MINUTES
OF
IOWA DOT SPECIFICATION COMMITTEE MEETING

April 13, 2017

Members Present:	Darwin Bishop	District 3 - Construction
	Donna Buchwald	Office of Local Systems
	Jeff Devries	District 1 - Materials
	Eric Johnsen, Secretary	Specifications Section
	Gary Novey	Office of Bridges & Structures
	Wes Musgrove	Office of Construction & Materials
	Tom Reis, Chair	Specifications Section
	Brian Smith	Office of Design
	Willy Sorensen	Office of Traffic & Safety
Members Not Present:	Mark Brandl	District 6 - Davenport RCE
	Charlie Purcell	Project Delivery Bureau
Advisory Members Present:	Andrew Zimmerman	FHWA
Others Present:	Mark Bortle	Office of Construction & Materials
	Ken Brink	Office of Location & Environment
	Mike Heller	Office of Design
	Melissa Serio	Office of Construction & Materials

Tom Reis, Specifications Engineer, opened the meeting. The following items were discussed in accordance with the revised agenda dated April 7, 2017:

The revised agenda is as follows:

1. Article 1105.13, Protection of Water Quality and Wetlands.

The Office of Location and Environment requested to update and move the article on Protection of Water Quality and Wetlands.

2. Article 2102.05, A, 8, Contractor Furnished Select Material.

The Office of Design requested to specify that moisture control is incidental to Contractor Furnished Select Treatment.

3. Article 2107.03, Construction (Embankments).

The Office of Design requested to move language from tabulations to the Standard Specifications.

4. Article 2528.03, Construction (Traffic Control).
Section 4188, Traffic Control Devices.

The Office of Traffic and Safety requested to include temporary portable rumble strips in the Standard Specifications.

5. Article 2601.03, Placement of Erosion Control.

The Office of Design requested multiple revisions to the methods of placing erosion control.

6. Article 2602.03, Construction (Water Pollution Control (Soil Erosion)).

The Offices of Design and Construction & Materials requested revisions to match NPDES Permit #2.

7. Article 4169.02, A, Seeds.

The Office of Design requested revisions to the seed list.

8. Article 2303.02, B, 1, b, 1, d, Friction Classification L-2 (Flexible Pavement).

The District 1 Materials Office requested revisions to the friction aggregate for friction classification L-2 mixes.

9. Article 2318.02, A, 2, Asphalt Stabilizing Agent (Cold In-Place Recycled Asphalt Pavement).

The District 1 Materials Office requested revisions to waive some testing for CIR foamed binders.

10. Article 2433.02, B, 6, Concrete (Concrete Drilled Shaft).

The Office of Construction and Materials requested revisions to allow high range water reducer.

11. Monument Preservation.

The Office of Design asked about adding a bid item for Monument Preservation. The Office of Design survey section indicated that they didn't think surveyors and contractors are not doing a good job of monument preservation. If it was a bid item, the Engineer would have more power to enforce protecting or reestablishing monuments. It was suggested that for the time being, monument preservation be discussed at the pre-construction meeting. The Office of Construction and Materials will add this item to the next District Construction Engineer Meeting agenda.

Form 510130 (08-15)

SPECIFICATION REVISION SUBMITTAL FORM

Submitted by: Tammy Nicholson / Wes Musgrove	**Office:** Location and Environment / Contracts	**Item 1**
Submittal Date: January 23, 2017	**Proposed Effective Date:** October 2017 GS	
Article No.: 1105.13 **Title:** Protection of Water Quality and Wetlands	**Other:**	

Specification Committee Action: Approved with changes.			
Deferred:	**Not Approved:**	**Approved Date:** 4/13/2017	**Effective Date:** 10/17/2017

Specification Section Recommended Text:

1105.13, PROTECTION OF WATER QUALITY AND WETLANDS

Renumber, Retitle, and **Replace** the Article:

~~**1105.13 PROTECTION OF WATER QUALITY AND WETLANDS.**~~
1107.18 ENVIRONMENTAL PROTECTION.

A. Protection of Water Quality and Wetlands.

~~**A**~~ **1.** The Contractor shall comply with the requirements of the Clean Water Act (33 U.S.C. 1344 and 33 CFR 323) and Executive Order 11990. When it becomes necessary for the Contractor to work in waters of the United States, the Contractor shall be aware that a Section 404 permit and Section 401 Water Quality Certification may be required.

~~**B**~~ **2.** When required, the Contracting Authority will obtain a Section 404 permit and Section 401 Water Quality Certification for essential work on the right-of-way prior to the award of the contract. The Contractor shall adhere to the requirements of the permit. Activities occurring in or across waters of the United States not specifically reviewed and approved in the permit are not authorized. If the Contractor desires to use construction methods that are not specifically approved by the permit, the Contractor shall be responsible for obtaining approval in the form of a new Section 404 permit from the U.S. Army Corps of Engineers and possibly DNR. The Contractor shall not use construction methods that require additional mitigation by the Contracting Authority. The Contractor will not be granted additional compensation or contract time due to their request for a new permit. If, however, due to no fault of the Contractor, a Section 404 permit modification involving activities within the right-of-way is deemed necessary by the Engineer, additional contract time and/or compensation may be considered.

~~**C**~~ **3.** Projects 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.

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

~~**2**~~ **a. Inspection.**
The Contractor shall allow representatives from the DNR 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~~ **b. Timing.**
The Contractor is encouraged to conduct construction activities during a period of low flow unless otherwise agreed upon by the Engineer.

~~4~~ **c. 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 a waterway or wetlands unless otherwise indicated in the contract documents.

~~5~~ **d. Disposal and Handling.**
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~~ **e. Erosion Control and Sediment Controls.**
Erosion control features shall be installed by the Contractor in accordance with Sections 2601 and 2602.

~~7~~ **f. Revegetation.**
Disturbed areas not covered with revetment shall be seeded in accordance with Section 2601.

~~8~~ **g. 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~~ **h. Flowable Mortar.**
Flowable mortar shall be installed in accordance with Section 2506.

~~10~~ **i. 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.

~~11~~ **j. Revetment.**
Revetment materials shall comply with Section 4130.

~~**12. Threatened/Endangered Bats.**~~
~~To protect threatened/endangered bats, trees shall be removed in accordance with Article 2101.01, unless otherwise directed in the contract documents. The Contractor shall limit removal of forest cover to those areas which are absolutely necessary for the construction of the work.~~

~~13~~ **k. 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~~ **l. 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~~ **m. 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.

~~**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~~ **n. Suitable Material.**
No activity shall use undesirable 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~~ **o. 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~~ **p. 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~~ **q. 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. Temporary stream diversion shall be done in accordance with Section 2418.

~~22~~ **r. Equipment.**
1) Heavy equipment working in wetlands or mudflats shall be placed on mats, or other measures shall be taken to minimize soil disturbance.
2) Unless otherwise indicated in the contract documents, heavy equipment shall not be used or operated within the stream channel. If in-stream work is unavoidable, it shall be performed in such a manner as to minimize the duration of the disturbance, turbidity increases, substrate disturbance, bank disturbance, and disturbance to vegetation.

~~23~~ **s. Threatened and 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.~~ Activities shall be completed in accordance with Article 1107.18, B, 1.

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

~~25~~ u. 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).

~~26. Active Nests of Migratory Birds~~.
~~To protect migratory birds, do not conduct construction activities where active nests are present between the dates of April 1 and July 15, inclusive or until the birds have fledged and left the nest. Active nests are nests containing eggs or young of migratory birds.~~

~~Beginning on the date the contract is fully executed, the contractor shall remove all non-active, existing migratory bird nests and monitor to prevent the establishment of active nests. Prior to that date, the Contracting Authority is responsible to remove all non-active, existing migratory bird nests and monitor to prevent the establishment of active nests.~~

~~If evidence of migratory bird nesting is discovered after beginning work, or in the event that migratory birds nests become established, immediately stop work and notify the Engineer.~~

B. Threatened and Endangered Species.

1. Threatened and Endangered Species.
No activity will be authorized which jeopardizes 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.

2. Threatened and Endangered Bats.
To protect threatened/endangered bats, trees deemed suitable habitat shall be removed in accordance with Article 2101.01, A, unless otherwise directed in the contract documents. The Contractor shall limit removal of forest cover to those areas which are absolutely necessary for the construction of the work. Areas of suitable habitat for threatened and endangered bats shall be determined by the Contracting Authority.

3. Working in Topeka Shiner Watersheds.
When critical habitat for Topeka shiner is identified in the contract documents, the following special conditions shall be implemented:

a. The Contractor shall not deposit sweepings, washings, treatment chemicals, or grouting and bonding materials in the stream or into any location where such pollutants can be washed in the stream by runoff water.

b. To protect Topeka Shiners during their peak spawning period, Contractor shall not conduct project activity within the stream bed between the dates of May 15 and July 31, inclusive. Constructing or removing temporary crossings, causeways, and weirs is prohibited between those dates as well. Previously constructed crossings, causeways, and weirs may remain in place between those dates.

c. Prompt attention is required for placing and maintaining temporary erosion control measures to minimize unnecessary sediment loading of the stream. Within one week of land disturbance at the project site, place appropriate temporary erosion control measures (e.g. silt fencing, hay bale ditch checks, erosion control blankets, rock ditch checks, etc.) and/or temporary grass seeding.

d. Within one month (or during the next appropriate seeding period) following completion of construction, reseed all areas denuded of vegetation as a result of the permitted

action, including all borrow areas that drain into the stream, using a permanent seed mix.

e. The Contractor shall not take sand for use in mixing concrete and/or asphalt from the project site, unless indicated otherwise in the contract documents.

f. The Contractor shall protect off-channel wetland complexes, such as old oxbow meanders, that are present near the project area.

g. The Contractor shall locate and protect temporary storage and/or staging facilities for waterways, tributaries, or drainageways within the project areas. In the event of an accidental spill, follow established state and federal spill reporting procedures. For Iowa DOT projects, immediately notify the Office of Location and Environment.

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

C. Active Nests of Migratory Birds.

1. To protect migratory birds, do not conduct construction activities where active nests are present. Active nests are likely to be present between the dates of April 1 and July 15~~, inclusive or until the birds have fledged and left the nest~~. Active nests are nests containing eggs or young of migratory birds.

