

MINUTES OF IOWA DOT SPECIFICATION COMMITTEE MEETING

February 9, 2017

Members Present: Darwin Bishop District 3 - Construction

Mark Brandl District 6 - Davenport RCE
Donna Buchwald Office of Local Systems
Eric Johnsen, Secretary Specifications Section

Tom Jacobson Office of Construction & Materials
Gary Novey Office of Bridges & Structures

Wes Musgrove Office of Contracts
Tom Reis, Chair Specifications Section
Brian Smith Office of Design

Members Not Present: Jeff Devries District 1 - Materials

Charlie Purcell Project Delivery Bureau Willy Sorensen Office of Traffic & Safety

Advisory Members Present: Kevin Jones Office of Construction & Materials

Tammy Nicholson Office of Location & Environment

Andrew Zimmerman FHWA

Others Present: Ken Brink Office of Location & Environment

Scott Somers Office of Construction & Materials
Dan Waid County Engineers' Service Bureau

Tom Reis, Specifications Engineer, opened the meeting. The following items were discussed in accordance with the agenda dated January 27, 2017:

The 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 1108.03, D, Limitation of Operations.

The Office of Construction and Materials requested to prohibit contractors from working over winter holidays.

3. Article 2417.02, Materials (Corrugated Culverts).

The Office of Design requested to require coated corrugated steel culvert pipe in all locations.

4. Article 2503.03, D, 2, a, Reinforced Concrete Pipe, Reinforced Concrete Arch Pipe, and

Reinforced Concrete Elliptical Pipe.

The Office of Design requested to clarify requirements for wrapping of storm sewer pipe joints.

5. Article 2529.03, H, Smoothness (Full Depth Finish Patches).

The Office of Construction and Materials requested to clarify smoothness testing of partial lane width patches and close the gap in the scenarios of profile indexes and ABIs.

6. Article 2552.03, E, 2, a, 1, Pipe Bedding.

The Office of Design requested to clarify the bedding material is to meet the requirements of Section 4119.

7. New Products Evaluation Committee.

The Specifications Section requested to review the procedures used by the Department for new product, material, or procedure evaluation.

The Specifications Section will work with the Office of Construction and Materials to set up a procedure and committee for new products evaluation. Changes will need to be reflected on the Department website so that the industry has the right contact information.



SPECIFICATION REVISION SUBMITTAL FORM

| Submitted by: Musgrove | Tammy Nicholson / V | Ves | Office: Location and Environment / Contracts | | Item 1 |
|---|---------------------|--|--|----------------|--------|
| Submittal Date: January 23, 2017 | | Proposed Effective Date: October 2017 GS | | | |
| Article No.: 1105.13 | | Other: | | | |
| Title: Protection of Water Quality and Wetlands | | | | | |
| Specification Committee Action: Deferred to the next Specification Committee me | | | committee meeti | ng. | |
| Deferred: X | Not Approved: | Approved Date: Effe | | Effective Date | : |

Specification Committee Approved Text:

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.

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.
- 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.

€ 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.

1. 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 I. 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.

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 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 may 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.

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 will 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 into 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 May 15 and July 31, inclusive. Constructing or removing temporary crossings, causeways, and weirs is prohibited between those dates. 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 areas denuded of vegetation as a result of permitted action, including borrow areas draining 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 project areas. In the event of an accidental spill, follow established state and federal spill reporting procedures. For lowa 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.

- To protect migratory birds, do not conduct construction activities where active nests are
 present. Active nests are likely to be present between 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. Costs associated with this work prior to initial mobilization will be paid as extra work as per Article 1109.03, B.
- **4.** 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.

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 any 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 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 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 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 lowa DNR staff, while conducting the Loess Hills of Western lowa 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:

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.
 - 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 <u>Section 2601</u>.

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 <u>Section 2547</u>.

9.h. Flowable Mortar.

Flowable mortar shall be installed in accordance with Section 2506.

40.i. Bridge Removal.

When bridge removal is identified in the contract documents, the bridge and piers shall be removed in accordance with <u>Section 2401</u>. 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.

44.I. 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.

45.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.

18. 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.

19. Shellfish Beds.

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

48.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.

49.0. 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 <u>Section 2418</u>.

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.
- I. 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 lowa 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.

 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:



SPECIFICATION REVISION SUBMITTAL FORM

| Submitted by: Greg Mulder | Office: Construction & Materials | Item |
|---|---------------------------------------|------|
| Submittal Date: 2016.11.29 | Proposed Effective Date: October 2017 | |
| Article No.: 1108.03, D Title: Limitations of Operations | Other: | |

Specification Committee Action: Approved as recommended.

Deferred: Not Approved: Approved Date: 2/9/2017 Effective Date: 10/17/2017

Specification Committee Approved Text: See Specification Section Recommended Text.

