INDIANA DEPARTMENT OF TRANSPORTATION

100 North Senate Avenue
Room N758 CM
Indianapolis, Indiana 46204

www.in.gov/indot

Eric Holcomb, Governor
Mike Smith, Commissioner

APPROVED MINUTES

June 16, 2022 Standards Committee Meeting

(Changes to the FINAL Draft Minutes are shown highlighted teal)

July 6, 2022

TO: Standards Committee

FROM: Scott Trammell, Secretary

RE: Minutes from the June 16, 2022 Standards Committee Meeting

The Standards Committee meeting was called to order by Mr. Pankow, Chair, at 09:03 a.m. on June 16, 2022, which was held virtually via *Teams* (Microsoft application). The meeting was adjourned at 10:42 a.m.

The following committee members were in attendance:

Gregory Pankow, Chairman, Director, Construction Management
Anne Rearick, Engineering and Asset Management
Dave Boruff, Traffic Engineering
Jim Reilman, Division of Materials and Tests
John Wooden, Division of Contract Administration
Joseph Novak, Construction Management
Kumar Dave, Pavement Engineering
Kurt Pelz, Construction Technical Support
Mark Orton, Highway Engineering
Michael Koch, District Construction, Fort Wayne District
Peter White, Bridge Engineering

Also, presence of the following throughout the meeting was captured by the *Microsoft Teams*:

Antwi Agyei, Emmanuel, INDOT
Awwad, Nathan E., INDOT
Barney, Bruce, INDOT
Bazlamit, Subhi M, INDOT
Beeson, Matthew, INDOT
Blanchard, Jacob, INDOT
Broadstreet, Adam M, INDOT
Bruno, Joseph E, INDOT
Corrice, Zachariah, INDOT
Harris, Tom, INDOT
Hauser, Derrick, INDOT
Hunter, Jeremy, INDOT
Jacobs, David L, INDOT
Jelks, Linda, INDOT
Kachler, Mischa, INDOT
Koch, Emma, INDOT
Mouser, Elizabeth, INDOT
Mueller, Bart, INDOT

Cox, Ed, INDOT
Dailey, Bryce, INDOT
Dan Osborn, ICI
Donald McNutt, Concrete Pipe Inc.
Duncan, Steve, INDOT
Duncan, Thomas, FHWA
Fegan, Roland, INDOT
Fletcher, Eryn, FHWA
Galetka, Jason, INDOT
Harms, Koryn, INDOT
Podorvanova, Lana, INDOT
Ritter, John, INDOT
Smutzer, Katherine, INDOT
Steve Smart, (guest)
Thomas, Elizabeth, INDOT
Thomas, Matt, INDOT
Thornton, Donald, INDOT
Trammell, Scott, INDOT
Zander, Anthony, INDOT

The following items were discussed at the meeting:

A. GENERAL BUSINESS ITEMS

OLD BUSINESS *(No items were listed)*

NEW BUSINESS

1. Approval of the Minutes from the April 21, 2022 meeting

Mr. Pankow requested a motion to approve the Minutes from the April 21, 2022 meeting.

Motion: Mr. Reilman
Second: Mr. Novak
Ayes: 9
Nays: 0

ACTION: PASSED AS SUBMITTED

B. CONCEPTUAL PROPOSAL ITEMS

OLD BUSINESS *(No items were listed)*

NEW BUSINESS *(No items were listed)*

C. STANDARD SPECIFICATIONS, SPECIAL PROVISIONS, AND STANDARD DRAWINGS ITEMS

OLD BUSINESS *(No items were listed)*

NEW BUSINESS

Item No. 1 (2022 SS) Mr. White pg 5
2022 Standard Specifications:
906.07 Bridge Expansion Joints

ACTION: PASSED AS SUBMITTED

Item No. 2 (2022 SS)	Mr. Wooden	pg 9

Recurring Special Provision:

107-R-169	STATEMENTS ABOUT EXISTING CONDITIONS OF UTILITIES, ADDITIONAL RIGHT-OF-WAY, AND ENCROACHMENTS
ACTION:	WITHDRAWN

Item No. 3 (2022 SS)	Mr. Reilman	pg 21

Recurring Special Provision:

620-R-483	SOUND BARRIER SYSTEMS
ACTION:	PASSED AS SUBMITTED

Item No. 4 (2022 SS)	Mr. Reilman	pg 36

2022 Standard Specifications:

101.01	Abbreviations
DIVISION 500	CONCRETE PAVEMENT (various sections)
ACTION:	PASSED AS SUBMITTED

Item No. 5 (2022 SS)	Mr. Pelz	pg 52

2022 Standard Specifications:

205.03(e)	Temporary BMPs
ACTION:	PASSED AS SUBMITTED

Item No. 6 (2022 SS)	Mr. Wooden	pg 56

Recurring Special Provision:

100-C-146	PAYMENT OF PREDETERMINED MINIMUM WAGE DETERMINATION (DAVIS-BACON ACT) General Decision Number IN20220001
100-C-147	PAYMENT OF PREDETERMINED MINIMUM WAGE DETERMINATION (DAVIS-BACON ACT) General Decision Number IN20220006
100-C-148	PAYMENT OF PREDETERMINED MINIMUM WAGE DETERMINATION (DAVIS-BACON ACT) General Decision Number IN
ACTION:	PASSED AS SUBMITTED

Item No. 7 (2022 SS)	Mr. White	pg 62

2022 Standard Specifications:

105.02	Plans and Working Drawings
ACTION:	PASSED AS SUBMITTED

Item No. 8 (2022 SS)	Mr. Wooden	pg 67

Recurring Special Provision:

105-C-XXX	*COORDINATION OF PRE-BID QUESTIONS AND ANSWERS AS DOCUMENTS*
ACTION:	PASSED AS SUBMITTED

Item No. 9 (2022 SS)	Mr. Boruff	pg 72

Standard Drawings:

E 801-TC~~TC~~*CO-~~11~~08*	TUBULAR MARKER DELINEATION
E 801-TC~~TC~~*CO-~~12~~09*	TUBULAR MARKER DELINEATION AT INTERSECTION
ACTION:	PASSED AS SUBMITTED

Item No. 10 (2022 SS)	Mr. Novak	pg 79

2022 Standard Specifications:

722.06	Preparation of the Bridge Floor
722.15	Method of Measurement
722.16	Basis of Payment
ACTION:	PASSED AS SUBMITTED

Item No. 11 (2022 SS)	Mr. Novak	pg 87

Recurring Special Provision:

108-C-094	FAILURE TO COMPLETE ON TIME FOR INTERMEDIATE COMPLETION DATE
ACTION:	PASSED AS SUBMITTED

cc: Committee Members
FHWA
ICI

PROPOSAL TO STANDARDS COMMITTEE

PROBLEM(S) ENCOUNTERED: The supply of silicone has changed in the recent past, and as a result some products have been forced to incorporate different source materials. Current Standard Specification Section 906.07(c) requires the silicone facing on PCF joints to be able to accommodate a minimum elongation of 1,200%, which can only be met by a single manufacturer.

PROPOSED SOLUTION: The PCF joints are installed in a compressed state and should never be subject to elongation. Reducing the required silicone facing elongation capability from 1,200% to 600% will open the market to several manufacturers without comprimising the integrity of the joint.

APPLICABLE STANDARD SPECIFICATIONS: 906.07(c)

APPLICABLE STANDARD DRAWINGS: N/A

APPLICABLE DESIGN MANUAL SECTION: N/A

APPLICABLE SECTION OF GIFE: N/A

APPLICABLE RECURRING SPECIAL PROVISIONS: N/A

PAY ITEMS AFFECTED: N/A

APPLICABLE SUB-COMMITTEE ENDORSEMENT: N/A

IF APPROVED AS RECURRING SPECIAL PROVISION OR PLAN DETAILS, PROPOSED BASIS FOR USE: N/A

IMPACT ANALYSIS (attach report):

Submitted By: Pete White, PE

Title: Design Manager

Organization: INDOT Bridge Engineering

Phone Number: 317-232-5371

Date: April 14, 2022

IMPACT ANALYSIS REPORT CHECKLIST

Explain the business case as to why this item should be presented to the Standards Committee for approval. Answer the following questions with Yes, No or N/A.

Does this item appear in any other specification sections? Yes, Section 724 covers PCF joints, but no changes required to this section

Will approval of this item affect the Approved Materials List? Yes, but the newly created QPL is based on the proposed elongation requirement.

Will this proposal improve:

Construction costs? Yes
Construction time? No
Customer satisfaction? No
Congestion/travel time? No
Ride quality? No

Will this proposal reduce operational costs or maintenance effort? No

Will this item improve safety:

For motorists? No
For construction workers? No

Will this proposal improve quality for:

Construction procedures/processes? No
Asset preservation? No
Design process? No

Will this change provide the contractor more flexibility? Yes

Will this proposal provide clarification for the Contractor and field personnel? No

Can this item improve/reduce the number of potential change orders? No

Is this proposal needed for compliance with:

Federal or State regulations? No
AASHTO or other design code? No

Is this item editorial? No

Provide any further information as to why this proposal should be placed on the Standards Committee meeting Agenda: The change will allow for more competition between PCF joint manufacturers, which will result in lower construction costs and better material availability.

The Standard Specifications are revised as follows:

SECTION 906, BEGIN LINE 273, DELETE AND INSERT AS FOLLOWS:

(c) Type PCF

Pre-compressed foam joints, PCF, shall be furnished from the ~~Department's list~~*QPL* of ~~approved~~ PCF Bridge Joints. PCF joints may be added to the ~~approved list~~*QPL* by completing the requirements of ITM 806, Procedure C.

These products shall consist of a highway grade silicone faced self-expanding foam expansion joint seal, a field-applied epoxy adhesive, and a field-applied silicone sealant. The foam seal shall be able to accommodate the thermal movement range shown on the plans and shall have a movement capability of no less than +50% to -50% of the nominal material size. The silicone facing material shall accommodate a minimum elongation of ~~1,200%~~*600%*.

The foam seal shall be accordance with the following requirements:

Property	ASTM Test Method	Requirement
Temperature Service Range	C711	-40ºF to 185ºF
UV Resistance	G155 or C793	No changes or cracking at 2,000 h

COMMENTS AND ACTION

906.07 Bridge Expansion Joints

DISCUSSION:

This item was introduced and presented by Mr. White who explained that the supply of silicone has changed recently, and as a result some products have been forced to incorporate different source materials. Current Standard Specification Section 906.07(c) requires the silicone facing on PCF joints to be able to accommodate a minimum elongation of 1,200%, which can only be met by a single manufacturer. Mr. White further stated that the PCF joints are installed in a compressed state and should never be subject to elongation.

Mr. White proposed to reduce the required silicone facing elongation capability from 1,200% to 600%, which will open the market to several manufacturers without compromising the integrity of the joint.

A minor editorial revision was made, as shown, for consistency.

There was no further discussion and this item passed as submitted.

Motion: Mr. White Second: Mr. Novak Ayes: 9 Nays: 0 FHWA Approval: YES	Action: X Passed as Submitted __ Passed as Revised __ Withdrawn
Standard Specifications Sections referenced and/or affected: 906 pg. 1019 Recurring Special Provisions NONE Standard Drawing affected: NONE Design Manual Sections affected: NONE GIFE Sections cross-references: NONE	X 2024 Standard Specifications __ Revise Pay Items List __ Create RSP (No.____) Effective: ___ RSP Sunset Date: __ Revise RSP (No.__) Effective: RSP Sunset Date: __ Standard Drawing Effective: __ Create RPD (No. __) Effective: __ GIFE Update __ Frequency Manual Update __ SiteManager Update

PROPOSAL TO STANDARDS COMMITTEE

PROBLEM(S) ENCOUNTERED: The existing RSP 107-R-169 template provides little detail regarding utilities in the project area and utility relocations. Therefore, this information is often left out or added in non-standard format causing complications and confusion in construction.

There are also sections of the RSP 107-R-169 for right-of-way and encroachments. The submitter of the RSP is typically the utility coordinator who knows little about right-of-way or encroachments on the project. Therefore, this section is often left blank, excluded entirely, or includes inaccurate information, leaving contracts responsible to update the information following submission.

PROPOSED SOLUTION: The utility section of the RSP was updated to provide more information regarding each utility and more scenarios of relocations and schedules.

The location for detail of right-of-way and encroachments within the RSP was removed and replaced with stock language requiring the contractor to reference the right-of-way certification for information regarding right-of-way and rights of entry. The right-of-way certification will be uploaded as an additional contract document for bidders. Encroachments will be excluded from the RSP as the RSP is typically inaccurate regarding the encroachments. Detail will be and typically already is included in the plans and other specifications to detail what the contractor is responsible for related to encroachments.

APPLICABLE STANDARD SPECIFICATIONS: 103, 104, 105, 107, 108, 201, 202, 203, 725, 731, 732, 805, and 807 but no revisions necessary.

APPLICABLE STANDARD DRAWINGS: none

APPLICABLE DESIGN MANUAL SECTION: Chapters 85 (Right-of-Way Plans Preparation) and 104 (Utility Coordination) but no revisions necessary.

APPLICABLE SECTION OF GIFE: Sections 2 (General Instructions) and 14 (Utility Relocation Inspection Procedures) but no revisions necessary.

APPLICABLE RECURRING SPECIAL PROVISIONS: 107-R-169 (Statements about Existing Conditions of Utilities, Additional Right-of-way, and Encroachments)
PAY ITEMS AFFECTED: None.
APPLICABLE SUB-COMMITTEE ENDORSEMENT: Division of Utilities and Railroad consulted with INDOT Divisions of Contract Administration, Real Estate, and Legal Services.
IF APPROVED AS RECURRING SPECIAL PROVISION OR PLAN DETAILS, PROPOSED BASIS FOR USE: Required on all contracts.
IMPACT ANALYSIS (attach report): Attached.

Submitted By: Bill Plant for John Wooden
Title: Utility and Railroad Manager Organization: INDOT Central Office
Phone Number: 630-890-1239 Date: 03/14/2022

IMPACT ANALYSIS REPORT CHECKLIST

Explain the business case as to why this item should be presented to the Standards Committee for approval. Answer the following questions with Yes, No or N/A.

Does this item appear in any other specification sections? No
Will approval of this item affect the Approved Materials List? No
Will this proposal improve:

Construction costs? Yes
Construction time? Yes
Customer satisfaction? No
Congestion/travel time? No
Ride quality? No

Will this proposal reduce operational costs or maintenance effort? No

Will this item improve safety:

For motorists? No
For construction workers? Yes

Will this proposal improve quality for:

Construction procedures/processes? Yes
Asset preservation? Yes
Design process? No

Will this change provide the contractor more flexibility? No

Will this proposal provide clarification for the Contractor and field personnel? Yes

Can this item improve/reduce the number of potential change orders? Yes

Is this proposal needed for compliance with:

Federal or State regulations? No
AASHTO or other design code? No

Is this item editorial? Yes

Provide any further information as to why this proposal should be placed on the Standards Committee meeting Agenda: Revising this RSP template will provide clarity and standardization regarding utility and right-of-way impacts on a project. It will reduce the amount of times the 107 will need revised, the amount of people involved in completing and ultimately create more accuracy.

REVISION TO RECURRING SPECIAL PROVISION

107-R-169 STATEMENTS ABOUT EXISTING CONDITIONS OF UTILITIES, ADDITIONAL RIGHT-OF-WAY, AND ENCROACHMENTS *(with shown proposed changes)*

107-R-169 STATEMENTS ABOUT EXISTING CONDITIONS OF UTILITIES, ADDITIONAL RIGHT-OF-WAY, AND ENCROACHMENTS *(shown proposed draft of final version)*

107-R-169 STATEMENTS ABOUT EXISTING CONDITIONS OF UTILITIES, ADDITIONAL RIGHT-OF-WAY, AND ENCROACHMENTS

(Revised 05-02-19)

The Standard Specifications are revised as follows:

SECTION 107, AFTER LINE 767, INSERT AS FOLLOWS:

107.26 Existing Conditions of Utilities, Additional Right-of-Way, and Encroachments

Such existing conditions are as described below.

DES {DES Number} - {Road Name}

[NOTE TO SPECIFIER – ONLY INCLUDE SECTION (a) BELOW IF LIMITED UTILITY INVOLVEMENT WAS DONE FOR THE PROJECT AND A LIMITED CERTIFICATION WAS USED. REMOVE THIS NOTE TO SPECIFIER PRIOR TO SUBMITTING]

(a) Utilities

Limited utility coordination was done for this project. It is not anticipated any utilities will be affected by the project. The ~~contractor~~ Contractor ~~must~~shall use caution and ~~is required to~~shall follow all laws and safety precautions when digging, excavating, or working near utility lines.

[NOTE TO SPECIFIER – ONLY INCLUDE SECTION (a) BELOW IF **NO** UTILITY COMPANIES ARE LOCATED NEAR THE PROJECT LIMITS. THIS NOTE TO SPECIFIER SHOULD BE REMOVED PRIOR TO SUBMITTING.]

(a) Utilities

There is no known involvement of utility companies or organizations located within the project limits. The ~~contractor~~Contractor ~~must~~shall use caution and ~~is required to~~shall follow all laws and safety precautions when digging, excavating, or working near utility lines.

[NOTE TO SPECIFIER – ONLY INCLUDE SECTION (a) BELOW WITH A COMPLETED APPLICABLE PARAGRAPH FOR EACH UTILITY IDENTIFIED AS A PART OF THE PROJECT. THIS NOTE TO SPECIFIER SHOULD BE REMOVED PRIOR TO SUBMITTING.]

(a) Utilities

The status of all utility companies and organizations potentially involved with the work to be performed are described below as know at the time this contract was prepared. The active engagement of the Utility Coordinator does not minimize nor negate the responsibility of the Contractor to perform duties ~~per~~in accordance with the Standard Specifications.

REVISION TO RECURRING SPECIAL PROVISION

107-R-169 STATEMENTS ABOUT EXISTING CONDITIONS OF UTILITIES, ADDITIONAL RIGHT-OF-WAY, AND ENCROACHMENTS *(with shown proposed changes)*

107-R-169 STATEMENTS ABOUT EXISTING CONDITIONS OF UTILITIES, ADDITIONAL RIGHT-OF-WAY, AND ENCROACHMENTS *(shown proposed draft of final version)*

The facilities of {Utility Company} exist within the project limits and are expected to be affected by the project. The utility has {Existing Facility Type} located {Existing Facility Location}. The existing facility will be {Plan for Existing Facilities - Removed or Retired}. The utility is proposing {Proposed Facility Type} located {Proposed Facility Location}. See their work plan for additional detail. The utility will be able to complete its involvement with the contract when {Party Utility is Dependent On} has completed {What Must Be Done Before Utility Begins} in the location of {Location Within Project} such that the utility may adjust its facilities. It is anticipated that the utility will take approximately {Precon Days} calendar days for preconstruction activities and mobilization and approximately {Construction Days} calendar days to adjust its facilities in such area. If questions arise, {Utility Contact} of the utility may be contacted at {Phone Number} or {Email Address}. The work plan was approved on {Date PM Signed Work Plan}.

The facilities of {Utility Company} exist within the project limits. Their facilities have been adjusted to accommodate construction. The utility now has {Facility Type} located {Facility Location}. See their work plan for additional detail. If questions arise, {Utility Contact} of the utility may be contacted at {Phone Number} or {Email Address}. The work plan was approved on {Date PM Signed Work Plan}.

The facilities of ~~_____~~{Utility Company} exist within the project limits, but are not expected to be affected by the proposed construction. The utility has {Facility Type} located {Facility Location}. See their work plan for additional detail. If questions arise, ~~_____~~{Utility Contact} of the utility may be contacted at ~~_____~~{Phone Number} or ~~_____~~{Email Address}. The work plan was approved on {Date PM Signed Work Plan}.

