Iowa Department of Transportation

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

December 11, 2008

Members Present:	John Adam	Statewide Operations Bureau
	Tom Reis, Chair	Specifications Section
	Daniel Harness, Secretary	Specifications Section
	Bruce Kuehl	District 6-District Construction
	Doug McDonald	District 1-Marshalltown RCE
	Gary Novey	Office of Bridges & Structures
	Dan Redmond	District 4-District Materials
	John Smythe	Office of Construction
Members Not Present:	Jim Berger	Office of Materials
	Roger Bierbaum	Office of Contracts
	Mike Kennerly	Office of Design
	Troy Jerman	Office of Traffic & Safety
	Larry Jesse	Office of Local Systems
Advisory Members Present:	Lisa Rold	FHWA
Others Present:	Donna Buchwald	Office of Local Systems
	Kevin Jones	Office of Materials
	Ed Kasper	Office of Contracts
	Scott Marler	Office of Location and Environment
	Kevin Merryman	Office of Construction

Tom Reis, Specifications Engineer, opened the meeting. The following items were discussed in accordance with the agenda dated December 4, 2008 and modified December 10, 2008:

1. Article 1105.14, Protection of Water Quality and Wetlands.

The Office of Location and Environment requested changes to more effectively communicate Corps of Engineers 404 permit conditions related to construction activities.

2. Article 2213.13, Samples.
Article 2213.14, G, Samples.
Article 2213.15, G, Samples.

The Office of Construction requested changes to correct an oversight related to changes made in 2007.

3. Article 2301.34, A, Method of Measurement.

The Office of Contracts requested a change that would require mutual agreement in order to waive pavement coring.

4. **Article 2303.02, E, Other Materials.**
Article 01118.02, E, Other Materials.
Article 2303.03, C, 1, c, 1, Hydrated Lime.
Article 01118.03, C, 1, c, 1, Hydrated Lime.
Article 2303.06, D, Anti-strip Agent.
Article 01118.06, D, Anti-strip Agent.

The Office of Materials requested changes to eliminate the potential of placing mixes with failing TSR values.

5. **Article 2506, D, Limitation of Operations.**

The Office of Location and Environment requested a change to add requirements for placing flowable mortar.

6. **Article 2513.03, B, 2, Cast-in-Place and Slip Form.**

The Office of Materials requested to change the minimum slump for slip form rail to 1/2 inch (12.5 mm).

7. **Article 4109.02, Gradation.**

The Office of Materials requested changes that will allow additional sources to produce coarse slurry aggregate.

8. **DS-011XX, Developmental Specifications for A + B Bidding.**

The Office of Contracts requested changes to DS-01061 that will update the specification to current practices.

9. **SS-010XX, Supplemental Specifications for Quality Control Program for Small HMA Paving Quantities.**

The Office of Materials requested to add patching to SS-01049 to provide consistency statewide.

10. **DS-010XXX, Developmental Specifications for Backfilling and Compaction of Culverts by Flooding.**

The Specifications Engineer requested the creation of a new DS to replace the multitude of SPs currently being developed to save staff resources.

11. **Update on the format of the 2009 Specification Book.**

SPECIFICATION REVISION SUBMITTAL FORM

Submitted by: Jim Rost / Scott Marler	**Office:** Location and Environment	**Item 1**
Submittal Date: November 25, 2008	**Proposed Effective Date:** October 2009	
Article No.: 1105.14 **Title:** Protection of Water Quality and Wetlands	**Other:**	

Specification Committee Action: Approved with changes as noted.

Deferred:	**Not Approved:**	**Approved Date:** 12/11/08	**Effective Date:** 10/20/09

Specification Committee Approved Text:

1105.14, Protection of Water Quality and Wetlands.

Add as the third paragraph:

Projects that are regulated by the requirements of a Clean Water Act Section 404/401 Permit will be identified in the contract documents. The Contractor shall comply with the following requirements in order to meet the general conditions of Clean Water Act Section 404/401 Permits.

A. Historic or Archaeological Remains. The Contractor shall comply with Article 2102.10.

B. Inspection. The Contractor shall allow representatives from the Iowa Department of Natural Resources or U.S. Army Corps of Engineers to inspect the work any time deemed necessary to ensure that the work is being accomplished in accordance with the terms and conditions of the contract documents and permit.

C. Timing. The Contractor is encouraged to conduct construction activities during a period of low flow unless otherwise agreed upon by the Engineer.

D. Vegetation Clearing. Clearing of vegetation, including trees located in or immediately adjacent to waters of the state, shall be limited to that which is absolutely necessary for construction of the project as indicated in the contract documents. Vegetative clearing material shall not be disposed of in wetlands unless otherwise indicated in the contract documents.

E. Disposal and Handling. All construction debris shall be disposed of at upland, non-wetland locations so that it cannot enter a waterway or wetland. Construction equipment, activities, and materials shall be kept out of the water to the maximum extent possible. Equipment for handling and conveying materials during construction shall be operated to prevent dumping or spilling the materials into waterbodies, streams, or wetlands except as approved by the Engineer. Care shall be taken to prevent petroleum products, chemicals, or other deleterious materials from entering waterbodies, streams, or wetlands.

F. Erosion Control. Erosion control features shall be installed by the Contractor in accordance with Sections 2601 and 2602.

G. Revegetation. All disturbed areas not covered with revetment shall be seeded in accordance with Section 2601.

H. Temporary Fills. If temporary crossings, causeways, or work pads are needed for the work, then temporary structures and fills shall be constructed in accordance with Section

2547.

I. Flowable Mortar. Flowable mortar shall be installed in accordance with Section 2506.

J. Bridge Removal. When bridge removal is identified in the contract documents, the bridge and piers shall be removed in accordance with Section 2401. Debris from bridge removal that falls into the water shall remain there only temporarily and shall be removed by the Contractor.

K. Revetment. Revetment materials shall comply with Section 4130.

L. Indiana Bats. Suitable habitat for the Indiana bat (Myotis sodalis), as identified by the Contracting Authority, shall be removed between September 15th and April 15th when Indiana bats are not expected to be using potentially suitable trees. The Contractor shall limit removal of forest cover to those areas which are absolutely necessary for the construction of the work. Questions regarding this condition shall be directed to the Engineer.

M. Navigation. No activity shall cause more than a minimal adverse effect on navigation. Safety lights and signals required by the contract documents shall be installed on authorized facilities in navigable waters of the United States. Payment will be made in accordance with Article 1109.03.

N. Aquatic Life Movements. When indigenous aquatic life has been identified in the contract documents, no activity shall substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area.

O. Spawning Areas. When spawning areas and spawning seasons have been identified in the contract documents, the Contractor shall limit activities in spawning areas during spawning seasons and avoid these areas. Contractor's activities that result in physical destruction (e.g., through excavation, fill, or downstream smothering by substantial turbidity) of an important spawning area will be prohibited, unless otherwise indicated in the contract documents.

P. Migratory Bird Breeding Areas. When migratory bird breeding areas have been identified in the contract documents, activities in waters of the United States that serve as breeding areas for migratory birds shall be avoided by the Contractor.

Q. Shellfish Beds. When shellfish beds have been identified in the contract documents, no construction activity shall occur in areas of concentrated shellfish populations.

R. Suitable Material. No activity shall use unsuitable material (e.g. trash, debris, car bodies, asphalt, etc.). Discharged material or material used for construction shall be free from toxic pollutants in toxic amounts in accordance with Section 307 of the Clean Water Act.

S. Water Supply Intakes. Unless otherwise indicated in the contract documents, no activity shall occur in the proximity of a public water supply intake, except where the activity is for repair or improvement of public water supply intake structures or adjacent bank stabilization.

T. Adverse Effects From Impoundments. If construction activity creates an impoundment of water, adverse effects to the aquatic system due to accelerating the passage of water, or restricting its flow shall be minimized.

U. Management of Water Flows. To the maximum extent practical; the pre-construction course, condition, capacity, and location of open waters shall be maintained by the Contractor during construction, including stream channelization and storm water management activities.

V. Equipment. Heavy equipment working in wetlands or mudflats shall be placed on mats, or other measures shall be taken to minimize soil disturbance.

W. Endangered Species. No activity will be authorized which will jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act, or will destroy or adversely modify the critical habitat of such species.

X. Historic Properties. No activity will be authorized which violates the requirements of Section 106 of the National Historic Preservation Act.

Y. Mitigation. The work shall be constructed to avoid and minimize adverse effects, both temporary and permanent, to waters of the United States at the project site (i.e., on site).

Comments: The Office of Location and Environment pointed out that the proposed language contains requirements that the Department is already responsible for upholding when a 404 permit applies. They noted that many of these items are informational items for the Contractor rather than contract requirements.

The Office of Contracts inquired how special situations such as “limit activities” would be handled. They wanted to know if the plans would have instructions for contractors. The Office of Environment and Location explained unique situations, such as construction activities near spawning areas, will be handled by Special Provisions.