Comments: None.

Specification Section Recommended Text:

1108.03, D.

Add the Articles:

- **3. Thanksgiving Day –** No work will be allowed the preceding Wednesday and the Friday, Saturday, and Sunday following Thanksgiving Day.
- 4. Christmas Day and New Year's Day -- When Christmas Day and New Year's Day are observed as a State Holiday on Monday, no work will be allowed beginning the preceding Friday through the holiday. When Christmas Day and New Year's Day are observed as a State Holiday on Friday, no work will be allowed the preceding Thursday through the following Sunday.

Comments:

Member's Requested Change: (Do not use '<u>Track Changes'</u>, or '<u>Mark-Up'</u>. Use Strikeout and Highlight.) 1108.03 LIMITATIONS OF OPERATIONS.

- **D.** Work on Primary Roads where traffic is maintained through the project and work on all Interstate highways will not be permitted during the times identified below without approval of the Engineer:
 - Memorial Day and Labor Day weekends No work will be allowed the preceding Friday and all day Saturday.
 - 2. Independence Day When Independence Day is observed as a State Holiday on Monday, no work will be allowed beginning the preceding Friday through the holiday. When Independence Day is observed as a State Holiday on Friday, no work will be allowed the preceding Thursday through the following Saturday.
 - 3. Thanksgiving Day No work will be allowed the preceding Wednesday and the Friday, Saturday, and Sunday following Thanksgiving Day.
 - 4. Christmas Day and New Year's Day -- When Christmas Day and New Year's Day are observed as a State Holiday on Monday, no work will be allowed beginning the preceding Friday through the holiday. When Christmas Day and New Year's Day are observed as a State Holiday on Friday, no work will be allowed the preceding Thursday through the following Sunday.

Reason for Revision: This specification revision is to prohibit Contactors from working during these

| busy holiday travel times which will avoid potential queues from lane closures due to the increased traffic volumes and meet the Department's goals of TSMO. | | | | |
|--|-----|------|--|--|
| 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: | | | | |



SPECIFICATION REVISION SUBMITTAL FORM

| Submitted by: Brian Smith | Office: Design | Item 3 |
|--|-------------------------------------|--------|
| Submittal Date: 11/23/2016 | Proposed Effective Date: 10/17/2017 | |
| Article No.: 2417.02 | Other: | |
| Title: Materials (Corrugated Culverts) | | |

Specification Committee Action: Approved with changes.

Deferred: Not Approved: Approved Date: 2/9/2017 Effective Date: 10/17/2017

Specification Committee Approved Text:

2417.02, Materials.

Replace the article:

- A. Use corrugated steel culverts that meet the meeting requirements of Section 4141., or Section 4146 For primary and interstate projects, corrugated steel culverts shall be coated according to Article 4141.02. *When polyethylene culvert pipe is designated, meet requirements of Section 4146.
- **B.** Use round culvert pipe, unless specified otherwise. When required, elongate round pipe. When specified, use arch type pipe.
- C. When placing under roadway, use corrugated steel culverts coated according to Article 4141.02.
- **D** C. A paved invert may be required according to the contract documents.

Comments: The County Engineer Service Bureau asked if the coated requirements would apply to local systems projects. This language was revised so that it does not unless the designer specifies it.

Specification Section Recommended Text:

2417.02, Materials.

Replace the article:

- **A.** Use coated corrugated steel culverts that meet the meeting requirements of Section 4141., or Section 4146 wWhen polyethylene culvert pipe is designated, meet requirements of Section 4146.
- **B.** Use round culvert pipe, unless specified otherwise. When required, elongate round pipe. When specified, use arch type pipe.
- **C.** When placing under roadway, use corrugated steel culverts coated according to Article 4141.02.
- **D** C. A paved invert may be required according to the contract documents.

Comments:

Member's Requested Change: (Do not use '<u>Track Changes'</u>, or '<u>Mark-Up'</u>. Use Strikeout and Highlight.) 2417.02, Materials.

Replace the article:

- A. Use coated corrugated steel culverts that meet the requirements of Section 4141.7 or Section 4146 wWhen polyethylene culvert pipe is designated, meet the requirements of Section 4146.
- **B.** Use round culvert pipe, unless specified otherwise. When required, elongate round pipe. When specified, use arch type pipe.
- C. When placing under roadway, use corrugated steel culverts coated according to Article 4141.02.
- **DC.** A paved invert may be required according to the contract documents.