~~*The facilities of _____ exist within the project limits. Their facilities have been adjusted to accommodate construction. If questions arise, _____ of the utility may be contacted at _____.*~~

~~*The facilities of _____ exist within the project limits. It is anticipated that they will adjust their facilities for construction on or before _____, 20____. If questions arise, _____ of the utility may be contacted at _____.*~~

~~*The facilities of _____ exist within the project limits. The utility will be able to complete its involvement with the contract when the Contractor has completed _____ in the location of _____ such that the utility may adjust its facilities. It is anticipated that the utility will take approximately _____ calendar days to adjust its facilities in such area. If questions arise, _____ of the utility may be contacted at _____.*~~

DES {DES Number} - {Road Name}

REVISION TO RECURRING SPECIAL PROVISION

107-R-169 STATEMENTS ABOUT EXISTING CONDITIONS OF UTILITIES, ADDITIONAL RIGHT-OF-WAY, AND ENCROACHMENTS *(with shown proposed changes)*

107-R-169 STATEMENTS ABOUT EXISTING CONDITIONS OF UTILITIES, ADDITIONAL RIGHT-OF-WAY, AND ENCROACHMENTS *(shown proposed draft of final version)*

[NOTE TO SPECIFIER – CREATE SIMILAR PARAGRAPHS TO THE ABOVE FOR ALL OTHER DES NUMBERS ON THE CONTRACT. REMOVE THIS NOTE TO SPECIFIER PRIOR TO SUBMITTING]

(b) Right-of-Way

~~*There is no involvement of additional right-of-way for the contract*~~*See* ~~*INDOT's*~~ *the Department's Right of Way Certification Letter included in the additional letting documents for information regarding right-of-way and rights of entry up until advertisement of the contract. The Contractor shall contact the* ~~*INDOT*~~ *District after letting for an updated* ~~*INDOT*~~ *Department Right of Way Certification Letter.*

~~***(b) Right-of-Way***~~

~~*All additional right-of-way requirements for the contract have been cleared.*~~

~~***(b) Right-of-Way***~~

~~*All additional right-of-way requirements for the contract have been cleared except for the conditions at the parcels described below.*~~

~~***1. Occupied Parcels***~~

~~*The buildings existing on the parcels listed below are still occupied. Demolition of buildings, clearance of debris, and subsequent construction on such parcels will not be permitted until they have been vacated. However, such demolition, clearance, and construction in parcels other than those listed will be permitted. The properties listed below shall not be entered until authorized in writing.*~~

~~*Parcel No.*~~	~~*Owner*~~	~~*Location*~~	~~*Estimated Date of Vacancy*~~

~~***2. Right-of-Entry***~~

~~*The right-of-entry to the following properties is anticipated as set out below. The properties listed below shall not be entered until authorized in writing.*~~

~~*Parcel No.*~~	~~*Owner*~~	~~*Location*~~	~~*Estimated Date Right-of-Entry*~~

~~***(c) Encroachments***~~

~~*There is no involvement of encroachments for the contract.*~~

~~***(c) Encroachments***~~

~~*All known encroachments within the project limits have been removed or have been cleared to remain.*~~

~~***(c) Encroachments***~~

REVISION TO RECURRING SPECIAL PROVISION

107-R-169 STATEMENTS ABOUT EXISTING CONDITIONS OF UTILITIES, ADDITIONAL RIGHT-OF-WAY, AND ENCROACHMENTS *(with shown proposed changes)*

107-R-169 STATEMENTS ABOUT EXISTING CONDITIONS OF UTILITIES, ADDITIONAL RIGHT-OF-WAY, AND ENCROACHMENTS *(shown proposed draft of final version)*

~~*All known encroachments within the project limits have been removed or have been cleared to remain, except as follows:*~~

~~*Encroachment*~~	~~*Owner*~~	~~*Location*~~	~~*Estimated Clear Date*~~

[NOTE TO SPECIFIER – INCLUDE THE APPLICABLE SECTION (c) BELOW. REMOVE THE OTHER, UNAPPLICABLE SECTION (c) AND THIS NOTE TO SPECIFIER PRIOR TO SUBMITTING]

(~~d~~c) Other Noteworthy Conditions

There are no other noteworthy conditions which may affect the prosecution and progress of the contract.

(~~d~~c) Other Noteworthy Conditions

The following condition exists which may affect the prosecution and progress of the contract.

_____

(~~e~~d) Preconstruction Conference Notification

The Contractor shall provide notification during the preconstruction conference about known corrections to or omissions of the information presented in 107.26(a) through 107.26(d) above. Otherwise, notification shall be provided as required in 105.06. Notifications regarding such corrections or omissions shall not alleviate the Contractor's inquiry or interpretation obligations as contained in 105 IAC 11-3-7.

REVISION TO RECURRING SPECIAL PROVISION

107-R-169 STATEMENTS ABOUT EXISTING CONDITIONS OF UTILITIES, ADDITIONAL RIGHT-OF-WAY, AND ENCROACHMENTS *(with shown proposed changes)*

107-R-169 STATEMENTS ABOUT EXISTING CONDITIONS OF UTILITIES, ADDITIONAL RIGHT-OF-WAY, AND ENCROACHMENTS *(shown proposed draft of final version)*

107-R-169 STATEMENTS ABOUT EXISTING CONDITIONS OF UTILITIES, ADDITIONAL RIGHT-OF-WAY, AND ENCROACHMENTS

(Revised xx-xx-22)

The Standard Specifications are revised as follows:

SECTION 107, AFTER LINE 765, INSERT AS FOLLOWS:

107.26 Existing Conditions of Utilities, Additional Right-of-Way, and Encroachments

Such existing conditions are as described below.

DES {DES Number} - {Road Name}

[NOTE TO SPECIFIER – ONLY INCLUDE SECTION (a) BELOW IF LIMITED UTILITY INVOLVEMENT WAS DONE FOR THE PROJECT AND A LIMITED CERTIFICATION WAS USED. REMOVE THIS NOTE TO SPECIFIER PRIOR TO SUBMITTING]

(a) Utilities

Limited utility coordination was done for this project. It is not anticipated any utilities will be affected by the project. The ~~contractor~~ Contractor ~~must~~shall use caution and ~~is required to~~shall follow all laws and safety precautions when digging, excavating, or working near utility lines.

[NOTE TO SPECIFIER – ONLY INCLUDE SECTION (a) BELOW IF **NO** UTILITY COMPANIES ARE LOCATED NEAR THE PROJECT LIMITS. THIS NOTE TO SPECIFIER SHOULD BE REMOVED PRIOR TO SUBMITTING.]

(a) Utilities

There is no known involvement of utility companies or organizations located within the project limits. The ~~contractor~~Contractor ~~must~~shall use caution and ~~is required to~~shall follow all laws and safety precautions when digging, excavating, or working near utility lines.

[NOTE TO SPECIFIER – ONLY INCLUDE SECTION (a) BELOW WITH A COMPLETED APPLICABLE PARAGRAPH FOR EACH UTILITY IDENTIFIED AS A PART OF THE PROJECT. THIS NOTE TO SPECIFIER SHOULD BE REMOVED PRIOR TO SUBMITTING.]

(a) Utilities

The status of all utility companies and organizations potentially involved with the work to be performed are described below as know at the time this contract was prepared. The active engagement of the Utility Coordinator does not minimize nor negate the responsibility of the Contractor to perform duties ~~per~~in accordance with the Standard Specifications.

REVISION TO RECURRING SPECIAL PROVISION

107-R-169 STATEMENTS ABOUT EXISTING CONDITIONS OF UTILITIES, ADDITIONAL RIGHT-OF-WAY, AND ENCROACHMENTS *(with shown proposed changes)*

107-R-169 STATEMENTS ABOUT EXISTING CONDITIONS OF UTILITIES, ADDITIONAL RIGHT-OF-WAY, AND ENCROACHMENTS *(shown proposed draft of final version)*

The facilities of {Utility Company} exist within the project limits and are expected to be affected by the project. The utility has {Existing Facility Type} located {Existing Facility Location}. The existing facility will be {Plan for Existing Facilities - Removed or Retired}. The utility is proposing {Proposed Facility Type} located {Proposed Facility Location}. See their work plan for additional detail. The utility will be able to complete its involvement with the contract when {Party Utility is Dependent On} has completed {What Must Be Done Before Utility Begins} in the location of {Location Within Project} such that the utility may adjust its facilities. It is anticipated that the utility will take approximately {Precon Days} calendar days for preconstruction activities and mobilization and approximately {Construction Days} calendar days to adjust its facilities in such area. If questions arise, {Utility Contact} of the utility may be contacted at {Phone Number} or {Email Address}. The work plan was approved on {Date PM Signed Work Plan}.

The facilities of {Utility Company} exist within the project limits. Their facilities have been adjusted to accommodate construction. The utility now has {Facility Type} located {Facility Location}. See their work plan for additional detail. If questions arise, {Utility Contact} of the utility may be contacted at {Phone Number} or {Email Address}. The work plan was approved on {Date PM Signed Work Plan}.

The facilities of {Utility Company} exist within the project limits, but are not expected to be affected by the proposed construction. The utility has {Facility Type} located {Facility Location}. See their work plan for additional detail. If questions arise, {Utility Contact} of the utility may be contacted at {Phone Number} or {Email Address}. The work plan was approved on {Date PM Signed Work Plan}.

DES {DES Number} - {Road Name}

[NOTE TO SPECIFIER – CREATE SIMILAR PARAGRAPHS TO THE ABOVE FOR ALL OTHER DES NUMBERS ON THE CONTRACT. REMOVE THIS NOTE TO SPECIFIER PRIOR TO SUBMITTING]

(b) Right-of-Way

See ~~INDOT's~~ the Department's Right of Way Certification Letter included in the additional letting documents for information regarding right-of-way and rights of entry up until advertisement of the contract. The Contractor shall contact the ~~INDOT~~ District after letting for an updated ~~INDOT~~ Department Right of Way Certification Letter.

[NOTE TO SPECIFIER – INCLUDE THE APPLICABLE SECTION (c) BELOW. REMOVE THE OTHER, UNAPPLICABLE SECTION (c) AND THIS NOTE TO SPECIFIER PRIOR TO SUBMITTING]

(c) Other Noteworthy Conditions

There are no other noteworthy conditions which may affect the prosecution and progress of the contract.

(c) Other Noteworthy Conditions

REVISION TO RECURRING SPECIAL PROVISION

107-R-169 STATEMENTS ABOUT EXISTING CONDITIONS OF UTILITIES, ADDITIONAL RIGHT-OF-WAY, AND ENCROACHMENTS *(with shown proposed changes)*

107-R-169 STATEMENTS ABOUT EXISTING CONDITIONS OF UTILITIES, ADDITIONAL RIGHT-OF-WAY, AND ENCROACHMENTS *(shown proposed draft of final version)*

The following condition exists which may affect the prosecution and progress of the contract.

(d) Preconstruction Conference Notification

The Contractor shall provide notification during the preconstruction conference about known corrections to or omissions of the information presented in 107.26(a) through 107.26(d) above. Otherwise, notification shall be provided as required in 105.06. Notifications regarding such corrections or omissions shall not alleviate the Contractor's inquiry or interpretation obligations as contained in 105 IAC 11-3-7.

COMMENTS AND ACTION

107-R-169 STATEMENTS ABOUT EXISTING CONDITIONS OF UTILITIES, ADDITIONAL RIGHT-OF-WAY, AND ENCROACHMENTS

DISCUSSION:

This item was introduced and presented by Mr. Wooden who stated that the existing RSP 107-R-169 template provides little detail regarding utilities in the project area and utility relocations. Therefore, this information is often left out or added in non-standard format causing complications and confusion in construction.

There are also sections of the RSP 107-R-169 for right-of-way and encroachments. The submitter of the RSP is typically the utility coordinator who knows little about right-of-way or encroachments on the project. Therefore, this section is often left blank, excluded entirely, or includes inaccurate information, leaving contracts responsible to update the information following submission.

Mr. Wooden proposed that the utility section of the RSP be updated to provide more information regarding each utility and more scenarios of relocations and schedules, as described in the proposal sheet. Mr. Wooden stated that revising this RSP template will provide clarity and standardization regarding utility and right-of-way impacts on a project. It will reduce the amount of times the 107 will need revised, the amount of people involved in completing and ultimately create more accuracy.

Minor editorial revisions are as shown.

Prior to the meeting, the following discussion ensued:
Mr. Koch mentioned that in ***(a) Utilities***, both statements are conveying the same end result; no anticipated conflicts. And I doubt the construction community will understand what 'limited utility coordination' means. Are both needed? Mr. Plant stated that he'd prefer to keep both from the utility coordination perspective, but if everybody is strongly against, we do not need to. The first intends to indicate that coordination essentially wasn't done so it is unknown what facilities will be out there. The second intends to indicate that we don't believe any facilities are out there. If we have to choose one, it would be the first and we'd remove the first sentence of it.

Mr. Koch stated that upon completion of a named task by the Contractor, the utility will be able to begin relocation. Ideally once the task completes, the Contractor shall notify the utility by dated email/letter with copy to the Department. This would create a clear beginning & reduce the notification burden on the department. Mr. Witt agreed that the Contractor should take this step. Mr. Plant said that he is okay with this. We can draft language accordingly if desired. We'd ask the utility coordinator also be included so they are aware of what is going on.

Mr. Koch asked if the utility's preconstruction activities will impact the relocation time? Sometimes/Maybe… A Contractor could claim that this time already occurred during the leadup. Or mobilization may be +/- leading a Contractor letter writing/claims thus increasing owner risk when all we really need is a single duration. As is, the language creates a degree of uncertainty. Ideally a single time frame would be included so that a Bidder could enter the time into the schedule as they are building the bid; X number of days to relocate upon notification. Mr. Witt added that this is probably the most concerning piece I see. The area engineer should be provided a Gantt chart and master relocation plan that is based on the preconstruction activities.

Mr. Plant stated that this is a good question/point. I hate to say it but the answer varies. If the coordination is done well and utilities notified properly in advance of being able to begin and the utility is willing/flexible, all that affects timeline is construction days. Reason being the preconstruction days are to schedule crews and such but if notified in advance can overlap with whatever is happening before it. However, some utilities will not schedule crews/start preconstruction timeline until everything is done and they could go out there that day, or nobody contacts the utility in advance to have it overlap. Again I'd prefer to leave as is or clarify/revise the language to explain this.

Mr. Koch stated that to make a time set meaningful, I require a complete 107-R-169. Both utility relocation & r/w are critical yet I understand that different groups complete each portion. Please consider an RSP for each for example 107-R-169 for utilities & 107-R-170 for r/w. And perhaps another RSP for 'other notable conditions'. Creating consecutive RSP's would help keep a degree of order when attempting to understand the work at hand. And selfishly,

COMMENTS AND ACTION

107-R-169 STATEMENTS ABOUT EXISTING CONDITIONS OF UTILITIES, ADDITIONAL RIGHT-OF-WAY, AND ENCROACHMENTS

I would prefer not to have to ask/look for a r/w certification basically needing to understand what is missing from the Designer's provided documents.

Mr. Witt agreed that these should be separate RSPs. Currently The Real Estate and UT/RR Teams are not targeting Stage for RSP completion in accordance with Chapter 14 of the design Manual. CO Real estate and UT/RR are targeting RFC which is after time set. To meet the design manual requirement and assist construction we have added the design manual requirement to the District Team's performance metrics for the year. We understand that we will not get the concern corrected but we will be able to define a starting point.

Mr. Plant replied that I see your point. We talked to ROW about this and this is not something they want to take on right now. The problem with it being in the utilities section is we've often seen it be incorrect or incomplete or not updated so ROW is needed in order to provide the correct answer and we don't want both teams working in one recurring spec. Utilities is keeping the other notable conditions in ours. Prefer to keep it as proposed as uploading the ROW cert as additional letting doc.

Mr. Koch stated that, in regard to ***(b) Right-of-Way***, the language is unnecessary and may encourage the Contractor to not follow proper channels. The 107 is also included on LPA contracts. Please consider striking the second sentence. Ideally r/w information would be included in an RSP if this cannot occur. Should INDOT be changed to the Department? The language has been revised to reflect proper specification standards.

Mr. Plant stated that we do not want to include r/w information in the RSP as explained above. The intention was for the construction team to know who to contact to find updated information about ROW following the letting. If there is a different method to do so that would be fine but I'm not sure what the proper channels would be. The Contractor to contact RPR who then contacts ROW maybe? Or ROW group sends RPR any updates as they come but I'm afraid the ball will get dropped in that method.

Mr. Wooden withdrew this item, stating that after working out details with the interested parties, it can be presented for consideration at a later date.

COMMENTS AND ACTION

107-R-169 STATEMENTS ABOUT EXISTING CONDITIONS OF UTILITIES, ADDITIONAL RIGHT-OF-WAY, AND ENCROACHMENTS

[continued]

Motion: Mr. Wooden Second: Mr. Ayes: Nays: FHWA Approval:	Action: ___ Passed as Submitted ___ Passed as Revised _X_ Withdrawn
Standard Specifications Sections referenced and/or affected: 103, 104, 105, 107, 108, 201, 202, 203, 725, 731, 732, 805, and 807 but no revisions necessary. Recurring Special Provisions 107-R-169 (Statements about Existing Conditions of Utilities, Additional Right-of-way, and Encroachments) Standard Drawing affected: NONE Design Manual Sections affected: Chapters 85 (Right-of-Way Plans Preparation) and 104 (Utility Coordination) but no revisions necessary. GIFE Sections cross-references: Sections 2 (General Instructions) and 14 (Utility Relocation Inspection Procedures) but no revisions necessary.	___ 2024 Standard Specifications ___ Revise Pay Items List ___ Create RSP (No.___) Effective: RSP Sunset Date: ___ Revise RSP (No._____) Effective: RSP Sunset Date: ___ Standard Drawing Effective: ___ Create RPD (No. ___) Effective: ___ GIFE Update ___ Frequency Manual Update ___ SiteManager Update

PROPOSAL TO STANDARDS COMMITTEE

PROBLEM(S) ENCOUNTERED: Paint specifications for sound wall posts need to be updated to reflect what is needed for the application.

PROPOSED SOLUTION: incorporate proposed changes into the existing RSP

APPLICABLE STANDARD SPECIFICATIONS: none

APPLICABLE STANDARD DRAWINGS: none

APPLICABLE DESIGN MANUAL SECTION: none

APPLICABLE SECTION OF GIFE: none

APPLICABLE RECURRING SPECIAL PROVISIONS: RSP 620-R-483

PAY ITEMS AFFECTED: none

APPLICABLE SUB-COMMITTEE ENDORSEMENT: Ad Hoc: Kelly Cummins & Jim Reilman

IF APPROVED AS RECURRING SPECIAL PROVISION OR PLAN DETAILS, PROPOSED BASIS FOR USE: unchanged from what it currently is for 620-R-483

IMPACT ANALYSIS (attach report):

Submitted By: Jim Reilman

Title: State Materials Engineer

Organization: INDOT

Phone Number: (317) 522-9692

Date: 5/23/22

IMPACT ANALYSIS REPORT CHECKLIST

Explain the business case as to why this item should be presented to the Standards Committee for approval. Answer the following questions with Yes, No or N/A.

Does this item appear in any other specification sections? No
Will approval of this item affect the Approved Materials List? No
Will this proposal improve:

Construction costs? N/A
Construction time? Yes
Customer satisfaction? Yes
Congestion/travel time? N/A
Ride quality? N/A

Will this proposal reduce operational costs or maintenance effort? N/A

Will this item improve safety:

For motorists? Yes
For construction workers? N/A

Will this proposal improve quality for:

Construction procedures/processes? N/A
Asset preservation? N/A
Design process? N/A

Will this change provide the contractor more flexibility? Yes

Will this proposal provide clarification for the Contractor and field personnel? Yes

Can this item improve/reduce the number of potential change orders? Yes

Is this proposal needed for compliance with:

Federal or State regulations? No

AASHTO or other design code? No

Is this item editorial? No

Provide any further information as to why this proposal should be placed on the Standards Committee meeting Agenda:

620-R-483 SOUND BARRIER SYSTEMS

(Revised 10-21-21)

The Standard Specifications are revised as follows:

SECTION 620, BEGIN LINE 1, DELETE AND INSERT AS FOLLOWS:

SECTION 620 – ~~BLANK~~ *SOUND BARRIER SYSTEMS*

620.01 Description

This work shall consist of furnishing materials and placement of a sound barrier system and a coping in accordance with 105.03.

620.02 General Design Requirements

The sound barrier system shall be either wall mounted, bridge mounted or ground mounted, and shall consist of wall attachments or post foundations, vertical support posts, and sound barrier panels. For the purposes of this section, "panel" is defined as the reflective or absorptive component mounted between the posts, piers or columns.

All appurtenances behind, in front of, under, over, mounted upon, or passing through the wall, including drainage structures, fire hydrant access openings, highway signage, emergency access openings, utilities or other appurtenances shown on the plans, shall be accounted for in the design of the sound barrier system.

