Table 01XXX.03-1

Nominal Maximum Coarse Aggregate Size	Greater than or equal to 1 inch (25 mm)
Gradation	Materials I.M. 532
Cementitious Content	Minimum, 560 lbs./cy* (333 kg/m^3*)
Fly Ash Substitution Rate	See Article 2301.04 Paragraph E
Water/Cementitious Ratio	Maximum, 0.45
Air Content	6% ± 1%, Design Absolute Volume = 0.060
28 Day Flexural Strength, Third Point	Minimum, 640 psi (4.40 MPa)

*The minimum cement content assumes the use of Type I/II cement with a specific gravity of 3.14 for an absolute volume of 0.106. The absolute volume shall be 0.106 and the weight (mass) of cement shall be determined from the specific gravity of the cement, if other than Type I/II cement. The absolute volume of cement for Type IP cement shall be 0.111. Cement content may need to be increased to maintain water to cementitious ratio during hot weather conditions.

Normal production gradations shall be used to determine the relative percentage of each individual aggregate used in the CDM. The relative percentage of each individual aggregate shall be selected to produce the desired combined aggregate gradation using the following sieves: 2 inch, 1 1/2 inch, 1 inch, 3/4 inch, 1/2 inch, 3/8 inch, No. 4, No. 8, No. 16, No. 30, No. 50, No. 100, and No. 200 (50 mm, 37.5 mm, 25 mm, 19 mm, 12.5 mm, 9.5 mm, 4.75 mm, 2.36 mm, 1.18 mm, 600 µm, 300 µm, 150 µm, and 75 µm). A target combined gradation shall be developed for each CDM based on normal production gradations and the relative percentages of each individual aggregate. Percent passing the No. 200 (75 µm) sieve shall not exceed 1.5% for the combined aggregate gradation. When the coarse aggregate used meets the increase in percent passing the No. 200 (75 µm) sieve, in accordance with Article 4115.05 of the Standard Specifications, the percent passing the No. 200 (75 µm) sieve shall not exceed 2.0% for the combined aggregate gradation. Water reducing admixture, Type A, or water reducing and retarding admixture, Type D, may be used in the CDM.

Laboratory development of the CDM shall be in accordance with AASHTO T 126. Mix designs may be conducted in a ready mix or central mix batch plant provided the following conditions are met:

1. All non-mix design materials are emptied.
2. Mix design materials are used.
3. Batch size at least 3 cubic yards (2 m^3).

Personnel overseeing the development of the CDM shall be an Iowa DOT PCC Level III Certified Technician. The Engineer shall be allowed to witness the development of the CDM. Notice shall be given 7 calendar days prior to this event. The following tests shall be performed in the development of the CDM:

Table 01XXX.03-2

Specific Gravity of Each Individual Aggregate	Materials I.M. 307
Gradation of Each Individual Aggregate	Materials I.M. 302
Unit Weight of Plastic Concrete	AASHTO T 121
Air Content of Plastic Concrete	Materials I.M. 318
28 Day Flexural Strength	AASHTO T 97
Temperature of Plastic Concrete	ASTM C 1064

01XXX.04 MIX DESIGN DOCUMENTATION.

At least 7 calendar days prior to the start of paving the Contractor shall submit a CDM report to the District Materials Engineer for approval. Contract extensions will not be allowed due to inadequate or additional CDMs. The CDM report shall include the following:

Table 01XXX.04

Cover Page	Contractor name Project number Date and location of CDM laboratory development Date Submitted Signature of Contractor representative
Material Source Information	Brand Type Source
Material Proportion Information	Specific gravity Relative percentage of each individual aggregate Target combined gradation % passing (Materials I.M. 531) Target combined gradation charts (Materials I.M. 532) Design batch weight (mass) (SSD) As mixed batch weight (mass) (SSD)
Mix Properties	Unit weight (mass) of plastic concrete Air content of plastic concrete 28 day flexural strength Slump Temperature of plastic concrete

The District Materials Engineer may approve the mix design without laboratory mixture testing if the proposed mix design proportions fall within Zone II-A of Materials I.M. 532. If the mix design is approved without laboratory testing, the Contractor shall cast a set of three beams on the first day of paving from concrete meeting the mix design criteria. The Contractor shall test the beams for 28 day flexural strength, third point loading. When the coarse aggregate for the mix design is quartzite, an additional set of three beams shall be cast and tested by the ~~e~~Contractor at 90 days. The strength results shall be submitted to the Engineer.