District 6 Construction asked what would happen if an agency included a general condition that is not covered within the proposed language. The Office of Location and Environment explained that since their office reviews plans for compliance with 404 permits, they would catch that condition and either develop a special provision or have designer engineers include bid items or reference notes related to that condition.

District 6 noted it’s difficult to comply with Article 1105.14, C. Inspectors aren’t always going to be on site during times of low flow. In addition, contractors aren’t likely going to be asked to shut down if precipitation results in increased flow, nor will they wait until low flow to move back in. The Office of Location and Environment noted that the 404 permit “encourages” work during low flows. They requested changing back to the language they submitted.

The Office of Location and Environment requested changing back to the language they submitted for Article 105.14, l. They explained they may mark trees to be cleared during the winter, and this may not be reflected in the contract documents. They noted since the specification is written to the Contractor, the first sentence should be reworded to state the habitat “…shall be removed between September 15th and April 15th…”.

The Office of Local Systems requested changing back to the language originally submitted for Article 1105.14, U. They pointed out contractors aren’t likely going to know what the capacity is. With the language proposed in the Specification Section Recommended Text, contractors won’t be able to construct temporary diversions. The Office of Location and Environment agreed with the request.

The Office of Local Systems asked if language could be added to the second sentence of the third paragraph to clarify that the proposed language applies only to projects with 404 permits. The paragraph implies that all projects have 404 permits and must meet these requirements. The Specifications Section suggested switching the two sentences of the paragraph.

The Office of Construction advised discussing these changes with Industry. The Specifications Section

will draft a discussion of the changes and send to AGC for their comments.

Specification Section Recommended Text:

1105.14, Protection of Water Quality and Wetlands.

Add as the third paragraph:

The Contractor shall comply with the following requirements in order to meet the general conditions of Clean Water Act Section 404/401 Permits. Projects that are regulated by the requirements of a Clean Water Act Section 404/401 Permit will be identified in the contract documents.

1. Historic or Archaeological Remains. The Contractor shall comply with Article 2102.10.

2. Inspection. The Contractor shall allow representatives from the Iowa Department of Natural Resources or U.S. Army Corps of Engineers to inspect the work any time deemed necessary to ensure that the work is being accomplished in accordance with the terms and conditions of the contract documents and permit.

3. Timing. The Contractor shall conduct work activities during a period of low flow unless otherwise agreed upon by the Engineer.

4. Vegetation Clearing. Clearing of vegetation, including trees located in or immediately adjacent to waters of the state, shall be limited to that which is absolutely necessary for construction of the project as indicated in the contract documents. Vegetative clearing material shall not be disposed of in wetlands unless otherwise indicated in the contract documents.

5. Disposal and Handling. All construction debris shall be disposed of at upland, non-wetland locations so that it cannot enter a waterway or wetland. Construction equipment, activities, and materials shall be kept out of the water to the maximum extent possible. Equipment for handling and conveying materials during construction shall be operated to prevent dumping or spilling the materials into waterbodies, streams, or wetlands except as approved by the Engineer. Care shall be taken to prevent petroleum products, chemicals, or other deleterious materials from entering waterbodies, streams, or wetlands.

6. Erosion Control. Erosion control features shall be installed by the Contractor in accordance with Sections 2601 and 2602.

7. Revegetation. All disturbed areas not covered with revetment shall be seeded in accordance with Section 2601.

8. Temporary Fills. If temporary crossings, causeways, or work pads are needed for the work, then temporary structures and fills shall be constructed in accordance with Section 2547.

9. Flowable Mortar. Flowable mortar shall be installed in accordance with Section 2506.

10. Bridge Removal. When bridge removal is identified in the contract documents, the bridge and piers shall be removed in accordance with Section 2401. Debris from the bridge removal that falls into the water shall remain there only temporarily and shall be removed by the Contractor.

11. Revetment. Revetment materials shall comply with Section 4130.

12. Indiana Bats. Suitable habitat for the Indiana bat (Myotis sodalis), as identified in the contract documents, shall be removed between September 15th and April 15th when Indiana bats are not expected to be using potentially suitable trees. The Contractor shall limit removal of forest cover to those areas which are absolutely necessary for the construction of the work. Questions regarding this condition shall be directed to the Engineer.

13. Navigation. No activity shall cause more than a minimal adverse effect on navigation. Safety lights and signals required by the contract documents shall be installed on authorized facilities in navigable waters of the United States. Payment will be made in accordance with Article 1109.03.

14. Aquatic Life Movements. When indigenous aquatic life has been identified in the contract documents, no activity shall substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area.

15. Spawning Areas. When spawning areas and spawning seasons have been identified in the contract documents, the Contractor shall limit activities in spawning areas during spawning seasons and avoid these areas. Contractor activities that result in physical destruction (e.g., through excavation, fill, or downstream smothering by substantial turbidity) of an important spawning area will be prohibited, unless otherwise indicated in the contract documents.

16. Migratory Bird Breeding Areas. When migratory bird breeding areas have been identified in the contract documents, activities in waters of the United States that serve as breeding areas for migratory birds shall be avoided by the Contractor.

17. Shellfish Beds. When shellfish beds have been identified in the contract documents, no construction activity shall occur in areas of concentrated shellfish populations.

18. Suitable Material. No activity shall use unsuitable material (e.g.: trash, debris, car bodies, asphalt, etc.). Discharged material or material used for construction shall be free from toxic pollutants in toxic amounts in accordance with Section 307 of the Clean Water Act.

19. Water Supply Intakes. Unless otherwise indicated in the contract documents, no activity shall occur in the proximity of a public water supply intake, except where the activity is for repair or improvement of public water supply intake structures or adjacent bank stabilization.

20. Adverse Effects From Impoundments. If construction activity creates an impoundment of water, adverse effects to the aquatic system due to accelerating the passage of water, or restricting its flow shall be minimized.

21. Management of Water Flows. The pre-construction course, condition, capacity, and location of open waters shall be maintained by the Contractor during construction, including stream channelization and storm water management activities.

22. Equipment. Heavy equipment working in wetlands or mudflats shall be placed on mats, or other measures shall be taken to minimize soil disturbance.

23. Endangered Species. No activity will be authorized which will jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act, or will destroy or adversely modify the critical habitat of such species.

24. Historic Properties. No activity will be authorized which violates the requirements of Section 106 of the National Historic Preservation Act.

25. Mitigation. The work shall be constructed to avoid and minimize adverse effects, both temporary and permanent, to waters of the United States at the project site (i.e., on site).

Comments:

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

New Article Subsection. Proposed at 1105.14.

C. The Contractor shall comply with the following specifications in order to meet the general conditions of Clean Water Act Section 404/401 Permits. Projects that are regulated by the requirements of a Clean Water Act Section 404/401 Permit will be identified in the contract documents.

1. Historic or Archaeological Remains. The Contractor shall comply with Article 2102.03J.

2. Inspection. The Contractor must allow representatives from the Iowa Department of Natural Resources or U.S. Army Corps of Engineers to inspect the authorized activity at any time deemed necessary to ensure that the activity is being or has been accomplished in accordance with the terms and conditions of the contract documents and permit.

3. Timing. The Contractor is encouraged to conduct construction activities during a period of low flow or as otherwise agreed upon by the Contracting Authority.

4. Vegetation Clearing. Clearing of vegetation, including trees located in or immediately adjacent to waters of the state, shall be limited to that which is absolutely necessary for construction of the project as indicated in the contract documents. Vegetative clearing material shall not be disposed of in wetlands unless otherwise indicated in the contract documents.

5. Disposal and Handling. All construction debris shall be disposed of at upland, non-wetland locations in such a manner that it cannot enter a waterway or wetland. Construction equipment, activities, and materials shall be kept out of the water to the maximum extent possible. Equipment for handling and conveying materials during construction shall be operated to prevent dumping or spilling the materials into waterbodies, streams or wetlands except as approved by the Contracting Authority. Care shall be taken to prevent any petroleum products, chemicals, or other deleterious materials from entering waterbodies, streams or wetlands.

6. Erosion Control. Erosion control features must be installed by the Contractor in accordance with Sections 2601, 2602, and the contract documents.

7. Revegetation. All disturbed areas not covered with revetment shall be seeded in accordance with Section 2601 and the contract documents.

8. Temporary Fills. If temporary crossings/causeways/work pads are needed for the project, then the temporary structures and fills shall be constructed in accordance with Section 2547.

9. Flowable Mortar. Flowable mortar will be installed in accordance with Article 2506.07.

10. Bridge Removal. When bridge removal is identified in the contract documents, the old bridge and its piers will be removed in accordance with Article 2401.03. Any debris from the bridge removal that falls into the water will remain there only temporarily and will be removed

accordingly by the Contractor.

11. Revetment. Revetment materials must comply with Article 4130.01.

12. Indiana Bats. Any suitable habitat for the Indiana bat (*Myotis sodalis*), as identified by the Contracting Authority, will be removed between September 15th and April 15th when Indiana bats are not expected to be using potentially suitable trees. The Contractor will limit the removal of forest cover to those areas which are absolutely necessary for the construction of the roadway project. Any questions regarding this condition should be directed to the Contracting Authority.