2. Prior to the date the contract is fully executed, the Contracting Authority will be responsible to remove non-active, existing migratory bird nests and monitor to prevent the establishment of active nests.

3. Beginning on the date the contract is fully executed, the Contractor shall remove non-active, existing migratory bird nests and monitor to prevent establishment of active nests. Only costs associated with removing nests prior to initial mobilization will be paid as extra work as per Article 1109.03, B. ~~Prior to that date, the contracting authority is responsible to remove all non-active, existing migratory bird nests and monitor to prevent the establishment of active nests.~~

4. In the event that active nests are discovered, stop work and notify the Engineer.

D. Cultural Resources.

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

2. When required, the Contracting Authority will obtain Section 106 authorization for essential work on the right-of-way prior to the award of the contract. The Contractor shall adhere to the requirements of the authorization.

3. The Contractor shall comply with Article 2102.03, J, if historic, cultural or archeological remains and artifacts are discovered while accomplishing the work under contract.

E. Regulated Materials.

1. The Contractor shall comply with Article 1107.07, C.

2. The removal, transport, and disposal of asbestos from buildings and structures scheduled for demolition or renovation shall be done in accordance with Section 2536.

3. The removal of underground tanks and remediation of petroleum contaminated soil shall be done in accordance with Section 2537.

4. The salvage, removal, and disposal of buildings and other obstructions from the project site shall be done according to in accordance with Section 2538.

F. Noise.

The Contractor shall comply with Article 1107.07, D.

G. Loess Hills Protection.

1. The following definitions apply to this specification:

a. Loess Hills.

A distinctive topographic landform encompassing over 640,000 acres in portions of seven Iowa counties: Plymouth, Woodbury, Monona, Harrison, Pottawattamie, Mills, and Fremont. The Loess Hills extend nearly 200 miles in a narrow band adjacent to the Missouri River floodplain, and are characterized by distinctive topographic features such as steep, narrow ridge crests, peaks, saddles, and numerous steep side slopes, branching spurs, and precipitous bluffs. The western boundary of the Loess Hills is generally defined by the sheer, nearly vertical faces rising from the adjoining Missouri River floodplain. The topography along the eastern boundary is more gradual and the soil types tend to be gradational; therefore, soil borings will be used to define Loess soils material, using a 50 foot or greater measurement to refine boundaries. Less than 50 foot Loess soils depths will not be considered Loess Hills.

b. Special Landscape Areas.

Twelve areas within the Loess Hills encompassing approximately 92,000 acres, and provide clusters of exemplary remnant prairie and geological/topographical features. The Special Landscape Areas are found along the western margins of the Loess Hills where the loess is the deepest, the topographic relief is greatest, and the exposure to sun and wind provide favorable conditions for prairie communities. The rugged topography within these areas also has served to protect inaccessible prairies from intensive livestock grazing and other human-induced disturbance. The Special Landscape Areas were identified by National Park Service, in coordination with advocacy organizations and Iowa DNR staff, while conducting the Loess Hills of Western Iowa Special Resources Study in 2002.

c. Glenwood Locality.

The Glenwood Locality, located in Mills County, contains a rich and diverse prehistoric archeological record that spans 12,000 to 13,000 years.

2. The Contractor shall ensure areas (including haul roads and staging areas) selected for furnishing borrow or for waste or disposal of excess material (excavated material or broken concrete), do not impact or encroach upon the western face of the Loess Hills landform, any of the twelve Special Landscape Areas located within the Loess Hills landform, or the Glenwood Locality.

3. The Contractor shall avoid areas (including haul roads and staging areas) for furnishing borrow or for waste or disposal of excess material (excavated material or broken concrete), that exhibit natural vegetation, which is defined as herbaceous or woody vegetation that is unmodified by human activities, vegetation that has been altered by humans but has retained or regained characteristics of an undisturbed community, or vegetation that has been planted by humans but is not actively maintained for agricultural/commercial purposes. Areas that have been cultivated and planted to non-native grasses, legumes, or grass-legume mixtures for purposes of livestock grazing, seed production, or hay crops shall not be given consideration as natural vegetation, except in cases where threatened or endangered species are present.

Comments: The Office of Construction and Materials requested revisions to the Active Nests of Migratory Birds Article. Article 3 was revised to emphasize that only costs associated with removing nests will be paid and not monitoring efforts. Article 4 was shortened to be more concise and emphasize that only active nests require the contractor to stop work.

Specification Section Recommended Text:

1105.13, PROTECTION OF WATER QUALITY AND WETLANDS

Renumber, Retitle, and **Replace** the Article:

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~~The Contractor shall comply with Article 2102.03, J.~~

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- **a.** The Contractor shall not deposit sweepings, washings, treatment chemicals, or grouting and bonding materials in the stream or into any location where such pollutants can be washed in the stream by runoff water.
- **b.** To protect Topeka Shiners during their peak spawning period, Contractor shall not conduct project activity within the stream bed between the dates of May 15 and July 31, inclusive. Constructing or removing temporary crossings, causeways, and weirs is prohibited between those dates as well. Previously constructed crossings, causeways, and weirs may remain in place between those dates.
- **c.** Prompt attention is required for placing and maintaining temporary erosion control measures to minimize unnecessary sediment loading of the stream. Within one week of land disturbance at the project site, place appropriate temporary erosion control measures (e.g. silt fencing, hay bale ditch checks, erosion control blankets, rock ditch checks, etc.) and/or temporary grass seeding.
- **d.** Within one month (or during the next appropriate seeding period) following completion of construction, reseed all areas denuded of vegetation as a result of the permitted action, including all borrow areas that drain into the stream, using a permanent seed mix.
- **e.** The Contractor shall not take sand for use in mixing concrete and/or asphalt from the project site, unless indicated otherwise in the contract documents.
- **f.** The Contractor shall protect off-channel wetland complexes, such as old oxbow meanders, that are present near the project area.
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2. The removal, transport, and disposal of asbestos from buildings and structures scheduled for demolition or renovation shall be done in accordance with Section 2536.

3. The removal of underground tanks and the remediation of petroleum contaminated soil shall be done in accordance with Section 2537.

4. The salvage, removal, and disposal of buildings and other obstructions from the project site shall be done according to in accordance with Section 2538.

F. Noise.

The Contractor shall comply with Article 1107.07, D.

G. Loess Hills Protection.

1. The following definitions apply to this specification:

a. Loess Hills.

A distinctive topographic landform encompassing over 640,000 acres in portions of seven Iowa counties: Plymouth, Woodbury, Monona, Harrison, Pottawattamie, Mills, and Fremont. The Loess Hills extend nearly 200 miles in a narrow band adjacent to the Missouri River floodplain, and are characterized by distinctive topographic features such as steep, narrow ridge crests, peaks, saddles, and numerous steep side slopes, branching spurs, and precipitous bluffs. The western boundary of the Loess Hills is generally defined by the sheer, nearly vertical faces rising from the adjoining Missouri River floodplain. The topography along the eastern boundary is more gradual and the soil types tend to be gradational; therefore, soil borings will be used to define Loess soils material, using a 50 foot or greater measurement to refine boundaries. Less than 50 foot Loess soils depths will not be considered Loess Hills.

b. Special Landscape Areas.

Twelve areas within the Loess Hills encompassing approximately 92,000 acres, and provide clusters of exemplary remnant prairie and geological/topographical features. The Special Landscape Areas are found along the western margins of the Loess Hills where the loess is the deepest, the topographic relief is greatest, and the exposure to sun and wind provide favorable conditions for prairie communities. The rugged topography within these areas also has served to protect inaccessible prairies from intensive livestock grazing and other human-induced disturbance. The Special Landscape Areas were identified by National Park Service, in coordination with advocacy organizations and Iowa DNR staff, while conducting the Loess Hills of Western Iowa Special Resources Study in 2002.

c. Glenwood Locality.

The Glenwood Locality, located in Mills County, contains a rich and diverse prehistoric archeological record that spans 12,000 to 13,000 years.

2. The Contractor shall ensure areas (including haul roads and staging areas) selected for furnishing borrow or for waste or disposal of excess material (excavated material or broken concrete), do not impact or encroach upon the western face of the Loess Hills landform, any of the twelve Special Landscape Areas located within the Loess Hills landform, or the Glenwood Locality.

3. The Contractor shall avoid areas (including haul roads and staging areas) for furnishing borrow or for waste or disposal of excess material (excavated material or broken concrete), that exhibit natural vegetation, which is defined as herbaceous or woody vegetation that is unmodified by human activities, vegetation that has been altered by humans but has retained or regained characteristics of an undisturbed community, or vegetation that has been planted by humans but is not actively maintained for agricultural/commercial purposes. Areas that have been cultivated and planted to non-native grasses, legumes, or grass-legume mixtures for purposes of livestock grazing, seed production, or hay crops shall not be given consideration as natural vegetation, except in cases where threatened or endangered species are present.

Comments: The District 3 Office had some concerns about paying extra work for removing inactive migratory bird nests. Depending on the bridge and when the Contractor chooses to mobilize, this cost could add up. Some alternatives were discussed, including making it incidental except for certain bridges that have tight construction windows or difficult access. Another suggestion was to create a bid item, but if this was added to all structure removals, it would not be necessary most of the time. The committee decided to go with the submitted alternative, but clean up the language to make sure that the Contracting Authority would not pay for monitoring, but only work required to remove inactive nests. This section will need to be reviewed to see that it is working.

In regards to the Article on Equipment, there was some confusion on the existing language referring to work in wetlands or mudflats and the new language referring to work in stream channels. This Article will be divided into separate paragraphs. There was also a question on what constitutes “heavy

equipment", but this language is used elsewhere in the Article. This language will be reviewed before this Article is brought back to the Specification Committee.

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

~~1105.13 PROTECTION OF WATER QUALITY AND WETLANDS~~

1107.XX ENVIRONMENTAL PROTECTION

H. Protection of Water Quality and Wetlands.

~~A.~~1. The Contractor shall comply with the requirements of the Clean Water Act (33 U.S.C. 1344 and 33 CFR 323) and Executive Order 11990. When it becomes necessary for the Contractor to work in waters of the United States, the Contractor shall be aware that a Section 404 permit and Section 401 Water Quality Certification may be required.