If the sound barrier manufacturer needs additional information to complete the design, the Contractor shall be responsible for obtaining such information. The Contractor shall be responsible for field verifying wall locations in areas of all existing traffic poles, utility poles, roadway lighting poles, drainage pipes, underdrain outlets, and bridge expansion joints and all other locations where the sound barrier system may conflict with existing conditions. The wall shall be realigned and designed to box out openings where conflicts occur with existing light poles and traffic control devices. The Contractor shall establish and account for the existing locations of all underdrain outlets, drainage pipes, and bridge expansion joints in the final wall plans. If the Contractor discovers that overhead utilities will be within 6 ft of the sound barrier, the Contractor shall notify the Engineer in accordance with 104.02 and 105.16.

The sound barrier wall design shall follow the general dimensions of the wall envelope as shown on the plans. The top of the sound barrier shall be at or above the acoustical profile line shown, unless noted. Changes in elevation shall be accomplished by stepping the sound barrier sections at the vertical support posts. Steps shall not exceed 3 ft vertically unless otherwise specified in the plans. Barrier heights shall be selected in groups of no fewer than three successive panels, except where barriers are to be stepped down for barrier termination. The ends of the sound barrier shall be tapered or stepped down to a height of 8 ft within the sound barrier end transitions or as shown on the plans. The bottom of ground mounted sound barrier shall be embedded a minimum of 6 in. into the ground. The bottom of wall mounted or bridge mounted sound barrier shall follow within 3 in. a profile 6 in. below the top of the existing concrete barrier railing or wall.

Caisson footings, vertical support posts, and connections for ground mounted sound barrier shall be designed as specified by the manufacturer, with minimum post spacing of 15 ft. Exceptions will be allowed due to site-specific conditions such as access doors, drainage requirements or utility accommodations. These shall be reviewed and approved through the working drawing process. The foundation design shall use the COM 624P or LPILE Program. The foundation design shall be based on the soil model shown on the plans based on cyclic loading and shall consider the effects of a sloping ground surface. The post deflection shall be limited to L/100, measured from the top of the caisson to the top of the wall. The foundation depth shall not be less than 7.5 ft and shall not exceed the depth of the soil model except where the Contractor elects to drill deeper borings to extend the model. The foundation diameter shall not be less than 18 in. and shall not be less than 6 in. larger than the diagonal dimension of the post being used. The foundation shall be designed by the sound barrier manufacturer. Vertical support posts shall be attached to caisson footings by means of anchor bolts, or embedded wide flange steel posts.

A sound barrier system shall be selected for the type specified from those which are on the QPL of Sound Barrier Systems. The materials used in the fabrication of the sound barrier system shall be the same as those used for qualification of the sound barrier system.

The structural design of the sound barrier system shall be in accordance with the AASHTO LRFD Bridge Design Specifications, except as otherwise directed.

The post spacing for sound barriers mounted on any structure or safety barrier shall be limited to a distance that does not overstress the structure or safety barrier. The spacing shall also be limited to a distance that allows the sound barrier to conform to the existing horizontal and vertical alignments. The allowable loads on a structure or barrier shall be as shown on the plans. If no allowable loads are shown, the allowable loads on a sound barrier shall be in accordance with the AASHTO LRFD Bridge Design Specifications.

When sound barriers are to be installed on a bridge structure, design calculations shall be submitted to the Engineer that demonstrate structure loading limits will not be exceeded.

All materials shall have a minimum predicted maintenance free structural and acoustical lifespan of 20 years. All colorings and coatings shall have a minimum predicted maintenance free lifespan of 10 years.

The types of acoustic sound barrier systems that are accepted are as follows:

Type 1, single sided absorptive, sound barrier systems and their components shall be designed to achieve a sound transmission loss equal to or greater than 20 decibels at all frequencies when tested in accordance with ASTM E90. Type 1 sound barrier systems shall be designed to have a minimum noise reduction coefficient of 0.70 on the roadway side. Type 1 sound barrier systems shall be tested in accordance with ASTM C423.

Material samples for this test shall be provided with the coating applied, so as to determine that the color coating does not inhibit the acoustic performance. The sample shall be mounted in accordance with ASTM E795, type A.

Type 2, double-sided absorptive, sound barrier systems and their components shall be designed to achieve a sound transmission loss equal to or greater than 20 decibels at all frequencies when tested in accordance with ASTM E90. Type 2 sound barrier systems shall be designed to have a minimum noise reduction coefficient of 0.70 on the roadway and non-roadway sides. Type 2 sound barrier systems shall be tested in accordance with ASTM C423. To determine that the color coating does not inhibit the acoustic performance, material samples for this test shall be provided with the coating applied. The sample shall be mounted in accordance with ASTM E795, type A.

Type 3, reflective, sound barrier systems and their components shall be designed to achieve a sound transmission loss equal to or greater than 20 decibels at all frequencies when tested in accordance with ASTM E90.

A type 2 barrier system may be substituted for a type 1 barrier system at the Contractor's discretion. A type 1 or a type 2 barrier system may be substituted, with written approval, for a type 3 barrier system.

All molded finishes shall have a 1 in. minimum relief. All rolled finishes shall have a minimum 3/4 in. relief. Relief is defined by material that is provided in excess of the minimum wall thickness required to meet the Noise Reduction Coefficient required for the absorptive surfaces. Fluted finishes shall be coped at each end to avoid cracking.

Corrugations, ribs, or battens on sound barrier panels shall be oriented vertically when erected. The sound barrier shall be designed to prevent entrapment and ponding of water. The sound barrier shall not be designed with openings promoting the perching or nesting of birds, or the collection of dirt, debris, or water. The sound barrier shall not be designed with hand holds or grips promoting scaling or climbing of the system.

When shown on the plans, fire hydrant access points shall be included in the sound barrier and designed with additional reinforcement or bracing and protective coating around the opening as necessary to maintain structural integrity.

Closure plates shall be provided where new sound barrier is constructed adjacent to existing sound barrier. Where bridge mounted walls cross over expansion joints, expansion closure plates shall be used. The wall manufacturer shall provide expansion closure plates for each expansion joint unless directed otherwise. The minimum thickness of closure plates shall be 3/16 in.

The calculations for sound barriers which also retain earth shall show that the walls are adequate for earth retention. The earth retention areas shall be shown on the plans. The exposed face of the sound barrier earth retaining panel shall match the adjacent panel's color and texture.

(a) Precast Panel Design Criteria

Base-plated or embedded reinforced precast concrete posts may be substituted for wide flanged steel posts with the approval of the Department. Proposed substitutions for wide flanged steel posts shall be shown on working drawings submitted for approval.

Support posts shall match the adjoining wall in color unless directed by the Engineer. Embedded reinforced precast concrete posts shall also match the adjoining wall in texture. Sound barrier systems utilizing stacked panels shall have ship-lapped or tongue and groove horizontal joints or other approved design which blocks the passage of light.

(b) Masonry Design Criteria

Reinforced masonry vertical support posts shall be faced to match the adjoining wall in color and texture unless directed by the Engineer.

Steel support posts shall match the adjoining wall in color unless directed by the Engineer.

620.03 Submittals

The Contractor shall submit a minimum of three alternative textured finishes for the wall to the Engineer. These shall include the following colors:

(a) light gray (SAE-AMS STD 595, color No. 36492),
(b) light brown (SAE-AMS STD 595, color No. 30450),
(c) light tan (SAE-AMS STD 595, color No. 37769).

The colors will be presented to the public for their input in accordance with 620.05. The final wall pattern and color will be approved before production of the wall panels may begin.

The Contractor shall submit design calculations in accordance with 105.02. Calculations for sound barriers on bridge structures shall include an analysis of the bridge structure that demonstrates the additional loads imposed by the sound barrier, in accordance with the AASHTO LRFD Bridge Design Specifications, will not exceed the structural capacity of the bridge. The Contractor shall submit working drawings in accordance with 105.02 after design calculations are approved and before beginning wall construction operations. Design calculations and working drawings shall meet the following minimum requirements:

(a) Design calculations shall include all structural design calculations and vertical support post design calculations.

(b) Design calculations for bridge mounted installations shall include the design unit weight and mass of the sound barrier and support systems.

(c) Design calculations for bridge mounted installations shall demonstrate that the structural loading limits of the structure will not be exceeded.

(d) Working drawings shall include all details, dimensions, quantities, and cross sections necessary to construct the sound barrier systems and shall include but not be limited to the following:

1. A plan and elevation sheet or sheets for each sound barrier systems location.

2. An elevation view of the sound barrier systems which shall include the elevation at the top of the wall at all horizontal and vertical break points at least every 50 ft along the face of the wall.

3. A plan view of the wall that indicates the offsets from the construction centerline to the face of the wall at all changes in horizontal alignment. A plan view and elevation view which detail the placing position.

4. A typical cross section or cross sections showing elevation relationship between ground conditions and the sound barrier systems locations.

5. All general notes required for constructing the wall.

6. Each sheet shall show the complete project identification number.

7. All horizontal and vertical curve data affecting the wall.

8. A listing of the summary of quantities on the elevation sheet for each wall.

9. A list of manufacturer's recommendations with respect to maintenance, including repair of graffiti and other damages.

10. Typical sections, connection details, and elevation views for bridge mounted installations.

(e) Working drawings shall include a detailed plan of aesthetic treatment for the entire sound barrier system, manufacturer-recommended installation requirements and sequence of construction, manufacturer-recommended repair requirements for damage caused by vandalism or graffiti prior to final acceptance, and a detailed bill of materials.

MATERIALS

620.04 Materials

Materials shall be in accordance with the following:

Cast-in-Place Portland Cement Concrete, Class A 702
Coarse Aggregate, Class A or Higher, Size No. 91 ..... 904.03
Coarse Aggregate, Class D or Higher, Size No. 2..... 904.03
Concrete Masonry Units..... 905.06
Fine Aggregate, Size No. 23 ..... 904.02
Joint Mortar..... 901.08, 907.12
Paint 909.02
Portland Cement ..... 901.01(b)
Precast Concrete..... 707
Reinforcing Bars 910.01
Structural Aluminum Posts..... 910.14(d)
Structural Steel..... 910
Water 913.01

Structural steel components shall be hot dipped galvanized in accordance with ASTM A123, coating grade 100 or painted in accordance with 619.11 and 619.12 with the exception that the finish coat shall be a waterborne acrylic paint in one of the colors listed below and otherwise in accordance with 909.02(e). ~~The~~If hot dipped, the galvanized surfaces shall be prepared using a light brush-off blast cleaning in accordance with SSPC-SP16. The surface profile shall be 15 to 30 microns in accordance with ASTM D4417, prior to painting.

Exposed surfaces of galvanized components shall be painted in accordance with 619.09(b), 909.02, and the following.

In lieu of the properties listed in 909.02(d)3, the waterborne finish paint mixed paint properties shall be in accordance with the following requirements.

Weight/volume, ASTM D1475, 25°C, min. .....1.200 kg/L
Total solids, % by weight, ASTM D2369, min. 48
Volatile organic compounds, ASTM D3960, max. .....180 g/L
Specular gloss, 60°, 10 ±0.5 mils wet film thickness on a tin coated steel panel, dried 48 h, ASTM D523, max. 25

The color of the dried paint film shall match the color of the sound barrier panels
(a) light gray (SAE-AMS-STD-595, color No. 26492),
(b) light brown (SAE-AMS-STD-595, color No. 20450),
(c) light tan (SAE-AMS-STD-595, color No. 27769),
unless otherwise shown on the plans.

All structural steel hardware shall be in accordance with ASTM F3125, grade A 325 and shall be hot dipped galvanized in accordance with ASTM F2329 or shall be made of nonferrous material or stainless steel. All other non-structural fastening devices shall be made of nonferrous metal or stainless steel. Plastic members shall be connected with either screws or bolts. Aluminum members shall be connected with stainless steel fasteners.

Anchor bolts shall be of the size shown with a minimum of 10 in. of 7NC threads on the upper end. Anchor bolts shall be in accordance with ASTM F1554. The threads, nuts, and washers shall be galvanized in accordance with ASTM F2329 or be mechanically galvanized and conform to the coating thickness, adherence, and quality requirements of ASTM B695, Class 55.

Solid portland cement concrete or composite concrete shall be coated or contain an integral pigment, as specified by the manufacturer, and shall meet the specified color requirements. Integral pigment shall be certified to be in accordance with ASTM C979. The coating shall be tested for accelerated weathering in accordance with ASTM D6695. The test panel substrate shall be of the same portland cement concrete or composite concrete material used in the sound barrier system component. Cured coating or integral pigment shall not contain heavy metals that exceed the requirements of 40 CFR 261.24.

Concrete class A for the coping shall be in accordance with the applicable requirements of 702, except the coarse aggregate for pre-cast units may be size No. 91 in accordance with 904. Reinforcing steel in the coping shall be in accordance with the applicable requirements of 703. The coping may be precast or cast-in-place.

Masonry block shall be tested in accordance with ASTM C90 and as follows:

(a) The average compressive strength of three units shall be a minimum of 3,000 psi with no single unit being less than 2,700 psi.

(b) The units shall be tested for water absorption in accordance with ASTM C140. The maximum absorption shall be 7%.

(c) Joint reinforcement for masonry block systems shall be in accordance with ASTM A951.

(d) Mortar for masonry block systems shall be in accordance with ASTM C270; type S, Table 2 proportion requirements.

(e) Portland cement-lime or mortar cement may be used. Masonry cement shall not be used. Grout for masonry shall be in accordance with ASTM C476.

(f) Aggregate for masonry grout shall be in accordance with ASTM C404.

Masonry blocks shall be coated or contain an integral pigment, as specified by the manufacturer, and shall meet the specified color requirements. The integral pigment shall be certified to be in accordance with ASTM C979. The coating shall be tested for accelerated weathering in accordance with ASTM D6695. The test panel substrate shall be of the same masonry blocks used in the sound barrier system component. Cured coating or integral pigment shall not contain heavy metals that exceed the requirements of 40 CFR 261.24.

Certifications shall be provided for each of the materials to be supplied for the sound barrier system. A type C certification in accordance with 916 shall be provided for the sound barrier materials, unless otherwise noted. A type A certification in accordance with 916 shall be provided for compressive strength and absorption test values for masonry block, sampled and tested in accordance with ASTM C140. All test reports required to substantiate compliance shall be in accordance with the test method/material requirements cited herein. A Department approved laboratory shall conduct the testing.

CONSTRUCTION REQUIREMENTS

620.05 Information for Public Input

Colored flyers with appropriate graphics shall be developed by the Contractor and furnished to the Department.

Wall color photos shall be provided for each color in accordance with 620.03 along with photos of each available texture alternative. A minimum of three wall samples of the non-roadway side textures shall be provided. All samples of the wall textures shall be a minimum of 3 sq ft in area, with a distinguishable pattern.

Based on comments received, the Department will select the final finishes and colors for each wall. Each wall shall have the selected color used throughout the entire wall on the roadway and the non-roadway sides. The Contractor shall coordinate all sound barrier wall issues with the Engineer prior to ordering any materials.

620.06 Construction Requirements

Sound barrier components shall not be stored on the right-of-way unless written permission is given by the Department. Requests for permission to store materials on the right-of-way will not be accepted until after the contract has been awarded.

The sound barrier supplier shall provide technical instruction, guidance in preconstruction activities including the preconstruction conference, and on-site technical assistance during construction. The Contractor is responsible for following installing instructions from the supplier unless otherwise directed in writing by the Engineer.

Clearing and grading shall be in accordance with 201 and 202 as required.

The foundations for ground mounted sound barrier systems shall be constructed as shown on the working drawings. Holes for footings shall be drained of free water prior to installing any components. Placing concrete shall be in accordance with 702.

The integrity of the sound barrier system continuity shall be such that no light will be visible through any vertical joint between sound barrier panel and vertical support post, through any horizontal joint between sound barrier panels, between the bottom of any ground mounted sound barrier and the adjacent ground, or between the bottom of any wall mounted sound barrier and the top of the adjacent wall. Exceptions may be allowed as necessary for drainage as indicated on the plans.

Sound barrier wall posts shall be placed vertical with a tolerance of 1/2 in. per 1 ft on each axis. Sound barrier wall posts shall be placed at the distance indicated on the plans with a tolerance of 1 in. from centerline to centerline. Sound barrier wall posts shall be aligned to within 1 in. when measured from a straight line from the two adjacent posts. Sound barrier wall posts shall be at the height as shown on the plans. The posts shall project above the top sound barrier wall panel by 1 1/2 in. ±1/2 in. The top of the sound barrier wall shall be at or above the acoustical profile. Steel posts embedded in concrete shall have bottom cover of 8 in. ±4 in. Field-cut steel posts shall be primed with an organic zinc primer and painted in accordance with 619.

After post erection the area shall be backfilled to within 6 in. of the required final grade or as specified in the plans. The aggregate pad shall be placed as required. Positive drainage of the work area shall be maintained.

An aggregate pad of No. 2 coarse aggregate shall be included that extends 4 in. outside of each side of the panel and 4 in. below the bottom of the panel.

The sound barrier system and sound barrier system components shall be maintained until final acceptance. Elements of the sound barrier system that are damaged or destroyed, including due to graffiti or other vandalism, shall be repaired or replaced as directed by the Engineer. Repairs and repainting shall be conducted in accordance with the manufacturer's guidance and 620.02.

After construction of the sound barrier system the site shall be restored to the original condition with grading, seeding and sodding in accordance with the plans.

(a) Construction Requirements for Precast Panels

Sound barrier wall panels shall be placed in accordance with the plans and centered between adjacent posts. The sound barrier wall panels shall be of sufficient length to span the entire length between posts less 1/2 the width of the smallest retaining flange.

Panels may be field-cut to facilitate erection in accordance with the manufacturer's recommendation. Field-cut panels shall be cut to have the least impact on any patterns present in the textured or colored finish. Field-cut panels or other field cut components shall be painted in accordance with the manufacturer's guidance.

(b) Construction Requirements for Masonry

All grouting and reinforcing work for masonry block systems shall be performed by masonry craftworkers holding current International Masonry Institute, IMI, Grouting and Reinforcing Certification. Proof of certification shall be submitted prior to the beginning of work.

620.07 Acceptance

The Contractor shall submit 2 ft by 2 ft sound barrier panel samples or five masonry block units in the colors and textures proposed and a 2 ft sample of painted support post,

prior to the approval of the working plans. Once approved, these samples will be used as a control sample to verify delivered products meet the aesthetic requirements. The sound barrier system will be accepted for color based on a visual comparison between the control sample and the color of the wall as constructed in place.

The sound barrier system will be accepted for quality based on a visual inspection of the components of the system by the Engineer. The sound barrier system shall be subject to rejection due to failure to be in accordance with the requirements specified herein. In addition, the following defects may also be sufficient cause for rejection:

(a) Defects that indicate imperfect fabrication

(b) Defects in physical appearance such as cracks, checks, dents, scrapes, chips, stains, or color variations.

The Engineer will determine whether a defective sound barrier shall be repaired or shall be cause for rejection. Repair, if permitted, shall be completed by the Contractor and will be approved by the Engineer.

620.08 Method of Measurement

Sound barrier panels and sound barrier erection will be measured by the square foot of wall surface area. The pay quantity will be based on the limits of the sound barrier envelope as shown on the plans. The vertical and horizontal distance for each section of the wall defines the sound barrier envelope. The vertical distance extends from the elevation at the bottom of the lowest panel to the elevation of the acoustic profile for each section of the wall. The horizontal distance extends from centerline to centerline of adjacent posts for each section of wall.

Coping will not be measured. Brackets required for the attachment of signs to the sound barrier will not be measured.

620.09 Basis of Payment

Wall mounted sound barrier panels, bridge mounted sound barrier panels, ground mounted sound barrier panels, wall mounted sound barrier erection, bridge mounted sound barrier erection, and ground mounted sound barrier erection will be paid for at the contract unit price per square foot.

The Department may choose to acquire additional precast sound wall panels or masonry blocks in the colors and patterns selected on the project. A maximum of 12 panels of each type would be paid for at the invoice cost of the panels and shall be delivered to the District Office. If the Department elects to acquire additional precast sound wall panels or masonry blocks, the Contractor shall provide the material as extra work in accordance with 104.03.

Partial payment will be made for sound barrier panels stockpiled on the project site or at the Contractor's approved storage location within the State of Indiana. Partial

payment will be based on the delivered cost of the sound barrier panels, as verified by invoices that include freight charges. The Contractor shall furnish the invoices and all required certifications. Partial payment will not exceed 75% of the contract unit price for bridge mounted, ground mounted or wall mounted sound barrier panels. Prior to authorizing the partial payment, verification will be obtained that all required inspection has been made and that the panels are acceptable.

Payment for all costs associated with the collection of all information not shown on the plans, revisions due to conflicts, sound barrier system details, all additions or incidentals necessary to provide complete plans, any redesigning of plans or details, the public information meetings and public information planning and presentations will be paid for at the contract lump sum price for sound barrier design and layout.