13. Navigation. No activity may cause more than a minimal adverse effect on navigation. Any safety lights and signals prescribed by the Contracting Authority must be installed on authorized facilities in navigable waters of the United States. Payment will be made per Article 1109.03.

14. Aquatic Life Movements. When indigenous aquatic life has been identified in the contract documents, no activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area.

15. Spawning Areas. When spawning areas and spawning seasons have been identified in the contract documents, the Contractor must limit activities in spawning areas during spawning seasons and avoid these areas to the maximum extent practicable. Contractor activities that result in the physical destruction (e.g., through excavation, fill, or downstream smothering by substantial turbidity) of an important spawning area are prohibited, unless otherwise indicated in the contract documents.

16. Migratory Bird Breeding Areas. When migratory bird breeding areas have been identified in the contract documents, activities in waters of the United States that serve as breeding areas for migratory birds must be avoided by the Contractor to the maximum extent practicable.

17. Shellfish Beds. When shellfish beds have been identified in the contract documents, no construction activity may occur in areas of concentrated shellfish populations.

18. Suitable Material. No activity may use unsuitable material (e.g., trash, debris, car bodies, asphalt, etc.). Material used for construction or discharged must be free from toxic pollutants in toxic amounts in accordance with Section 307 of the Clean Water Act.

19. Water Supply Intakes. Unless otherwise indicated in the contract documents, no activity may occur in the proximity of a public water supply intake, except where the activity is for the repair or improvement of public water supply intake structures or adjacent bank stabilization.

20. Adverse Effects From Impoundments. If the construction activity creates an impoundment of water, adverse effects to the aquatic system due to accelerating the passage of water, and/or restricting its flow must be minimized to the maximum extent practicable.

21. Management of Water Flows. To the maximum extent practicable, the pre-construction course, condition, capacity, and location of open waters must be maintained by the Contractor during construction, including stream channelization and storm water management activities.

22. Equipment. Heavy equipment working in wetlands or mudflats must be placed on mats, or other measures must be taken to minimize soil disturbance.

23. Endangered Species. No activity is authorized which is likely to jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will destroy or adversely modify the critical habitat of such species.

24. Historic Properties. No activity is authorized which may violate the requirements of Section 106 of the National Historic Preservation Act (NHPA).

25. Mitigation. The activity must be constructed to avoid and minimize adverse effects, both temporary and permanent, to waters of the United States to the maximum extent practicable at the project site (i.e., on site).

Reason for Revision: The general conditions of 404 permits remain essentially unchanged from permit to permit. This will allow the DOT to convey the general conditions of 404 permits to contractors via more traditional methods. It also allows DOT to communicate the 404 conditions that are important for construction activities, while eliminating all other 404 conditions that are not applicable to contractors or construction.

This effort is one part of a new approach for enhancing 404 permit compliance at DOT. In addition to providing original 404 permits for contractors to review on their own, the DOT intends to translate 404 permit requirements that are applicable to construction into three places: 1) the general specifications, 2) the plans, bid items, and reference notes, and 3) special provisions as needed. The Water Resources Section has already begun reviewing every DOT project requiring a 404 permit to evaluate whether the permit conditions are reflected in the plans and contract documents. Inserting 404 general conditions into DOT specifications is one key part of this new approach to compliance.

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

SPECIFICATION REVISION SUBMITTAL FORM

Submitted by: John Smythe / Kevin Merryman	**Office:** Construction	**Item 2**
Submittal Date: November 18, 2008	**Proposed Effective Date:** October 2009	
Article No.: 2213.13 **Title:** Samples **Article No.:** 2213.14, G **Title:** Samples (Method of Measurement) **Article No.:** 2213.15, G **Title:** Samples (Basis of Payment)	**Other:**	

Specification Committee Action: Approved as is.

Deferred:	**Not Approved:**	**Approved Date:** 12/11/08	**Effective Date:** 4/21/09

Specification Committee Approved Text: See Specification Section Recommended Text.

Comments: The Office of Construction noted PCC pavement thickness incentive was never intended to be applied to widening.

Specification Section Recommended Text:

2213.13, Samples.

Replace the sentence:
Articles 2303.04, D, 2~~, and 2301.34 shall apply~~.

2213.14, G, Samples.

Delete the second sentence:
~~Article 2301.34, I, shall apply for PCC base widening.~~

2213.15, G, Samples.

Delete the second sentence:
~~PCC base widening samples will be paid for in accordance with Article 2301.35, I.~~

Comments:

Member's Requested Change (Redline/Strikeout):

2213.13 SAMPLES.
Articles 2303.04, D, 2~~, and 2301.34~~ shall apply.

2213.14 METHOD OF MEASUREMENT.

G. Samples.
Article 2303.05, H, shall apply for HMA base widening. ~~Article 2301.34, I, shall apply for PCC base widening.~~

2213.15 BASIS OF PAYMENT.

G. Samples.
HMA base widening samples will be paid for in accordance with Article 2303.06, F. ~~PCC base widening samples will be paid for in accordance with Article 2301.35, I.~~

Reason for Revision: This change is intended to correct an oversight in a previous change to this article in 2007. The previous change revised the method of measurement and basis of payment for this work type to exclude thickness evaluation. The above changes should also have been made at that time.

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: Forwarded to Gordon Smith, ICPA.					

SPECIFICATION REVISION SUBMITTAL FORM

Submitted by: Roger Bierbaum	**Office:** Contracts	**Item 3**
Submittal Date: 2008.12.10	**Proposed Effective Date:** October 2009	
Article No.: 2301.34, A **Title:** Method of Measurement, PCC Pavement	**Other:**	

Specification Committee Action: Approved as is.

Deferred:	**Not Approved:**	**Approved Date:** 12/11/08	**Effective Date:** 4/21/09

Specification Committee Approved Text: See Specification Section Recommended Text.

Comments: District 6 Construction asked if it would be best not to allow the option to core for quantities less than 5000 square yards. It is infrequently done and would require a large number of cores for a small area of pavement. The Office of Construction explained they have been told some RCEs want to have the option. The Office of Construction's preference is to keep the option to core. They pointed out the importance of documenting the decision as to whether or not coring is to be waived for a project. The Committee decided to approve the Specification Section Recommended Text.

Specification Section Recommended Text:

2301.34, A, Portland Cement Concrete Pavement.

Replace the first sentence of the third indented paragraph:

Coring of pavement and other work for thickness determination may be waived by mutual agreement ~~the Engineer~~ for sections of the same design thickness less than 5000 square yards (4200 square meters).

Comments:

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

Coring of pavement and other work for thickness determination may be waived by mutual agreement ~~the Engineer~~ for sections of the same design thickness less than 5,000 square yards (4200 square meters). Only sections which are cored shall be included in the thickness index determination. Areas not cored shall be paid for at the contract unit price.

Reason for Revision: As written the engineer may independently waive coring (for less than 5000 S.Y.) and thereby eliminate a contractor's incentive payment. At the time of letting contractors are uncertain whether they will be able to collect incentive they have earned.

The default is still that everything is cored. However, with this change the engineer could not independently eliminate an incentive payment, yet would still have the authority to core any work they were suspect of. If a contractor wants their incentive they can still get it, but they have to earn both it through quality and performing the coring.

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

SPECIFICATION REVISION SUBMITTAL FORM

Submitted by: Jim Berger	**Office:** Materials	**Item 4**
Submittal Date: 11-26-08	**Proposed Effective Date:** October 2009	
Article No.: 2303.02, E & DS-01118.02, E **Title:** Other Materials **Article No.:** 2303.03,C,1,c,1 & DS-01118.03,C,1,c,1 **Title:** Hydrated Lime **Article No.:** 2303.06, D & DS-01118.06, D **Title:** Anti-strip Agent	**Other:**	

Specification Committee Action: Approved with changes noted below.

Deferred:	**Not Approved:**	**Approved Date:** 12/11/08	**Effective Date:** 4/21/09

Specification Committee Approved Text: For Article 2303.03, C, 1, c, 1; Article 01118.03, C, 1, c, 1; Article 2303.06, D; and DS-01118.06, D see the Specification Section Recommended Text.

2303.02, E and DS-01118.02, E, Other Materials.

Replace the entire article:

1. Tack Coat.

Tack coat may be SS-1, SS-1H, CSS-1, or CSS-1H. Mixing of CSS and SS grades will not be permitted. RC-70 and MC-70 may also be used after October 1, at the Contractor's option.

2. Anti-strip Agent.

On Primary highways designed for over 10,000,000 ESALs and all Interstate highways, ~~if 25% or more of the plus No. 4 (4.75 mm) (virgin and RAP) aggregate is gravel, quartzite, granite, trap rock, steel slag, or other siliceous aggregate (not a limestone or dolomite), anti-strip agent will be required in the affected mixture unless the minimum requirements for moisture sensitivity are met.~~ the Contractor shall perform an AASHTO T 283 moisture sensitivity evaluation of the proposed HMA mixture design.