01XXX.05 QUALITY CONTROL.

Quality control of the concrete shall be the responsibility of the Contractor. Personnel overseeing quality control operations shall be an Iowa DOT PCC Level II Certified Technician. Personnel conducting testing on grade shall be an Iowa DOT PCC Level I Certified Technician or Concrete Field Testing Technician Grade I in accordance with ACI CP-2. The Contractor shall calibrate and correlate testing equipment prior to and during paving operations. The Quality Control Plan and Project Information Quality Control Plan, in accordance with Materials I.M. 530, shall be submitted to the Engineer at least 7 calendar days prior to the preconstruction conference. Paving shall not begin until the plan is reviewed for conformance with the contract documents. The Contractor shall maintain equipment and qualified personnel who shall direct and perform all field quality control sampling and testing necessary to determine the various properties of the concrete governed by the contract documents and to maintain the properties described in this ~~Supplemental S~~specification.

A. Quality Control Testing.

The Contractor shall perform all quality control tests necessary to control the production and construction processes applicable to this ~~Supplemental S~~specification and as set forth in the Quality

Control Plan. All samples for quality control testing shall be taken in a random manner according to the prescribed sampling rate. The Contractor shall perform the following tests described herein:

Table 01XXX.05, A-1
QUALITY CONTROL TABLE

	Limits	**Minimum Testing Frequency**	**Test Methods**
Unit Weight (Mass) of Plastic Concrete	±3% of the CDM	Twice/day	AASHTO T 121
Gradation Combined % Passing	See below	1/1500 cy (1/1200 m^3)	Materials I.M. 216, 301, 302, & 531
Aggregate Moisture Contents	See Materials I.M. 527	1/1500 cy (1/1200 m^3)	Materials I.M. 308
Air Content Plastic Concrete In Front of Paver	See Article 2301.04, C	1/350 cy (1/275 m^3) See below	Materials I.M. 318
Water/Cementitious Ratio	0.45 maximum	Twice/day	Materials I.M. 527
Vibrator Frequency	See Article 2301.07,A,6,a	With Electronic Vibration Monitoring: Twice/day Without Electronic Vibration Monitoring: Twice/Vibrator/Day	Materials I.M. 384

Gradation shall be performed at a frequency listed in the table above. The running average of three combined aggregate gradation tests shall fall within the limits established by the CDM target gradation and the following working ranges:

Table 01XXX.05, A-2	
Sieve Size	**Working Range**
No. 4 or greater (4.75 mm or greater)	± 5%
No. 8 to No. 30 (2.36 mm to 600 µm)	± 4%
No. 50 (300 µm)	± 3%
No. 100 (150 µm)	± 2%
minus No. 200 (75 µm)	See Article 01XXX.03

B. Corrective Action.
For QM-C mixes only, the Contractor shall plot all quality control test results on control charts as described in Materials I.M. 530.

1. Aggregate Tests.
When the running average approaches the working range limits, the Contractor shall take corrective action. When a combined gradation test result for a sieve exceeds the working range limits, the target shall be adjusted and the Engineer shall be notified. If the verification test result for the minus No. 200 (75 µm) exceeds the limits in Article 01XXX.03 of this specification for the combined gradation, the material represented by that test for this sieve will be considered non-complying. Pay factors will be assessed based on Coarseness/Workability Factors as described in Article 01XXX.07 of this ~~Supplemental S~~specification.

2. Concrete Tests.
When an individual test result approaches the control limits, the Contractor shall take corrective action. The Contractor shall notify the Engineer whenever an individual test result exceeds the control limits.