~~B.~~2. When required, the Contracting Authority will obtain a Section 404 permit and Section 401 Water Quality Certification for essential work on the right-of-way prior to the award of the contract. The Contractor shall adhere to the requirements of the permit. Activities occurring in or across waters of the United States not specifically reviewed and approved in the permit are not authorized. If the Contractor desires to use construction methods that are not specifically approved by the permit, the Contractor shall be responsible for obtaining approval in the form of a new Section 404 permit from the U.S. Army Corps of Engineers and possibly Iowa DNR. The Contractor shall not use construction methods that require additional mitigation by the Contracting Authority. The Contractor will not be granted additional compensation or contract time due to their request for a new permit. If, however, due to no fault of the Contractor, a Section 404 permit modification involving activities within the right-of-way is deemed necessary by the Engineer, additional contract time and/or compensation may be considered.

~~C.~~3. 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.

~~3. Historic or Archaeological Remains.~~
~~The Contractor shall comply with Article 2102.03, J.~~

~~2.~~a. 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.~~b. Timing.
The Contractor is encouraged to conduct construction activities during a period of low flow unless otherwise agreed upon by the Engineer.

~~4.~~c. 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 a waterway or wetlands unless otherwise indicated in the contract documents.

~~5.~~d. 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.e.~~ Erosion Control and Sediment Controls.
Erosion control features shall be installed by the Contractor in accordance with Sections 2601 and 2602.

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

~~8.g.~~ 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.h.~~ Flowable Mortar.
Flowable mortar shall be installed in accordance with Section 2506.

~~10.i.~~ 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.

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

~~12. Threatened/Endangered Bats.~~
~~To protect threatened/endangered bats, trees shall be removed in accordance with Article 2101.01, unless otherwise directed in the contract documents. The Contractor shall limit removal of forest cover to those areas which are absolutely necessary for the construction of the work.~~

~~13.k.~~ 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.l.~~ 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.m.~~ 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.

~~**20. 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.~~

~~**21. Shellfish Beds.**~~
~~When shellfish beds have been identified in the contract documents, no construction activity shall occur in areas of concentrated shellfish populations.~~

~~**18.**~~**n. Suitable Material.**
No activity shall use undesirable 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.**~~**o. 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.**~~**p. 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.**~~**q. 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. Temporary stream diversion shall be done in accordance with Section 2418.

~~**22.**~~**r. Equipment.**
Heavy equipment working in wetlands or mudflats shall be placed on mats, or other measures shall be taken to minimize soil disturbance. Unless otherwise indicated in the contract documents, heavy equipment shall not be used or operated within the stream channel. If in- stream work is unavoidable, it shall be performed in such a manner as to minimize the duration of the disturbance, turbidity increases, substrate disturbance, bank disturbance, and disturbance to vegetation.

~~**23.**~~**s. Threatened and 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.~~ Activities shall be completed in accordance with 1107.XX B.1 Threatened and Endangered Species.

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

~~**25.**~~**u. 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).

~~**26. Active Nests of Migratory Birds.**~~

~~To protect migratory birds, do not conduct construction activities where active nests are present between the dates of April 1 and July 15, inclusive or until the birds have fledged and left the nest. Active nests are nests containing eggs or young of migratory birds.~~

~~Beginning on the date the contract is fully executed, the contractor shall remove all non-active, existing migratory bird nests and monitor to prevent the establishment of active nests. Prior to that date, the Contracting Authority is responsible to remove all non-active, existing migratory bird nests and monitor to prevent the establishment of active nests.~~

~~If evidence of migratory bird nesting is discovered after beginning work, or in the event that migratory birds nests become established, immediately stop work and notify the Engineer.~~

I. Threatened and Endangered Species

5. Threatened and 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.

6. Threatened~~/~~ and Endangered Bats.

To protect threatened/endangered bats, trees deemed suitable habitat shall be removed in accordance with Article 2101.01 A., unless otherwise directed in the contract documents. The Contractor shall limit removal of forest cover to those areas which are absolutely necessary for the construction of the work. Areas of suitable habitat for threatened and endangered bats shall be determined by the Contracting Authority.

7. Working in Topeka Shiner Watersheds.

When critical habitat for the Topeka shiner is identified in the contract documents, the following Special Conditions shall be implemented:

h. The Contractor shall not deposit sweepings, washings, treatment chemicals, or grouting and bonding materials in the stream or into any location where such pollutants can be washed in the stream by runoff water.

i. To protect Topeka Shiners during their peak spawning period, the Contractor shall not conduct project activity within the stream bed between the dates of May 15 and July 31, inclusive. Constructing or removing temporary crossings, causeways, and weirs is prohibited between those dates as well. Previously constructed crossings, causeways, and weirs may remain in place between those dates.

j. Prompt attention is required for placing and maintaining temporary erosion control measures to minimize unnecessary sediment loading of the stream. Within one week of land disturbance at the project site, place appropriate temporary erosion control measures (e.g. silt fencing, hay bale ditch checks, erosion control blankets, rock ditch checks, etc.) and/or temporary grass seeding.

k. Within one month (or during the next appropriate seeding period) following completion of construction, reseed all areas denuded of vegetation as a result of the permitted action, including all borrow areas that drain into the stream, using a permanent seed mix.

l. The Contractor shall not take sand for use in mixing concrete and/or asphalt from the project site, unless indicated otherwise in the contract documents.

m. The Contractor shall protect off-channel wetland complexes, such as old oxbow meanders, that are present near the project area.

n. The Contractor shall locate and protect all temporary storage and/or staging facilities for waterways, tributaries, or drainageways within the project areas. In the event of an accidental spill, follow established state and federal spill reporting procedures. For Iowa DOT projects, immediately notify the Office of Location and Environment.

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

J. Migratory Birds.

1. Active Nests of Migratory Birds.

To protect migratory birds, do not conduct construction activities where active nests are present between the dates of April 1 and July 15.~~, inclusive or until the birds have fledged and left the nest. Active nests are nests containing eggs or young of migratory birds.~~ Prior to the date the contract is fully executed, the Contracting Authority is responsible to remove all non-active, existing migratory bird nests and monitor to prevent the establishment of active nests.

Beginning on the date the contract is fully executed, the contractor shall remove all non-active, existing migratory bird nests and monitor to prevent the establishment of active nests. All related costs associated with this work prior to initial mobilization will be paid as extra work as per Article 1109.03 B. ~~Prior to that date, the contracting authority is responsible to remove all non-active, existing migratory bird nests and monitor to prevent the establishment of active nests.~~

If evidence of migratory bird nesting is discovered after beginning work, or in the event that migratory birds nests become established, immediately stop work and notify the Engineer.

K. Cultural Resources.

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

5. When required, the Contracting Authority will obtain Section 106 authorization for essential work on the right-of-way prior to the award of the contract. The Contractor shall adhere to the requirements of the authorization.

6. The Contractor shall comply with Article 2102.03, J if any historic, cultural or archeological remains and artifacts are discovered while accomplishing the work under contract.

L. Regulated Materials.

5. The Contractor shall comply with Article 1107.07, C.

6. The removal, transport, and disposal of asbestos from buildings and structures scheduled for demolition or renovation shall be done in accordance with Section 2536.

7. The removal of underground tanks and the remediation of petroleum contaminated soil shall be done in accordance with Section 2537.

8. The salvage, removal, and disposal of buildings and other obstructions from the project site shall be done in accordance with Section 2538.

M. Noise.

1. The Contractor shall comply with Article 1107.07, D.

N. Loess Hills Protection

2. Borrow and Waste Areas within the Loess Hills.

4. The following definitions apply to this specification:

a. Loess Hills.

A distinctive topographic landform encompassing over 640,000 acres in portions of seven Iowa counties: Plymouth, Woodbury, Monona, Harrison, Pottawattamie, Mills, and Fremont. The Loess Hills extend nearly 200 miles in a narrow band adjacent to the Missouri River floodplain, and are characterized by distinctive topographic features such as steep, narrow ridge crests, peaks, saddles, and numerous steep side slopes, branching spurs, and precipitous bluffs. The western boundary of the Loess Hills is generally defined by the sheer, nearly vertical faces rising from the adjoining Missouri River floodplain. The topography along the eastern boundary is more gradual and the soil types tend to be gradational; therefore, soil borings will be used to define Loess soils material, using a 50- foot or greater measurement to refine boundaries. Less than 50-foot Loess soils depths will not be considered Loess Hills.

b. Special Landscape Areas.

Twelve areas within the Loess Hills which encompass a total of approximately 92,000 acres, and provide clusters of exemplary remnant prairie and geological/topographical features. The Special Landscape Areas are found along the western margins of the Loess Hills where the loess is the deepest, the topographic relief is greatest, and the exposure to sun and wind provide favorable conditions for prairie communities. The rugged topography within these areas also has served to protect inaccessible prairies from intensive livestock grazing and other human-induced disturbance. The Special Landscape Areas were identified by National Park Service, in coordination with advocacy organizations and Iowa DNR staff, while conducting the Loess Hills of Western Iowa Special Resources Study in 2002.

c. Glenwood Locality

The Glenwood Locality, located in Mills County, contains a rich and diverse prehistoric archeological record that spans 12,000-13,000 years.

5. The Contractor shall ensure areas (including haul roads and staging areas) selected for furnishing borrow or for waste or disposal of excess material (excavated material or broken concrete), do not impact or encroach upon the western face of the Loess Hills landform, any of the 12 Special Landscape Areas located within the Loess Hills landform, or the Glenwood Locality.

6. The Contractor shall avoid areas (including haul roads and staging areas) for furnishing borrow or for waste or disposal of excess material (excavated material or broken concrete), that exhibit natural vegetation, which is defined as herbaceous or woody vegetation that is unmodified by human activities, vegetation that has been altered by humans but has retained or regained characteristics of an undisturbed community, or vegetation that has been planted by humans but is not actively maintained for agricultural/commercial purposes. Areas that have been cultivated and planted to non-native grasses, legumes, or grass-legume mixtures for purposes of livestock grazing, seed production, or hay crops shall not be given consideration as natural vegetation, except in cases where threatened or endangered species are present.