Reason for Revision: The Office of Design would like coated corrugated steel pipe to be placed, whether under the roadway or not. Coated pipe costs slightly more than galvanized pipe, but lasts longer. The Office of Bridges and Structures has expressed agreement with the change.

| 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:



SPECIFICATION REVISION SUBMITTAL FORM

| Submitted by: Brian Smith | Office: Design | Item 4 |
|--|-------------------------------------|--------|
| Submittal Date: 11/23/2016 | Proposed Effective Date: 10/17/2017 | |
| Article No.: 2503.03, D, 2, a Title: Reinforced Concrete Pipe, Reinforced Concrete Arch Pipe, and Reinforced Concrete Elliptical Pipe | Other: | |

Specification Committee Action: Approved with changes.

Deferred: Not Approved: Approved Date: 2/9/2017 Effective Date: 10/17/2017

Specification Committee Approved Text:

2503.03, D, 2, a.

Replace the Article:

Wrap non-sealed joints unless otherwise specified. Comply with Standard Road Plan SW-211 for pipe joint wrapping. Wrap joints with engineering fabric meeting requirements of Article 4196.01, B, 3. Secure engineering fabric in place to prevent displacement while placing backfill material.

Comments: The Article reference was incorrect, so that has been corrected.

The Office of Construction requested that the direction to wrap non-sealed joints be the first sentence of the article instead of at the end for clarity.

Specification Section Recommended Text:

2503.03, D, 2, a.

Replace the Article:

Comply with Standard Road Plan SW-211 for pipe joint wrapping. Wrap joints with engineering fabric meeting requirements of Article 4196.03, B, 3. Secure engineering fabric in place to prevent displacement while placing backfill material. Wrap non-sealed joints.

Comments:

Member's Requested Change: (Do not use '<u>Track Changes'</u>, or '<u>Mark-Up'</u>. Use Strikeout and Highlight.) 2503.03, D, 2, a.

Add as the second sentence:

Wrap joints with Engineering Fabric meeting the requirements of Article 4196.03, B, 3.

Add as the last sentence:

Wrap all non-sealed joints.

Reason for Revision: To clarify what material to use for wrapping pipe and to specify non-sealed joints are to be wrapped.

| 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: | | |



SPECIFICATION REVISION SUBMITTAL FORM

| Submitted by: Greg Mulder | Office: Construction and Materials | Item 5 | |
|-----------------------------------|--|--------|--|
| Submittal Date: December 22, 2016 | Proposed Effective Date: October, 2017 | | |
| Article No.: 2529.03,H | Other: | | |
| Title: Smoothness | | | |

Specification Committee Action: Approved as recommended.

Deferred: Not Approved: Approved Date: 2/9/2017 /Effective Date: 10/17/2017

Specification Committee Approved Text: See Specification Section Recommended Text.

Comments: None.

Specification Section Recommended Text:

2529.03, H, 1.

Replace the Article:

Profilemeter Smoothness testing and evaluation is required for each patch with a length of 50 feet or more. For full lane width patches, Pperform testing near the center of the traffic lane after the patch is placed. For partial lane width patches, perform testing in the patched wheel path.

2529.03, H, 2, d.

Replace the Article:

Compare the new index with the ABI. Perform surface correction according to Article 2316.03 to a profile index less than the ABI when:

- 1) New profile index exceeds 12.0 inches per mile and exceeds ABI by more than 2.0 inches per mile.
- 2) New profile index exceeds 30.0 inches per mile and exceeds ABI.
- 1) If the new profilemeter index does not exceed the ABI, the work is acceptable and no correction is required.
- 2) Corrective action is also not required if the new profilometer index is equal to or less than 12 inches per mile, regardless of the ABI.
- 3) If the new profilemeter index is greater than 12 inches per mile and less than 30 inches per mile and is also within 2 inches per mile of the ABI, corrective action is not required.
- 4) If the new profilemeter index is greater than 30 inches per mile, corrective action is required to reduce the new index at least to the ABI.

Comments:

H. Smoothness.

Apply <u>Section 2316</u> to smoothness of full depth finish patches (except when the contract includes an overlay or pavement surface repair by diamond grinding or milling within the patch area) with the following modifications for Full Depth Finish Patches (50 feet or greater in length):

- 1. Smoothness Profilemeter testing and evaluation is required for each patch with a length of 50 feet or more. For full lane width patches, Pperform the testing near the center of the traffic lane after the patch is placed. For partial lane width patches, perform testing in the patched wheel path.
- 2. Patches 50 feet to 100 feet in length:
 - **a.** Test the patch length, and the existing pavement in that lane, for a distance of three times the patch length on both ends of the patch. If a patch occurs near a bridge, an intersection, and so

forth, where the proper distance cannot be tested, make up the required total on the other end of the patch. If interference occurs on both ends, test only to the points of interference.

- **b.** Establish one Average Base Index (ABI) of the pavement for both ends of patch.
- **c.** Calculate a new index for the entire length.