On all other Primary highways, if 25% or more of the plus No. 4 (4.75 mm) (virgin and RAP) aggregates or more than 40% of the total (virgin and RAP) aggregates is quartzite, granite, or other siliceous aggregates (not limestone or dolomite) which is obtained by crushing from ledge rock, ~~anti-strip agent will be required in the affected mixtures requiring Type A aggregate unless the minimum requirements for moisture sensitivity are met.~~ the Contractor shall perform an AASHTO T 283 moisture sensitivity evaluation of the proposed HMA mixture design.

Anti-strip agent will not be required for base repair, patching, or temporary pavement.

When an AASHTO T 283 analysis is required:

a. If the Contractor’s results equal or exceed 90% tensile strength ratio (TSR), a mix design verification sample shall be submitted by the Contractor to the Central Materials Laboratory for testing. If Central Laboratory results verify the Contractor’s results, no anti-strip agent will be required and no further testing will be required unless substantial mix proportion changes from the original design are made.

b. If either the Contractor’s results equal or exceed 80% but are less than 90% or the Central Laboratory TSR results do not verify the Contractor’s results, the Contractor will be required to obtain an additional sample for AASHTO T 283 testing during the initial

placement of the plant produced mix. The additional sample shall be obtained either from a test strip, if available, or during the initial, approximately, 500 tons (500 Mg) of mix. This sample shall be from an area without anti-strip and will be used to determine acceptability of the plant produced mixture for moisture sensitivity. Production taking place after this initial 500 tons (500 Mg) shall be made with an anti-strip added to the mixture until results are obtained from Central Laboratory. Payment for the anti-strip will be made according to Article 2303.06, D. If Central Laboratory results on mixture without anti-strip confirm acceptability, anti-strip will no longer be required from the time of notification.

c. If the Contractor's results fall below 80% TSR, anti-strip will be required.

~~When anti-strip agent is require based on aggregate source, the Contractor may arrange for moisture sensitivity evaluation of the proposed HMA mixture design according to AASHTO T 283, "Resistance of Compacted Bituminous Mixture to Moisture-Induced Damage." When results of this evaluation on mixtures without anti-strip agent indicate the minimum requirements for moisture sensitivity of 80% tensile strength ratio (TSR) with visual confirmation are met, anti-strip agent will not be required. Confirmation of AASHTO T 283 test results will be completed by the Central Materials Laboratory during the initial production and placement of the mix. The Contractor will be subject to the provisions of Section 1105 for mixture placed without anti-strip agent prior to completion of the AASHTO T 283 confirmation testing.~~

~~When a liquid anti-strip additive or aggregate treatment is used, confirmation of the AASHTO T 283 test results will be completed by the Central Materials Laboratory during the initial production and placement of the mix. The Contractor will be subject to the provisions of Section 1105 for mixture placed with liquid anti-strip additive or aggregate treatment prior to completion of the AASHTO T 283 confirmation testing.~~

One of the following anti-strip agents shall be used:

a. Hydrated Lime.
Hydrated lime shall meet the requirements of AASHTO M 303, Type I. Section 4193 shall not apply. Hydrated lime will not be considered part of the aggregate when determining the job mix formula and the filler/bitumen ratio.

b. Liquid Anti-strip Additives.
Liquid anti-strip additives blended into the asphalt binder shall be approved for each JMF. The approval will be based on the following conditions:

1) Asphalt binder supplier shall provide test results that the additive does not negatively impact the asphalt binder properties, including short term and long term aged properties.

2) ~~The AASHTO T 283 test is required and must satisfy 80% TSR when compared to the dry strength of specimens prepared with asphalt binder not containing the anti-strip additive.~~ The design shall establish the optimum additive rate when comparing the dry strength of specimens prepared with asphalt binder not containing the anti-strip additive to conditioned specimens prepared with asphalt binder containing the anti-strip additive. See Materials I.M. 510 for additional information.

3) A change in the source of asphalt binder, liquid anti-strip, or aggregates will require a re-evaluation of the AASHTO T 283 test. When there is a significant change in the aggregate proportions, the Engineer may require a re-evaluation of the AASHTO T 283 test.

c. Polymer-based Liquid Aggregate Treatments.

Polymer-based liquid aggregate treatments shall be approved for each JMF. The approval will be based on the following conditions:

1) ~~The AASHTO T 283 test is required and shall satisfy 80% TSR when compared to the dry strength of specimens prepared with and without the aggregate treatment.~~ The design shall establish the optimum additive rate when comparing the dry strength of specimens prepared without the anti-strip additive to conditioned specimens prepared with the anti-strip additive. See Materials I.M. 510 for additional information.

2) A change in the source of asphalt binder, liquid aggregate treatment, or aggregates will require a re-evaluation of the AASHTO T 283 test.

Comments: The Office of Materials handed out additional recommended revisions at the meeting. The additional revisions are being requested to clarify who is running the tests. The Office of Materials noted the intent of the changes is to make sure anti-strip agent is put down when it is needed. District 6 Construction asked why the specifications pay for anti-strip agent rather than make it incidental. District 4 explained payment for anti-strip agent has been in place for a long time. It was felt that paying for anti-strip agent helps to ensure that it is actually being added.

Specification Section Recommended Text:

2303.02, E and 01118.02, E, Other Materials.

Replace the entire article:

1. Tack Coat.

Tack coat may be SS-1, SS-1H, CSS-1, or CSS-1H. Mixing of CSS and SS grades will not be permitted. RC-70 and MC-70 may also be used after October 1, at the Contractor's option.

2. Anti-strip Agent.

On Primary highways designed for over 10,000,000 ESALs and all Interstate highways, ~~if 25% or more of the plus No. 4 (4.75 mm) (virgin and RAP) aggregate is gravel, quartzite, granite, trap rock, steel slag, or other siliceous aggregate (not a limestone or dolomite), anti-strip agent will be required in the affected mixture unless the minimum requirements for moisture sensitivity are met.~~ the Contractor shall arrange for moisture sensitivity evaluation of the proposed HMA mixture design according to AASHTO T 283.

On all other Primary highways, if 25% or more of the plus No. 4 (4.75 mm) (virgin and RAP) aggregates or more than 40% of the total (virgin and RAP) aggregates is quartzite, granite, or other siliceous aggregates (not limestone or dolomite) which is obtained by crushing from ledge rock, ~~anti-strip agent will be required in the affected mixtures requiring Type A aggregate unless the minimum requirements for moisture sensitivity are met.~~ the Contractor shall arrange for moisture sensitivity evaluation of the proposed HMA mixture design according to AASHTO T 283.

Anti-strip agent will not be required for base repair, patching, or temporary pavement.

When AASHTO T 283 analysis is required and the Contractor's results meet or exceed 90% tensile strength ratio (TSR) with visual confirmation, a mix design verification sample shall be submitted by the Contractor to the Central Materials Laboratory for testing. If Central Laboratory results verify the Contractor's results, no further testing will be required unless substantial mix proportion changes from the original design are made. If either the Contractor's results fall below 90% or if the Central Laboratory results do not verify the Contractor's results, the Contractor will be required to obtain an additional sample for AASHTO T 283 testing during the initial placement of the plant produced mix. The additional sample shall be obtained either from a test strip, if available, or during the initial, approximately, 500 tons (500 Mg) of mix. This sample shall be from an area without anti-strip and will be used to determine acceptability of

the plant produced mixture for moisture sensitivity. Production taking place after this initial 500 tons (500 Mg) shall be made with an anti-strip added to the mixture until results are obtained from Central Laboratory. Payment for the anti-strip will be made according to Article 2303.06, D.

~~When anti-strip agent is require based on aggregate source, the Contractor may arrange for moisture sensitivity evaluation of the proposed HMA mixture design according to AASHTO T 283, "Resistance of Compacted Bituminous Mixture to Moisture-Induced Damage." When results of this evaluation on mixtures without anti-strip agent indicate the minimum requirements for moisture sensitivity of 80% tensile strength ratio (TSR) with visual confirmation are met, anti-strip agent will not be required. Confirmation of AASHTO T 283 test results will be completed by the Central Materials Laboratory during the initial production and placement of the mix.~~ If the Contractor's results fall below 80% TSR, anti-strip will be required. After the test strip or initial 500 tons (500 Mg) of mixture is placed, ~~T~~the Contractor will be subject to the provisions of Section 1105 for mixture placed without anti-strip agent prior to completion of the AASHTO T 283 confirmation testing. If Central Laboratory results on mixture without anti-strip confirm acceptability, anti-strip will no longer be required from the time of notification.

~~When a liquid anti-strip additive or aggregate treatment is used, confirmation of the AASHTO T 283 test results will be completed by the Central Materials Laboratory during the initial production and placement of the mix. The Contractor will be subject to the provisions of Section 1105 for mixture placed with liquid anti-strip additive or aggregate treatment prior to completion of the AASHTO T 283 confirmation testing.~~

One of the following anti-strip agents shall be used:

a. Hydrated Lime.
Hydrated lime shall meet the requirements of AASHTO M 303, Type I. Section 4193 shall not apply. Hydrated lime will not be considered part of the aggregate when determining the job mix formula and the filler/bitumen ratio.

b. Liquid Anti-strip Additives.
Liquid anti-strip additives blended into the asphalt binder shall be approved for each JMF. The approval will be based on the following conditions:

1) Asphalt binder supplier shall provide test results that the additive does not negatively impact the asphalt binder properties, including short term and long term aged properties.