C. Acceptable Field Adjustments.
All mix changes shall be documented by the Contractor on the QM-C Mix Adjustment form and mutually agreed upon between the Contractor and Engineer. Batch weights shall be determined using a basic water cement ratio of 0.40. When the water cement ratio varies more than ±0.03 from the basic water cement ratio, the mix design shall be adjusted to a unit volume of 1.000. A change in the source of materials or an addition of admixtures or additives shall necessitate a new CDM. The following are small adjustments that may be made without a new CDM being required:

- Increase cementitious content
- Decrease fly ash substitution rate
- Aggregate proportions may be adjusted from CDM proportions by a maximum of ± 2% for the coarse aggregate and ± 2% for the fine aggregate. The coarse and intermediate aggregates may be adjusted from CDM proportions by a maximum of ± 5% in the coarse fraction.
- Change water reducer to water reducer retarder
- Adjustment in water reducer or water reducer retarder admixture dosage
- Change in source of fly ash
- Change in source of sand, provided target gradation limits are met

When circumstances arise, such as a cement plant breakdown, that create cement supply problems, a change in cement source may be allowed with approval of the Engineer. The District Materials Engineer shall be consulted for approval of other changes to the mix design. A set of three beams for 28 day flexural strength testing may be required to document the changes. The Contractor will be allowed to utilize a Class C mix or a mix based on Class C mix proportions utilizing project materials in the event conditions beyond the Contractor's control prevent completion of the work with the CDM. This shall be by mutual agreement between the Contractor and Engineer and at no additional cost to the Contracting Authority.

Prior to 28 days strength test results, paving with QM-C mix may begin when the mix design strength, based on the average of three beams, meets or exceeds 640 psi (4.4 MPa) with the approval of the Engineer.

D. Hand Finished Pavement.
Contractor produced concrete for hand finished pavement shall utilize project materials, based on Class C or Class M concrete mix proportions. With approval of the Engineer, the Contractor's CDM may be used for hand finished pavement. ~~Quality control, as specified in this Supplemental Specification, shall not apply to hand finished concrete.~~ Hand finished pavement may utilize Class C or M ready mix concrete without the requirements of this ~~Supplemental S~~specification.

01XXX.06 METHOD OF MEASUREMENT.

A. Quality Management Concrete (QM-C).
The Engineer will compute the number of cubic yards (cubic meters) of QM-C based on the number of batches produced upon which quality control and testing were performed. This QM-C quantity will also include the quantity of QM-C produced at the Contractor's option as referenced in Article 01XXX.01 of this ~~Supplemental S~~specification and Class C mixture used in accordance with Article 01XXX.05, C, of this ~~Supplemental S~~specification. All quantity of waste will be excluded from this quantity.

B. Standard or Slip-Form Portland Cement Concrete Pavement, QM-C.
The quantity of Standard or Slip-Form Portland Cement Concrete Pavement, QM-C, in square yards (square meters), will be the quantity shown in the contract documents.

C. Portland Cement Concrete Overlay, QM-C, Furnish Only.
Article 2310.04, A, of the Standard Specifications will apply.

D. Portland Cement Concrete Overlay, QM-C, Placement Only.
Article 2310.04, B, of the Standard Specifications will apply.

E. Class C and Class M Mixtures.
The Engineer will compute the number of square yards (square meters) of Standard or Slip-Form Portland Cement Concrete Pavement, QM-C, constructed utilizing Class C or Class M mixtures. For overlays, the Engineer will compute the number of square yards (square meters) of Portland Cement Concrete Overlay, QM-C, Placement Only, constructed utilizing Class C or Class M mixtures and the number of cubic yards (cubic meters) of Class C and Class M mixtures used.

01XXX.07 BASIS OF PAYMENT.
For construction of concrete pavement and other construction in connection therewith, the Contractor will be paid the contract unit prices for the following items of work:

A. Quality Management Concrete (QM-C).
For the number of cubic yards (cubic meters) of QM-C computed as provided above, the Contractor will be paid the predetermined contract unit price for Quality Management-Concrete per cubic yard (cubic meter). This price will be considered full compensation for furnishing all labor, equipment, and materials for the work required by the Contractor to design, test, and provide process control for the production of QM-C.