Payment will be made under:

Pay Item	***Pay Unit Symbol***
Sound Barrier Design and Layout	*LS*
Sound Barrier Erection, _____, _____ mounting type, type***	*SFT*
Sound Barrier Panels, _____, _____ mounting type, type***	*SFT*

* *Type of sound barrier system: (BM) bridge mounted, (GM) ground mounted, (WM) wall mounted*

** *Type 1, 2, or 3.*

The cost of sound barrier panel materials including vertical support posts, coping, aggregate pad, grout and joint reinforcement for masonry block, fasteners, closures, expansion plates, openings and incidentals shall be included in the cost of the sound barrier panels for the type of sound barrier panels.

The cost of designing, furnishing, and installing brackets for signs that attach to the sound barrier shall be included in the cost of the design and ~~erection~~layout of the sound barrier panels.

Substituting type 2 wall for type 1 wall or substituting type 1 or type 2 wall for type 3 wall shall be at no cost to the Department.

The cost of the selected texture and selected color shall be included in the cost of the sound barrier panel for the type of sound barrier panels.

The cost of all labor and materials to prepare and erect the sound barrier shall be included in the cost of sound barrier erection for the type of sound barrier panels.

The cost of foundation preparation and construction with associated work shall be included in the cost of sound barrier, ground mounted.

The cost of removal or construction of concrete barrier walls is not included in the cost of sound barrier erection, wall mounted.

COMMENTS AND ACTION

620-R-483 SOUND BARRIER SYSTEMS

DISCUSSION:

Mr. Reilman introduced and presented this item stating that paint specifications for sound wall posts need to be updated to reflect what is needed for the application.

Mr. Reilman proposed to incorporate the proposed changes into the existing RSP, as shown.

Mr. Koch asked, with regard to the language in Materials, "In lieu of the properties listed in 909.02(d)3….", 909.02(d)3 includes nine material properties. Is it the intent to have the Waterborne Finish Paint comply only with the five properties listed, OR are the five properties replacing the SS & we still need to keep the remaining four?

Mr. Reilman responded that yes, for Sound Barriers we are only concerned about the four properties listed. For everything else, we still want the nine material properties listed in 909.02(d)3. Which is why it says "in lieu of" and not "in addition to".

There was no further discussion and this item passed as submitted.

Motion: Mr. Reilman Second: Mr. Novak Ayes: 9 Nays: 0 FHWA Approval: YES	Action: X __ __	Passed as Submitted Passed as Revised Withdrawn
Standard Specifications Sections referenced and/or affected: NONE Recurring Special Provisions 620-R-483 SOUND BARRIER SYSTEMS Standard Drawing affected: NONE Design Manual Sections affected: NONE GIFE Sections cross-references: NONE	__ __ __ X __ __ __ X X	2024 Standard Specifications Revise Pay Items List Create RSP (No.__) Effective: RSP Sunset Date: Revise RSP (No. 620-R-483) Effective: December 1, 2022 RSP Sunset Date: Standard Drawing Effective: Create RPD (No. __) Effective: GIFE Update Frequency Manual Update SiteManager Update

PROPOSAL TO STANDARDS COMMITTEE

PROBLEM(S) ENCOUNTERED: Clean up to the 500 spec section. Unnecessary terminology should be removed and other minor issues need updating

PROPOSED SOLUTION: Incorporate the proposed changes in the various 500 sections into the 2024 spec book

APPLICABLE STANDARD SPECIFICATIONS: 101, 501 thru 509 inclusive

APPLICABLE STANDARD DRAWINGS: none

APPLICABLE DESIGN MANUAL SECTION: none

APPLICABLE SECTION OF GIFE:

APPLICABLE RECURRING SPECIAL PROVISIONS: none

PAY ITEMS AFFECTED:

APPLICABLE SUB-COMMITTEE ENDORSEMENT: Ad Hoc: INDOT Legal, Kurt Pelz, Lana Podorvanova, Jim Reilman, Scott Trammell

IF APPROVED AS RECURRING SPECIAL PROVISION OR PLAN DETAILS, PROPOSED BASIS FOR USE: N/A

IMPACT ANALYSIS (attach report):

Submitted By: Jim Reilman

Title: State Materials Engineer

Organization: INDOT

Phone Number: (317) 522-9692

Date: 5/23/22

IMPACT ANALYSIS REPORT CHECKLIST

Explain the business case as to why this item should be presented to the Standards Committee for approval. Answer the following questions with Yes, No or N/A.

Does this item appear in any other specification sections? No
Will approval of this item affect the Approved Materials List? No
Will this proposal improve:

Construction costs? N/A
Construction time? N/A
Customer satisfaction? Yes
Congestion/travel time? N/A
Ride quality? N/A

Will this proposal reduce operational costs or maintenance effort? N/A

Will this item improve safety:

For motorists? N/A
For construction workers? N/A

Will this proposal improve quality for:

Construction procedures/processes? Yes
Asset preservation? Yes
Design process? Yes

Will this change provide the contractor more flexibility? N/A

Will this proposal provide clarification for the Contractor and field personnel? Yes

Can this item improve/reduce the number of potential change orders? Yes

Is this proposal needed for compliance with:

Federal or State regulations? No
AASHTO or other design code? No

Is this item editorial? No

Provide any further information as to why this proposal should be placed on the Standards Committee meeting Agenda:

REVISION TO STANDARD SPECIFICATIONS

SECTION 101 - DEFINITIONS AND TERMS
101.01 Abbreviations
DIVISION 500 - CONCRETE PAVEMENT (various sections)

The Standard Specifications are revised as follows:

SECTION 101, AFTER LINE 127, INSERT AS FOLLOWS:

SCM *supplementary cementitious material*

SECTION 501, BEGIN LINE 8, DELETE AND INSERT AS FOLLOWS:

501.02 Quality Control

The mixture for PCCP shall be produced by ~~an approved~~*a qualified* plant in accordance with ITM 405, transported, and placed ~~according to~~*in accordance with* a QCP, prepared and submitted by the Contractor in accordance with ITM 803, for PCCP. The QCP shall contain a plan for placing PCCP in cold weather, as defined in 501.15. The cold weather plan shall, at a minimum, provide details to address changes in materials, concrete batching and mixing processes, construction methods, curing, temperature monitoring, and protection of in-situ PCCP. Temperature monitoring shall consist of monitoring the surface temperature of the PCCP by use of a thermometer. The thermometer shall be capable of recording and maintaining a record of the day, time, and temperature every 15 minutes around the clock. The thermometer shall be located 6 in. in from the edge of the PCCP. The QCP shall be submitted to the Engineer ~~at least~~*a minimum of* 15 days prior to commencing PCCP paving operations. *Work shall not begin until written notice has been received that the QCP was accepted by the Engineer.*

An ~~American Concrete Institute~~ *ACI*-certified concrete field testing technician, grade I, shall be on site to direct all sampling and testing.

A common testing facility shall be provided for both production control and acceptance testing.

MATERIALS

501.03 Materials

Materials shall be in accordance with the following:

Admixtures	912.03
Concrete Coarse Aggregate, Class AP	904.03, ITM 226
Fine Aggregate, Size No. 23~~*~~	904.02
Fly Ash	901.02
Liquid Membrane Forming Compound	*912.01(e)*
Portland Cement	901.01(b)*
Rapid Setting Patch Materials	901.07
Silica Fume	901.04
Slag Cement	901.03
Water	913.01

* Type IS-A and Type IP-A blended cements shall not be used.

501.04 Concrete Mix Design

A concrete mix design submittal, CMDS, shall be in accordance with 501.05. The CMDS shall be submitted to ~~and approved by~~ the DTE. The CMDS shall be submitted a minimum of seven calendar days prior to the trial batch utilizing the Department provided spreadsheet and shall include the following:

(a) a list of all ingredients
(b) the source of all materials
(c) the fine to total aggregate ratio
(d) the gradation of the aggregates
(e) the absorption of the aggregates
(f) the SSD bulk specific gravity of the aggregates
(g) the specific gravity of each ~~supplementary cementitious material,~~ SCM~~,~~
(h) the batch weights
(i) the names of all admixtures
(j) the admixture dosage rates and the manufacturer's recommended range.

The aggregate blend submitted on the CMDS shall produce an optimized aggregate gradation in accordance with ITM 226 sections 6.2.1 and 6.3. The aggregate blend shall consist of, at a minimum, one concrete coarse aggregate and one fine aggregate, size No. 23. One additional class A intermediate-sized coarse aggregate may be included if approved by the Engineer.

The CMDS ~~is~~*shall be* used to conduct a trial batch in accordance with 501.06. Upon completion of the trial batch, the Contractor shall *update the* submit*ted* ~~the concrete mix design~~*CMDS to include the Contractor's and the Engineer's trial batch test results on* ~~for production, CMDP. The CMDP shall be submitted to the DTE utilizing~~ the Department ~~furnished~~*provided* spreadsheet a minimum of three work days prior to production. Production shall not commence ~~without an approved CMDP~~*until the DTE has issued the concrete mix design for production, CMDP*. ~~Both the Contractor's and the Engineer's test results from the trial batch will be included in the CMDP submittal.~~

A CMDP may be changed or adjusted in accordance with the following:

(a) Change in Materials

~~A change in a previously approved CMDP, for a given contract, to any of the following shall be submitted to the DTE as a CMDS, referencing the original CMDP.~~ *Any of the following changes to a CMDP shall require a new CMDS to be submitted to the DTE, referencing the original CMDP.*

1. cement source or type
2. SCM source or type
3. coarse aggregate source or type
4. admixture type.

A trial batch shall be conducted in accordance with 501.06, or verification of the new CMDS may be made during the first day of production by tests conducted by the Contractor and the Engineer. Acceptance test results may be used for the Engineer's verification tests. Production may continue until flexural strength tests are completed, provided all other properties are in accordance with 501.06. The test results shall be submitted to the DTE utilizing the Department *provided* spreadsheet no later than one day after the flexural strength test results are complete. If the test beams indicate a modulus of rupture that is not in accordance with 501.06, production shall stop and all PCCP constructed with the new CMDS will be adjudicated as a failed material in accordance with normal Department practice as listed in 105.03. *If all properties are in accordance with 501.06, the DTE will issue the CMDP.*

(b) Adjustments to Materials

~~An adjustment in a previously approved CMDP, for a given contract, to any of the following shall be submitted to the DTE as a CMDS, referencing the original CMDP.~~ *Any of the following adjustments to a CMDP shall require a new CMDS to be submitted to the DTE, referencing the original CMDP.*

1. admixture source
2. admixture product of the same type and from the same source designated in the original CMDP
3. fine aggregate source
4. target unit weight due to change in aggregate properties
5. fine to total aggregate ratio in excess of ±3% from the value designated by the original CMDP.

The new CMDS shall be submitted to the DTE utilizing the Department *provided* spreadsheet a minimum of one work day prior to production. A trial batch or verification testing ~~is~~*will* not *be* required~~ for approval~~. Production shall not commence ~~without an approved~~ *until the DTE has issued the* CMDP.

(c) Other Adjustments

Other adjustments in a~~n approved~~ CMDP~~, for a given contract,~~ to any of the following will be allowed and DTE notification ~~and approval~~ prior to use ~~is not~~ *will not be*

required.

1. admixture dosage rate

2. fine aggregate to total aggregate ratio within ±3% of the value designated by the original CMDP.

~~An approved CMDP from a previous contract may be used on additional contracts. The CMDP shall be submitted to the DTE for review and approval prior to use.~~ *A CMDP in accordance with either 501.05 or 502.04 from a previous contract may be submitted to the DTE for consideration for use on the current contract. The DTE will notify the Contractor when the review is complete and if the previously used CMDP can be used on the current contract.*

SECTION 501, BEGIN LINE 164, DELETE AND INSERT AS FOLLOWS:

** Ternary binder systems shall contain two SCM's such as fly ash and slag cement, or fly ash and silica fume, or slag cement and silica fume, combined with a cement. If a blended cement is used, it shall not be combined with a plant added SCM of the same type of ~~pozzolan~~*SCM* to create a ternary system. For example: a Type IP shall not be combined with plant-added fly ash and slag cement. When using a Type IL blended cement, the plant addition of both fly ash and slag cement will be allowed. The limestone dust in Type IL cement will not be considered in calculating the amount of SCM. Silica fume shall only be a SCM component of a ternary binder system. If a blended cement is used, silica fume shall only be an SCM component of the ternary system.

SECTION 501, BEGIN LINE 184, DELETE AND INSERT AS FOLLOWS:

Hand placed paving operations meeting the requirements of 508.04(c) shall utilize concrete having a ternary binder system that contains silica fume as one of the SCM's when the ambient temperature is below 50°F during placement or when the ambient temperature will fall below 50°F before the opening to traffic strength is attained. Concrete with a ternary binder system containing silica fume as one of the SCM's, may be used in any approved method of pavement placement without restriction. Placement operations that involve form riding equipment in accordance with 508.04(b), may ~~utilize~~*use* ~~an approved~~ binary CMDP, without restriction.

SECTION 501, BEGIN LINE 213, INSERT AS FOLLOWS:

Test results shall be added to the Department *provided* spreadsheet and submitted to the DTE in accordance with 501.04. Adjustments to the target unit weight and the target water/cementitious ratio may be made.

SECTION 501, BEGIN LINE 252, DELETE AND INSERT AS FOLLOWS:

501.10 Preparation of ~~G~~*Subg*rade

The subgrade shall be shaped to the required grade and section, free from all ruts, corrugations, or other irregularities, and uniformly compacted ~~and approved~~ in accordance with 207.

SECTION 501, BEGIN LINE 287, DELETE AND INSERT AS FOLLOWS:

The batch ticket for contract dedicated plants and delivery tickets for ready mix plants shall include the ~~approved~~*assigned* CMDP number. The tickets shall be delivered to the Engineer.

SECTION 501, BEGIN LINE 357, DELETE AS FOLLOWS:

Concrete shall not be mixed, placed, or finished when the natural light is insufficient, unless an adequate ~~and approved~~ artificial lighting system is operated in accordance with the QCP.

SECTION 501, BEGIN LINE 374, DELETE AND INSERT AS FOLLOWS:

501.20 Curing

PCCP shall be cured with a~~n approved~~ white pigmented liquid membrane forming compound *from the QPL of Liquid Membrane Forming Curing Compounds*. Alternative methods of curing ~~may~~*shall* be *as* approved by the Engineer. Curing shall be in accordance with 504. For formed PCCP, immediately after the forms are removed, the sides of the PCCP shall be cured.

SECTION 501, BEGIN LINE 413, DELETE AND INSERT AS FOLLOWS:

(a) Profilograph

When a pay item for Profilograph, PCCP is included in the contract, the Contractor shall furnish, calibrate, and operate a~~n approved~~ profilograph in accordance with ITM 912 for the acceptance of longitudinal smoothness on the mainline traveled way and ramps, including adjacent acceleration or deceleration lanes, where both of the following conditions are met:

SECTION 501, BEGIN LINE 602, DELETE AND INSERT AS FOLLOWS:

(a) Modulus of Rupture

Appeals will not be considered unless QC test results for modulus of rupture obtained from flexural strength testing indicate greater than a 50 psi difference between the Department's and the Contractor's test results. ~~Upon approval for the additional testing~~*Once additional testing has been approved,* the Contractor shall obtain cores, as directed, in the presence of the Engineer.

SECTION 501, BEGIN LINE 614, DELETE AND INSERT AS FOLLOWS:

(b) Air Content

Appeals will not be considered unless QC test results indicate greater than a 0.5% difference between the Department's and the Contractor's tests. ~~Upon approval for the additional testing~~*Once additional testing has been approved,* the Contractor shall obtain

core as directed in the presence of the Engineer.

SECTION 502, AFTER LINE 15, DELETE AND INSERT AS FOLLOWS:

Liquid Membrane Forming Compound ..... *912.01(e)*
Portland Cement ..... 901.01(b)
Rapid Setting Patch Materials 901.07
Silica Fume 901.04
Slag Cement 901.03
Water 913.01

502.03 Concrete Mix Design

A concrete mix design submittal, CMDS, shall be in accordance with 502.04. The CMDS shall be submitted to the DTE. The CMDS shall be submitted a minimum of seven calendar days prior to production~~. The CMDS shall use~~*utilizing* the Department provided spreadsheet and shall include the following:

(a) a list of all ingredients
(b) the source of all materials
(c) the fine to total aggregate ratio
(d) the absorption of the aggregates
(e) the SSD bulk specific gravity of the aggregates
(f) the specific gravity of ~~pozzolan~~*all SCMs*
(g) the batch weights
(h) the names of all admixtures
(i) the admixture dosage rates and the manufacturer's recommended range.

The aggregate blend submitted on the CMDS shall produce an optimized aggregate gradation in accordance with ITM 226 sections 6.2.1 and 6.3. The aggregate blend shall consist of, at a minimum, one ~~C~~*c*oncrete ~~C~~*c*oarse ~~A~~*a*ggregate and one fine aggregate, No. 23. One additional class A or higher intermediate-sized coarse aggregate may be included if approved by the Engineer.

The absolute volume of the mix design shall be 27.0 cu ft at the design air content of 6.5%.

Production shall not commence until the DTE has ~~assigned a mix number to the CMDS. The mix design will henceforth be identified as a~~*issued the* concrete mix design for production, CMDP.

Any of the following changes or adjustments to a~~n existing~~ CMDP shall require a new CMDS to be submitted to the DTE, *referencing the original CMDP. The new CMDS shall be submitted to the DTE utilizing the Department provided spreadsheet a minimum*

of one work day prior to production. Production shall not commence until the DTE has issued the CMDP.

(a) cement source or type
(b) ~~pozzolan~~*SCM* source or type
(c) aggregate source or type
(d) admixture source or type
(e) addition or deletion of an admixture
(f) proportioning of the concrete in accordance with 502.04 as follows:

1. cement content or cement reduction
2. ~~pozzolan~~*SCM* to cement substitution ratio
3. target water/cementitious ratio
4. proportion of aggregate by weight exceeding ±2%.

A CMDP in accordance with *either* 501.05 or ~~a CMDP in accordance with~~ 502.04 from a previous contract may be submitted *to the DTE* for ~~review~~*consideration* for use on the current contract ~~to the DTE~~. The DTE will notify the Contractor when the review is complete and ~~whether or not~~*if* the previously used CMDP can be used on the current contract.

SECTION 502, BEGIN LINE 163, DELETE AND INSERT AS FOLLOWS:

502.07 Preparation of ~~G~~*Subg*rade

The subgrade shall be shaped to the required grade and section, free from all ruts, corrugations, or other irregularities, and uniformly compacted ~~and approved~~ in accordance with 207. Surfaces on which a mixture is placed shall be free from objectionable or foreign materials at the time of placement.

SECTION 502, BEGIN LINE 216, DELETE AND INSERT AS FOLLOWS:

Concrete shall be uniformly mixed when delivered to the job site. Batch tickets for each load of PCC shall indicate the weight of cement, ~~pozzolan~~*SCM*, and aggregates, volume or weight of water, and the type and volume of admixtures. The weight of the cement shall be within 1% of the CMDP, the saturated surface dry weight of the aggregates shall be within 2% of the CMDP, and the volume or weight of water shall be within 1% of the required amount.

SECTION 502, BEGIN LINE 314, DELETE AND INSERT AS FOLLOWS:

Concrete shall not be mixed, placed, or finished when the natural light is insufficient, unless an ~~adequate and approved~~ artificial lighting system *in accordance with 702.26* is operated.

SECTION 502, BEGIN LINE 328, DELETE AND INSERT AS FOLLOWS:

502.15 Curing

PCCP shall be cured with a~~n approved~~ white pigmented liquid membrane forming

compound *from the QPL of Liquid Membrane Forming Curing Compounds*. Alternative methods of curing ~~may~~*shall* be *as* approved by the Engineer. Curing shall be in accordance with 504. For formed PCCP, immediately after the forms are removed, the sides of the PCCP shall be cured.

SECTION 503, BEGIN LINE 116, DELETE AS FOLLOWS:

(e) Terminal Joints

A terminal joint of the type specified shall be constructed at the locations as shown on the plans. The embankment shall be shaped to the required grade and section, free from all ruts, corrugations, or other irregularities, and uniformly compacted ~~and approved~~ in accordance with 203. The embankment shall be furnished within a tolerance of 1/2 in. from the grade as shown on the plans. The subgrade shall be prepared as shown on the plans and in accordance with 207. The sleeper slab shall be placed on top of the prepared subgrade.