2) ~~The AASHTO T 283 test is required and must satisfy 80% TSR when compared to the dry strength of specimens prepared with asphalt binder not containing the anti-strip additive.~~ The design shall establish the optimum additive rate when comparing the dry strength of specimens prepared with asphalt binder not containing the anti-strip additive to conditioned specimens prepared with asphalt binder containing the anti-strip additive. See Materials I.M. 510 for additional information.

3) A change in the source of asphalt binder, liquid anti-strip, or aggregates will require a re-evaluation of the AASHTO T 283 test. When there is a significant change in the aggregate proportions, the Engineer may require a re-evaluation of the AASHTO T 283 test.

c. Polymer-based Liquid Aggregate Treatments.
Polymer-based liquid aggregate treatments shall be approved for each JMF. The approval will be based on the following conditions:

1) ~~The AASHTO T 283 test is required and shall satisfy 80% TSR when compared to the dry strength of specimens prepared with and without the aggregate treatment.~~ The design shall establish the optimum additive rate when comparing the dry strength of specimens prepared without the anti-strip additive to conditioned specimens prepared with the anti-strip additive. See Materials I.M. 510 for additional information.

2) A change in the source of asphalt binder, liquid aggregate treatment, or aggregates will require a re-evaluation of the AASHTO T 283 test.

2303.03, C, 1, c, 1 and 01118.03, C, 1, c, 1, Hydrated Lime.

Replace the entire article:

The lime shall be accurately proportioned by a method acceptable to the Engineer.

a) Added to a Drum Mixer.
The hydrated lime shall be added at the rate of 0.75% by weight (mass) of the total aggregate (virgin and RAP) for Interstate and Primary projects. The hydrated lime shall be added to a drum mixer by one of the following methods:

(1) Added to the virgin aggregate on the primary feed belt, as a lime water slurry.
(2) Thoroughly mixed with the total combined aggregate if the aggregate contains at least 3% total moisture.
~~**(3)** Added to the Type 2 or Type 3 virgin aggregate in a moist condition, and then mixed with the total combined virgin aggregate.~~

Alternative methods for mixing must be reviewed and approved by the Engineer. Hydrated lime shall not be introduced directly into a drum mixer by blowing or auguring.

b) Added to a Batch Plant.
Hydrated lime shall be added at the rate of 0.5% by weight (mass) of total aggregate (virgin and RAP) for Interstate and Primary projects. It shall be introduced to a batch plant by one of the following methods:

(1) Placed on the recycle belt which leads directly into the weigh hopper.
(2) Added directly into the pugmill.
(3) Added directly into the hot aggregate elevator into the hot aggregate stream.

In any case, the lime shall be introduced prior to the start of the dry mix cycle.

c) Added to the Aggregate Stockpile.
Hydrated lime shall be added at a rate established by the AASHTO T 283 test. The instructions for establishing the rate are discussed in Materials I.M. 510. The hydrated lime shall be added to the source aggregates defined in Article 2303.02, E, 2, thoroughly mixed with sufficient moisture to achieve aggregate coating, and then placed in the stockpile.

~~When either method b or c above for a batch plant is used, the hydrated lime will be considered part of the JMF.~~

2303.06, D and 01118.06, D, Anti-strip Agent.

Replace "$1.00" with "$2.00" in the second sentence.

Comments:

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

Change Section 2303.02,E and 01118.02,E as follows:

E. Other Materials.

1. Tack Coat.
Tack coat may be SS-1, SS-1H, CSS-1, or CSS-1H. Mixing of CSS and SS grades will not be permitted. RC-70 and MC-70 may also be used after October 1, at the Contractor's option.

2. Anti-strip Agent.
On Primary highways designed for over 10,000,000 ESALs and all Interstate highways, ~~if 25% or more of the plus No. 4 (4.75 mm) (virgin and RAP) aggregate is gravel, quartzite, granite, trap rock, steel slag, or other siliceous aggregate (not a limestone or dolomite), anti-strip agent will be required in the affected mixture unless the minimum requirements for moisture sensitivity are met.~~ the Contractor will arrange for moisture sensitivity evaluation of the proposed HMA mixture design according to AASHTO T 283, “Resistance of Compacted Bituminous Mixture to Moisture-Induced Damage."

On all other Primary highways, if 25% or more of the plus No. 4 (4.75 mm) (virgin and RAP) aggregates or more than 40% of the total (virgin and RAP) aggregates is quartzite, granite, or other siliceous aggregates (not limestone or dolomite) which is obtained by crushing from ledge rock, ~~anti-strip agent will be required in the affected mixtures requiring Type A aggregate unless the minimum requirements for moisture sensitivity are met.~~ the Contractor will arrange for moisture sensitivity evaluation of the proposed HMA mixture design according to AASHTO T 283, “Resistance of Compacted Bituminous Mixture to Moisture-Induced Damage."

Anti-strip agent will not be required for base repair, patching, or temporary pavement.

When ~~anti-strip agent~~ AASHTO T 283 analysis is required and the Contractor’s results meet or exceed 90% tensile strength ratio (TSR) with visual confirmation, a mix design verification sample will be submitted by the Contractor to the Central Materials Laboratory for testing. If Central Laboratory results verify the Contractor’s results, no further testing will be required unless substantial mix proportion changes from the original design are made. If either the Contractor’s results fall below 90% or if the Central Laboratory results do not verify the Contractor’s results, the Contractor will be required to obtain an additional sample for AASHTO T 283 testing during the initial placement of the plant produced mix. The additional sample will be obtained either from a test strip, if available, or during the initial, approximately, 500 tons of mix. This sample will be from an area without anti-strip and will be used to determine acceptability of the plant produced mixture for moisture sensitivity. Production taking place after this initial 500 tons will be made with an anti-strip added to the mixture until results are obtained from Central Laboratory. Payment for the anti-strip will be made per Standard Specification 2303.06.

If the Contractor’s results fall below 80% TSR, anti-strip will be required. ~~based on aggregate source, the Contractor may arrange for moisture sensitivity evaluation of the proposed HMA mixture design according to AASHTO T 283, "Resistance of Compacted Bituminous Mixture to Moisture-Induced Damage." When results of this evaluation on mixtures without anti-strip agent indicate the minimum requirements for moisture sensitivity of 80% tensile strength ratio (TSR) with visual confirmation are met, anti-strip agent will not be required. Confirmation of AASHTO T 283 test results will be completed by the Central Materials Laboratory during the initial production and placement of the mix.~~ After the test strip or initial 500 tons of mixture is placed, t~~T~~he

Contractor will be subject to the provisions of Section 1105 for mixture placed without anti-strip agent prior to completion of the AASHTO T 283 confirmation testing. If Central Laboratory results on mixture without anti-strip confirm acceptability, anti-strip will no longer be required from the time of notification.

~~When a liquid anti-strip additive or aggregate treatment is used, confirmation of the AASHTO T 283 test results will be completed by the Central Materials Laboratory during the initial production and placement of the mix. The Contractor will be subject to the provisions of Section 1105 for mixture placed with liquid anti-strip additive or aggregate treatment prior to completion of the AASHTO T 283 confirmation testing.~~

One of the following anti-strip agents shall be used:

a. Hydrated Lime.
Hydrated lime shall meet the requirements of AASHTO M 303, Type I. Section 4193 shall not apply. Hydrated lime will not be considered part of the aggregate when determining the job mix formula and the filler/bitumen ratio.

b. Liquid Anti-strip Additives.
Liquid anti-strip additives blended into the asphalt binder shall be approved for each JMF. The approval will be based on the following conditions:

1) Asphalt binder supplier shall provide test results that the additive does not negatively impact the asphalt binder properties, including short term and long term aged properties.

2) ~~The AASHTO T 283 test is required and must satisfy 80% TSR when compared to the dry strength of specimens prepared with asphalt binder not containing the anti-strip additive.~~ The design shall establish the optimum additive rate when comparing the dry strength of specimens prepared with asphalt binder not containing the anti-strip additive to conditioned specimens prepared with asphalt binder containing the anti-strip additive. See Materials I.M. 510 for additional information.

3) A change in the source of asphalt binder, liquid anti-strip or aggregates will require a re-evaluation of the AASHTO T 283 test. When there is a significant change in the aggregate proportions, the Engineer may require a re-evaluation of the AASHTO T 283 test.

c. Polymer-based Liquid Aggregate Treatments.
Polymer-based liquid aggregate treatments shall be approved for each JMF. The approval will be based on the following conditions:

1) ~~The AASHTO T 283 test is required and shall satisfy 80% TSR when compared to the dry strength of specimens prepared with and without the aggregate treatment.~~ The design shall establish the optimum additive rate when comparing the dry strength of specimens prepared without the anti-strip additive to conditioned specimens prepared with the anti-strip additive. See Materials I.M. 510 for additional information.