Industry Comments:

- **d.** Compare the new index with the ABI. Perform surface correction according to 2316.03 when:
 - 1) The new profile index exceeds 12.0 inches per mile and exceeds the ABI by more than 2.0 inches per mile.
 - 2) The new profile index exceeds 30.0 inches per mile and exceeds the ABI. Correct the surface to a profile index less than the ABI.
 - If the new profilometer index does not exceed the ABI, the work is acceptable and no correction is required.
 - Corrective action is also not required if the new profilometer index is equal to or less than 12 inches per mile, regardless of the ABI.
 - 3) If the new profilemeter index is greater than 12 inches per mile and less than 30 inches per mile and is also within 2 inches per mile of the ABI, corrective action is not required.
 - 4) If the new profilemeter index is greater than 30 inches per mile, corrective action is required to reduce the new index at least to the ABI.
- e. Corrective action involves correction of bumps and dips exceeding a vertical height of 0.5 inch in a 25 foot span in the patch, if identified from the trace, plus appropriate surface correction within the patch and existing pavement, or both, on either end of the patch within the limits tested.

Reason for Revision: Some districts have been using partial lane width patches. The change clears up the issue of where to test.

There is a gap in the scenarios of profile indexes and ABIs. The change closes the gap.

| 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: | | | |



SPECIFICATION REVISION SUBMITTAL FORM

| Submitted by: Brian Smith | Office: Design | Item 6 |
|---|-------------------------------------|--------|
| Submittal Date: 11/23/2016 | Proposed Effective Date: 10/17/2017 | |
| Article No.: 2552.03, E, 2, a, 1 | Other: | |
| Title: Pipe Bedding | | |

Specification Committee Action: Approved as recommended.

Deferred: Not Approved: Approved Date: 2/9/2017 Effective Date: 10/17/2017

Specification Committee Approved Text: See Specification Section Recommended Text.

Comments: The lowa Limestone Producers had some concerns about calling this material bedding, when there is a separate Section 4118 for bedding. The Specifications Section will make them aware of some of the recent changes, such as renaming Section 4119, Pipe Bedding and Backfill Material for Interstate and Primary Roadways.

Specification Section Recommended Text:

2552.03, E, 2, a, 1.

Add as the first sentence:

Use material meeting requirements of Section 4119.

Comments:

Member's Requested Change: (Do not use '<u>Track Changes'</u>, or '<u>Mark-Up'</u>. Use Strikeout and Highlight.) 2552.03, E, 2, a, 1.

Add as the first sentence:

Use material meeting requirements of Section 4119.

Reason for Revision: To clarify the bedding material is to meet the requirements of Section 4119.

| 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: Martin Marietta commented: Item is confusing. The agenda item references pipe bedding, but the DOT wants a Class A roadstone product. These two are completely different products. Pipe bedding is a clean stone where Class A is a product that can have up to 16% passing the #200 sieve. Does the agenda item mean pipe backfill material instead of pipe bedding since it has its own gradation and quality requirements in the DOT spec book already? Nobody from our sales staff knows of this difference. Thank you.

Forms:

650075 - Data for New Product, Material or Procedure Evaluation

Policy and Procedure:

Purpose

- A. The Specifications Committee is responsible for a thorough and fair evaluation of newly developed products, materials and procedures for potential use in highway construction and maintenance.
- B. The Specifications Committee has the authority to accept, reject or determine the status of new products, materials and procedures submitted for Department use.

Procedure

- A. Department offices that receive new product information directly will forward the information with Form 650075 to the Committee secretary. Continue this or modify?
- B. The secretary??? will review the product information and Form 650075 for completeness. If further information or clarification of the intent is needed, the secretary will attempt to obtain this information from the contact provided on Form 650075. Items that are already covered by a Materials I.M. will forwarded to the Construction and Materials Office for action.
- C. The secretary??? will maintain a database of submitted products and actions taken.
- D. The Committee will consider each new product or proposal on the agenda, may consult with technical experts in the Department, and will recommend one of the following actions:
 - 1. Immediate adoption.
 - 2. Referral to the initiator for additional information.
 - 3. Referral to an appropriate Department office for evaluation or recommendation.
 - 4. Referral for testing and evaluation by AASHTO Product Evaluation List (APEL).
 - 5. Field trial for further evaluation.
 - 6. Referral to the Performance and Technology Division for formal research and development.
 - 7. Deferral due to current unavailability of technology or equipment.
 - 8. Deferral because the item is not currently cost-effective.

- 9. Rejection.
- E. The secretary will prepare and distribute minutes of the meeting to the members of the Committee and to other interested persons.
- F. The chair??? will notify suppliers, manufacturers or persons who submitted proposals of the decision of the Specifications Committee.