Reason for Revision: As they exist today, specifications related to environmental resources are spread throughout the spec book and in some instances misplaced. Our purpose of the proposed environmental protection section is to consolidate existing environmental specs (either by relocation or reference) and include new or clarifying language where appropriate. In addition, there is opportunity to fold a number of standard environmental notes into the proposed specs. This proposed environmental protection section will help people better understand and apply these specs as intended.

Specific to Article 1105.13 C.26, to clarify current language regarding the requirement to protect active nests, and to address industry concerns with the requirement to remove inactive nests and monitor to prevent the establishment of active nests beginning on the date the contract is fully executed. This is particularly a concern for extreme cases involving difficult site access, work over water, the need for specialized equipment, lane closures, etc. to remove inactive nests and to monitor the site in the interim between contract execution and initial mobilization for construction. In some situations, this could be a significant period of time.

New Bid Item Required (X one)	**Yes**	**No** X
Bid Item Modification Required (X one)	**Yes**	**No** X
Bid Item Obsoletion Required (X one)	**Yes**	**No** X

Comments: Paying for these costs by Contract Modification was discussed and agreed upon at the December 14, 2016 Iowa DOT/ AGC bi-monthly meeting. This agenda item is to accomplish this intent.

County or City Comments:

Industry Comments:

Form 510130 (08-15)

IOWA DOT

SPECIFICATION REVISION SUBMITTAL FORM

Submitted by: Brian Smith	**Office:** Design	**Item 2**
Submittal Date: 2/20/2017	**Proposed Effective Date:** 10/17/17	
Article No.: 2102.05, A, 8 **Title:** Contractor Furnished Select Material	**Other:**	

Specification Committee Action: Approved with changes.

Deferred:	**Not Approved:**	**Approved Date:** 4/13/2017	**Effective Date:** 10/17/2017

Specification Committee Approved Text:

2102.05, A, 8, Contractor Furnished Select Treatment.

Add as the third sentence:

Moisture control of select soil treatment is incidental to Contractor Furnished Select Treatment and will not be paid for separately.

Comments: The Office of Construction and Materials requested to add "of select soil treatment" so that moisture control is not required when special backfill is used.

Specification Section Recommended Text:

2102.05, A, 8, Contractor Furnished Select Treatment.

Add as the third sentence:

Moisture control is incidental to Contractor Furnished Select Treatment and will not be paid for separately.

Comments:

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

2102.05, A, 8, Contractor Furnished Select Treatment.

Add as the third sentence:

Moisture control is incidental to Contractor Furnished Select Treatment and will not be paid for separately.

Reason for Revision: The Office of Design would like to include that moisture control is incidental to Contractor Furnished Select Treatment.

New Bid Item Required (X one)	**Yes**	**No** X
Bid Item Modification Required (X one)	**Yes**	**No** X
Bid Item Obsoletion Required (X one)	**Yes**	**No** X

Comments:

County or City Comments:

Industry Comments:

Form 510130 (08-15)

IOWA DOT

SPECIFICATION REVISION SUBMITTAL FORM

Submitted by: Brian Smith	**Office:** Design	**Item 3**
Submittal Date: 2/20/2017	**Proposed Effective Date:** 10/17/17	
Article No.: 2107.03 **Title:** Construction	**Other:**	

Specification Committee Action: Approved with changes.

Deferred:	**Not Approved:**	**Approved Date:** 4/13/2017	**Effective Date:** 10/17/2017

Specification Committee Approved Text:

2107.03, H, 1.

Replace the article:

The contract documents will ~~show~~ indicate ~~areas in which~~ where to construct embankments ~~shall be constructed~~ with moisture and density control. ~~The~~ When a specific depth is required, the contract documents will also ~~show~~ indicate the distance below the elevation of the completed grading work to which such methods are to be applied. Unless specified otherwise in the contract documents, maintain moisture content within the limits of -2.0% and +2.0% of optimum moisture content for maximum dry density.

2107.03, I, 1.

Replace the article:

The contract documents will ~~show~~ indicate~~:~~

~~**a.**~~ ~~Areas in which~~ where to construct embankments ~~are to be constructed~~ with moisture control.

~~**b.**~~ ~~The~~ When a specific depth is required, the contract documents will indicate the distance below the elevation of the completed grading work to which such methods are to be applied.

~~**c.**~~ ~~The moisture limits.~~ Unless specified otherwise in the contract documents, maintain moisture content within the limits of -2.0% and +2.0% of optimum moisture content for maximum dry density.

Comments: The Office of Construction and Materials requested that the moisture content limits go out to a tenth, since it is measured to the nearest tenth. It was also requested to clarify that moisture content is a percentage of maximum dry density.

Specification Section Recommended Text:

2107.03, H, 1.

Replace the article:

The contract documents will ~~show~~ indicate ~~areas in which~~ where to construct embankments ~~shall be constructed~~ with moisture and density control. ~~The~~ When a specific depth is required, the contract documents will also ~~show~~ indicate the distance below the elevation of the completed grading work to which such methods are to be applied. Unless specified otherwise in the contract documents, maintain moisture content within the limits of -2% and +2% of optimum for maximum density.

2107.03, I, 1.

Replace the article:

The contract documents will ~~show~~ indicate~~:~~

~~a.~~ ~~Areas in which~~ where to construct embankments ~~are to be constructed~~ with moisture control.

~~b.~~ ~~The~~ When a specific depth is required, the contract documents will indicate the distance below the elevation of the completed grading work to which such methods are to be applied.

~~c.~~ ~~The moisture limits.~~ Unless specified otherwise in the contract documents, maintain moisture content within the limits of -2% and +2% of optimum for maximum density.

Comments:

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

2107.03, H, 1.

Replace the article:

The contract documents will ~~show~~ indicate areas ~~in which~~ where to construct embankments ~~shall be constructed~~ with moisture and density control. ~~The~~ When a specific depth is required, the contract documents will also ~~show~~ indicate the distance below the elevation of the completed grading work to which such methods are to be applied. Unless specified otherwise in the contract documents, maintain moisture content within the limits of -2% and +2% of optimum for maximum density.

2107.03, I, 1.

Replace the article:

The contract documents will ~~show~~ indicate~~:~~

~~a.~~ ~~A~~areas ~~in which~~ where to construct embankments ~~are to be constructed~~ with moisture control.

~~b.~~ ~~The~~ When a specific depth is required, the contract documents will indicate the distance below the elevation of the completed grading work to which such methods are to be applied.

~~c.~~ ~~The moisture limits.~~ Unless specified otherwise in the contract documents, maintain moisture content within the limits of -2% and +2% of optimum for maximum density.

Reason for Revision: The Office of Design would like to move this information from Tabulations 103-1 and 103-6 to the Standard Specifications. -2% and +2 are typically the limits required for moisture control.

New Bid Item Required (X one)	**Yes**	**No** X
Bid Item Modification Required (X one)	**Yes**	**No** X
Bid Item Obsoletion Required (X one)	**Yes**	**No** X
Comments:		
County or City Comments:		
Industry Comments:		

Form 510130 (08-15)

IOWA DOT

SPECIFICATION REVISION SUBMITTAL FORM

Submitted by: Willy Sorenson	**Office:** Traffic & Safety	**Item 4**
Submittal Date: 3/27/17	**Proposed Effective Date:** October 2017	
Article No.: 2528.03 **Title:** Construction (Traffic Control) **Section No.:** 4188 **Title:** Traffic Control Materials	**Other:**	

Specification Committee Action: Approved as recommended.

Deferred:	**Not Approved:**	**Approved Date:** 4/13/2017	**Effective Date:** 10/17/2017

Specification Committee Approved Text: See Specification Section Recommended Text.

Comments: A Public Interest Finding Memo will still be required as there is only one know product that will meet the specifications.

Specification Section Recommended Text:

2528.03, Construction.

Add the Article:

L. Temporary Portable Rumble Strips

Use temporary portable rumble strips of the type shown in the contract documents and meeting requirements of Article 4188.08.

1. Placement.

a. A temporary portable rumble strip panel consists of three individual temporary portable rumble strips placed on roadway surface.

b. Place centerline end of temporary portable rumble strip 6 inches from centerline of roadway perpendicularly extending its full length transversely across pavement surface.

c. Place each individual temporary portable rumble strip 15 to 20 feet apart within the temporary portable rumble strip panel.

2. Maintenance.

Ensure temporary portable rumble strips maintain alignment within 6 inches perpendicular to centerline of roadway when measured from one end to the other end of the individual temporary portable rumble strip.

3. Removal.

When temporary traffic control requiring temporary portable rumble strips is no longer in operation, remove temporary portable rumble strips from roadway.

4188, Traffic Control Devices.

Add the Article:

4188.08 TEMPORARY PORTABLE RUMBLE STRIPS.

Furnish temporary portable rumble strips to be used in traffic control zones. Ensure temporary portable rumble strips meet requirements of MUTCD and the following:

A. Properties.

1. Rated for posted speed limits up to 70 mph.

2. Installation without using nails or adhesive.

3. Provides auditory and tactile warnings for all vehicles.

4. Minimal lateral displacement under traffic loading.

5. Installation and removal of rumble strips in less than 5 minutes.

6. Reusable within manufacturer's recommended life of the product.

B. Acceptance.
Comply with Materials I.M. 488.07 for inspection and acceptance of temporary portable rumble strips.

Comments: Payment was removed from Article 2528.03, L, as temporary portable rumble strips are incidental to Traffic Control.

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

2528.03

L. Temporary Portable Rumble Strips

Use temporary portable rumble strips that are of the type shown in the contract documents and meet the requirements of Section 4188.08.

4. Placement.
- **d.** A temporary portable rumble strip panel consists of three individual temporary portable rumble strips placed on the roadway surface.
- **e.** Place the centerline end of the temporary portable rumble strip 6 inches from the centerline of the roadway perpendicularly extending its full length transversely across the pavement surface.
- **f.** Each individual temporary portable rumble strip shall be placed between 15-20 feet apart within the temporary portable rumble strip panel.