2) A change in the source of asphalt binder, liquid aggregate treatment or aggregates will require a re-evaluation of the AASHTO T 283 test.

Change Section 2303.03,C,1,c and 01118.03,C,1,c as follows:

c. Handling Anti-strip Agents.

1) Hydrated Lime.
The lime shall be accurately proportioned by a method acceptable to the Engineer.

a) Added to a Drum Mixer.
The hydrated lime shall be added at the rate of 0.75% by weight (mass) of the total aggregate (virgin and RAP) for Interstate and Primary projects. The hydrated lime shall be added to a drum mixer by one of the following methods:

(1) Added to the virgin aggregate on the primary feed belt, as a lime water slurry.
(2) Thoroughly mixed with the total combined aggregate if the aggregate contains at least 3% total moisture.
~~**(3)** Added to the Type 2 or Type 3 virgin aggregate in a moist condition, and then mixed with the total combined virgin aggregate.~~

Alternative methods for mixing must be reviewed and approved by the Engineer. Hydrated lime shall not be introduced directly into a drum mixer by blowing or auguring.

b) Added to a Batch Plant.
Hydrated lime shall be added at the rate of 0.5% by weight (mass) of total aggregate (virgin and RAP) for Interstate and Primary projects. It shall be introduced to a batch plant by one of the following methods:

(1) Placed on the recycle belt which leads directly into the weigh hopper.
(2) Added directly into the pugmill.
(3) Added directly into the hot aggregate elevator into the hot aggregate stream.

In any case, the lime must be introduced prior to the start of the dry mix cycle.

c) Added to the Aggregate Stockpile.
Hydrated lime shall be added at a rate established by the AASHTO T 283 test. The instructions for establishing the rate are discussed in Materials I.M. 510. The hydrated lime shall be added to the source aggregates defined in Article 2303.02, E, 2, thoroughly mixed with sufficient moisture to achieve aggregate coating, and then placed in the stockpile.

~~When either method b or c above for a batch plant is used, the hydrated lime will be considered part of the JMF.~~

2) Liquid.
When liquid anti-strip additives are used, the equipment used to store, measure, and blend the additive with the asphalt binder shall comply with the anti-strip supplier's recommended practice. The additive may be injected into the asphalt binder by the asphalt supplier or the Contractor. If the Contractor elects to add the liquid anti-strip additive, the Contractor assumes the material

certification responsibilities of the asphalt binder supplier. The shipping ticket shall report the type and amount of additive and the time of injection. The asphalt supplier shall provide the Contractor and Engineer with the shelf life criteria defining when the anti-strip additive maintains its effectiveness. Binder that has exceeded the shelf life criteria shall not be used.

When polymer-based liquid aggregate treatment is used, the Contractor shall comply with the manufacturer's current recommended specifications and guidelines.

Change Section 2303.06,D and 01118.06,D as follows:

D. Anti-strip Agent.
When anti-strip agent is required according to Article 2303.02, E, 2, the incorporation of the anti-strip agent into the HMA mixture will be considered as extra work ordered by the Engineer. Payment will be made at the rate of $2~~1~~.00 per ton (megagram) of HMA mixture in which the anti-strip agent is incorporated. This payment will be full compensation for designing, adding, and testing for anti-strip agent.

Reason for Revision: Current requirements for anti-strip agents have resulted in several projects where HMA has been placed on the Interstate system with failing TSR values indicating moisture damage may be expected. Substantial price adjustments have resulted even though the contractor made a good faith effort to comply with the specification. Increasing the payment for anti-strip from $1 to $2 per ton of mix and requiring the anti-strip be added until DOT test results are available is intended to reduce the risk to the agency of accepting non-complying mix and reduce the risk of the contractor being penalized for material previously tested and thought to comply.

Recent testing has also indicated that the current method of establishing when anti-strip is required is flawed. Aggregates other than those currently specified as requiring anti-strip have shown failing TSR values. Requiring all mixtures for Interstate highways and for greater than 10 million ESALs to be tested according to AASHTO T283 is intended to reduce the risk to the agency of accepting non-complying material.

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**	**No**
Comments: Discussed at QMA Steering Committee meeting.					

SPECIFICATION REVISION SUBMITTAL FORM

Submitted by: Jim Rost / Scott Marler	**Office:** Location and Environment	**Item 5**
Submittal Date: November 25, 2008	**Proposed Effective Date:** October 2009	
Article No.: 2506.07 **Title:** Limitation of Operations	**Other:**	

Specification Committee Action: Approved as is.

Deferred:	**Not Approved:**	**Approved Date:** 12/11/08	**Effective Date:** 4/21/09

Specification Committee Approved Text: See Specification Section Recommended Text.

Comments: The Office of Environment and Location noted this requirement is already in the 404 permit. The question was asked where water from flowable mortar should go. It was noted it would be very difficult to keep water from erosion control measures such as articulated billow mattresses out of the water. The Office of Environment and Location suggested looking into the possibility of using floating silt curtains in cases such as these.

Specification Section Recommended Text:

2506.07, Limitation of Operations.

Add new article:

D. Flowable mortar shall be kept out of streams and waterways.

Comments:

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

2506.07 LIMITATION OF OPERATIONS.

A. Flowable mortar shall not be placed on frozen ground.

B. Flowable mortar batching, mixing, and placing may be started, if weather conditions are favorable, when the temperature is at least 34°F (1°C) and rising. At time of placement, mortar must have a temperature of at least 40°F (4°C). Mixing and placing shall stop when the temperature is 38°F (3°C) or less and falling.

C. Each filling stage shall be as continuous an operation as is practicable.

D. Flowable mortar will be kept out of the streams/waterway to the degree possible and limited to that which is absolutely necessary for construction of the project as indicated in the contract documents.

Reason for Revision:

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 6**
Submittal Date: 2008.11.12	**Proposed Effective Date:** October 2009	
Article No.: 2513.03, B, 2 **Title:** Cast-in-Place and Slip Form (Conc. Barrier)	**Other:**	

Specification Committee Action: Approved as is.

Deferred:	**Not Approved:**	**Approved Date:** 12/11/08	**Effective Date:** 4/21/09

Specification Committee Approved Text: See Specification Section Recommended Text.

Comments: The Office of Bridges and Structures noted the w/c ratio for cast-in-place does not match what is in the GS. The Specifications Section noted the error is likely in the ERL. It should be 0.488. This will be corrected with the April 2009 ERL.

Specification Section Recommended Text:

2513.03, B, 2, Cast-in-Place and Slip Form.

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

Class of Concrete	Pounds (kg) of Water Per Pound (kg) Of Cementitious Material
BR (Slip Form) C (Cast-in-Place)	0.450 ~~0.480~~ 0.488

Slump for slip form rail shall be a minimum of 1/2 inch (12.5 mm).

Comments:

Member's Requested Change (Redline/Strikeout):

B. Cast-in-Place and Slip Form.
Class C concrete in accordance with Materials I.M. 529 shall be used for cast-in-place. Class BR in accordance with Materials I.M. 529 shall be used for slip form.

Class BR mix design shall be submitted to the District Materials Engineer for approval at least 7 calendar days prior to placement. Section 2403 shall apply, except the concrete shall meet the following mix design requirements:

1. Cement for Class BR. Cement content shall be a minimum of 603 pounds per cubic yard (358 kg/m^3).

2. Water. The total mixing water and free moisture in the aggregate shall not exceed the following:

Class of Concrete	Pounds (kg) of Water Per Pound (kg)

	Of Cementitious Material
BR (Slip Form) C (Cast-in-Place)	0.450 0.480

Slump for slip form rail shall be a minimum of 0.5 inches (12.5 mm).

Reason for Revision: Recent projects have indicated problem with contractors wanting zero slump. Zero slump concrete produces poor rail and poor air entrainment. Also has caused problems for ready mix producers wasting loads all because the mix needs a little water to place. DOT has tried to show contractor placement improvement with ½ to 3/4 " slump. Slump requirements for cast in place is in 2403.

County or City Input Needed (X one)			**Yes**	**No**	
Comments:					
Industry Input Needed (X one)			**Yes**	**No**	
Industry Notified:	**Yes** X	**No**	**Industry Concurrence:**	**Yes** X	**No**
Comments: Several contractors that place rail have tried to require zero slump from the ready mix producer resulting in poorly placed rail and ready mix also has trouble entraining air.					

SPECIFICATION REVISION SUBMITTAL FORM

Submitted by: Jim Berger	**Office:** Materials	**Item 7**
Submittal Date: 11-26-08	**Proposed Effective Date:** October, 2009	
Article No.: 4109.02 **Title:** Gradation	**Other:**	

Specification Committee Action: Approved as is.

Deferred:	**Not Approved:**	**Approved Date:** 12/11/08	**Effective Date:** 4/21/09

Specification Committee Approved Text: See Specification Section Recommended Text.