SECTION 503, BEGIN LINE 179, DELETE AND INSERT AS FOLLOWS:

(h) Expansion Joint with Load Transfer

Expansion joints with load transfer shall be constructed at the locations shown on the plans. The joint shall be an assembly of dowel bars, expansion caps, and joint filler components as shown on the plans. The components shall be supported ~~by an approved welded wire assembly which holds the components rigid and in proper alignment during placement of the concrete~~*in accordance with 503.04(a)*.

SECTION 504, BEGIN LINE 20, DELETE AS FOLLOWS:

Hand methods of finishing may be used when finishing equipment breaks down or in tight working areas where field conditions limit the use of mechanical devices. Hand placed concrete shall be further finished by means of a longitudinal float or a~~n approved~~ transverse smoothing float in accordance with 508.08(a).

SECTION 504, BEGIN LINE 81, DELETE AND INSERT AS FOLLOWS:

(a) Liquid Membrane Forming Compounds

The curing compound shall be mixed thoroughly within 1 h before use. The ~~rate of~~ application shall be ~~as approved, with~~ a minimum spreading rate ~~per application~~ of 1 gal. of liquid coating for *every* 150 sq ft of concrete surface. *Curing compound shall be applied to provide a uniform, solid, white opaque coverage on all surfaces, similar to a white sheet of paper.*

~~Curing compound shall be applied to provide a uniform, solid, white opaque coverage on all surfaces, similar to a white sheet of paper.~~ All concrete cured by this method shall receive two applications of the curing compound. The first application shall be applied immediately after surface water has disappeared and surface texturing has been applied. If formwork has been used, both applications of curing compound shall be applied immediately after the formwork is removed. The second application shall be applied after the first application has set.

REVISION TO STANDARD SPECIFICATIONS

SECTION 101 - DEFINITIONS AND TERMS
101.01 Abbreviations
DIVISION 500 - CONCRETE PAVEMENT (various sections)

SECTION 506, BEGIN LINE 42, DELETE AND INSERT AS FOLLOWS:

The rapid hardening hydraulic cement or ~~calciumsulfoaluminate~~*calcium sulfoaluminate*, CSA, cement type selected shall be a type shown in ASTM C1600 that will enable opening to traffic in accordance with the contract requirements. Food grade citric acid may be used as an organic retarding admixture in concrete utilizing CSA cement. The use and strength of food grade citric acid, or any other admixture, shall be approved in writing by the manufacturer of the CSA cement. The basis for use for the food grade citric acid will be visual inspection.

A bonding agent shall be selected from the QPL of Non-Vapor Barrier Type Bonding Agents.

506.03 Concrete Mix Design

A concrete mix design submittal, CMDS, shall be in accordance with 506.04. The CMDS shall be submitted to the DTE. The CMDS shall be submitted a minimum of seven calendar days prior to the trial batch~~. The CMDS shall use~~*utilizing* the Department provided spreadsheet and shall include the following:

(a) a list of all ingredients, including the type of CSA cement, if applicable
(b) the source of all materials
(c) the fine to total aggregate ratio
(d) the gradation of the aggregates
(~~d~~*e*) the absorption of the aggregates
(~~e~~*f*) the SSD bulk specific gravity of the aggregates
(~~f~~*g*) the specific gravity of ~~pozzolan~~*all SCMs*
(~~g~~*h*) the batch weights
(~~h~~*i*) the names of all admixtures
(~~i~~*j*) the admixture dosage rates and the manufacturer's recommended range.

SECTION 506, BEGIN LINE 80, DELETE AND INSERT AS FOLLOWS:

The CMDS shall be used to conduct a trial batch in accordance with 506.05. Upon completion of the ~~trail~~*trial* batch, the Contractor shall *update the* submit*ted* ~~the~~ CMDS ~~and~~*to include* the Contractor's and the Engineer's trial batch *test* results ~~for the CMDS to the DTE. The results shall be submitted to the DTE utilizing~~*on* the Department ~~furnished~~*provided* spreadsheet a minimum of three work days prior to production. Production shall not commence until the DTE has ~~assigned a mix number to the CMDS. The concrete mix design will henceforth be identified as a~~*issued the* concrete mix design for production, CMDP.

A CMDP *in accordance with 506.04* from another contract in the current or previous calendar year may be submitted *to the DTE* for ~~review~~*consideration* for use on the current contract ~~to the DTE~~. The DTE will notify the Contractor when the review is

complete and ~~whether or not~~*if* the previously used CMDP can be used on the current contract.

A CMDP may be changed or adjusted in accordance with the following:

(a) Change in Materials

~~A change in a previously approved CMDP, for a given contract, to any of the following shall be submitted to the DTE as a CMDS, referencing the original CMDP.~~ *Any of the following changes to a CMDP shall require a new CMDS to be submitted to the DTE, referencing the original CMDP.*

1. cement source or type
2. ~~pozzolan~~*SCM* source or type
3. coarse aggregate source or type
4. admixture type.

A trial batch shall be conducted in accordance with 506.05.

(b) Adjustments to Materials

~~An adjustment in a previously approved CMDP, for a given contract, to any of the following shall be submitted to the DTE as a CMDS, referencing the original CMDP.~~ *Any of the following adjustments to a CMDP shall require a new CMDS to be submitted to the DTE, referencing the original CMDP.*

1. admixture source
2. admixture product of same type and from same source designated in the original CMDP
3. fine aggregate source
4. fine to total aggregate ratio in excess of ±3% from the value designated by the original CMDP
5. Increase in cement content from amount designated in the original CMDP.

The new CMDS shall be submitted to the DTE utilizing the Department *provided* spreadsheet a minimum of one work day prior to production. A trial batch or verification testing is not required ~~for approval~~. Production shall not commence ~~without an approved~~*until the DTE has issued the* CMDP.

(c) Other Adjustments

~~Other a~~*A*djustments ~~in previously approved~~*to the admixture dosage rate for a* CMDP~~, for a given contract, to the admixture dosage rate~~ will be allowed and DTE notification and review prior to use is not required.

REVISION TO STANDARD SPECIFICATIONS

SECTION 101 - DEFINITIONS AND TERMS
101.01 Abbreviations
DIVISION 500 - CONCRETE PAVEMENT (various sections)

SECTION 506, BEGIN LINE 412, DELETE AND INSERT AS FOLLOWS:

(b) For Patches Greater than 15 ft in Length

For patches containing portland cement, the mixing and transportation shall be in accordance with 502.10. If concrete containing CSA cement is used, it may be batched and mixed in a mobile volumetric mixer meeting the requirements of 722.09, regardless of the patch length. Calibration of the mobile mixer shall be in accordance with 722.13. Alternatively, a mixer from a CSA cement supplier may be used, ~~contingent upon approval~~*if approved* by the Engineer.

SECTION 506, BEGIN LINE 523, DELETE AND INSERT AS FOLLOWS:

Joint filler material with vertical slits or cuts will be rejected. Grout retention discs shall be installed to make the annular space between the dowel and the oversized hole mortar tight. The joint material may be spliced along vertical joints that are joined and sealed with tape. The joint material shall not be spliced in the horizontal direction. An alternate method of installing a joint filler that has a mortar tight seal around the dowel bar may be ~~allowed~~*used* if approved by the Engineer.

SECTION 507, BEGIN LINE 108, DELETE AND INSERT AS FOLLOWS:

507.06 Profiling

Profiling consists of the diamond grinding of the pavement. The grinding shall be completed by mechanical grinding equipment in accordance with 508.08(c). Grinding shall be completed in a longitudinal direction and shall begin and end at lines normal to the pavement centerline in any ground section. The operation shall be coordinated such that the slurry or residue materials are continuously removed from the pavement. The slurry shall not encroach into adjacent pavement lanes carrying traffic, or flow into gutters or other drainage facilities and shall be immediately and directly deposited into a tanker truck and removed from the jobsite. Final disposal of the material shall be ~~in an approved manner and~~ in accordance with 104.07 *and 203.08*. Pavement smoothness will be measured and adjusted in accordance with 501.25 and 501.28(d) after the cracks are routed, cleaned, and sealed in accordance with 507.03 and joints are sawed, cleaned, and resealed in accordance with 507.04.

SECTION 508, BEGIN LINE 19, DELETE AS FOLLOWS:

All scales shall be accurate to within ±0.5% throughout their range ~~unless otherwise approved~~. For applied loads less than 1,000 lb on the cement scale and 4,000 lb on the aggregate scale, the scales shall be accurate to 2.0% or 1 gradation.

SECTION 508, BEGIN LINE 56, DELETE AND INSERT AS FOLLOWS:

(d) Hoppers

Weighing hoppers shall be constructed to eliminate accumulation of materials and to discharge fully. The fine aggregate and coarse aggregate shall be weighed separately into a weigh hopper in the respective amounts defined in the CMD. Separate scales and hoppers shall be used for weighing the cement. ~~Pozzolan~~*SCM*s may be weighed into the cement hopper in one cumulative operation provided that the portland cement is weighed

in first.

SECTION 509, BEGIN LINE 89, DELETE AND INSERT AS FOLLOWS:

[D] The maximum allowable shrinkage will only apply if the Contractor requests to omit tooling as part of re-establishing the longitudinal joint prior to sawing. Testing shall be in accordance with ASTM C157 and conducted on specimens cast using the same materials stated in the CMDS. ~~Approval will be based on a~~ *A* type A certification in accordance with 916 ~~which~~ shall be ~~submitted~~*provided* to the Department's Concrete Engineer.

SECTION 509, BEGIN LINE 145, DELETE AND INSERT AS FOLLOWS:

[F] The maximum allowable shrinkage will only apply if the Contractor requests to omit tooling the longitudinal joint prior to sawing. Testing shall be in accordance with ASTM C157 and conducted on specimens cast from concrete at the trial batch. ~~Approval will be based on a~~ *A* type A certification in accordance with 916~~, which~~ shall be ~~submitted~~*provided* to the Department's Concrete Engineer.

(c) RSP

Prepackaged RSP material may be extended with a coarse aggregate as recommended by the manufacturer. Water shall be added in an amount not to exceed the amount recommended by the manufacturer. The material shall meet the same requirements for slump, compressive strength, and shrinkage as stated in 509.04(b).

509.05 Quality Control Plan

A quality control plan, QCP, shall be in accordance with sections 1.1 through 4.7 of ITM 803, except that the Quality Control Technician shall be an ACI Certified Technician, Level I or higher. *The QCP shall be submitted to the Engineer a minimum of 15 days prior to commencing PCCP joint repair. Work shall not begin until written notice has been received that the QCP was accepted by the Engineer.* As a minimum, the QCP shall contain the following information concerning aspects of producing, placing, finishing, and curing the joint repair concrete for joint restoration:

SECTION 509, BEGIN LINE 268, DELETE AND INSERT AS FOLLOWS:

509.08 PCCP Removal

PCCP removal areas for partial depth repairs will be determined by sounding and will be marked. The Contractor shall remove all concrete to the limits shown on the plans or as directed by the Engineer. A machine configured to safely and consistently mill the necessary profile as detailed on the plans shall be provided. The teeth on the milling head shall be spaced at either 1/2 in. or 5/8 in. The milling machine shall be ~~subject to approval~~ *approved* by the Engineer prior to the start of milling operations. Whenever possible, the rotating axis of the milling head shall operate perpendicular to the joint being repaired.

REVISION TO STANDARD SPECIFICATIONS

SECTION 101 - DEFINITIONS AND TERMS
101.01 Abbreviations
DIVISION 500 - CONCRETE PAVEMENT (various sections)

SECTION 509, BEGIN LINE 360, DELETE AND INSERT AS FOLLOWS:

(a) Joint Filler - General Requirements

The installation of joint filler is required before concrete placement and shall be of a width that matches the existing transverse or longitudinal joint being repaired or a minimum width of 3/8 in, whichever is greater. The joint filler shall extend at least 3 in. beyond the length of the patch area. Joint filler shall be installed as one piece for the depth of the repair. Splicing long lengths of joint filler may be allowed. The method of splicing shall be ~~subject to approval~~*as approved* by the Engineer.

SECTION 509, BEGIN LINE 389, DELETE AND INSERT AS FOLLOWS:

1. Tool the plastic repair concrete after placement to create a weak plane at the original joint location. The joint tooling equipment shall be identified in the QCP ~~and approved by the Engineer prior to use~~. Tooling of the joint may be eliminated if the concrete used in the patch has been verified by the Engineer as meeting the shrinkage requirements stated in 509.04.

SECTION 509, BEGIN LINE 477, DELETE AND INSERT AS FOLLOWS:

For RHCC, LMC, and LMC-VE, thoroughly soak the cleaned surface and maintain it in a wet condition for at least 2 h immediately prior to placing the repair concrete. Maintaining a wet surface shall be accomplished by covering the soaked surface with wet burlap. The burlap shall be re-wetted as necessary. A layer of white opaque polyethylene film, that is at least 4 mils thick, may be used to offset the need to rewet the burlap. Prior to placing the joint repair material, the burlap shall be removed. Any standing water in depressions, holes, or areas of concrete removal shall be blown out with compressed air or other type of blower sufficient for removal, or by ~~the use of an approved~~*using an approved* vacuum system. The surface shall be damp at time of placing the repair concrete. Bonding grout shall not be used.

COMMENTS AND ACTION

101.01 Abbreviations
DIVISION 500 - CONCRETE PAVEMENT (various sections)

DISCUSSION:
Mr. Reilman introduced and presented this item explain the intention to clean up the 500 spec section. Unnecessary terminology should be removed and other minor issues need updating.

Mr. Reilman proposed to incorporate the proposed changes in the various 500 sections into the 2024 spec book. Minor editorial revisions are as shown.

There was no further discussion and this item passed as submitted.

Motion: Mr. Reilman Second: Mr. Koch Ayes: 9 Nays: 0 FHWA Approval: YES	Action: _X_ Passed as Submitted ___ Passed as Revised ___ Withdrawn
2022 Standard Specifications Sections referenced and/or affected: 101 pg 3 Division 500 begin pg 403 thru 486. Recurring Special Provisions NONE Standard Drawing affected: NONE Design Manual Sections affected: NONE GIFE Sections cross-references: NONE	_X_ 2024 Standard Specifications ___ Revise Pay Items List ___ Create RSP (No.___) Effective: RSP Sunset Date: ___ Revise RSP (No.___) Effective: RSP Sunset Date: ___ Standard Drawing Effective: ___ Create RPD (No. ___) Effective: ___ GIFE Update ___ Frequency Manual Update ___ SiteManager Update

PROPOSAL TO STANDARDS COMMITTEE

PROBLEM(S) ENCOUNTERED: It has come to our attention that 205.03(e) refers to 202.08 for the requirements for cleaning up the wastewater from an overflowed or leaking concrete washout. 202.08 is the section on underground storage tanks. Other parts of the 202 section are more relevant to procedures that should be followed for disposing of soil contaminated by wastewater from concrete washout.

PROPOSED SOLUTION: Revise 205.03 to refer to the 202 section in full.

APPLICABLE STANDARD SPECIFICATIONS: 205.03

APPLICABLE STANDARD DRAWINGS: N/A

APPLICABLE DESIGN MANUAL SECTION: None

APPLICABLE SECTION OF GIFE: None

APPLICABLE RECURRING SPECIAL PROVISIONS: None

PAY ITEMS AFFECTED: None

APPLICABLE SUB-COMMITTEE ENDORSEMENT: ad hoc group of Tom Harris, Greg Couch and Cam Maschino

IF APPROVED AS RECURRING SPECIAL PROVISION OR PLAN DETAILS, PROPOSED BASIS FOR USE: All contracts with a 205 item

IMPACT ANALYSIS (attach report): Yes

Submitted By: Kurt Pelz

Title: Construction Technical Support Manager

Organization: INDOT

Phone Number: 317-691-4800

Date: May 16, 2022

IMPACT ANALYSIS REPORT CHECKLIST

Explain the business case as to why this item should be presented to the Standards Committee for approval. Answer the following questions with Yes, No or N/A.

Does this item appear in any other specification sections? No
Will approval of this item affect the Approved Materials List? No
Will this proposal improve:

Construction costs? No
Construction time? No
Customer satisfaction? No
Congestion/travel time? No
Ride quality? No

Will this proposal reduce operational costs or maintenance effort? No

Will this item improve safety:

For motorists? No
For construction workers? No

Will this proposal improve quality for:

Construction procedures/processes? Yes
Asset preservation? No
Design process? No

Will this change provide the contractor more flexibility? Yes

Will this proposal provide clarification for the Contractor and field personnel? Yes

Can this item improve/reduce the number of potential change orders? Yes

Is this proposal needed for compliance with:

Federal or State regulations? No
AASHTO or other design code? No

Is this item editorial? No

Provide any further information as to why this proposal should be placed on the Standards Committee meeting Agenda:

REVISION TO STANDARD SPECIFICATIONS

SECTION 205 - STORMWATER MANAGEMENT
205.03(e) Temporary BMPs

The Standard Specifications are revised as follows:

SECTION 205, BEGIN LINE 288, DELETE AS FOLLOWS:

Concrete washout capacity shall not be exceeded. Concrete wastewater shall not be allowed to leak onto the ground, run into storm drains, or into any body of water. Where concrete wastewater leaks onto the ground, all contaminated soils shall be excavated and disposed of in accordance with 202~~.08~~, except that all costs associated with excavation and disposal shall be the responsibility of the Contractor.

COMMENTS AND ACTION

205.03(e) Temporary BMPs

DISCUSSION:

This item was introduced and presented by Mr. Pelz who stated that 205.03(e) refers to 202.08 for the requirements for cleaning up the wastewater from an overflowed or leaking concrete washout. Specifications section 202.08 is the section on underground storage tanks. Other parts of the 202 section are more relevant to procedures that should be followed for disposing of soil contaminated by wastewater from concrete washout.

Mr. Pelz proposed to revise 205.03 to refer to the 202 section in full.

Ms. Mouser asked for explanation of removing the 202.08, which was explained by Mr. Pelz. Further clarification was provided by Mr. Harris.

This item passed as submitted.

Motion: Mr. Pelz Second: Mr. Novak Ayes: 9 Nays: 0 FHWA Approval: YES	Action: X Passed as Submitted __ Passed as Revised __ Withdrawn
2022 Standard Specifications Sections referenced and/or affected: 205.03(e) pg. 197 Recurring Special Provisions NONE Standard Drawing affected: NONE Design Manual Sections affected: NONE GIFE Sections cross-references: NONE	X 2024 Standard Specifications __ Revise Pay Items List __ Create RSP (No.____) Effective: _____ RSP Sunset Date: __ Revise RSP (No.__) Effective: RSP Sunset Date: __ Standard Drawing Effective: __ Create RPD (No. __) Effective: __ GIFE Update __ Frequency Manual Update __ SiteManager Update

PROPOSAL TO STANDARDS COMMITTEE

PROBLEM(S) ENCOUNTERED: The wording of Prevailing Wage provisions RSP 100-C-146, -147, and -148 are not in agreement with actual Department practices. Changes were made in practices reducing the risk of errors in bids, and Department internet publications. The RSPs and Department practices need contractually coordinated.

PROPOSED SOLUTION: Revise the Recurring Special Provisions so they are in agreement with our current standard proctices.

APPLICABLE STANDARD SPECIFICATIONS: 103.6 Wage and Labor Requirements

APPLICABLE STANDARD DRAWINGS: N.A.

APPLICABLE DESIGN MANUAL SECTION: N.A

APPLICABLE SECTION OF GIFE: N.A.

APPLICABLE RECURRING SPECIAL PROVISIONS: 100-C-146, 100-C-147, and 100-C-148

PAY ITEMS AFFECTED: N.A.

APPLICABLE SUB-COMMITTEE ENDORSEMENT: Contract Administration has secured INDOT Legal Services approval of provision language.

IF APPROVED AS RECURRING SPECIAL PROVISION OR PLAN DETAILS, PROPOSED BASIS FOR USE: Unchanged for current Basis For Use.

IMPACT ANALYSIS (attach report): Yes

Submitted By: John P Wooden

Title: Estimating Administrator

Organization: INDOT, Contract Administration

Phone Number: 317/233-5743

Date: May 20, 2022

IMPACT ANALYSIS REPORT CHECKLIST

Explain the business case as to why this item should be presented to the Standards Committee for approval. Answer the following questions with Yes, No or N/A.

Does this item appear in any other specification sections? No
Will approval of this item affect the Approved Materials List? No
Will this proposal improve:

Construction costs? No
Construction time? No
Customer satisfaction? No
Congestion/travel time? No
Ride quality? No

Will this proposal reduce operational costs or maintenance effort? No

Will this item improve safety:

For motorists? No
For construction workers? No

Will this proposal improve quality for:

Construction procedures/processes? No
Asset preservation? No
Design process? No

Will this change provide the contractor more flexibility? No

Will this proposal provide clarification for the Contractor and field personnel? Yes

Can this item improve/reduce the number of potential change orders? No

Is this proposal needed for compliance with:

Federal or State regulations? Yes
AASHTO or other design code? No

Is this item editorial? No

Provide any further information as to why this proposal should be placed on the Standards Committee meeting Agenda: N,A,

REVISION TO SPECIAL PROVISIONS

100-C-146 PAYMENT OF PREDETERMINED MINIMUM WAGE DETERMINATION (DAVIS-BACON ACT) General Decision Number IN20220001
100-C-147 PAYMENT OF PREDETERMINED MINIMUM WAGE DETERMINATION (DAVIS-BACON ACT) General Decision Number IN20220006
100-C-148 PAYMENT OF PREDETERMINED MINIMUM WAGE DETERMINATION (DAVIS-BACON ACT) General Decision Number IN

100-C-146 PAYMENT OF PREDETERMINED MINIMUM WAGE DETERMINATION
(DAVIS-BACON ACT)
General Decision Number IN20220001

(Revised XX-XX-XX)

General Decision Number IN20220001 shall apply to this contract.

The above referenced wage determination is available ~~at the Department's Contract Administration Division website location: http://www.in.gov/dot/div/contracts/letting/index.html~~ *from the USDOL at the SAM internet website https://sam.gov/content/wage-determinations. Any modification published there by the USDOL not later than 10 days prior to letting is applicable to this contract.*

~~The modification number and publication date for the General Decision effective for the bid opening is posted on the Contract Administration website ten days prior to the bid opening. The bidder shall enter the appropriate modification number, General Decision Number, and publication date in the proposal form.~~ *The Department will confirm the modification number and publication date for the General Decision effective for the bid opening. Notice of confirmation will be published on the Contract Administration website https://www.in.gov/dot/div/contracts/letting/index.html at least one week prior to the bid opening. The bidder shall acknowledge in applicable wage determination, modification, and publication date in the proposal form.*

REVISION TO SPECIAL PROVISIONS

100-C-146 PAYMENT OF PREDETERMINED MINIMUM WAGE DETERMINATION (DAVIS-BACON ACT) General Decision Number IN20220001
100-C-147 PAYMENT OF PREDETERMINED MINIMUM WAGE DETERMINATION (DAVIS-BACON ACT) General Decision Number IN20220006
100-C-148 PAYMENT OF PREDETERMINED MINIMUM WAGE DETERMINATION (DAVIS-BACON ACT) General Decision Number IN

100-C-147 PAYMENT OF PREDETERMINED MINIMUM WAGE DETERMINATION
(DAVIS-BACON ACT)
General Decision Number IN20220006

(Revised XX-XX-XX)

General Decision Number IN20220006 shall apply to this contract.

The above referenced wage determination is available ~~at the Department's Contract Administration Division website location: http://www.in.gov/dot/div/contracts/letting/index.html~~ *from the USDOL at the SAM internet website https://sam.gov/content/wage-determinations. Any modification published there by the USDOL not later than 10 days prior to letting is applicable to this contract.*

~~The modification number and publication date for the General Decision effective for the bid opening is posted on the Contract Administration website ten days prior to the bid opening. The bidder shall enter the appropriate modification number, General Decision Number, and publication date in the proposal form.~~*The Department will confirm the modification number and publication date for the General Decision effective for the bid opening. Notice of confirmation will be published on the Contract Administration website*
https://www.in.gov/dot/div/contracts/letting/index.html
at least one week prior to the bid opening. The bidder shall acknowledge in applicable wage determination, modification, and publication date in the proposal form.

REVISION TO SPECIAL PROVISIONS

100-C-146 PAYMENT OF PREDETERMINED MINIMUM WAGE DETERMINATION (DAVIS-BACON ACT) General Decision Number IN20220001
100-C-147 PAYMENT OF PREDETERMINED MINIMUM WAGE DETERMINATION (DAVIS-BACON ACT) General Decision Number IN20220006
100-C-148 PAYMENT OF PREDETERMINED MINIMUM WAGE DETERMINATION (DAVIS-BACON ACT) General Decision Number IN

100-C-148 PAYMENT OF PREDETERMINED MINIMUM WAGE DETERMINATION (DAVIS-BACON ACT)
General Decision Number IN_____

(Revised XX-XX-XX)

General Decision Number IN_____ shall apply to this contract.

The above referenced wage determination is available ~~at the Department's Contract Administration Division website location: http://www.in.gov/dot/div/contracts/letting/index.html~~ *from the USDOL at the SAM internet website https://sam.gov/content/wage-determinations. Any modification published there by the USDOL not later than 10 days prior to letting is applicable to this contract.*

~~The modification number and publication date for the General Decision effective for the bid opening is posted on the Contract Administration website ten days prior to the bid opening. The bidder shall enter the appropriate modification number, General Decision Number, and publication date on the form provided in the Proposal Book.~~*The Department will confirm the modification number and publication date for the General Decision effective for the bid opening. Notice of confirmation will be published on the Contract Administration website https://www.in.gov/dot/div/contracts/letting/index.html at least one week prior to the bid opening. The bidder shall acknowledge in applicable wage determination, modification, and publication date in the proposal form.*

COMMENTS AND ACTION

100-C-146 PAYMENT OF PREDETERMINED MINIMUM WAGE DETERMINATION (DAVIS-BACON ACT)
General Decision Number IN20220001
100-C-147 PAYMENT OF PREDETERMINED MINIMUM WAGE DETERMINATION (DAVIS-BACON ACT)
General Decision Number IN20220006
100-C-148 PAYMENT OF PREDETERMINED MINIMUM WAGE DETERMINATION (DAVIS-BACON ACT)
General Decision Number IN

DISCUSSION:
Mr. Wooden introduced and presented this item stating that the wording in provisions 100-C-146, -147, and -148 are not in agreement with actual Department practices. Changes were made in practices reducing the risk of errors in bids, and Department internet publications. The RSPs and Department practices need to be contractually coordinated.

Mr. Wooden proposed to revise the RSPs so they are in agreement with our current standard practices.

There was no further discussion and this item passed as submitted.

Motion: Mr. Wooden Second: Mr. Novak Ayes: 9 Nays: 0 FHWA Approval: YES	Action: X Passed as Submitted ___ Passed as Revised ___ Withdrawn
2022 Standard Specifications Sections referenced and/or affected: 103.6 begin pg 28. Recurring Special Provisions 100-C-146, 100-C-147, and 100-C-148 Standard Drawing affected: NONE Design Manual Sections affected: NONE GIFE Sections cross-references: NONE	___ 2024 Standard Specifications ___ Revise Pay Items List ___ Create RSP (No.___) Effective: RSP Sunset Date: X Revise RSP (No. 100-C-146, 100-C-147, 100-C- 148) Effective: December 1, 2022 RSP Sunset Date: ___ Standard Drawing Effective: ___ Create RPD (No. ___) Effective: ___ GIFE Update ___ Frequency Manual Update ___ SiteManager Update

PROPOSAL TO STANDARDS COMMITTEE

PROBLEM(S) ENCOUNTERED: Precast concrete box structures and three-sided structures that require load rating require a longer review time than the 14 calendar days specified in 105.02.

PROPOSED SOLUTION: Section 105.02 will be updated to indicate that working drawings that include bridge load rating will be returned either approved or showing changes or corrections required within 28 calendar days of receipt.

APPLICABLE STANDARD SPECIFICATIONS: 105.02, 714.04(c) item 9 (no change), 723.04(c) item 10 (no change)

APPLICABLE STANDARD DRAWINGS: N/A

APPLICABLE DESIGN MANUAL SECTION: 14-1.02(08) (no changes required)

APPLICABLE SECTION OF GIFE: Section 29.2 (no changes required as a result of the proposed change in review time)

APPLICABLE RECURRING SPECIAL PROVISIONS: 700-B-301d (no changes required)

PAY ITEMS AFFECTED: N/A

APPLICABLE SUB-COMMITTEE ENDORSEMENT: Ad hoc committee including Joe Novak, Derrick Hauser, Jennifer Hart, Stephanie Wagner, and Elizabeth Mouser.

IF APPROVED AS RECURRING SPECIAL PROVISION OR PLAN DETAILS, PROPOSED BASIS FOR USE: Contracts that include 714 or 723 pay items.

IMPACT ANALYSIS (attach report):

Submitted By: Pete White, PE

Title: Design Manager

Organization: INDOT Bridge Engineering

Phone Number: 317-232-5371

Date: May 25, 2022

IMPACT ANALYSIS REPORT CHECKLIST

Explain the business case as to why this item should be presented to the Standards Committee for approval. Answer the following questions with Yes, No or N/A.

Does this item appear in any other specification sections? No reference to review time of working drawings appears in other specification sections.
Will approval of this item affect the Approved Materials List? No
Will this proposal improve:

Construction costs? No
Construction time? No
Customer satisfaction? No
Congestion/travel time? No
Ride quality? No

Will this proposal reduce operational costs or maintenance effort? No

Will this item improve safety:

For motorists? No
For construction workers? No

Will this proposal improve quality for:

Construction procedures/processes? No
Asset preservation? No
Design process? No

Will this change provide the contractor more flexibility? No

Will this proposal provide clarification for the Contractor and field personnel? Yes

Can this item improve/reduce the number of potential change orders? Yes

Is this proposal needed for compliance with:

Federal or State regulations? No
AASHTO or other design code? No

Is this item editorial? No

Provide any further information as to why this proposal should be placed on the Standards Committee meeting Agenda: The change will greatly reduce the risk of discovering an issue in the load rating after working drawings have been approved.

The Standard Specifications are revised as follows:

SECTION 105, BEGIN LINE 17, INSERT AS FOLLOWS:

105.02 Plans and Working Drawings

Road plans will show in detail structures of up to and including 20 ft spans, lines, grades, typical cross sections of the improvement, and general cross sections. They may also show general features of bridges. Bridge plans will show general plans and details of bridges.

Working drawings as defined in 101.78 shall be furnished.

All working drawings and design calculations shall include the contract number, the Contractor's name, and contact person.

Working drawings shall be submitted as soon as practical after contract award in a format acceptable to the Engineer. Working drawings will be reviewed for design features only. The Contractor shall be responsible for dimensions, accuracy, and fit of work. Welding symbols used on working drawings shall be those shown in AWS A2.4 standards.

Design calculations required for approval for construction purposes shall be submitted as soon as practical after contract award in a format acceptable to the Engineer. When requested, a longhand example of the design methodology shall be furnished if the design calculations are in a computer-printout format.

Working drawings and design calculations for permanent work items shall be signed by and shall bear the seal of a professional engineer. Design calculations and drawings shall be checked for accuracy by a second qualified individual. This individual shall include their initials on the drawings and calculations. The qualifications of the checker shall be commensurate with the items being reviewed.

Working drawings for temporary work items shall be signed by and shall bear the seal of a professional engineer.

Working drawings shall be furnished for commercially available patented devices that appear on a QPL as published by the Department. Drawings shall be signed by and shall bear the seal of a licensed professional engineer. However, the professional engineer signing and stamping these drawings may be licensed in any state. Manufacturer's installation manuals shall be provided with the working drawings and will remain the property of the Department.

Working drawings and design calculations will be returned either approved or showing changes or corrections required within 14 calendar days of receipt. *Working drawings that include bridge load rating in accordance with 714.04(c) item 9 or 723.04(c) item 10 will be returned either approved or showing changes or corrections required*

within 28 calendar days of receipt. If required to be changed or corrected, the drawings shall be resubmitted until they receive approval.

Fabrication or construction shall not start on an item of work before working drawings are approved. Authorized alterations will be endorsed on approved plans or shown on supplementary sheets. All work done or material ordered prior to the approval of such plans and drawings shall be at the risk of the Contractor. Department approval of working drawings will not release the Contractor from the responsibility for errors, adequacy or safety of falsework, cofferdams, or other temporary work or risk in connection with the work. Prior to final acceptance, the Contractor shall provide a copy of all approved working drawings, including all approved modifications.

COMMENTS AND ACTION

105.02 Plans and Working Drawings

DISCUSSION:

This item was introduced and presented by Mr. White who explained that precast concrete box structures and three-sided structures that require load rating require a longer review time than the 14 calendar days specified in 105.02.

Mr. White proposed that Section 105.02 will be updated to indicate that working drawings that include bridge load rating will be returned either approved or showing changes or corrections required within 28 calendar days of receipt.

Mr. Smart asked if the clock resets after the 28 day review time. Mr. White said yes, but he does not anticipate any problems with that, and that each will be treated on a case-by-case basis. Mr. Osborn asked if this will have an impact on the process. Mr. White stated that this should not have a significant change to the current process. Mr. White provided further clarification as to how the process works.

There was no further discussion and this item passed as submitted.

Motion: Mr. White Second: Mr. Novak Ayes: 9 Nays: 0 FHWA Approval: YES	Action: X Passed as Submitted __ Passed as Revised __ Withdrawn
2022 Standard Specifications Sections referenced and/or affected: 105.02, 714.04(c) item 9 (no change), 723.04(c) item 10 (no change). Recurring Special Provisions or Plan Details: 700-B-301d (no changes required) Standard Drawing affected: NONE Design Manual Sections affected: 14-1.02(08) (no changes required) GIFE Sections cross-references: Section 29.2 (no changes required as a result of the proposed change in review time)	X 2024 Standard Specifications __ Revise Pay Items List X Create RSP (No. 105-C-275) Effective: December 1, 2022 RSP Sunset Date: __ Revise RSP (No.__) Effective: RSP Sunset Date: __ Standard Drawing Effective: __ Create RPD (No. __) Effective: __ GIFE Update __ Frequency Manual Update __ SiteManager Update

PROPOSAL TO STANDARDS COMMITTEE

PROBLEM(S) ENCOUNTERED: Answers given by the Department to questions asked during the letting advertisement period need to be made binding upon the Contractor and Department. Not all Department answers result in revisions when possibly they should.

PROPOSED SOLUTION: Make the published Question and Answers Form a material part of the contract documents. This binds both Contractor and Department to the answers provided. Define the coordination of the Question and Answer form as having the same standing as Unique Special Provisions.

APPLICABLE STANDARD SPECIFICATIONS: SECTION 105 - CONTROL OF WORK

APPLICABLE STANDARD DRAWINGS: n.a.

APPLICABLE DESIGN MANUAL SECTION: n.a.

APPLICABLE SECTION OF GIFE: n.a.

APPLICABLE RECURRING SPECIAL PROVISIONS: Create new 105 RSP

PAY ITEMS AFFECTED: n.a.

APPLICABLE SUB-COMMITTEE ENDORSEMENT: n.a.

IF APPROVED AS RECURRING SPECIAL PROVISION OR PLAN DETAILS, PROPOSED BASIS FOR USE: Required for all contracts.

IMPACT ANALYSIS (attach report): n.a..

Submitted By: John Wooden for Contract Administartion Division.

Title: Estimating Administrator

Organization: Contract Administration Division

Phone Number: 317-233-5743

Date: May 25, 2022

IMPACT ANALYSIS REPORT CHECKLIST

Explain the business case as to why this item should be presented to the Standards Committee for approval. Answer the following questions with Yes, No or N/A.

Does this item appear in any other specification sections? No
Will approval of this item affect the Approved Materials List? No
Will this proposal improve:

Construction costs? n.a.
Construction time? n.a.
Customer satisfaction? Yes
Congestion/travel time? n.a.
Ride quality? n.a.

Will this proposal reduce operational costs or maintenance effort? n.a.

Will this item improve safety:

For motorists? n.a.
For construction workers? n.a.

Will this proposal improve quality for:

Construction procedures/processes? n.a.
Asset preservation? n.a.
Design process? n.a.

Will this change provide the contractor more flexibility? n.a.

Will this proposal provide clarification for the Contractor and field personnel? Yes

Can this item improve/reduce the number of potential change orders? Yes

Is this proposal needed for compliance with:

Federal or State regulations? No
AASHTO or other design code? No

Is this item editorial? No

Provide any further information as to why this proposal should be placed on the Standards Committee meeting Agenda: Clarification.

105-C-XXX COORDINATION OF PRE-BID QUESTIONS AND ANSWERS AS DOCUMENTS

(Adopted xx-xx-xx)

The Standard Specifications are revised as follows:

SECTION 105, BEGIN LINE 108, ~~DELETE AND~~ INSERT AS FOLLOWS:

105.04 Coordination of Plans, Standard Specifications, and Special Provisions

The Standard Specifications, the plans, special provisions, and all supplementary documents are essential parts of the contract. A requirement occurring in one is as binding as though occurring in all. They are intended to be complementary and to describe and provide for a complete work. In case of discrepancy, calculated dimensions will govern over scaled dimensions; and the following relationships apply:

Instruction to Bidders and description of pay items listed in the Schedule of Pay Items	hold over:	*Question and Answer Form* Unique Special Provisions Plans Recurring Special Provisions Standard Specifications
Question and Answer Form	*hold over*	*Unique Special Provisions* *Plans* *Recurring Special Provisions* *Standard Specifications*
Unique Special Provisions	hold over:	Plans Recurring Special Provisions Standard Specifications
Plans	hold over:	Recurring Special Provisions Standard Specifications
Recurring Special Provisions	hold over:	Standard Specifications

The Contract pre-bid Question and Answer Form~~s~~ published on the Department's Contract Administration Division ~~W~~website are a part of the Contract Letting Documents. In case of discrepancy relative to other contract documents, the Question and Answer Form~~s~~ shall take precedence over Unique Special Provisions. In case of discrepancy relative to other contract documents, the QPL will be regarded the same as Recurring Special Provisions. Notes on the plans which are not also included in either the special provisions or among the general notes portion of the plans, and refer to payment, non-payment, or cost to be included in that of other pay items, will not govern over

specifications. The precedence outlined herein shall not absolve the Contractor of its responsibility in accordance with 107.17.

Advantage shall not be taken of any apparent error or omission in the plans or specifications. In the event such an error or omission is discovered, the Engineer shall be notified immediately. Such corrections and interpretations as may be deemed necessary for fulfilling the intent of the plans and specifications will then be made.

COMMENTS AND ACTION

105-C-XXX COORDINATION OF PRE-BID QUESTIONS AND ANSWERS AS DOCUMENTS

DISCUSSION:

This item was introduced and presented by Mr. Wooden who explained that answers given by the Department to questions asked during the letting advertisement period need to be made binding upon the Contractor and Department. Not all Department answers result in revisions when, possibly, they should.

Mr. Wooden proposed to make the published Question and Answers Form a material part of the contract documents. This binds both the Contractor and the Department to the answers provided, and defines the coordination of the Question and Answer form as having the same standing as Unique Special Provisions.

Mr. Koch mentioned that the proposal page mentions the Q & A form, so does this now become redundant by placing this in the 105.04. Ms. Jelks stated that a little redundancy doesn't hurt, but they can discuss this separately after the meeting.

Ms. Mouser asked if this should be placed to hold over other documents. Mr. Pankow stated that sometimes the Q&A responses have not been good for the Department. Mr. Wooden explained that some Q&A items happen right before the letting. Ms. Mouser stated that this could be a problem. Mr. Mueller mentioned that the Q&A responses could result in postponing the letting. Mr. Wooden concurred.

Ms. Thomas stated that questions are not normally posted right away, and the responses are not posted until later, but normally the Friday prior to the letting. Further discussion ensued as to how this process works, and Mr. Novak stated that this is basically spelling out how things have been done.

There was no further discussion and this item passed as submitted.

Motion: Mr. Wooden Second: Mr. Koch Ayes: 9 Nays: 0 FHWA Approval: YES	Action: X Passed as Submitted ___ Passed as Revised ___ Withdrawn
2022 Standard Specifications Sections referenced and/or affected: 105 pg 45-46. Recurring Special Provisions: NONE 105-C-XXX COORDINATION OF PRE-BID QUESTIONS AND ANSWERS AS DOCUMENTS (proposed new) Standard Drawing affected: NONE Design Manual Sections affected: NONE GIFE Sections cross-references: NONE	X 2024 Standard Specifications ___ Revise Pay Items List X Create RSP (No. 105-C-276) Effective: December 1, 2022 RSP Sunset Date: ___ Revise RSP (No.___) Effective: RSP Sunset Date: ___ Standard Drawing Effective: ___ Create RPD (No. ___) Effective: ___ GIFE Update ___ Frequency Manual Update ___ SiteManager Update

STANDARD SPECIFICATIONS, SPECIAL PROVISIONS AND STANDARD DRAWINGS

REVISION TO STANDARD DRAWINGS

PROPOSAL TO STANDARDS COMMITTEE

PROBLEM(S) ENCOUNTERED: At the Standards Committee meeting on 3/17/2022 the move of 801-TCTC-11 to 801-TCCO-08 and the move of 801-TCTC-12 to 801-TCCO-09 were approved as being the more logical place for tubular marker details of non-freeway crossovers. However, the mark-up did not indicate whether the move would involve updating the stamp and signatures.