5. Maintenance.
Ensure temporary portable rumble strips maintain alignment within 6 inches perpendicular to the centerline of the roadway when measured from one end to the other end of the individual temporary portable rumble strip.

6. Removal.
When the temporary traffic control requiring the temporary portable rumble strips is no longer in operation, remove the temporary portable rumble strips from the roadway.

7. Payment.
No separate payment will be made for the temporary portable rumble strip placement, maintenance, and removal.

4188.08 Temporary Portable Rumble Strips

Furnish temporary portable rumble strips to be used in traffic control zones. Ensure that the temporary portable rumble strips meet the requirements of the MUTCD and the following:

A. Properties

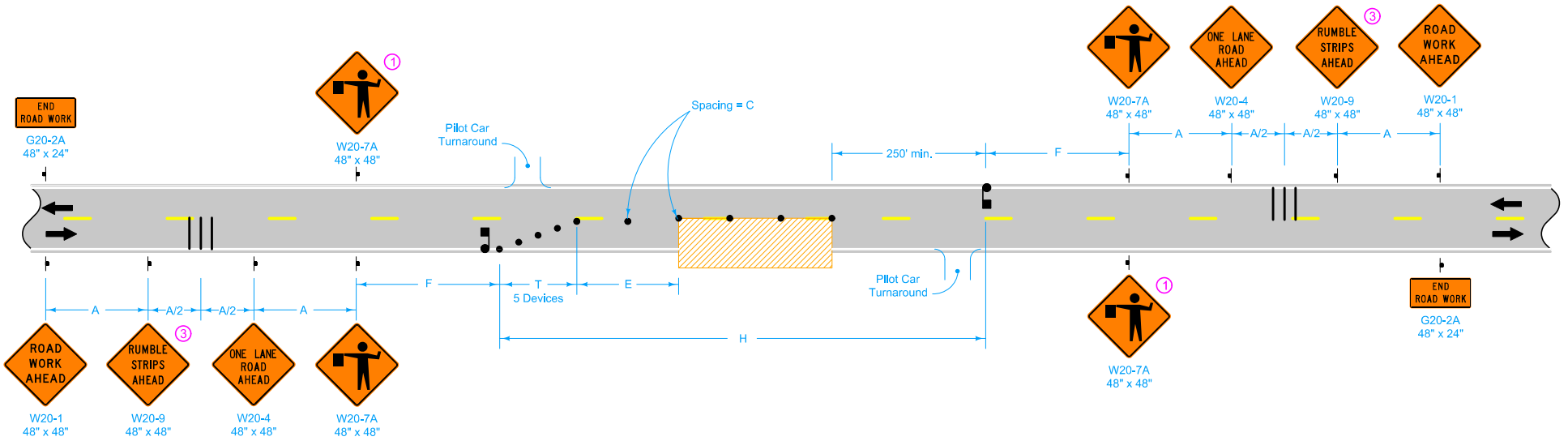
1) Rated for posted speed limits up to 70 MPH.
2) Installation without the use of nails or adhesive.
3) Provides both auditory and tactile warnings for trucks and passenger vehicles.
4) Minimal lateral displacement under traffic loading.
5) Installation and removal of rumble strips in less than five minutes.
6) Reusable within the manufacture's recommended life of the product.

B. Acceptance

Comply with Materials I.M. 488.07 for inspection and acceptance of temporary portable rumble strips.

Reason for Revision: The Iowa DOT has been testing Temporary Portable Rumble Strips on projects for 3 years, using the same requirements spelled out in Special Provisions 150169, SP-120209, SP-150012, and SP-150016. InTrans conducted research on a few projects using different configurations to see if one set of rumbles (paired with a sign) would yield the same reductions in speed and increase braking as compared to two sets of rumbles. It did, therefore, the road standard (TC- 419) has changed to reflect this reduction in sets of rumbles (2 sets down to 1 set, per direction) and the addition of a "Rumble Strip Ahead" sign. Based the success of reducing end of queue crashes in work zones, we would like to make this a permanent change in our specifications.

New Bid Item Required (X one)	**Yes**	**No** X
Bid Item Modification Required (X one)	**Yes**	**No** X
Bid Item Obsoletion Required (X one)	**Yes**	**No** X
Comments:		
County or City Comments:		
Industry Comments:		



LEGEND

- Traffic Sign
- Flagger
- 42" Channelizer
- Work Area
- Direction of Traffic
- Portable Rumble Strip Panel

SPEED LIMIT (mph)	ADT	A	C	E	F	H (2) max.	T
35 or less	up to 2,500	250'	40'	0'-200'	500'	2.5 mi.	50'
	2,500 - 5,000	250'	40'	0'-200'	500'	2.0 mi.	50'
	more than 5,000	500'	40'	0'-200'	1000'	1.5 mi.	50'
40 - 45	up to 2,500	350'	80'	0'-200'	700'	2.5 mi.	100'
	2,500 - 5,000	350'	80'	0'-200'	700'	2.0 mi.	100'
	more than 5,000	700'	80'	0'-200'	1400'	1.5 mi.	100'
50 or greater	up to 2,500	500'	160'	200'-300'	1000'	2.5 mi.	100'
	2,500 - 5,000	500'	160'	200'-300'	1000'	2.0 mi.	100'
	more than 5,000	1000'	160'	200'-300'	2000'	1.5 mi.	100'

(1) Sign optional for ADT less than 5,000.

(2) In rural areas, as work activity nears the downstream limits of dimension H, the lane closure may be extended up to 1.0 mile beyond the maximum distance, H, shown in the table. After the traffic control devices have been placed to extend the closure and after work activity has progressed, the advanced signing and devices at the beginning of the traffic control zone should be moved downstream so that the H distance is once again within the limits shown in the table. This one-mile extension will not be allowed during any peak traffic hours listed in the contract documents.

(3) Refer to SI-881 for sign details.

Possible Contract Items:
Flagger
Pilot Car
Traffic Control

IOWA DOT

STANDARD ROAD PLAN

REVISION	
6	10-17-17

TC-214

SHEET 1 of 1

REVISIONS: Changed title. Added rumble strips, 'Rumble Strips Ahead' sign, and circle note 3.

Brian Smith
APPROVED BY DESIGN METHODS ENGINEER

LANE CLOSURE WITH FLAGGERS AND RUMBLE STRIPS FOR USE WITH PILOT CAR

INSPECTION & ACCEPTANCE
TEMPORARY PORTABLE RUMBLE STRIP

GENERAL

The Temporary Portable Rumble Strip consists of a series of rumble strips placed in a panel of three to provide a rumble strip panel. These strips shall meet the requirements of the current specifications for Temporary Portable Rumble Strips and the following:

- Black flexible polymer material with a non-slip surface weighing at least 100 pounds.
- Minimum length 10 feet, approximately 1 foot wide, maximum 1 inch thickness.
- Leading and trailing edges are beveled.
- Shall not be required to be physically attached to underlying roadway surface in order to maintain placement location.

Approved Products are listed in the Materials Approved Products Listing Enterprise (MAPLE).

ACCEPTANCE

Acceptance of Temporary Portable Rumble Strip will be based on satisfactory evaluation of a preliminary sample furnished to the Iowa Department of Transportation, Office of Construction and Materials, Ames, Iowa, and the manufacturer certification statement of specification compliance. A list of approved manufacturers based on preliminary sample evaluation and certification documentation will be developed and maintained by the Office of Construction and Materials.

CERTIFICATION

The manufacturer shall provide the Project Inspector the following statement of certification:

Certification Statement

This is to certify that (manufacturer name, product number) this Temporary Portable Rumble Strip meets the requirements of the applicable specifications of the Iowa Department of Transportation.

_____
Authorized Signature and Date

A responsible company representative shall sign the certification statement.

Form 510130 (08-15)

IOWA DOT

SPECIFICATION REVISION SUBMITTAL FORM

Submitted by: Brian Smith	**Office:** Design	**Item 5**
Submittal Date: 2/20/2017	**Proposed Effective Date:** 10/17/17	
Article No.: 2601.03 **Title:** Placement of Erosion Control	**Other:**	

Specification Committee Action: Approved with changes.

Deferred:	**Not Approved:**	**Approved Date:** 4/13/2017	**Effective Date:** 10/17/2017

Specification Section Recommended Text:
2601.03, A, 7, a.

Replace the first sentence:

Use hydraulic seeding equipment with a pump rated at no less than 100 gallons per minute and is capable of continuous agitation action to uniformly distribute seed over the area.

2601.03, B, 4, d, 2, Seeding and Fertilizing with Hydraulic Seeder.

Replace the Title and Article:

~~**Seeding and Fertilizing with**~~ **Hydraulic** ~~**Seeder**~~ **Seeding.**

a) ~~A hydraulic seeder may be used when seedbed has been prepared according to Article 2601.03, B, 4, a. When a hydraulic seeder is used, apply seed or fertilizer, or both, at the rates specified in approximately 400 gallons of water slurry per acre.~~ Add 50 pounds of Wood Cellulose Fiber complying with Article 4169.07, B, 1, as a tracer for each 500 gallons of water in hydraulic seeder tank.

b) ~~Apply mixture within 1 hour after fertilizer and seed are placed in hydraulic seeder. Use continuous agitation. Seed remaining in the fertilizer solution for more than 1 hour will be unacceptable. Additional seed at the specified rate will be required.~~ Use flood type nozzles and manufacture's recommended water volume to apply mixture.

c) Once seed has been added to tank mixture, a 1 hour time limit is set for spreading mixture on soil. Once 1 hour time limit has expired, discard remaining mixture.

d) Perform hydraulic seeding separate from placing hydraulic mulch.

2601.03, C, 3, a, Preparation and Application.

Replace the Article:

1) Prepare seed according to Article 2601.03, B, 4, c.

2) ~~In areas without existing stabilized crop seeding residue,~~ pPrepare seedbed according to Article 2601.03, B, 4, a, and apply seed according to Article 2601.03, B, 4, d, using only a drop seeder complying with Article 2601.03, A, 19.

~~**3)** In areas with existing stabilized crop residue, apply seed with a silt seeder. Seedbed preparation will not be required, except for areas with rills and gullies.~~

2601.03, C, 5, a, Preparation and Application.