B. Standard or Slip Form Portland Cement Concrete Pavement, QM-C.
For the number of square yards (square meters) of Standard or Slip-Form Portland Cement Concrete Pavement, QM-C, constructed, the Engineer will determine the average coarseness and workability factors for each lot in accordance with Materials I.M. 530.

The contract unit price per square yard (square meter) for Standard or Slip-Form Portland Cement Concrete Pavement, QM-C, constructed will be adjusted in the following manner:

Table 01XXX.07, B
Pay Factor Chart

Gradation Zone (Materials I.M. 532)	Pay Factor
II-A	1.03
II-B	1.02
II-C	1.01
II-D	1.00
IV	0.98
I	0.95

C. Portland Cement Concrete Overlay, QM-C, Furnish Only
Article 2310.04, A, of the Standard Specifications will apply. The Engineer will determine the average coarseness and workability factor for each lot according to Materials I.M. 530. The contract unit price will be adjusted according to Table 01XXX.07 B, of this specification.

D. Portland Cement Concrete Overlay, QM-C, Placement Only
Article 2310.04, B, of the Standard Specifications will apply. The Engineer will determine the average coarseness and workability factor for each lot according to Materials I.M. 530. The contract unit price will be adjusted according to Table 01XXX.07, B, of this specification.

E. Class C and Class M Mixtures.
For the number of square yards (square meters) of Class C and Class M mixtures constructed, the Contractor will be paid the contract unit price per square yard (square meter) for Standard or Slip-Form Portland Cement Concrete Pavement, QM-C. For overlays, the Contractor will be paid the contract unit price per square yard (square meter) for Portland Cement Concrete Overlay, QM-C, Placement Only, and the contract unit price per cubic yard (cubic meter) for Portland Cement Concrete Overlay, QM-C, Furnish Only. Pay Factor incentives/disincentives in Article 01XXX.07, B, of this specification, will not be applied to Class C and Class M mixtures.

Item 9

DS-01096, Water Main.
DS-01097, Sanitary Sewer.
DS-01098, Storm Sewer.

The Developmental Specifications (DS) for Sanitary Sewer, Storm Sewer, and Water Main have been modified to reflect changes in the SUDAS Standard Specifications that will become effective October 2008. For the time being, these DSs will maintain the SUDAS numbering system, but are in the five part format that will be prevalent in the new 2009 Standard Specification book. The text in these DSs will be included in the 2009 Standard Specifications book, although the information will be reorganized and renumbered to separate out individual work types for appropriate placement within the book.

These DSs will become effective with the October 21, 2008 letting. The Specifications Section is asking the Committee to examine these DSs and they will be placed on the agenda for discussion and potential approval at the June 12, 2008 Specification Committee meeting. The DSs are available in the W:\Highway\Specifications\Exchange\SUDAS DSs folder. The Specifications Section will e-mail the DSs to individuals that do not have access to the Department's 'W' drive. The Specifications Section intends to have these DSs finalized prior to the July 1, 2008 Methods Plan Turn-in.

Discussion:
SUDAS noted the Methods Section is currently reviewing figures to be shared by the Department and SUDAS. The intent is to have those Standard Road Plans effective with the October 2008 letting. The Methods Section has found language on the drawings that belongs in the specifications. SUDAS is incorporating that language into their specifications. They will review these changes with the Specifications Section after the changes have been completed.

The Office of Local Systems asked if there will be a packet of Standard Road Plans with specifications for the Committee to review. They noted it would be nice to have the drawings and specifications side-by-side to review. The Specifications Section will prepare a packet to send out.

The Office of Contracts asked if the RA series of Standard Road Plans would be voided with the October 2008 letting. The Methods Section explained they would not be voided until all projects using them are complete.

The Specifications Section noted that it is common for SUDAS specifications to require the Contractor to hire a consulting firm to do testing. SUDAS commented that typically the Contracting Authority is responsible for testing, but if there is a testing bid item, it would be done as specified. The bid item is intended for use with locals. Some local agencies do their own testing while others require the Contractor be responsible for testing. The Department can eliminate that bid item and associated language since they require the Contracting Authority to do all testing.

The Specifications Section will add these DSs to both the May and June agendas for the Committee to further discuss.