PROPOSED SOLUTION: Move 801-TCTC-11 to 801-TCCO-08 and 801-TCTC-12 to 801-TCCO-09 as an editorial change without updating the stamp and signatures. The 801-TCCO series currently ends at 801-TCCO-07 and the series does not have an index sheet.

APPLICABLE STANDARD SPECIFICATIONS: 801.08

APPLICABLE STANDARD DRAWINGS: 801-TCTC-11 and 801-TCTC-12

APPLICABLE DESIGN MANUAL SECTION: 503-7.02

APPLICABLE SECTION OF GIFE: N/A

APPLICABLE RECURRING SPECIAL PROVISIONS: N/A

PAY ITEMS AFFECTED: N/A

APPLICABLE SUB-COMMITTEE ENDORSEMENT: Yes

IF APPROVED AS RECURRING SPECIAL PROVISION OR PLAN DETAILS, PROPOSED BASIS FOR USE: N/A

IMPACT ANALYSIS (attach report): Yes

Submitted By: Joe Bruno on behalf of Dave Boruff

Title: Sr. Traffic Engineer, Signals & Markings

Organization: INDOT

Phone Number: (317) 234-7949

Date: 5/23/2022

IMPACT ANALYSIS REPORT CHECKLIST

Explain the business case as to why this item should be presented to the Standards Committee for approval. Answer the following questions with Yes, No or N/A.

Does this item appear in any other specification sections? No
Will approval of this item affect the Qualified Products List? No
Will this proposal improve:

Construction costs? No
Construction time? No
Customer satisfaction? Yes
Congestion/travel time? No
Ride quality? No

Will this proposal reduce operational costs or maintenance effort? No

Will this item improve safety:

For motorists? No
For construction workers? No

Will this proposal improve quality for:

Construction procedures/processes? Yes
Asset preservation? No
Design process? Yes

Will this change provide the contractor more flexibility? No

Will this proposal provide clarification for the Contractor and field personnel? Yes

Can this item improve/reduce the number of potential change orders? No

Is this proposal needed for compliance with:

Federal or State regulations? No
AASHTO or other design code? No

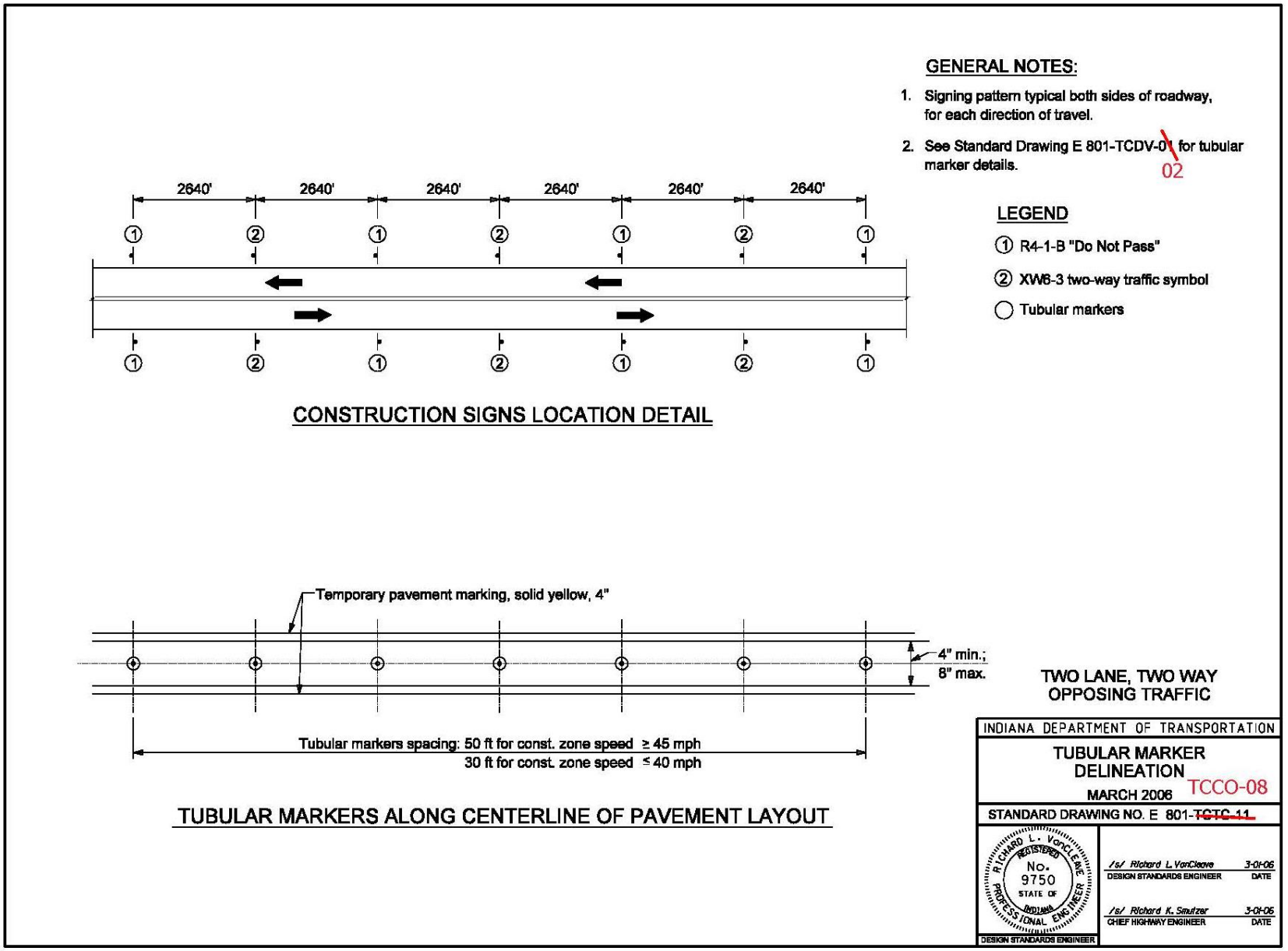
Is this item editorial? Yes

Provide any further information as to why this proposal should be placed on the Standards Committee meeting Agenda: N/A

REVISIONS TO STANDARD DRAWINGS

E 801-TCTC-11 TUBULAR MARKER DELINEATION (SHOWN MARKUPS)

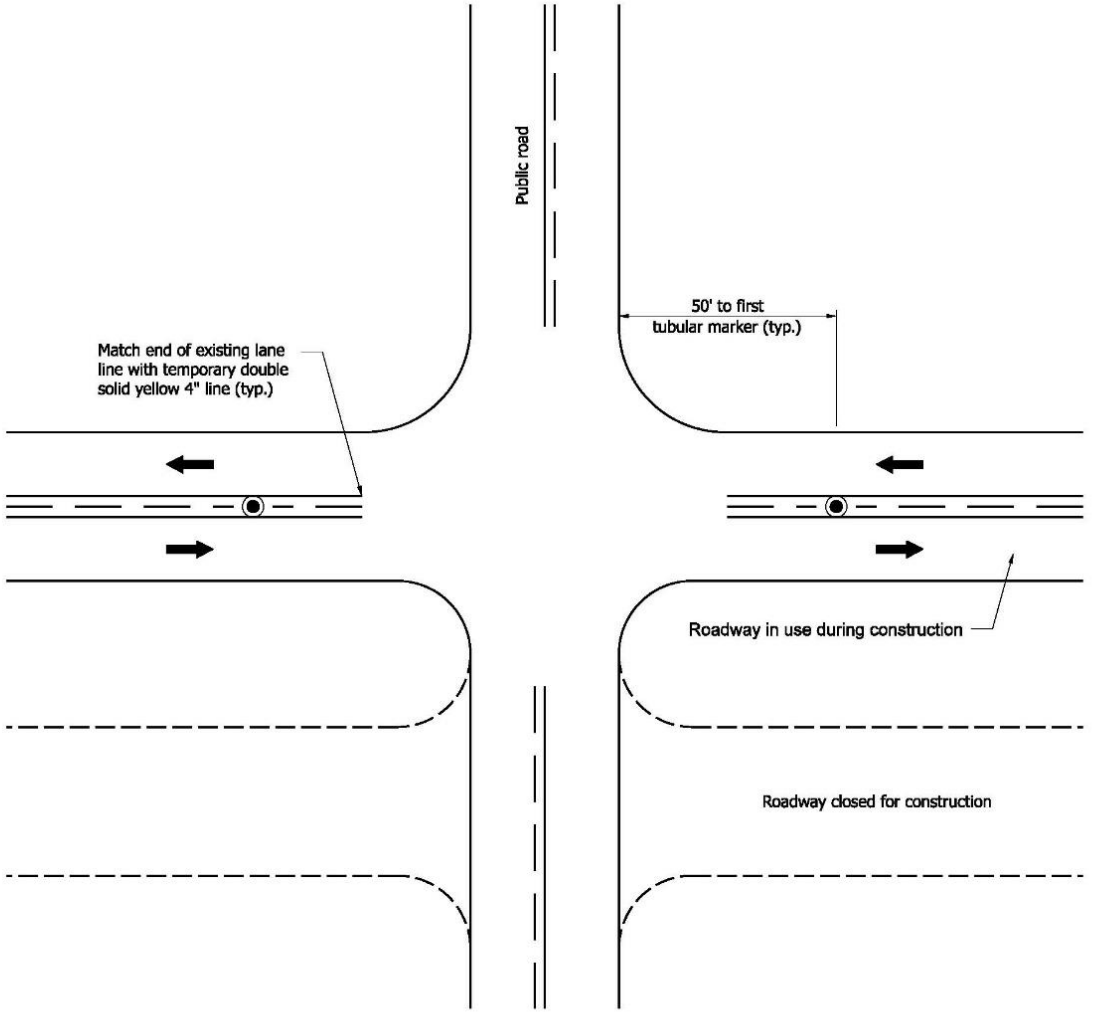
Move to 801-TCCO-08



REVISIONS TO STANDARD DRAWINGS

E 801-TCTC-12 TUBULAR MARKER DELINEATION AT INTERSECTION (SHOWN MARKUPS)

Move to 801-TCCO-09



GENERAL NOTES:

1. See Standard Drawing E 801-TCDV-01 02 for tubular marker details.

LEGEND

Tubular markers

INDIANA DEPARTMENT OF TRANSPORTATION

TUBULAR MARKER DELINEATION
AT INTERSECTION

SEPTEMBER 2007 TCCO-09

STANDARD DRAWING NO. E 801-~~TCTC-12~~

RICHARD L. VanCLEAVE REGISTERED No. 9750 STATE OF INDIANA PROFESSIONAL ENGINEER

DESIGN STANDARDS ENGINEER

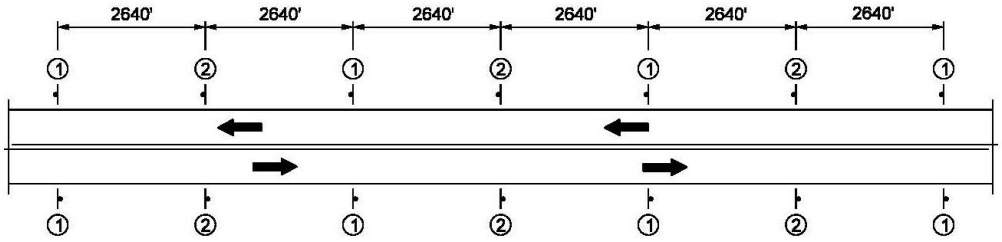
/s/ Richard L. VanCleave 09/04/07
DESIGN STANDARDS ENGINEER DATE

/s/ Mark A. Miller 09/04/07
CHIEF HIGHWAY ENGINEER DATE

E 801-TCCO-08 TUBULAR MARKER DELINEATION (PROPOSED DRAFT)

GENERAL NOTES:

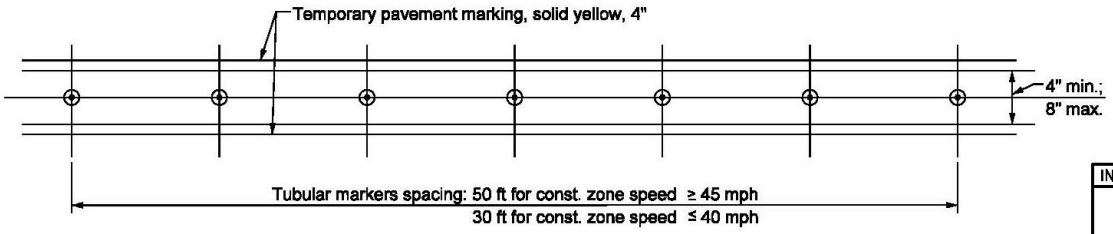
1. Signing pattern typical both sides of roadway, for each direction of travel.
2. See Standard Drawing E 801-TCDV-02 for tubular marker details.



LEGEND

① R4-1-B "Do Not Pass"
② XW6-3 two-way traffic symbol
◯ Tubular markers

CONSTRUCTION SIGNS LOCATION DETAIL



TUBULAR MARKERS ALONG CENTERLINE OF PAVEMENT LAYOUT

TWO LANE, TWO WAY
OPPOSING TRAFFIC

INDIANA DEPARTMENT OF TRANSPORTATION

TUBULAR MARKER
DELINEATION

MARCH 2006

STANDARD DRAWING NO. E 801-TCCO-08

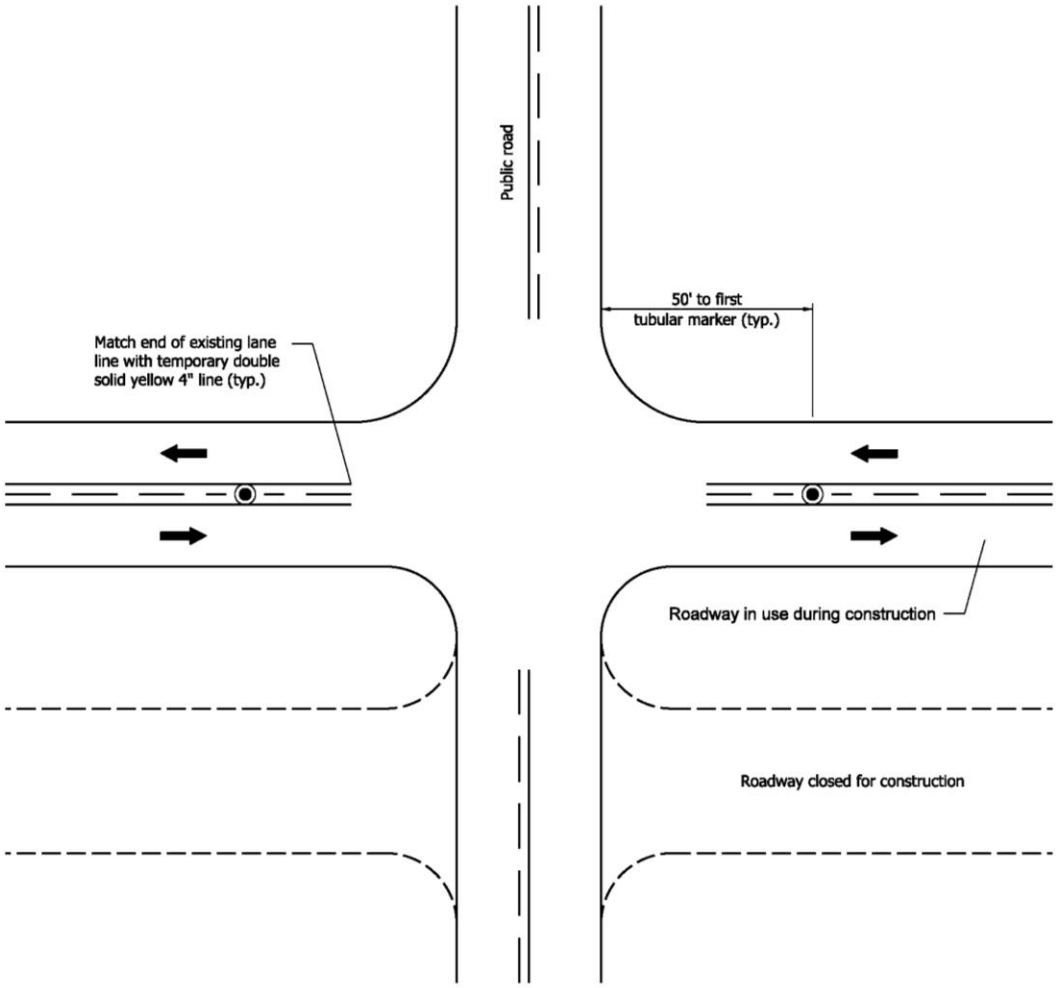
RICHARD L. VanCLEAVE REGISTERED No. 9750 STATE OF Indiana PROFESSIONAL ENGINEER
DESIGN STANDARDS ENGINEER

/s/ Richard L VanCleave 3-01-06
DESIGN STANDARDS ENGINEER DATE

/s/ Richard K. Smutzer 3-01-06
CHIEF HIGHWAY ENGINEER DATE

REVISIONS TO STANDARD DRAWINGS

E 801-TCCO-09 TUBULAR MARKER DELINEATION AT INTERSECTION (PROPOSED DRAFT)



GENERAL NOTES:

1. See Standard Drawing E 801-TCDV-02 for tubular marker details.

LEGEND

◉ Tubular markers

INDIANA DEPARTMENT OF TRANSPORTATION

TUBULAR MARKER DELINEATION
AT INTERSECTION
SEPTEMBER 2007

STANDARD DRAWING NO. E 801-TCCO-09

RICHARD L. VanCLEAVE REGISTERED No. 9750 STATE OF INDIANA PROFESSIONAL ENGINEER

/s/ Richard L. VanCleave 09/04/07
DESIGN STANDARDS ENGINEER DATE

/s/ Mark A. Miller 09/04/07
CHIEF ENGINEER DATE

COMMENTS AND ACTION

E 801-TCCO-08 TUBULAR MARKER DELINEATION
E 801-TCCO-09 TUBULAR MARKER DELINEATION AT INTERSECTION

DISCUSSION:

Mr. Bruno, sitting in as proxy for Mr. Boruff, introduced and presented this item stating that at the Standards Committee meeting on 3/17/2022, the move of 801-TCTC-11 to 801-TCCO-08 and the move of 801-TCTC-12 to 801-TCCO-09 were approved as being the more logical place for tubular marker details of non-freeway crossovers. However, the mark-up did not indicate whether the move would involve updating the stamp and signatures.

Mr. Bruno proposed to move 801-TCTC-11 to 801-TCCO-08 and 801-TCTC-12 to 801-TCCO-09 as an editorial change without updating the stamp and signatures. The 801-TCCO series currently ends at 801-TCCO-07 and the series does not have an index sheet.

Mr. Bazlamit asked to modify this motion to be okay with these two sheets but that the other sheets in the series be restamped as updated. Mr. Bruno provided clarification of all of the drawings in the process, and that this particular item is merely editorial.

There was no further discussion and this item passed as submitted.

Motion: Mr. Bruno Second: Mr. Novak Ayes: 10 Nays: 0 FHWA Approval: YES	Action: X Passed as Submitted __ Passed as Revised __ Withdrawn
2022 Standard Specifications Sections referenced and/or affected: 801.08 pg. 869. Recurring Special Provisions NONE Standard Drawing affected: 801-TCTC-11 and 801-TCTC-12 Design Manual Sections affected: 503-7.02 GIFE Sections cross-references: NONE	__ 2024 Standard Specifications __ Revise Pay Items List __ Create RSP (No.__) Effective: RSP Sunset Date: __ Revise RSP (No.__) Effective: RSP Sunset Date: X as Standard Drawings E 801-TCCO-08 and -09 Effective: September 1, 2022 __ Create RPD (No. __) Effective: __ GIFE Update __ Frequency Manual Update __ SiteManager Update

PROPOSAL TO STANDARDS COMMITTEE

PROBLEM(S) ENCOUNTERED: It came to the Department's attention that the hydrodemolition calibration process was not completely clear regarding the criteria for the verification area. Also, within SS 722.16, it came to our attention that the listed pre-established price list for additional overlay quantity that exceeds the Department's bridge deck overlay budget does not reflect the actual cost that is being incurred by the Contractor for the material.

PROPOSED SOLUTION: Include additional criteria for the hydrodemolition calibration verification area and how often the calibration should be performed. The criteria would exclude any patching within the verification area and that the calibration should be performed at each project bridge deck. This way if there are multiple decks in a contract, the calibration pressures for one deck could not be used for another.

Remove the list of pre-stablished prices for overlay types, as those costs for material will continue to be in fluctuation due to the nature of the economy. Replace the list with a method of paying by invoice, plus 10% for related costs as approximated for disposal costs based on a recent claim. The payment will be made against the bridge deck overlay budget item once they planned quantity for the overlay item is met.

APPLICABLE STANDARD SPECIFICATIONS: 722.06(b)1, 722.15, 722.16

APPLICABLE STANDARD DRAWINGS: NA

APPLICABLE DESIGN MANUAL SECTION: Design memo 18-17

APPLICABLE SECTION OF GIFE: NA

APPLICABLE RECURRING SPECIAL PROVISIONS: NA

PAY ITEMS AFFECTED: Bridge Deck Overlay, Additional LMC, Bridge Deck Overlay, Additional LMC-VE, Bridge Deck Overlay, Additional Silica Fume Modified, Bridge Deck Overlay, Additional Surface Prep

APPLICABLE SUB-COMMITTEE ENDORSEMENT: NA

IF APPROVED AS RECURRING SPECIAL PROVISION OR PLAN DETAILS, PROPOSED BASIS FOR USE:

IMPACT ANALYSIS (attach report): Yes

Submitted By: Joe Novak
Title: State Construction Engineer

Organization: Construction Management

Phone Number: (317) 501-7805
Date: 4/26/2022

IMPACT ANALYSIS REPORT CHECKLIST

Explain the business case as to why this item should be presented to the Standards Committee for approval. Answer the following questions with Yes, No or N/A.

Does this item appear in any other specification sections?
Will approval of this item affect the Qualified Products List? No
Will this proposal improve:

Construction costs? Yes
Construction time? No
Customer satisfaction? No
Congestion/travel time? No
Ride quality? No

Will this proposal reduce operational costs or maintenance effort? No

Will this item improve safety:

For motorists? No
For construction workers? No

Will this proposal improve quality for:

Construction procedures/processes? Yes
Asset preservation? No
Design process? No

Will this change provide the contractor more flexibility? Yes

Will this proposal provide clarification for the Contractor and field personnel? Yes

Can this item improve/reduce the number of potential change orders? Yes

Is this proposal needed for compliance with:

Federal or State regulations? No
AASHTO or other design code? No

Is this item editorial? No

Provide any further information as to why this proposal should be placed on the Standards Committee meeting Agenda:

REVISION TO STANDARD SPECIFICATIONS

SECTION 722 - CONCRETE BRIDGE DECK OVERLAYS
722.06 Preparation of the Bridge Floor
722.15 Method of Measurement
722.16 Basis of Payment

The Standard Specifications are revised as follows:

SECTION 722, BEGIN LINE 231, DELETE AND INSERT AS FOLLOWS:

2. Hydrodemolition

When shown on the plans, removal of unsound concrete shall be performed by hydrodemolition. Following the cleanup from the surface removal operation, areas of unsound concrete to be removed will be marked. The hydrodemolition equipment shall consist of a self-propelled computerized machine that utilizes a high pressure water jet stream capable of removing concrete as specified, as well as, removing rust and concrete particles from exposed reinforcing bars.

Prior to hydrodemolition, the equipment shall be calibrated on an area of sound original deck concrete as designated by the Engineer. *Calibration shall be performed at the bottom depth of the overlay shown on the plans.*

The initial settings shall be verified on an area of unsound concrete. *This area shall not contain existing patches*. The initial settings ~~may need to~~*shall* be adjusted in order to achieve total removal of unsound concrete *within the verification area.* Equipment shall be calibrated *at* each ~~day~~*project bridge deck* prior to operation. Where directed, equipment shall be recalibrated to ensure removal of known areas of unsound concrete and to guard against removal of sound concrete. The Engineer shall be notified of the final equipment settings resulting from the calibration process.

SECTION 722, BEGIN LINE 824, DELETE AND INSERT AS FOLLOWS:

722.15 Method of Measurement

Removal of the existing overlay and the additional depth into the existing deck surface will be measured by the square yard of deck area regardless of the number of passes with the milling machine.

Removal of the existing concrete deck surface will be measured by the square yard for the initial depth shown on the plans. Additional surface removal required below the initial depth will be measured by the square yard for each required 1/4 in. depth. The areas of the bridge floor which are shown on the plans to be removed, except for undefined full depth patching areas, will not be measured for payment.

Hydrodemolition of the bridge deck will be measured by the square yard. Additional surface preparation *around reinforcing bars* will be measured by the linear foot of exposed reinforcing bar. Reinforcing bar repair will not be measured for payment.

When hydrodemolition is not shown on the plans, partial depth patching will be measured by the square foot.

The measurement of bridge deck patching concrete for partial depth cavities created

by handchipping or hydrodemolition will be based on a theoretical quantity determined by multiplying the area of the appropriate partial depth cavities by an assumed average depth of 2 in. and converting the resulting volume into cubic yards. Overlay material used in a partial depth cavity will be measured by the cubic yard. The quantities of patching material used in a partial depth cavity will be included in the measurement of additional bridge deck overlay.

The overlay and bridge deck patching concrete used to fill cavities as part of patching an existing bridge deck overlay will not be measured for payment.

Overlay material used to fill surface irregularities *and partial depth cavities* will be ~~measured~~*calculated* by the cubic yard and will be included ~~in the measurement of additional bridge deck overlay~~*for payment for Bridge Deck Overlay Budget*.

SECTION 722, BEGIN LINE 870, DELETE AND INSERT AS FOLLOWS:

722.16 Basis of Payment

Removal of the existing overlay and the additional depth into the existing deck surface will be paid for at the contract unit price per square yard of bridge deck, remove existing concrete overlay.

Milling of the initial depth of surface will be paid for at the contract unit price per square yard of bridge deck, remove existing concrete surface. Additional surface removal below the initial depth will be paid for at the contract unit price per square yard for bridge deck, remove existing concrete surface for each required 1/4 in. depth.

Hydrodemolition of the bridge deck will be paid for at the contract unit price per square yard. When hydrodemolition is shown on the plans, additional surface preparation will be paid for at the established price shown per linear foot for bridge deck overlay, additional surface prep.

When hydrodemolition is not shown on the plans, partial depth patching will be paid for at the contract unit price per square foot for bridge deck patching, partial depth.

When partial depth cavities are subsequently directed to be made full depth, additional payment will be made at 80% of the contract unit price per square foot for bridge deck patching, full depth.

Full depth patching will be paid for at the contract unit price per square foot for bridge deck patching, full depth.

~~Patching material used for partial depth cavities will be paid for at the established price shown per cubic yard for bridge deck overlay, additional for the type of overlay material placed.~~

REVISION TO STANDARD SPECIFICATIONS

SECTION 722 - CONCRETE BRIDGE DECK OVERLAYS
722.06 Preparation of the Bridge Floor
722.15 Method of Measurement
722.16 Basis of Payment

~~Overlay material used to fill surface irregularities will be paid for at the established price shown per cubic yard for bridge deck overlay, additional for the type of overlay material placed.~~

Bridge deck overlay will be paid for at the contract unit price per square yard, for the type of overlay material specified.

Patching an existing bridge deck overlay will be paid for at the contract unit price per square foot for bridge deck overlay patching.

Overlay dam will be paid for at the contract unit price per square foot, complete in place.

~~Transverse~~*Longitudinal* grooving will be paid for at the contract unit price per square yard.

The Department will include the pay item Bridge Deck Overlay Budget, with an established dollar amount in the proposal to pay for additional surface preparation completed after hydrodemolition and bridge deck overlay additional *quantity* used to fill irregularities and partial depth cavities. ~~This established amount is the Department's estimate of the total cost of the work required to be performed for the contract.~~ The ~~established~~*Bridge Deck Overlay Budget* amount shown in the proposal is included in the total bid amount. The Department will pay for ~~those items~~ *the additional quantity* installed ~~and listed with established prices for the quantities installed~~*to fill irregularities and partial depth cavities* as directed by the Engineer. Where the ~~work~~*material* exceeds the ~~Department's estimated amount~~*planned overlay quantity*, ~~the additional quantities will be reviewed for acceptance in accordance with 104.03 except that the additional surface preparation and bridge deck overlay additional will be paid at the pre-determined established prices shown~~*payment will be at the invoice cost of the additional bridge deck overlay quantity installed. An amount equal to 10% of the invoice cost will also be paid for additional disposal and all other related costs in connection with the additional quantity installed. No additional markup shall be applied for additional bridge deck overlay quantity installed. This amount will be paid using the Bridge Deck Overlay Budget pay item.*

Payment will be made under:

Pay Item	**Pay Unit Symbol**
Bridge Deck Overlay Budget	DOL
Bridge Deck Overlay, Latex Modified	SYS
Bridge Deck Overlay, LMC-VE	SYS
Bridge Deck Overlay, Patching	SFT
Bridge Deck Overlay, Silica Fume Modified	SYS

REVISION TO STANDARD SPECIFICATIONS

SECTION 722 - CONCRETE BRIDGE DECK OVERLAYS
722.06 Preparation of the Bridge Floor
722.15 Method of Measurement
722.16 Basis of Payment

Bridge Deck, Remove Existing Concrete Overlay ..... SYS
Bridge Deck, Remove Existing Concrete Surface..... SYS
Bridge Deck Patching, Full Depth..... SFT
Bridge Deck Patching, Partial Depth..... SFT
Hydrodemolition..... SYS
~~Transverse~~*Longitudinal* Grooving..... SYS
Overlay Dam ..... SFT

Item~~s~~ shown with an established price will be paid at the price~~s~~ shown. ~~Where any of the following items are shown in the schedule of pay items the bid item and price will prevail over the established prices shown.~~

Pay Item	Pay Unit Symbol	Established Price
~~Bridge Deck Overlay, Additional LMC....CYS..... $550~~		
~~Bridge Deck Overlay, Additional LMC-VE ..... CYS~~		~~$650~~
~~Bridge Deck Overlay, Additional Silica Fume Modified ..... CYS~~		~~$200~~
Bridge Deck Overlay, Additional Surface Prep	LFT	$~~15~~*20*

The cost of overlay removal by handchipping in areas adjacent to the curb or otherwise inaccessible to the power-operated mechanical milling machine shall be included in the cost of bridge deck overlay, remove existing overlay. The cost of disposing of overlay removal residue, including water, dust, concrete and incidentals shall be included in the cost of bridge deck, remove existing overlay.

The cost of deck surface preparation by handchipping in areas adjacent to the curb or otherwise inaccessible to the power-operated mechanical milling machine shall be included in the cost of bridge deck, remove existing concrete surface or bridge deck, remove existing overlay. The removal of surface milling residue, including water, dust, concrete and incidentals shall be included in the cost of bridge deck, remove existing concrete surface or bridge deck, remove existing overlay.

The cost of the wastewater control and disposal plan, wastewater containment, testing, storing, transporting and disposal, and any incidentals related to the carrying out of the plan shall be included in the cost of hydrodemolition. If the wastewater is found to have a pH of 12.5 or higher and thereby classified as hazardous, the additional costs associated with this classification will be paid for in accordance with 109.05.

The initial equipment calibration, any re-calibration, equipment shielding, handchipping curb areas, handchipping unsound concrete, cleaning of debris and slurry, compressed air cleaning, water blasting, and sandblasting shall be included in the cost of hydrodemolition.

REVISION TO STANDARD SPECIFICATIONS

SECTION 722 - CONCRETE BRIDGE DECK OVERLAYS
722.06 Preparation of the Bridge Floor
722.15 Method of Measurement
722.16 Basis of Payment

When hydrodemolition is shown on the plans, the cost of removal of unsound concrete shall be included in the cost of hydrodemolition. Preparation of cavity surfaces, furnishing and applying bond coat or epoxy resin adhesive as required in handchipped locations, furnishing and placing patching material, and necessary incidentals shall be included in the cost of bridge deck overlay for the type of overlay material specified. Additional concrete removal required around exposed bars shall be included in the cost of additional surface preparation.

When hydrodemolition is not shown on the plans, the cost of removal of unsound concrete, preparation of cavity surfaces, furnishing and applying bond coat or epoxy resin adhesive as required, furnishing and placing patching material, and necessary incidentals shall be included in the cost of bridge deck patching, full depth, or bridge deck patching, partial depth.

The cost of patching material used for full depth patching shall be included in the cost of bridge deck patching, full depth. The cost of texturing patched areas will not be paid for separately, but shall be included in the cost of the patch.

The cost of furnishing and placing patching material in partial depth cavities and necessary incidentals shall be included in the cost of bridge deck overlay, additional.

When the project does not include the installation of a new bridge deck overlay, the cost of partial depth patching below the bottom of the overlay shall be included in the cost of bridge deck overlay, patching. The cost of patching and overlay materials used to fill the cavities shall be included in the cost of bridge deck overlay, patching.

The cost of removing the existing concrete; furnishing, hauling, and placing all materials including the epoxy; preparing the surface; and all necessary incidentals shall be included in the cost of overlay dam.

The cost of deck cleaning shall be included in the cost of other pay items.

The cost of removing and disposing of the slurry created during the ~~transverse~~*longitudinal* grooving shall be included in the cost of ~~transverse~~*longitudinal* grooving.

Coring of the bridge deck, patching core holes, and all corrective measures required in accordance with 722.12 shall be performed at no additional cost to the Department.

COMMENTS AND ACTION

722.06 Preparation of the Bridge Floor
722.15 Method of Measurement
722.16 Basis of Payment

DISCUSSION:
This item was introduced and presented by Mr. Novak who stated that it has come to the Department's attention that the hydrodemolition calibration process was not completely clear regarding the criteria for the verification area. Also, within SS 722.16, it came to our attention that the listed pre-established price list for additional overlay quantity that exceeds the Department's bridge deck overlay budget does not reflect the actual cost that is being incurred by the Contractor for the material.

Mr. Novak proposed to include additional criteria for the hydrodemolition calibration verification area and how often the calibration should be performed. The criteria would exclude any patching within the verification area and that the calibration should be performed at each project bridge deck. This way if there are multiple decks in a contract, the calibration pressures for one deck could not be used for another.

Mr. Novak also proposed to remove the list of pre-stablished prices for overlay types, as those costs for material will continue to be in fluctuation due to the nature of the economy. Mr. Novak proposed to replace the list with a method of paying by invoice, plus 10% for related costs as approximated for disposal costs based on a recent claim. The payment will be made against the bridge deck overlay budget item once they planned quantity for the overlay item is met.

Ms. Mouser asked for clarification as to how this payment process will work, which was provided by Mr. Hauser.

There was no further discussion and this item passed as submitted.

Motion: Mr. Novak Second: Mr. Reilman Ayes: 10 Nays: 0 FHWA Approval: YES	Action: X Passed as Submitted __ Passed as Revised __ Withdrawn
2022 Standard Specifications Sections referenced and/or affected: 722.06(b)1, 722.15, 722.16 begin pg 768 Recurring Special Provisions or Plan Details: 722-B-317 LONGITUDINAL GROOVING FOR THE RCBA, CONCRETE FLOOR SLABS, AND CONCRETE BRIDGE DECK OVERLAYS SURFACES Standard Drawing affected: NONE Design Manual Sections affected: Design Memo 18-17 GIFE Sections cross-references:	X 2024 Standard Specifications __ Revise Pay Items List __ Create RSP (No.____) Effective: _____ RSP Sunset Date: X Revise RSP (No. 722-B-317) Effective: December 1, 2022 RSP Sunset Date: __ Standard Drawing Effective: __ Create RPD (No. __) Effective: __ GIFE Update __ Frequency Manual Update __ SiteManager Update

PROPOSAL TO STANDARDS COMMITTEE

PROBLEM(S) ENCOUNTERED: Current RSP 108-C-094 used by District Construction for setting contract time does not adequately cover current needs. It is written primarily for a reopening date for road closure but being used for other work including bundled contracts. This has resulted in disputes over LD's.

PROPOSED SOLUTION: Revise 108-C-094 to better accommodate all specified work.

APPLICABLE STANDARD SPECIFICATIONS: 108.09

APPLICABLE STANDARD DRAWINGS: N/A

APPLICABLE DESIGN MANUAL SECTION: N/A

APPLICABLE SECTION OF GIFE: 2.18

APPLICABLE RECURRING SPECIAL PROVISIONS: 108-C-094

PAY ITEMS AFFECTED: None

APPLICABLE SUB-COMMITTEE ENDORSEMENT: n/a

IF APPROVED AS RECURRING SPECIAL PROVISION OR PLAN DETAILS, PROPOSED BASIS FOR USE: Unchanged from current.

IMPACT ANALYSIS (attach report): Attached

Submitted By: Joe Novak

Title: State Construction Engineer

Organization: INDOT Construction Management

Phone Number: 317-501-7805

Date: 5/26/22

IMPACT ANALYSIS REPORT CHECKLIST

Explain the business case as to why this item should be presented to the Standards Committee for approval. Answer the following questions with Yes, No or N/A.

Does this item appear in any other specification sections? N
Will approval of this item affect the Approved Materials List? N
Will this proposal improve:

Construction costs? N/A
Construction time? N/A
Customer satisfaction? N/A
Congestion/travel time? N/A
Ride quality? N/A

Will this proposal reduce operational costs or maintenance effort? N/A

Will this item improve safety:

For motorists? N/A
For construction workers? N/A

Will this proposal improve quality for:

Construction procedures/processes? N/A
Asset preservation? N/A
Design process? N/A

Will this change provide the contractor more flexibility? N/A

Will this proposal provide clarification for the Contractor and field personnel? N/A

Can this item improve/reduce the number of potential change orders? N/A

Is this proposal needed for compliance with:

Federal or State regulations? N

AASHTO or other design code? N

Is this item editorial? N

Provide any further information as to why this proposal should be placed on the Standards Committee meeting Agenda: Necessary to provide Area Engineers tools to set contract time for most contracts via RSP.

108-C-094 FAILURE TO COMPLETE ON TIME FOR INTERMEDIATE COMPLETION DATE

(Revised 04-25-21)

The Standard Specifications are revised as follows:

SECTION 108, AFTER LINE 598, INSERT AS FOLLOWS:

The work specified shall be arranged and prosecuted such that ~~the~~ _____ ~~and appurtenances specified~~ shall be completed and opened to traffic on or before the intermediate completion date shown on the Proposal sheet.

If the~~ and appurtenances are not completed and~~specified work and all required lanes are not opened to traffic on or before the intermediate completion date shown on the Proposal sheet, $_____ will be assessed as liquidated damages, not as a penalty, but as damages sustained for each calendar day ~~that lanes required to be open remain closed to traffic~~ after such intermediate completion date.

~~*An extension to the intermediate completion date, as set out above, may be granted if the award of the contract is not made within 30 days of the date of the letting and if the delay in award is not due to the failure of the Contractor to provide necessary information or documents.*~~

COMMENTS AND ACTION

108-C-094 FAILURE TO COMPLETE ON TIME FOR INTERMEDIATE COMPLETION DATE

DISCUSSION:

Mr. Novak introduced and presented this item stating that the current RSP 108-C-094 used by District Construction for setting contract time does not adequately cover current needs. It is written primarily for a reopening date for road closure but being used for other work including bundled contracts. This has resulted in disputes over LD's.

Mr. Novak proposed to revise 108-C-094 to better accommodate all specified work.

There was no further discussion and this item passed as submitted.

Motion: Mr. Novak Second: Mr. Koch Ayes: 10 Nays: 0 FHWA Approval: YES	Action: X Passed as Submitted __ Passed as Revised __ Withdrawn
2022 Standard Specifications Sections referenced and/or affected: 108.09 pg. 95. Recurring Special Provisions or Plan Details: 108-C-094 FAILURE TO COMPLETE ON TIME FOR INTERMEDIATE COMPLETION DATE Standard Drawing affected: NONE Design Manual Sections affected: GIFE Sections cross-references: 2.18	__ 2024 Standard Specifications __ Revise Pay Items List __ Create RSP (No.__) Effective: RSP Sunset Date: X Revise RSP (No. 108-C-094) Effective: December 1, 2022 RSP Sunset Date: __ Standard Drawing Effective: __ Create RPD (No. __) Effective: __ GIFE Update __ Frequency Manual Update __ SiteManager Update