Replace the Article:

1) ~~In areas without existing stabilized crop seeding residue, prepare seedbed according to Article 2601.03, B, 4, a. Seed areas accessible to field equipment with native grass seed drill, gravity, or broadcast equipment. Cultipack as specified in Article 2601.03, B, 4, d.~~

~~Broadcast seed other areas and follow with a light dragging or hand raking.~~ Apply seed with native grass seed drill with a no till attachment. Seedbed preparation and cultipacking will not be required. Mowing according to Article 2601.03, B, 4, a, 3, may be required. In areas where rills and gullies are present, prepare seedbed according to Article 2601.03, B, 4, a, and then apply seed with a native grass seed drill with a no till attachment.

~~**2)** In areas with existing stabilized crop residue, apply seed with a native grass seed drill with a no till attachment. Seedbed preparation and cultipacking will not be required. Seedbed preparation is required for areas with rills and gullies.~~

~~**3** **2)** Prepare seed according to Article 2601.03, B, 4, c.~~

~~**4** **3)** Calibrate native grass seed drill to specified seeding rate for project prior to operation on project.~~

~~**5** **4)** Plant seed at a maximum 1/8 inch depth. Do not perform seeding when wet soil conditions would cause seed to be placed deeper than specified.~~

~~**6** **5)** Fill seed boxes loosely without packing seed to allow agitator wheels to run freely and seed flows freely through drill.~~

~~**7** **6)** Set no-till coulters to penetrate between 1/4 and 1/2 inch below soil surface.~~

~~**8** **7)** Operate drill so drive wheel maintains ground contact. Perform two passes with drill, with second pass being offset from first pass.~~

~~**9** **8)** Operate tractor between 3 and 5 mph to prevent drill from bouncing.~~

~~**10** **9)** Remove seed remaining in drill at end of each day. At completion of seeding, remove remaining seed from drill by vacuum or other means. Hand broadcast remaining seed on project.~~

2601.03 E, 2, a, Straw Mulches.

Add the Articles:

4) Do not operate mulch-blowing equipment on slopes steeper than 2.5:1 or on slopes that may rut. Use blower attachments to apply mulch without traversing slopes. Hydraulic mulching, as described in Article 4169.07, B, 2, may be substituted at no additional cost to the Contracting Authority.

5) Do not mulch when wind velocities are greater than 15 mph.

2601.04, A.

Add as the third bullet:

- Hydraulic Seeding,

2601.05, A, 2.

Add as the third bullet:

- Hydraulic Seeding,

Comments: Method of Measurement and Basis of Payment was added for hydraulic seeding. Hydraulic Seeding was added to Articles 2601.04 and 2601.05.

Specification Section Recommended Text:
2601.03, A, 7, a.

Replace the first sentence:

Use hydraulic seeding equipment with a pump rated at no less than 100 gallons per minute and is capable of continuous agitation action to uniformly distribute seed over the area.

2601.03, B, 4, d, 2, Seeding and Fertilizing with Hydraulic Seeder.

Replace the Title and Article:

~~**Seeding and Fertilizing with** **Hydraulic** **Seeder** **Seeding.**~~

~~**a)** A hydraulic seeder may be used when seedbed has been prepared according to Article~~

~~2601.03, B, 4, a. When a hydraulic seeder is used, apply seed or fertilizer, or both, at the rates specified in approximately 400 gallons of water slurry per acre.~~ Add 50 pounds of Wood Cellulose Fiber complying with Article 4169.07, B, 1, as a tracer for each 500 gallons of water in the hydraulic seeder tank.

b) ~~Apply mixture within 1 hour after fertilizer and seed are placed in hydraulic seeder. Use continuous agitation. Seed remaining in the fertilizer solution for more than 1 hour will be unacceptable. Additional seed at the specified rate will be required.~~ Use flood type nozzles and manufacture's recommended water volume to apply mixture.

c) Once seed has been added to tank mixture, a 1 hour time limit is set for spreading the mixture on the soil. Once the 1 hour time limit has expired, discard excess mixture.

d) Perform hydraulic seeding separate from placing hydraulic mulch.

2601.03, C, 3, a, Preparation and Application.

Replace the Article:

1) Prepare seed according to Article 2601.03, B, 4, c.

2) ~~In areas without existing stabilized crop seeding residue,~~ ~~p~~Prepare seedbed according to Article 2601.03, B, 4, a, and apply seed according to Article 2601.03, B, 4, d, using only a drop seeder complying with Article 2601.03, A, 19.

~~**3)** In areas with existing stabilized crop residue, apply seed with a silt seeder. Seedbed preparation will not be required, except for areas with rills and gullies.~~

2601.03, C, 5, a, Preparation and Application.

Replace the Article:

1) ~~In areas without existing stabilized crop seeding residue, prepare seedbed according to Article 2601.03, B, 4, a. Seed areas accessible to field equipment with native grass seed drill, gravity, or broadcast equipment. Cultipack as specified in Article 2601.03, B, 4, d. Broadcast seed other areas and follow with a light dragging or hand raking.~~ Apply seed with a native grass seed drill with a no till attachment. Seedbed preparation and cultipacking will not be required. Mowing according to Article 2601.03, B, 4, a, 3 may be required. In areas where rills and gullies are present, prepare seedbed according to Article 2601.03, B, 4, a, and then apply seed with a native grass seed drill with a no till attachment.

~~**2)** In areas with existing stabilized crop residue, apply seed with a native grass seed drill with a no till attachment. Seedbed preparation and cultipacking will not be required. Seedbed preparation is required for areas with rills and gullies.~~

~~**3**~~ **2)** Prepare seed according to Article 2601.03, B, 4, c.

~~**4**~~ **3)** Calibrate native grass seed drill to specified seeding rate for the project prior to operation on the project.

~~**5**~~ **4)** Plant seed at a maximum 1/8 inch depth. Do not perform seeding when wet soil conditions would cause seed to be placed deeper than specified.

~~**6**~~ **5)** Fill seed boxes loosely without packing seed to allow agitator wheels to run freely and seed flows freely through drill.

~~**7**~~ **6)** Set no-till coulters to penetrate between 1/4 and 1/2 inch below soil surface.

~~**8**~~ **7)** Operate drill so the drive wheel maintains ground contact. Perform two passes with drill, with second pass being offset from first pass.

~~**9**~~ **8)** Operate tractor between 3 and 5 mph to prevent drill from bouncing.

~~**10**~~ **9)** Remove seed remaining in drill at the end of each day. At the completion of seeding, remove remaining seed from drill by vacuum or other means. Hand broadcast remaining seed on project.

2601.03 E, 2, a, Straw Mulches.

Add the Articles:

4) Do not operate mulch-blowing equipment on slopes steeper than 2.5:1 or on slopes that

may rut. Use blower attachments to apply mulch without traversing the slopes.

5) Do not mulch when wind velocities are greater than 15 mph.

Comments:

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

2601.03, A, 7, a.

Replace the first sentence:

Use hydraulic seeding equipment with a pump rated at no less than 100 gallons per minute and that is capable of continuous agitation action to uniformly distribute the seed over the area.

2601.03, B, 4, d, 2, Seeding and Fertilizing with Hydraulic Seeder.

Replace the title and article:

~~**Seeding and Fertilizing with Hydraulic Seeder.**~~

~~**a)** A hydraulic seeder may be used when seedbed has been prepared according to Article 2601.03, B, 4, a. When a hydraulic seeder is used, apply seed or fertilizer, or both, at the rates specified in approximately 400 gallons of water slurry per acre.~~

~~**b)** Apply mixture within 1 hour after fertilizer and seed are placed in hydraulic seeder. Use continuous agitation. Seed remaining in the fertilizer solution for more than 1 hour will be unacceptable. Additional seed at the specified rate will be required.~~

Hydraulic Seeding.

a) Add 50 pounds of Wood Cellulose Fiber complying with Article 4169.07, B, 1, as a tracer for each 500 gallons of water in the hydraulic seeder tank.

b) Use flood type nozzles and the manufacture's recommended water volume to apply mixture.

c) Once the seed has been added to the tank mixture, a one hour time limit is set for spreading the mixture on the soil. Once the one hour time limit has passed, discard the excess mixture.

d) Perform hydraulic seeding separate from placing hydraulic mulch.

2601.03, C, 3, a, Preparation and Application.

Replace the second article:

2) ~~In areas without existing stabilized crop seeding residue, prepare seedbed according to Article 2601.03, B, 4, a, and apply seed according to Article 2601.03, B, 4, d.~~ Prepare seedbed according to Article 2601.03, B, 4, a, and apply seed according to Article 2601.03, B, 4, d, using only a drop seeder complying with Article 2601.03, A, 19.

Delete the third article:

~~**3)** In areas with existing stabilized crop residue, apply seed with a silt seeder. Seedbed preparation will not be required, except for areas with rills and gullies.~~

2601.03, C, 5, a, Preparation and Application.

Replace the first article:

~~**1)** In areas without existing stabilized crop seeding residue, prepare seedbed according to Article 2601.03, B, 4, a. Seed areas accessible to field equipment with native grass seed drill, gravity, or broadcast equipment. Cultipack as specified in Article 2601.03, B, 4, d. Broadcast seed other areas and follow with a light dragging or hand raking.~~ Apply seed with a native grass seed drill with a no till attachment. Seedbed preparation and cultipacking will not be required. Mowing according to Article 2601.03, B, 4, a, 3 may be required. In areas where rills and gullies are present, prepare seedbed according to Article

2601.03, B, 4, a, and then apply seed with a native grass seed drill with a no till attachment.

Delete the second article:

~~**2)** In areas with existing stabilized crop residue, apply seed with a native grass seed drill with a no till attachment. Seedbed preparation and cultipacking will not be required. Seedbed preparation is required for areas with rills and gullies.~~

Renumber the remaining articles.

2601.03 E, 2, a, Straw Mulches.

Add the following articles:

4) Do not operate mulch-blowing equipment on slopes steeper than 2.5:1 or on slopes that will rut the soil surface. Use blower attachments to apply the mulch without traversing the slopes.