Comments: The Office of Materials pointed out they still do a mix design to determine if the material is suitable.

Specification Section Recommended Text:

4109.02, Gradation.

Replace Gradation No.23:

		Std. Sieve Size	1 1/2"	1.0"	3/4"	1/2"	3/8"	4	8	30	50	100	200	
Grad. No.	Section No.	Intended use	Percent Passing											Notes
23	4124.02B (Cr. St.)	Course Slurry Mixture					100	70-90	~~45 70~~ 40-70	19-~~34~~ 42	~~12 25~~	~~7 18~~	5-15	12

		Std. Sieve Size	37.5 mm	25 mm	19 mm	12.5 mm	9.5 mm	4.75 mm	2.36 mm	600 µm	300 µm	150 µm	75 µm	
Grad. No.	Section No.	Intended use	Percent Passing											Notes
23	4124.02B (Cr. St.)	Course Slurry Mixture					100	70-90	~~45 70~~ 40-70	19-~~34~~ 42	~~12 25~~	~~7 18~~	5-15	12

Comments:

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

Change gradation 23 in both the English and Metric Aggregate Gradation Tables in 4109.02:

3/8"	4	8	30	50	100	200
~~100~~	~~70 90~~	~~45 70~~	~~19 34~~	~~12 25~~	~~7 18~~	~~5 15~~
100	70-90	40-70	19-42			5-15

9.5mm	4.75mm	2.36mm	600µm	300µm	150µm	75µm
~~100~~	~~70 90~~	~~45 70~~	~~19 34~~	~~12 25~~	~~7 18~~	~~5 15~~

100 70-90 40-70 19-42 5-15					
Reason for Revision: Some aggregate sources have had difficulty producing aggregate to the required gradation. Broadening the range of the limits on the #8 and #30 sieves and eliminating the limits on the #50 and #100 sieves will allow more sources to produce coarse slurry aggregate.					
County or City Input Needed (X one)			**Yes**	**No** X	
Comments:					
Industry Input Needed (X one)			**Yes**	**No** X	
Industry Notified:	**Yes**	**No** X	**Industry Concurrence:**	**Yes**	**No**
Comments:					

SPECIFICATION REVISION SUBMITTAL FORM

Submitted by: Roger Bierbaum	**Office:** Contracts	**Item 8**
Submittal Date: September 3, 2008	**Proposed Effective Date:** February 17, 2009	
Article No.: DS-01061 **Title:** Developmental Specifications for A + B Bidding	**Other:**	

Specification Committee Action: Approved as is.

Deferred:	**Not Approved:**	**Approved Date:** 12/11/08	**Effective Date:** 2/12/09

Specification Committee Approved Text: See attached Draft DS.

Comments: The Office of Contracts explained this is essentially the same as the Special Provision they have been issuing. They noted they have added Determination of DBE Good Faith Effort.

The Specifications Section noted this DS will be incorporated into Article 1103.02 of the new book. They explained that there will be a paragraph added to the book explaining A + B Bidding will apply only when indicated.

Specification Section Recommended Text:

Comments:

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

See attached draft DS

Reason for Revision: We have been using Special Provisions when A+B Bidding is used. We feel it would be beneficial to use a DS rather than SPs every time.

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

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

DS-01XXX
(Replaces DS-01061)

Iowa Department of Transportation

DEVELOPMENTAL SPECIFICATIONS
FOR
A + B BIDDING

Effective Date
February 17, 2009

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 GENERAL.
The determination of the low bidder ~~on this project~~ will involve a combination of the contract sum and the bidder's proposed time to complete all work designated in the A + B portion of the proposal form.

01XXX.02 DEFINITIONS.

A. Critical Closure Activity.
Critical closure activities are those activities specified in the contract documents where traffic movements are adversely affected, causing undue delay and operating costs. The Critical Closure Activity will be defined in the proposal form.

B. Closure Day.
A closure day is a calendar day during the critical closure activity. A closure day will be counted for each calendar day or portion of a day during the critical closure activity. The Contractor may work any days and hours within the critical closure activity.

C. Daily Road User Cost: The amount which represents the average daily cost of interference and inconvenience to the road user. The daily road user cost will be shown on the proposal form.

01XXX.03 PREPARATION OF PROPOSAL.
The bidder shall establish the number of calendar days to be used to complete the work required under the A + B portion of this contract as identified in the proposal form. The proposal may state a maximum number of calendar days allowable. Bids showing time for completion in excess of this maximum amount will be considered non-responsive and will be rejected.

The product of the number of calendar days proposed by the bidder multiplied by the daily road user cost will be added to the contract sum. The total will be the amount used for consideration of bids for award.

01XXX.04 CONSIDERATION OF BIDS.
Each bid submitted shall consist of two parts:

(A) The contract sum.
(B) Total number of calendar days proposed by the bidder to complete all work defined as the Critical Closure Activity in ~~required in the A + B portion of~~ the proposal form. The ~~Contractor~~ bidder shall enter the number of calendar days on the proposal form.

The successful bid will be determined by the lowest combination of (A) plus (B) according to the following formula:

(A) + [(B) x (Daily Road User Cost)] = Bid amount for award consideration.

01XXX.05 ~~CHARGING OF CONTRACT TIME~~ WORK OUTSIDE THE CRITCAL CLOSURE ACTIVITY.
Work performed on any calendar day prior to and/or following the critical closure activity will have working days charged according to Article 1108.02, D, of the Standard Specifications. Working days will not be charged on any calendar day that a closure day is charged.

The liquidated damage rate shown on the proposal will be assessed for each working day used in excess of the number of working days specified.

~~The proposal form will identify conditions that will begin and end charging of calendar days for the A + B portion of the project.~~

~~Work performed outside the A + B portion identified in the proposal form will have working days charged according to Article 1108.02, D of the Standard Specifications.~~

01XXX.06 I/D PAYMENT OR ASSESMENT.

A. Incentive Payment.
For the number of closure days remaining after completion of the critical closure activity, the Contractor will be paid the I/D daily rate as an incentive payment. Incentive payments will be made in accordance with Article 1109.09 of the Standard Specifications.

B. Disincentive Assessment.
For the number of closure days used to complete the work required in a critical closure activity in excess of the specified closure days, the Contractor will be assessed the I/D daily rate. There will be no maximum amount for the disincentive assessment.

01XXX.07 CONSIDERATION FOR EXTRA WORK OR DELAYS DURING THE CRITICAL CLOSURE ACTIVITY.
The duration of a critical closure activity will be in closure days. Closure day credits will not be given within the assigned critical closure activity.

Additional closure days may be added when approved by the Engineer for extra work, overruns of contract items, or extraordinary circumstances.

A. Approved extra work or overruns of contract items that will delay the Contractor during the critical closure activity shall be documented and included in the critical path of the project on a revised critical path diagram which is subject to the approval of the Engineer. An additional closure day may be added for each additional closure day caused by the approved extra work or overruns of contract items as shown on the revised critical path diagram and approved by the Engineer.

B. Non-weather related extraordinary circumstances that delay the Contractor during the critical closure activity shall be documented by the Contractor and a written request for additional closure days must be submitted to the Engineer within 10 calendar days of the beginning of the delay. The Engineer will approve or deny all requests for additional closure days resulting from non-weather related extraordinary circumstances.

Non-weather related extraordinary circumstances shall be limited to the following:

1. Strikes.
Strikes which are not directed against the Contractor.

2. Legal Stoppages.
Legal Stoppages will be allowed if they result from legal action against the Contracting Authority or against the Contractor if not based on a specification violation.

3. Late Delivery of Material.
Procurement of material for a project is the sole responsibility of the Contractor. Late delivery will be considered an extraordinary circumstance only when the Contractor can show that orders were placed with a reliable supplier in sufficient time for materials to be delivered when needed and only when there is:

a) A nationwide shortage; or
b) An industry wide strike; or
c) Transportation strike which delays the delivery of material; or
d) Delays due to a change in material commitments when caused by a Federal emergency or order.

4. Natural Disaster.
A suspension order may be issued on any project in a declared disaster area, if the disaster causes conditions that do not allow productive work.

C. Adverse weather including rain, snow, wind, flood, extreme heat, and the results thereof, such as inaccessibility or non-workability of materials, is only considered as extraordinary circumstance if the Contractor is working or ready to work on the contract and the adverse weather conditions do not allow productive work on the critical path. Adverse weather that delays the Contractor during the critical closure activity shall be documented by the Contractor and a written request for additional closure days must be submitted to the Engineer within 10 calendar days of the beginning of the delay. Some delays for weather have been included in the number of closure days allowed. Therefore, additional closure days for adverse weather will not be allowed for the first 5 consecutive closure days of each delay.

01XXX.08 DETERMINATION OF DBE GOOD FAITH EFFORT.
The percentage of DBE Commitment for each bidder will be computed by dividing their DBE Commitment by their bid for the Contract Sum (A). This percentage will used in the Contract Award Procedures listed in Article 1102.17, D, of the Standard Specifications.

SPECIFICATION REVISION SUBMITTAL FORM

Submitted by: Jim Berger	**Office:** Materials	**Item 9**
Submittal Date: 11-26-08	**Proposed Effective Date:** April 21, 2009	
Article No.: SS-01049 **Title:** Supplemental Specifications for Quality Control Program for Small HMA Paving Quantities	**Other:**	

Specification Committee Action: Approved as is.

Deferred:	**Not Approved:**	**Approved Date:** 12/11/08	**Effective Date:** 2/17/09

Specification Committee Approved Text: See attached Draft SS.

Comments: The Specifications Section noted this SS will be incorporated into the book.

Specification Section Recommended Text:

Comments:

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

Delete the last sentence of the first paragraph under 01049.01 and add another paragraph under 01049.01, General as follows:

This Supplemental Specification applies to work on the Interstate, Primary, and Secondary road systems and defines the quality control programs for contracts with HMA mixtures. ~~These requirements will not apply to mixtures used for HMA patching~~

Each patching bid item shall be defined as a small quantity and shall meet the requirements of this Supplemental Specification.

Reason for Revision: District Materials Engineers requested that patching be added to the small quantities specification to provide consistency statewide.

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

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

SS-010XX
(Replaces SS-01049)

Iowa Department of Transportation

SUPPLEMENTAL SPECIFICATIONS
FOR
QUALITY CONTROL PROGRAM FOR SMALL HMA PAVING QUANTITIES

Effective Date
February 17, 2009

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

010XX.01 GENERAL.
This specification applies to work on the Interstate, Primary, and Secondary road systems and defines the quality control programs for contracts with HMA mixtures. ~~These requirements will not apply to mixtures used for HMA patching.~~

Each patching bid item shall be defined as a small quantity and shall meet the requirements of this specification.

For each HMA mixture bid item of more than 1000 tons (1000 Mg), all requirements of Article 2303.04 of the Standard Specifications shall apply.

For each HMA mixture bid item of 1000 tons (1000 Mg) or less shall be defined as small quantities and shall meet the requirements of this Supplemental Specification.

010XX.02 QUALITY CONTROL FOR SMALL QUANTITIES.

A. Mix Design.
The Job Mix Formula (JMF) shall be prepared by the Contractor and approved by the Engineer prior to HMA production. The mix design shall comply with Article 2303.02 of the Standard Specifications and Materials I.M. 510.

B. Plant Production.
The calibration of the HMA production plant for the JMF shall be current and not more than 12 months old.

The Contractor shall use certified asphalt binder and approved aggregate sources meeting the JMF. The plant shall maintain an asphalt binder log to track the date and time of binder delivery. The HMA delivery tickets shall identify the JMF.

The Contractor shall monitor the quality control test results and make adjustments to keep the mixture near the target JMF values.

C. Construction.
Density measurements shall be taken of the compacted mixture, except when Class II compaction is

specified. The Contractor's field quality control laboratory compaction shall be used for field density control as specified in Article 2303.04 of the Standard Specifications. The Engineer may accept the density of the compacted layer based on cores or density gauge. The Engineer may waive density measurement provided the compaction has been thorough and effective. Density measurements of the compacted mixture shall be taken no later than the next working day following placement and compaction.

For small quantities, a lot will be the entire quantity of each HMA mixture bid item.

The quality index for density will not apply to small quantities.

D. Sampling and Testing.
Material sampling and testing is for production quality control only. Acceptance of mixture is based on Contractor certification. The Contractor shall perform a minimum of one aggregate cold-feed and one loose HMA test per lot. Sampling and testing of loose HMA is only required for mechanically placed mixture. All sampling and testing procedures shall follow the Standard Specifications and Materials I.M.s using certified technicians and qualified testing equipment. The Engineer may approve alternative sampling procedures. The sample shall be taken between the first 100 to 200 tons (100 to 200 Mg) of production. No split samples for agency verification testing are required.

Asphalt binder will be accepted based on the asphalt supplier's shipment certification. No binder sampling or testing is required.

No material sampling or testing is required for daily HMA production of less than 100 tons (100 Mg) on any project.

E. Certification.
The Contractor shall provide a certification for the production of any mixture in which the requirements in this Supplemental Specification for small quantities are applied. The test results and certification statement shall be placed on the Daily HMA Plant Report (Form 800241). The Daily HMA Plant Report for certified HMA may be submitted at the end of the project for all certified HMA quantities, or submitted at intervals for portions of the certified quantity. The certification statement shall be as follows:

> "The HMA mixture contains certified asphalt binder and approved aggregate as specified in the approved mix design and was produced in compliance with the provisions of SS-010XX.02, Quality Control for Small HMA Paving Quantities."

010XX.03 METHOD OF MEASUREMENT AND BASIS OF PAYMENT.
A completed Daily HMA Plant Report with the certification statement is required for measurement and payment for Contractor Certified HMA. The quantity of asphalt binder will be based on the approved JMF and any plant production quality control adjustments. Payment for the quality control requirements for small quantities will not be measured separately and shall be considered incidental to the items of HMA mixtures in the contract.

SPECIFICATION REVISION SUBMITTAL FORM

Submitted by: Tom Reis	**Office:** Specifications	**Item 10**
Submittal Date: 2008.12.10	**Proposed Effective Date:** February 17, 2009	
Article No.: DS-01XXX **Title:** DS for Backfilling and Compaction of Culverts by Flooding	**Other:**	

Specification Committee Action: Approved as is.

Deferred:	**Not Approved:**	**Approved Date:** 12/11/08	**Effective Date:** 2/17/09

Specification Committee Approved Text: See attached Draft DS.

Comments: The Specifications Section noted this DS is not intended for use with intakes and storm sewers since there is no place for the water to drain.

The Office of Bridges and Structures explained they discussed the use of flooded backfill with the Office of Design, Soils Section. The Soils Section informed them flooded backfill won't be used for all box culverts. The Specifications Section explained this DS would typically be used for situations when paving will occur shortly after culvert installation otherwise standard compaction procedures will be used. The Office of Design will place guidance in the Design Manual.

The Specification Section will be the controller for this DS.

Specification Section Recommended Text:

Comments:

Member's Requested Change (Redline/Strikeout):

Reason for Revision: Since June 17, 2008, approximately 20 projects have been developed using a Special Provision for Backfilling and Compaction of Pipe Culverts by Flooding. Recently this has been requested by designers to include RCBs, intakes, and storm sewers. The specification has been used unchanged since June 2008. Evolving this specification into a DS will save staff resources.

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:					

DRAFT DS-01XXX
(New)

Iowa Department of Transportation

DEVELOPMENTAL SPECIFICATIONS
FOR
BACKFILLING AND COMPACTION OF CULVERTS BY FLOODING

Effective Date
February 17, 2009

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.

010XXX.01 Description
This specification describes backfill and compaction requirements for culverts using flooding. Sections 2415, 2416, and 2417 of the Standard Specifications shall apply unless modified by this specification.

010XXX.02 Materials
Granular backfill material shall have 4% or less passing the No. 200 (75 µm) sieve (e.g. washed concrete sand).

010XXX.03 Construction
When backfilling and compaction by flooding is required, granular backfill may be placed in lifts up to 2 feet (0.6 m) thick. The Contractor shall determine if box or pipe culverts need to be restrained and take appropriate actions to prevent floating of culverts during backfilling, flooding, and compaction.

Cohesive soil plugs shall be constructed at the inlet, outlet, and sides (if needed) prior to flooding.

Surface flooding each lift shall start at the inlet end of the pipe or box culvert and progress to the outlet. To ensure uniform surface flooding and adequate compaction, water shall be fan-sprayed in successive 6 to 8 foot (1.8 to 2.4 m) increments from a 2 inch (50 mm) diameter hose for 3 minutes within each increment. The hose shall be run fully; however, the water pressure shall be low enough to avoid erosion of cohesive soil plugs.

After flooding, the Contractor shall evaluate the effectiveness of the compaction with a vibratory pan compactor. If the pan compactor produces visible compaction, repeat flooding process until the pan compactor produces no visible compaction.

010XXX.04 Method of Measurement
The quantity of Flooded Backfill, in cubic yards (cubic meters), will be the quantity shown in the contract documents regardless of the compaction method. The quantity measured for payment will not be adjusted unless the quantity of pipe installed is adjusted.

010XXX.05 Basis of Payment
The Contractor will be paid the contract unit price for Flooded Backfill per cubic yard (cubic meters).

Water required for flooding, subdrains, porous backfill, restraining culverts against floating, and granular backfill will not be measured separately for payment, but will be considered incidental to the contract unit price bid for Flooded Backfill.

Item 11

Update on the format of the 2009 Specification Book.

The Specifications Section explained that by changing the some minor formatting for the 2009 Standard Specification book, the page count has been reduced by approximately 100 pages. It was noted that an 8 1/2” X 11” book was preferred by most Specification Committee members. Construction personnel noted field personnel prefer a hardbound book.

The Committee agreed on an 8 1/2” X 11” hard bound book, however this may be subject to change once contract negotiations begin with a publisher.