5) Do not mulch when wind velocities are greater than 15 mph.

Reason for Revision:

1. The changes provide direction for how to mix and apply when hydraulic seeding is required. There is no current specification for hydraulic seeding.

2. Straw mulch reduces up to 70% of soil loss (erosion) on a site when properly applied. The DOT is still facing challenges of having the straw mulch applied incorrectly. The changes will help ensure the straw mulch is applied evenly over a slope. Minnesota DOT has a similar specification for the application of straw mulch.

3. The changes will require full seed bed preparation anytime rural seed is applied. We have been testing this form of application out with our erosion control contracts for three years. We have found that by have the contractor prepare the seed bed prior to planting the seed, we are able to establish the planting in less than 45 days verses over 90 days with our current specifications.

4. The changes will require the contractor to only use a native grass drill to install the native grass and wildflowers. The other methods for installing native grass and wildflowers that are also currently included in the specification are not suitable for the type of conditions that are present when the majority of the native grass and wildflower plantings are completed.

New Bid Item Required (X one)	**Yes** X	**No**
Bid Item Modification Required (X one)	**Yes**	**No** X
Bid Item Obsoletion Required (X one)	**Yes**	**No** X
Comments: New bid item for hydraulic seeding.		
County or City Comments:		
Industry Comments:		

Form 510130 (08-15)

IOWA DOT

SPECIFICATION REVISION SUBMITTAL FORM

Submitted by: Brian Smith / Melissa Serio	**Office:** Design / Construction	**Item 6**
Submittal Date: 3/29/2017	**Proposed Effective Date:** October 2017	
Article No.: 2602.03 **Title:** Construction	**Other:**	

Specification Committee Action: Approved with changes.

Deferred:	**Not Approved:**	**Approved Date:** 4/13/2017	**Effective Date:** 10/17/2017

Specification Committee Approved Text:

2602.03, E.

Replace the first sentence:

~~Stabilize disturbed areas, in which construction activity will not occur for a period of 21 calendar days, no later than the 14th calendar day after no construction activity has occurred.~~ For projects regulated by an NPDES storm water permit, initiate stabilization of disturbed areas immediately after clearing, grading, excavating, or other earth disturbing activities have:

- Permanently ceased on any portion of site, or
- Temporarily ceased on any portion of site and will not resume for a period exceeding 14 calendar days.

2602.03, L, 7.

Replace the article:

Mobilize within 72 hours of a written order with sufficient labor, equipment, and materials to perform erosion and sediment control work included in ECIP or PPP, or as ordered or approved by Engineer. Complete work within 7 calendar days of a written order. ~~Failure to mobilize when erosion control work is needed to comply with the ECIP or PPP, will result in the Engineer, by written order, direct mobilization within 72 hours of a written order.~~

2602.03, L, 8.

Replace the article:

Failure to mobilize and complete work within such time period, will result in a deduction of $750.00 per calendar day from payment due under the contract, except when Engineer extends such time period.

Comments: The Office of Construction and Materials asked to add a clarifier to the first sentence of Article 2602.03, E, so that areas under 1 acre will not be affected.

Specification Section Recommended Text:

2602.03, E.

Replace the first sentence:

~~Stabilize disturbed areas, in which construction activity will not occur for a period of 21 calendar days, no later than the 14th calendar day after no construction activity has occurred.~~ Initiate stabilization of disturbed areas immediately after clearing, grading, excavating, or other earth disturbing activities have:

- Permanently ceased on any portion of site, or

- Temporarily ceased on any portion of site and will not resume for a period exceeding 14 calendar days.

2602.03, L, 7.

Replace the article:

Mobilize within 72 hours of a written order with sufficient labor, equipment, and materials to perform erosion and sediment control work included in the ECIP or PPP, or as ordered or approved by Engineer. Complete work within 7 calendar days of a written order. ~~Failure to mobilize when erosion control work is needed to comply with the ECIP or PPP, will result in the Engineer, by written order, direct mobilization within 72 hours of a written order.~~

2602.03, L, 8.

Replace the article:

Failure to mobilize and complete work within such time period, will result in a deduction of $750.00 per calendar day from payment due under the contract, except when Engineer extends such time period.

Comments:

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

2602.03, E.

Replace the first sentence:

~~Stabilize disturbed areas, in which construction activity will not occur for a period of 21 calendar days, no later than the 14th calendar day after no construction activity has occurred.~~ Initiate stabilization of disturbed areas immediately after clearing, grading, excavating or other earth disturbing activities have:

- Permanently ceased on any portion of the site, or
- Temporarily ceased on any portion of the site and will not resume for a period exceeding 14 calendar days.

2602.03, L, 7.

Replace the article:

Mobilize within 72 hours of a written order with sufficient labor, equipment, and materials to perform erosion and sediment control work included in the ECIP or PPP, or as ordered or approved by Engineer. Complete work within 7 calendar days of a written order. ~~Failure to mobilize when erosion control work is needed to comply with the ECIP or PPP, will result in the Engineer, by written order, direct mobilization within 72 hours of a written order.~~

2602.03, L, 8.

Replace the article:

Failure to mobilize and complete work within such time period, will result in a deduction of $750.00 per calendar day from payment due under the contract, except when Engineer extends such time period.

Reason for Revision: To match changes to NPDES Permit #2.

Should change to 2602.03, E be in the PPP to avoid this applying to projects under 1 acre.

New Bid Item Required (X one)	**Yes**	**No** X
Bid Item Modification Required (X one)	**Yes**	**No** X
Bid Item Obsoletion Required (X one)	**Yes**	**No** X

Comments:
County or City Comments:
Industry Comments:

Form 510130 (08-15)

IOWA DOT

SPECIFICATION REVISION SUBMITTAL FORM

Submitted by: Brian Smith	**Office:** Design	**Item 7**
Submittal Date: 2/20/2017	**Proposed Effective Date:** 10/17/17	
Article No.: 4169.02 **Title:** Seeds	**Other:**	

Specification Committee Action: Approved with changes.

Deferred:	**Not Approved:**	**Approved Date:** 4/13/2017	**Effective Date:** 10/17/2017

Specification Committee Approved Text:

4169.02, A.

Replace Table 4169.02-1:

Common Name	Scientific Name	Purity (%)	Germination (%)
DOMESTIC GRASSES			
Alkali Grass	Puccinellia Distans	90	95
Bluegrass, Kentucky	Poa pratensis	85	80
Bluegrass, Ky. RAM-1	Poa pratensis-RAM-1	95	85
Bluegrass, Ky. PARK	Poa pratensis-PARK	95	85
Brome, smooth-LINCOLN	Bromus inermis	90	85
Fescue, tall, FAWN	Festuca arundinacea-FAWN	98	85
Fescue, tall, turf-type	Festuca Arundinacea	90	95
Fescue, chewings, red	Festuca rubra var. commutate	98	90
Fescue, creeping, red	Festuca rubra	98	85
Fescue, hard fine	Festuca Ovina Spp. Duriuscula	90	95
Fescue, red-PENNLAWN	Festuca rubra PENNLAWN	98	85
Fescue, Tall, Olympic (Fineleaf)	Festuca arundinacea-Olympic	98	85
Fescue, Tall, Rebel (Fineleaf)	Festuca arundinacea	98	85
Fescue, Sheeps	Festuca ovina	~~98~~ 90	~~85~~ 95
Orchardgrass	Dactylis glomerata	90	90
Red top	Agrostis alba	92	85
~~Reed Canarygrass~~	~~Phalaris arundinacea~~	~~98~~	~~70~~
Wildrye, Canada	Elymus Canadensis	95	85
~~Wildrye, Russian~~	~~Elymus junceus~~	~~95~~	~~85~~
Ryegrass, Perennial	Lolium perenne	95	90
Timothy	Phleum pratense	99	85
Wheatgrass, crested	Agropyron Cristatum	90	95
LEGUMES			
Alfalfa, RANGER/VERNAL	Medicago sativa	99	90[(a)]
Alfalfa, Travois	Medicoa spp.	99	90[(a)]
~~Birdsfoot Trefoil EMPIRE~~	~~Lotus corniculatus~~	~~98~~	~~85[(a)]~~
~~Crownvetch, Emerald~~	~~Coronilla varia~~	~~98~~	~~70[(a)]~~
~~Hairy Vetch~~	~~Vicia villosa~~	~~96~~	~~85[(a)]~~
~~Lespedeza, Korean~~	~~Lespedeza stipulacea~~	~~98~~	~~80[(a)]~~
Red Clover, medium	Trifolium pretense	99	90[(a)]
~~Alsike Clover~~	~~Trifolium hybridum~~	~~99~~	~~90[(a)]~~
~~White Clover~~	~~Trifolium repens~~	~~98~~	~~90[(a)]~~
NURSE CROP OR STABILIZING CROP			
Oats	Avena sativa	97	90

Rye	Secale cereale	97	90
~~Sudangrass, PIPER~~	~~Sorghum vulgare var. sudanese~~	~~98~~	~~85~~
[a] Includes hard seed.			

Comments: There was a typo in one of the seed types. It should be "Fescue, tall, turf-type".

Specification Section Recommended Text:
4169.02, A.

Replace Table 4169.02-1:

Common Name	Scientific Name	Purity (%)	Germination (%)
DOMESTIC GRASSES			
Alkali Grass	Puccinellia Distans	90	95
Bluegrass, Kentucky	Poa pratensis	85	80
Bluegrass, Ky. RAM-1	Poa pratensis-RAM-1	95	85
Bluegrass, Ky. PARK	Poa pratensis-PARK	95	85
Brome, smooth-LINCOLN	Bromus inermis	90	85
Fescue, tall, FAWN	Festuca arundinacea-FAWN	98	85
Fescue, tall, turn-type	Festuca Arundinacea	90	95
Fescue, chewings, red	Festuca rubra var. commutate	98	90
Fescue, creeping, red	Festuca rubra	98	85
Fescue, hard fine	Festuca Ovina Spp. Duriuscula	90	95
Fescue, red-PENNLAWN	Festuca rubra PENNLAWN	98	85
Fescue, Tall, Olympic (Fineleaf)	Festuca arundinacea-Olympic	98	85
Fescue, Tall, Rebel (Fineleaf)	Festuca arundinacea	98	85
Fescue, Sheeps	Festuca ovina	~~98~~ 90	~~85~~ 95
Orchardgrass	Dactylis glomerata	90	90
Red top	Agrostis alba	92	85
~~Reed Canarygrass~~	~~Phalaris arundinacea~~	~~98~~	~~70~~
Wildrye, Canada	Elymus Canadensis	95	85
~~Wildrye, Russian~~	~~Elymus junceus~~	~~95~~	~~85~~
Ryegrass, Perennial	Lolium perenne	95	90
Timothy	Phleum pratense	99	85
Wheatgrass, crested	Agropyron Cristatum	90	95
LEGUMES			
Alfalfa, RANGER/VERNAL	Medicago sativa	99	90[a]
Alfalfa, Travois	Medicoa spp.	99	90[a]
~~Birdsfoot Trefoil EMPIRE~~	~~Lotus corniculatus~~	~~98~~	~~85[a]~~
~~Crownvetch, Emerald~~	~~Coronilla varia~~	~~98~~	~~70[a]~~
~~Hairy Vetch~~	~~Vicia villosa~~	~~96~~	~~85[a]~~
~~Lespedeza, Korean~~	~~Lespedeza stipulacea~~	~~98~~	~~80[a]~~
Red Clover, medium	Trifolium pretense	99	90[a]
~~Alsike Clover~~	~~Trifolium hybridum~~	~~99~~	~~90[a]~~
~~White Clover~~	~~Trifolium repens~~	~~98~~	~~90[a]~~
NURSE CROP OR STABILIZING CROP			
Oats	Avena sativa	97	90
Rye	Secale cereale	97	90
~~Sudangrass, PIPER~~	~~Sorghum vulgare var. sudanese~~	~~98~~	~~85~~
[a] Includes hard seed.			

Comments:

Member's Requested Change: (Do not use 'Track Changes', or 'Mark-Up'. Use ~~Strikeout~~ and Highlight.)
4169.02, A.

Delete the following species and associated information from Table 4169.02-1:

~~Reed Canarygrass~~

~~Wildrye, Russian~~
~~Birdsfoot Trefoil EMPIRE~~
~~Crownvetch, Emerald~~
~~Hairy Vetch~~
~~Lespedeza, Korean~~
~~Alsike Clover~~
~~White Clover~~
~~Sudangrass, PIPER~~

Add the following species and associated information to Table 4169.02-1:

Common Name	Scientific Name	Germination	Purity
Alkali Grass	Puccinellia Distans	90%	95%
Turn-type Tall Fescue	Festuca Arundinacea	90%	95%
Crested Wheatgrass	Agropyron Cristatum	90%	95%
Hard Fine Fescue	Festuca Ovina Spp. Duriuscula	90%	95%

Replace the following species in Table 4169.02-1:

Sheeps Fescue	Festuca Ovina	~~98~~90%	~~85~~95%

Reason for Revision: We are removing seeds that we no longer use or are now considered nuisance and invasive species. We are also adding several new species to the list that we have started to use.

New Bid Item Required (X one)	**Yes**	**No** X
Bid Item Modification Required (X one)	**Yes**	**No** X
Bid Item Obsoletion Required (X one)	**Yes**	**No** X
Comments:		
County or City Comments:		
Industry Comments:		

Form 510130 (08-15)

IOWA DOT

SPECIFICATION REVISION SUBMITTAL FORM

Submitted by: Jeff DeVries	**Office:** District 1 Materials	**Item 8**
Submittal Date: 2017.03.01	**Proposed Effective Date:** October 2017	
Article No.: 2303.02, B, 1, b, 1, d **Title:** Aggregates (L-2 friction requirements on interstates and all mixtures designed for Very High Traffic (VT).	**Other:**	

Specification Committee Action: Approved as recommended.

Deferred:	**Not Approved:**	**Approved Date:** 4/13/2017	**Effective Date:** 10/17/2017

Specification Committee Approved Text: See Specification Section Recommended Text.

Comments: This item will be added to the Office of Contracts "bucket list" proposal note to cover projects from the June through September lettings. There is one project in the May letting that uses an L-2 mix. We will request that the designer ask for an addendum to add the missing language. The following projects have been previously let with L-2 mixes since the October 18, 2016 letting:

Oct. 18, 2016 Letting NHSX-141-7(42)--3H-77

Nov. 15, 2016 Letting NHSN-218-7(232)--2R-07

HSIPX-020-4(53)--3L-40

Dec. 20, 2016 Letting IMX-080-8(282)285--02-82

Jan. 18, 2017 Letting NHSN-018-2(114)--2R-71

Feb. 21, 2017 Letting IMX-680-2(161)20--02-78

March 21, 2017 Letting NHSN-218-4(42)--2R-52

IMN-680-1(165)0--0E-78

April 18, 2017 Letting MP-071-3(706)112--76-14

IMN-029-5(235)72--0E-43

Specification Section Recommended Text:

2303.02, B, 1, b, 1, d.

Replace the Article:

On Interstates and all mixtures designed for Very High Traffic (VT), if 40% or more of the total aggregate is a limestone as defined in Materials I.M. T203, at least 30% of the combined aggregate retained on the No. 4 sieve is Type 2 or better friction aggregate and at least 25% of combined aggregate passing No. 4 sieve is Type 2 or better friction aggregate.

Comments:

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

B. Aggregates.

1. Individual Aggregates.

a. Use virgin mineral aggregate as specified in Section 4127.

b. When specified, furnish friction aggregate from sources identified in Materials I.M. T203.

1) Friction Classification L-2.

Use a combined aggregate such that:

a) At least 80% of the combined aggregate retained on the No. 4 sieve is Type 4 or better friction aggregate, and **b)** At least 25% of the combined aggregate retained on the No. 4 sieve is Type 2 or better friction aggregate, and **c)** For Interstates and all mixtures designed for ~~30,000,000 ESALS and higher~~ Very High Traffic (VT), the fineness modulus of the combined Type 2 aggregate is at least 1.0. Calculations for fineness modulus are shown in Materials I.M. 501. **d)** On Interstates and all mixtures designed for ~~30,000,000 ESALS and higher~~ Very High Traffic (VT), if 40% or more of the total aggregate is a limestone as defined in Materials I.M. T203, at least 30% of the combined aggregate retained on the No. 4 sieve is Type 2 or better friction aggregate and at least 25% of the combined aggregate passing the No. 4 sieve is Type 2 or better friction aggregate.		
Reason for Revision: GS-15003 inadvertently removed the requirement to have 25% of the combined aggregate passing the number 4 sieve to be type 2 or better friction aggregate.		
New Bid Item Required (X one)	**Yes**	**No** X
Bid Item Modification Required (X one)	**Yes**	**No** X
Bid Item Obsoletion Required (X one)	**Yes**	**No** X
Comments:		
County or City Comments:		
Industry Comments:		

Form 510130 (08-15)

IOWA DOT

SPECIFICATION REVISION SUBMITTAL FORM

Submitted by: Jeff DeVries	**Office:** District 1 Materials	**Item 9**
Submittal Date: 3/1/2017	**Proposed Effective Date:**	
Article No.: 2318.02, A **Title:** Asphalt Stabilizing Agent (Cold In-Place Recycled Asphalt Pavement)	**Other:**	

Specification Committee Action: Approved as recommended.			
Deferred:	**Not Approved:**	**Approved Date:** 4/13/2017	**Effective Date:** 10/17/2017
Specification Committee Approved Text: See Specification Section Recommended Text.			
Comments: None.			

Specification Section Recommended Text:
2318.02, A, 2.

Replace the second and third bullets:

- Minimum G*/sinδ of 1.5 kPa for RTFO aged binder (Jnr waived), or
- Maximum G*sinδ of 5000 kPa (Jnr waived) for PAV aged binder.

Comments:

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

2. Foamed Asphalt using PG 52-34S ~~or PG 46-34~~ asphalt binder meeting the requirements of Section 4137 may be used on Interstate, Primary, Secondary, and local projects. For projects using PG 52-34S as the cold in-place stabilizing agent, meet the following requirements:

- Minimum G*/sinδ of 0.70 kPa for the original asphalt binder,
- Minimum G*/sinδ of 1.5 kPa for RTFO aged binder (Jnr waived), or
- Maximum G*sinδ of 5000 kPa (Jnr waived) for PAV aged binder.

Reason for Revision: We have a new asphalt binder spec that is intended for hot mix paving. An unintended consequence is CIR foamed binders may not be able to meet the new specification.

New Bid Item Required (X one)	**Yes**	**No** X
Bid Item Modification Required (X one)	**Yes**	**No** X
Bid Item Obsoletion Required (X one)	**Yes**	**No** X
Comments:		
County or City Comments:		
Industry Comments:		

Form 510130 (08-15)

IOWA DOT

SPECIFICATION REVISION SUBMITTAL FORM

Submitted by: Wes Musgrove / Neal Fobian	**Office:** Construction and Materials	**Item 10**
Submittal Date: 02/10/2016	**Proposed Effective Date:** October 2017	
Article No.: 2433.02, B **Title:** Concrete	**Other:**	

Specification Committee Action: Approved as recommended.

Deferred:	**Not Approved:**	**Approved Date:** 4/13/2017	**Effective Date:** 10/17/2017

Specification Committee Approved Text: See Specification Section Recommended Text.

Comments: None.

Specification Section Recommended Text:
2433.02, B, 6.

Replace the Article:

Mid-range or high-range water reducer is required according to Materials I.M. 403.

Comments:

Member's Requested Change: **(Do not use 'Track Changes', or 'Mark-Up'. Use ~~Strikeout~~ and Highlight.)**
Add highlighted words to sentence in Article 2433.02.B.6.

6. Mid-range or high-range water reducer is required according to Materials I.M. 403.

Reason for Revision: To take advantage of new admixtures.

New Bid Item Required (X one)	**Yes**	**No** X
Bid Item Modification Required (X one)	**Yes**	**No** X
Bid Item Obsoletion Required (X one)	**Yes**	**No** X

Comments:

County or City Comments:

Industry Comments: