# **INDIANA DEPARTMENT OF TRANSPORTATION**



100 North Senate Avenue Room N758 CM Indianapolis, Indiana 46204 PHONE: (317) 232-5502 www.in.gov/indot

Eric Holcomb, Governor Joe McGuinness, Commissioner

# **APPROVED MINUTES**

# June 17, 2021 Standards Committee Meeting

July 23, 2021

TO: Standards Committee

FROM: Scott Trammell, Secretary

RE: Minutes from the June 17, 2021 Standards Committee Meeting

The Standards Committee meeting was called to order by Mr. Pankow, Chair, at 09:07 a.m. on June 17, 2021, and was held virtually via *Teams* (Microsoft application). The meeting was adjourned at 10:09 a.m.

The following committee members were present:

Gregory Pankow, Chairman, Director, Construction Management
John Wooden, Contract Administration Division
Dave Boruff, Traffic Engineering
Mark Orton, Bridge Design Division
Joe Novak, Construction Management
Kumar Dave, Pavement Engineering, Highway Design
Mike Pelham\*, Materials and Tests Division
Michael Koch, District Construction, Fort Wayne District
Elena Veksler, Highway Design and Technical Support
Kurt Pelz, Construction Technical Support
Louis Feagans, Statewide Tech Services Director (items 7 and 8)
\*\*Proxy for Jim Reilman

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

Barich, Dave, INDOT Beaucaire, Melissa, INDOT Blanchard, Jacob, INDOT Corrice, Zachariah, INDOT Fegan, Roland, INDOT Fisher, Steve, INDOT Osborn, Dan, ICI
Patterson, Patrick, INDOT
Pfeiffer, Nate, INDOT
Podorvanova, Lana, INDOT
Russell, Melissa, INDOT (item 8)
Ritter, John, INDOT

Gootee, Kenny, INDOT Hauser, Derrick, INDOT Lagpacan, Joiner, FHWA Leckie, John, guest Mouser, Elizabeth, INDOT

Mueller, Bart, INDOT

Siddiki, Nayyar, INDOT
Stickney, Daniel, INDOT (item 8)
Susong, John, guest
Trammell, Scott, INDOT
White, Peter, INDOT
Yeon, Sung Min, guest
Jelks, Linda, INDOT

The following items were discussed:

# A. GENERAL BUSINESS ITEMS

OLD BUSINESS (No items were listed)

#### **NEW BUSINESS**

1. Approval of the Minutes from the May 20, 2021 meeting

DISCUSSION: Mr. Pankow requested a motion to approve the Minutes from the May 20, 2021

meeting.

Motion: Mr. Novak Second: Mr. Dave

Ayes: 9 Nays: 0 Absent: 1

ACTION: PASSED AS SUBMITTED

# B. CONCEPTUAL PROPOSAL ITEMS

OLD BUSINESS

(No items were listed)

**NEW BUSINESS** 

(No items were listed)

# <u>C. STANDARD SPECIFICATIONS, SPECIAL PROVISIONS AND STANDARD DRAWINGS</u> PROPOSED ITEMS

**OLD BUSINESS** 

(No items were listed)

# **NEW BUSINESS**

Item No. 1 (2022 SS)	Mr. Wooden	pg 5
Recurring Special Provision:		
103-C-xxx	INDIANA-KENTUCKY DBE RECIPF	ROCITY
ACTION:	PASSED AS SUBMITTED	
Item No. 2 (2022 SS)	Mr. Wooden	pg 9
Recurring Special Provision:		5
103-C-xxx	SUBMITTAL OF DBE QUOTES	7,7
ACTION:	PASSED AS SUBMITTED	
Item No. 3 (2022 SS)	Mr. Wooden	pg 13
Recurring Special Provision:		<u> </u>
105-С-ххх	QUESTION AND ANSWER FORM	,
ACTION:	WITHDRAWN	
Item No. 4 (2022 SS)	Mr. Wooden	pg 18
Recurring Special Provision:		
10x-C-xxx	MBE, WBE, AND IVOSB PARTICII PLAN PROTOCOLS	PATION
ACTION:	PASSED AS SUBMITTED	
Itom No. E (2022 SS)	Mr. Woodon	ng 22
Item No. 5 (2022 SS) Recurring Special Provision:	Mr. Wooden	pg 22
103-C-xxx	DBE AFFIRMATIVE ACTION CERT PROTOCOLS	TIFICATE
ACTION:	PASSED AS SUBMITTED	
<u>Item No. 6 (2022 SS)</u>	Mr. Orton	pg 26
Standard Drawing: E 703-BRST-01	BAR BENDING DETAILS	
ACTION:	PASSED AS SUBMITTED	

Item No. 7 (2022 SS) Mr. Novak pg 31 **Recurring Special Provision:** 108-C-xxx **CRITICAL PATH METHOD SCHEDULING** PROSECUTION OF WORK PASSED AS REVISED ACTION: Item No. 8 (2022 SS) Mr. Novak pg 37 Recurring Special Provision: 401-R-xxx INERTIAL PROFILER WITH SMOOTHNESS PAY ADJUSTMENTS FOR HMA, FIXED INTERVAL ACTION: PASSED AS REVISED

cc: Committee Members

FHWA ICI

#### STANDARD SPECIFICATIONS, SPECIAL PROVISIONS AND STANDARD DRAWINGS

**REVISION TO SPECIAL PROVISIONS** 

#### PROPOSAL TO STANDARDS COMMITTEE

PROBLEM(S) ENCOUNTERED: Indiana Department of Transportation and the Kentucky Transportation Cabinet are participating in a DBE Exchange. A reciprocal agreement between the Kentucky Transportation Cabinet and INDOT was executed in 2017 and since renewed on by annual basis. Terms of the agreement required changes to Standard Specifications.

<u>PROPOSED SOLUTION:</u> Revise the Standard Specification allowing the use of Kentucky Transportation Cabinet certified DBE businesses to meet specified goals on INDOT contracts.

APPLICABLE STANDARD SPECIFICATIONS: 103.01

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: Required for all federal aid contracts.

**IMPACT ANALYSIS (attach report):** 

Submitted By: John Wooden for Economic Opportunity Division

Title: Estimating Administrator

Organization: Contract Administration Division

Phone Number: 317-233-5743

Date: May 11, 2021

#### STANDARD SPECIFICATIONS, SPECIAL PROVISIONS AND STANDARD DRAWINGS

#### **REVISION TO SPECIAL PROVISIONS**

#### 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.

<u>Does this item appear in any other specification sections?</u> No <u>Will approval of this item affect the Approved Materials List?</u> 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? 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? Yes 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? No

AASHTO or other design code? No

Is this item editorial? No

<u>Provide any further information as to why this proposal should be placed on the Standards Committee meeting Agenda:</u> The proposal allows for the employment of subcontractors certified by the Kentucky Transportation Cabinet to meet specified DBE goals on INDOT contracts.

#### **REVISION TO SPECIAL PROVISIONS**

103-C-xxx INDIANA-KENTUCKY DBE RECIPROCITY (proposed new)

103-C-xxx INDIANA-KENTUCKY DBE RECIPROCITY

(Adopted xx-xx-21)

The Standard Specifications are revised as follows:

SECTION 103, BEGIN LINE 66, INSERT AS FOLLOWS:

#### 4. Certified DBE

A business enterprise which has completed and filed a request for certification with the Department *or with the Kentucky Transportation Cabinet*, and that the business enterprise has been reviewed and determined to comply with the guidelines established in 49 CFR Part 26. Business enterprises which are determined to be eligible will be certified as DBEs to perform specific types of work.

SECTION 103, BEGIN LINE 401, INSERT AS FOLLOWS:

# (f) Affirmative Action Certification

The Affirmative Action Certification, included in the Proposal book, shall be completed when the Proposal book is submitted to the Department. The certification shall list all DBE firms the Contractor plans to utilize, either race/gender consciously or race/gender neutrally. Blank certifications shall cause the bid to be rejected. If a portion of a pay item is to be performed by a DBE, an explanation shall be included stating exactly what the DBE is performing or supplying. Failure to do so may affect the award of the contract. The Contractor shall ensure that DBE firms listed on the Affirmative Action Certification are certified DBE firms as listed in the Department's DBE directory or on the Kentucky Transportation Cabinet's DBE directory at the time of letting. When a firm is certified in both Indiana and Kentucky, the Contractor shall use the Indiana certification. In addition to the listing of DBE firms that will be used race/gender consciously to meet the goal, the Contractor shall also provide a total for the amount of work that it anticipates will be performed by other DBE firms used race/gender neutrally on the contract beyond the goal requirements.

<u>Item No. 1</u> (2022 SS) (contd.)

Mr. Wooden Date: 6/17/21

#### **COMMENTS AND ACTION**

103-C-xxx INDIANA-KENTUCKY DBE RECIPROCITY (proposed new)

# **DISCUSSION:**

This item was introduced and presented by Mr. Wooden who explained that the Indiana Department of Transportation and the Kentucky Transportation Cabinet are participating in a DBE Exchange. A reciprocal agreement between the Kentucky Transportation Cabinet and INDOT was executed in 2017 and has since been renewed on an annual basis. The terms of the agreement required changes to Section 103 of the Standard Specifications.

Mr. Wooden proposed to revise 103 allowing the use of Kentucky Transportation Cabinet certified DBE businesses to meet specified goals on INDOT contracts.

Mr. Boruff asked if this has anything to do with pre-qualification. Mr. Wooden said no, just DBE.

There was no further discussion, and this item passed as submitted with one editorial change as shown highlighted yellow.

	ı	
Motion: Mr. Wooden Second: Mr. Pelz	Action:	
Ayes: 9	<u>X</u>	Passed as Submitted
Nays: 0		Passed as Revised
FHWA Approval: Yes		Withdrawn
2022 Standard Specifications Sections referenced and/or affected:		2024 Standard Specifications
103 pg 15 and 22.	<b>—</b> )	Revise Pay Items List
200 kg 20 m/m 22/	X	Create RSP (No. <u>103-C-268</u> )
Recurring Special Provision references		Effective: December 1, 2021
in:		RSP Sunset Date:
NONE		
		Revise RSP (No. )
Standard Drawing affected:	' <u></u> '	Effective:
		RSP Sunset Date:
NONE		
<b>Y</b>		Standard Drawing
Design Manual Sections affected:	, <u> </u>	Effective:
NONE		Create RPD (No)
<i>y</i>		Effective:
GIFE Sections cross-references:		
		GIFE Update
NONE		Frequency Manual Update
		SiteManager Update

#### STANDARD SPECIFICATIONS, SPECIAL PROVISIONS AND STANDARD DRAWINGS

**REVISION TO SPECIAL PROVISIONS** 

#### PROPOSAL TO STANDARDS COMMITTEE

<u>PROBLEM(S)</u> ENCOUNTERED: INDOT Economic Opportunity Division are unable to reconcile the proposed function of committed DBE without details of services provided.

<u>PROPOSED SOLUTION:</u> Require the apparent lowest bidder to timely provide copies of proposed DBE quotes.

APPLICABLE STANDARD SPECIFICATIONS: 103.01

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: Include in all federally funded contracts.

**IMPACT ANALYSIS (attach report):** 

Submitted By: John Wooden for Economic Opportunity Division

Title: Estimating Administrator

Organization: Contract Administration Division

Phone Number: 317-233-5743

Date: May 11, 2021

#### STANDARD SPECIFICATIONS, SPECIAL PROVISIONS AND STANDARD DRAWINGS

#### **REVISION TO SPECIAL PROVISIONS**

#### 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.

<u>Does this item appear in any other specification sections?</u> No <u>Will approval of this item affect the Approved Materials List?</u> 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? 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? No

AASHTO or other design code? No

Is this item editorial? No

<u>Provide any further information as to why this proposal should be placed on the Standards Committee meeting Agenda:</u> To assist in FHWA program compliance.

Item No. 2 (2022 SS) (contd.)

Mr. Wooden Date: 6/17/21

#### **REVISION TO SPECIAL PROVISIONS**

# 103-C-xxx SUBMITTAL OF DBE QUOTES (proposed new)

#### 103-C-xxx SUBMITTAL OF DBE QUOTES

(Adopted xx-xx-21)

The Contractor that is the apparent low bidder on a contract that specifies a DBE goal shall submit to the Department the quotes received from DBE firms listed on the Affirmative Action Certification, in accordance with 103.01, no later than 24 h after the time specified in the Notice To Contractors for receipt of bids.

To submit the documents, the Contractor shall attach the documents to an e-mail sent to the following address:

#### DBEQuotes@indot.in.gov

To ensure that the electronic documents are placed in the correct contract folder with a date and time stamp and that they cannot be altered, the subject line of the e-mail shall contain the following information in the exact format shown:

CompanyNameDocumentTitleLettingDate-ContractNumber

The subject line shall contain no spaces, periods, commas, apostrophes or other punctuation marks other than the one hyphen indicated between CompanyNameDocumentTitleLettingDate and ContractNumber.

LettingDate shall be in the format MMDDYY.

ContractNumber shall be in the format AA###Z, where AA is the 1 or 2 letter prefix, ### is the 5 digit number and Z is the 1 letter suffix.

The following is an example of the subject line for the Jones Construction Co., Inc., submitting DBE quotes for contract IR-30999-A for a March 10,  $\frac{2008}{2021}$  letting:

 ${\it Jones Construction CoIncDBE Quotes 031508} {\it Jones Construction CoIncDBE Quotes 031021-IR} {\it Jones Construction CoIncDBE Quotes 031021-IR} {\it Jones Construction CoIncDBE Quotes 031508} {\it Jones Const$ 

<u>Item No. 2</u> (2022 SS) (contd.)

Mr. Wooden Date: 6/17/21

#### **COMMENTS AND ACTION**

103-C-xxx SUBMITTAL OF DBE QUOTES (proposed new)

# DISCUSSION:

Mr. Wooden introduced and presented this item stating that the Economic Opportunity Division are unable to reconcile the proposed function of committed DBEs without details of services provided.

Mr. Wooden proposed to require the apparent lowest bidder to timely provide copies of proposed DBE quotes, as illustrated above.

Following a brief discussion, the example was revised to a more recent letting date.

There was no further discussion, and this item passed as submitted with an editorial change shown in these minutes.

Motion: Mr. Wooden Second: Mr. Pelz Ayes: 9 Nays: 0	Action:	Passed as Submitted Passed as Revised
FHWA Approval: Yes  2022 Standard Specifications Sections referenced and/or affected:  103 begin pg 13.	_	Withdrawn 2024 Standard Specifications Revise Pay Items List
Recurring Special Provision references in:  NONE	<u>x</u>	Create RSP (No. <u>103-C-269</u> ) Effective: <u>December 1, 2021</u> RSP Sunset Date:
Standard Drawing affected:  NONE  Design Manual Sections affected:	_	Revise RSP (No) Effective: RSP Sunset Date:
NONE GIFE Sections cross-references:	_	Standard Drawing Effective:
NONE		Create RPD (No) Effective:
	_ _ _	GIFE Update Frequency Manual Update SiteManager Update

#### STANDARD SPECIFICATIONS, SPECIAL PROVISIONS AND STANDARD DRAWINGS

**REVISION TO SPECIAL PROVISIONS** 

#### PROPOSAL TO STANDARDS COMMITTEE

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

<u>PROPOSED SOLUTION:</u> Make the published Question and Answers Form a material part of the contract documents. This binds both Contractor and Engineer to the answers provided.

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):**

Submitted By: John Wooden for Contract Administration Division.

Title: Estimating Administrator

Organization: Contract Administration Division

Phone Number: 317-233-5743

Date: May 11, 2021

#### STANDARD SPECIFICATIONS, SPECIAL PROVISIONS AND STANDARD DRAWINGS

#### **REVISION TO SPECIAL PROVISIONS**

#### 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.

<u>Does this item appear in any other specification sections?</u> No <u>Will approval of this item affect the Approved Materials List?</u> 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

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

<u>Item No. 3</u> (2022 SS) (contd.)

Mr. Wooden Date: 6/17/21

# **REVISION TO SPECIAL PROVISIONS**

# 105-C-xxx QUESTION AND ANSWER FORM (proposed new)

105-C-xxx QUESTION AND ANSWER FORM

(Adopted xx-xx-21)

The Question and Answer Form available on the Department's Contract Administration Division website at <a href="http://www.in.gov/dot/div/contracts/letting/index.html">http://www.in.gov/dot/div/contracts/letting/index.html</a>, which includes all answers provided by INDOT prior to the letting, is hereby incorporated and made a material part of this contract.

The form will not be updated after  $12:00\ PM$ , two business days prior to the letting.

Item No. 3 (2022 SS) (contd.)

Mr. Wooden Date: 6/17/21

#### **COMMENTS AND ACTION**

105-C-xxx QUESTION AND ANSWER FORM (proposed new)

#### **DISCUSSION:**

This item was introduced and presented by Mr. Wooden, who stated that answers given by the Department to questions asked during the letting advertisement period need to be made binding upon the Contractor and the Engineer. 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 will bind both the Contractor and the Engineer to the answers provided.

Mr. Koch mentioned that the proposal page states that the Prebid Q&A is included in the contract, and asked if the statement "Pre-Bid Questions and Answers published in the INDOT website" addresses the proposal's goal? Mr. Koch also asked if we need to consider discrepancy clauses; several years ago the Q&A was closed with a final contract revision (unique special provision).

Mr. Wooden responded that, a few years back, Contract Administration, CA, found the practice of adding the Q&A as a final USP revision unmanageable due to the volume alone. CA had staff working more than 12 hours on many Fridays prior to lettings completing revisions and releasing documents. That is why Contract Admin asked legal if the Q&A could be made a part of the contracts by declaring it as we do now, listing it on the proposal page. As I recall, our then director Bob Cales along with Legal felt it necessary to also include the USP, similar to the proposed RSP, to confirm it as part of the contract. If the Legal Division and the Standards Committee are accepting of the sufficiency of the statement on the Proposal page alone, CA would have no objection. The use of the USP could be discontinued and the pursuit of this RSP voided. Since the potential for discrepancies were the reason for making the Pre-Bid Questions and Answers part of the contract originally, these have to be considered. I suppose the desire would be for the Pre-Questions and Answers to be regarded similar to Instructions to Bidders or at least Unique Special Provisions. Also, 105.04 could be revised to state the Q&A will be regarded the same as Unique Special Provisions. However, the Q&A would also need to be defined.

Mr. Koch replied that with Legal's past recommendation of a proposal page reference and USP, the proposed RSP would fall a bit short. I assume including the language as a RSP is easier for CA than adding as a USP for every contract, if so my two cents would be to define Q&A as a USP within 105.04. That said I will defer to Construction Management and Legal's recommendation.

Mr. Novak stated that he concurs with Mr. Koch in that it is more of a coordination, priority, of documents issue than whether it's part of the contract; and that it should be the equivalent of a USP.

Mr. Wooden said that it is sounding like he may need to withdraw this proposal and present something different at a future date. Therefore, this item was withdrawn.

<u>Item No. 3</u> (2022 SS) (contd.)

Mr. Wooden Date: 6/17/21

# COMMENTS AND ACTION

105-C-xxx QUESTION AND ANSWER FORM (proposed new)

# [continued]

Motion: Mr. Wooden Second: Mr. Ayes: Nays: FHWA Approval:	Action:	Passed as Submitted Passed as Revised Withdrawn
2022 Standard Specifications Sections referenced and/or affected:  105 begin pg 43.	_ ^	2024 Standard Specifications Revise Pay Items List
Recurring Special Provision references in:  NONE		Create RSP (No) Effective: RSP Sunset Date:
Standard Drawing affected:  NONE  Design Manual Sections affected:	_	Revise RSP (No) Effective: RSP Sunset Date:
NONE GIFE Sections cross-references:	_	Standard Drawing Effective:  Create RPD (No)
NONE	_ _ _ _	Effective:  GIFE Update Frequency Manual Update SiteManager Update

#### STANDARD SPECIFICATIONS, SPECIAL PROVISIONS AND STANDARD DRAWINGS

**REVISION TO SPECIAL PROVISIONS** 

#### PROPOSAL TO STANDARDS COMMITTEE

PROBLEM(S) ENCOUNTERED: By definition, IDIQ contracts are 'indefinite' in their scope and size. MBE, WBE, and IVOSB utilization commitments can not be identified at the time of bid preparation. Contractors are unsure of the utilization commitments and how to complete there proposal bids.

<u>PROPOSED SOLUTION:</u> Declare expectations for the Contractor and allow for commitments to be made at the time of work assignments.

APPLICABLE STANDARD SPECIFICATIONS: n.a.

APPLICABLE STANDARD DRAWINGS: n.a.

APPLICABLE DESIGN MANUAL SECTION: n.a.

APPLICABLE SECTION OF GIFE: ??

APPLICABLE RECURRING SPECIAL PROVISIONS: 100-C-203

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 100% State funded Indefinite Delivery Indefinite Quantity (IDIQ) contracts.

IMPACT ANALYSIS (attach report):

Submitted By: John Wooden for Contract Administration Division

Title: Estimating Administrator

Organization: Contract Administration Division

Phone Number: 317-233-5743

Date: May 11, 2021

#### STANDARD SPECIFICATIONS, SPECIAL PROVISIONS AND STANDARD DRAWINGS

#### **REVISION TO SPECIAL PROVISIONS**

#### 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.

<u>Does this item appear in any other specification sections?</u> No <u>Will approval of this item affect the Approved Materials List?</u> 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? 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? Yes

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

Can this item improve/reduce the number of potential change orders? n.a.

Is this proposal needed for compliance with:

Federal or State regulations? No

AASHTO or other design code? No

Is this item editorial? No

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

#### **REVISION TO SPECIAL PROVISIONS**

#### 10x-C-xxx MBE, WBE, AND IVOSB PARTICIPATION PLAN PROTOCOLS (proposed new)

10x-C-xxx MBE, WBE, AND IVOSB PARTICIPATION PLAN PROTOCOLS

(Adopted xx-xx-21)

At the time of bid submittal, Contractor shall submit participation plans with a commitment to utilize certified Minority and Women Owned Business Enterprises, MBE's and WBE's, as well as Indiana Veteran Owned Small Businesses, IVOSB's, for minimums of 7%, 5% and 3% of the total dollar value of the contract, respectively. No M/WBE or IVOSB will need to be identified at the time of bid submittal.

Work categories identified as areas of opportunity for certified businesses include, but are not limited to:

- 1. hauling
- 2. surface seal
- 3. landscaping and erosion control
- 4. milling
- 5. pavement markings
- 6. painting
- 7. concrete work
- 8. maintenance of traffic
- 9. signage
- 10. reinforcing steel (furnish)
- 11. reinforcing steel (install)
- 12. construction engineering
- 13. railings.

For each on-call job order, and prior to work commencing and issuance of the notice to proceed, Contractor shall submit a separate participation plan which lists the MBE's, WBE's and IVOSB's to be utilized, type of work to be performed and actual dollar amount to be paid to each.

At the conclusion of each on-call job order,  $\mbox{M/WBE}$  and  $\mbox{IVOSB}$  utilization will be evaluated.

Item No. 4 (2022 SS) (contd.)

Mr. Wooden Date: 6/17/21

#### **COMMENTS AND ACTION**

10x-C-xxx MBE, WBE, AND IVOSB PARTICIPATION PLAN PROTOCOLS (proposed new)

# **DISCUSSION:**

Mr. Wooden introduced and presented this item stating that by definition, IDIQ contracts are 'indefinite' in their scope and size. MBE, WBE, and IVOSB utilization commitments cannot be identified at the time of bid preparation. Contractors are unsure of the utilization commitments and how to complete their proposal bids.

Mr. Wooden proposed to declare expectations for the Contractor and allow for commitments to be made at the time of work assignments.

Ms. Jelks asked who is responsible for the evaluation at the conclusion of the work. Mr. Wooden and Mr. Pankow agreed that it will be the Department.

There was no further discussion and this item passed as submitted with shown editorial revisions.

Motion: Mr. Wooden Second: Mr. Pelz Ayes: 9	Action:	Passed as Submitted
Nays: 0 FHWA Approval: Yes		Passed as Revised Withdrawn
2022 Standard Specifications Sections referenced and/or affected:	_	2024 Standard Specifications
NONE		Revise Pay Items List
Recurring Special Provision references in:  100-C-203 INDIANA DEPARTMENT OF	<u>x</u>	Create RSP (No. <u>100-C-270</u> ) Effective: <u>December 1, 2021</u> RSP Sunset Date:
ADMINISTRATION M/WBE AND IVOSB PARTICIPATION POLICY FOR INDIANA DEPARTMENT OF TRANSPORTATION CONSTRUCTION PROJECTS  Standard Drawing affected:	_	Revise RSP (No) Effective: RSP Sunset Date:
NONE	_	Standard Drawing Effective:
Design Manual Sections affected:  NONE	_	Create RPD (No) Effective:
GIFE Sections cross-references:	_	GIFE Update Frequency Manual Update
NONE		SiteManager Update

#### STANDARD SPECIFICATIONS, SPECIAL PROVISIONS AND STANDARD DRAWINGS

**REVISION TO SPECIAL PROVISIONS** 

#### PROPOSAL TO STANDARDS COMMITTEE

PROBLEM(S) ENCOUNTERED: By definition, IDIQ contracts are 'indefinite' in their scope and size. DBE utilization commitments can not be identified at the time of bid preparation. Contractors are unsure of the utilization commitments and how to complete there proposal bids.

<u>PROPOSED SOLUTION:</u> Declare expectations for the Contractor and allow for commitments to be made at the time of work assignments.

APPLICABLE STANDARD SPECIFICATIONS: 103.01

APPLICABLE STANDARD DRAWINGS: n.a.

APPLICABLE DESIGN MANUAL SECTION: n.a.

APPLICABLE SECTION OF GIFE: ??

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: Required for federally aid Indefinite Delivery Indefinite Quantity (IDIQ) contracts.

IMPACT ANALYSIS (attach report):

Submitted By: John Wooden for Contract Administration Division

Title: Estimating Administrator

Organization: Contract Administration Division

Phone Number: 317-233-5743

Date: May 11, 2021

#### STANDARD SPECIFICATIONS, SPECIAL PROVISIONS AND STANDARD DRAWINGS

#### **REVISION TO SPECIAL PROVISIONS**

#### 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.

<u>Does this item appear in any other specification sections?</u> No <u>Will approval of this item affect the Approved Materials List?</u> 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? 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? Yes

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

Can this item improve/reduce the number of potential change orders? n.a.

<u>Is this proposal needed for compliance with:</u>

Federal or State regulations? No

AASHTO or other design code? No

Is this item editorial? No

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

#### **REVISION TO SPECIAL PROVISIONS**

# 103-C-xxx DBE AFFIRMATIVE ACTION CERTIFICATE PROTOCOLS (proposed new)

103-C-xxx DBE AFFIRMATIVE ACTION CERTIFICATE PROTOCOLS

(Adopted xx-xx-21)

At the time of bid submittal, Contractor shall submit an affirmative action certification with a commitment to utilize certified Disadvantaged Business Enterprises, DBEs, for a minimum of 7% of the total dollar value of the contract. No DBEs need to be identified at the time of bid submittal.

Work categories identified as areas of opportunity for certified DBE's include, but are not limited to:

- 1. hauling
- 2. surface seal
- 3. landscaping and erosion control
- 4. milling
- 5. pavement markings
- 6. painting
- 7. concrete work
- 8. maintenance of traffic
- 9. signage
- 10. reinforcing steel (furnish)
- 11. reinforcing steel (install)
- 12. construction engineering
- 13. railings.

For each on-call job order, and prior to work commencing and issuance of the notice to proceed, the Contractor shall submit a separate affirmative action certification form which lists the DBEs to be utilized, type of work to be performed and actual dollar amount to be paid to each DBE.

At the conclusion of each on-call job order, DBE utilization will be evaluated.

<u>Item No. 5</u> (2022 SS) (contd.)

Mr. Wooden Date: 6/17/21

#### **COMMENTS AND ACTION**

103-C-xxx DBE AFFIRMATIVE ACTION CERTIFICATE PROTOCOLS (proposed new)

# DISCUSSION:

Mr. Wooden introduced and presented this item stating that by definition, IDIQ contracts are 'indefinite' in their scope and size. MBE, WBE, and IVOSB utilization commitments cannot be identified at the time of bid preparation. Contractors are unsure of the utilization commitments and how to complete their proposal bids.

Mr. Wooden proposed to declare expectations for the Contractor and allow for commitments to be made at the time of work assignments.

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

Motion: Mr. Wooden Second: Mr. Pelz Ayes: 9 Nays: 0 FHWA Approval: Yes	Action:  X —	Passed as Submitted Passed as Revised Withdrawn
Standard Specifications Sections referenced and/or affected:  103	- ^ _	2024 Standard Specifications  Revise Pay Items List
Recurring Special Provision references in:  NONE	x	Create RSP (No. <u>103-C-271</u> ) Effective: <u>December 1, 2021</u> RSP Sunset Date:
Standard Drawing affected:  NONE  Design Manual Sections affected:	_	Revise RSP (No) Effective: RSP Sunset Date:
NONE GIFE Sections cross-references:	_	Standard Drawing Effective:  Create RPD (No)
NONE	_ _ _	Effective:  GIFE Update Frequency Manual Update SiteManager Update

Mr. Orton Date: 6/17/21

#### STANDARD SPECIFICATIONS, SPECIAL PROVISIONS AND STANDARD DRAWINGS

**REVISION TO STANDARD DRAWINGS** 

#### PROPOSAL TO STANDARDS COMMITTEE

<u>PROBLEM(S) ENCOUNTERED:</u> Standard Drawing series E 703-BRST provides standard hook dimensions for longitudinal reinforcement, but no information is currently provided for transverse reinforcing or seismic hooks.

PROPOSED SOLUTION: Drawing E 703-BRST has been updated.

APPLICABLE STANDARD SPECIFICATIONS: 703 (no changes required)

APPLICABLE STANDARD DRAWINGS: E 703-BRST-01

<u>APPLICABLE DESIGN MANUAL SECTION:</u> Chapter 405 (To be updated upon approval of the standard drawing revisions to eliminate figure 405-2Y, which contains much of the same information as the proposed standard drawing.)

APPLICABLE SECTION OF GIFE: No specific mention of standard hooks.

APPLICABLE RECURRING SPECIAL PROVISIONS: No specific mention of standard hooks.

PAY ITEMS AFFECTED: N/A

APPLICABLE SUB-COMMITTEE ENDORSEMENT: Drawing revised by INDOT Bridge Engineering.

IF APPROVED AS RECURRING SPECIAL PROVISION OR PLAN DETAILS, PROPOSED BASIS FOR USE: Recurring plan detail for contracts containing 703 pay items.

# IMPACT ANALYSIS (attach report):

Submitted By: Pete White for Mark Orton

Title: Standards Engineer

Organization: INDOT Standards and Policy

Phone Number: 317-233-3840

Date: May 20, 2021

Mr. Orton Date: 6/17/21

#### STANDARD SPECIFICATIONS, SPECIAL PROVISIONS AND STANDARD DRAWINGS

**REVISION TO STANDARD DRAWINGS** 

#### IMPACT ANALYSIS REPORT CHECKLIST

<u>Does this item appear in any other specification sections?</u> Reinforcing bars appear throughout the specifications, but no specific mention of standard hooks.

<u>Will approval of this item affect the Approved Materials List?</u> 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? 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? Yes

Is this proposal needed for compliance with:

Federal or State regulations? No

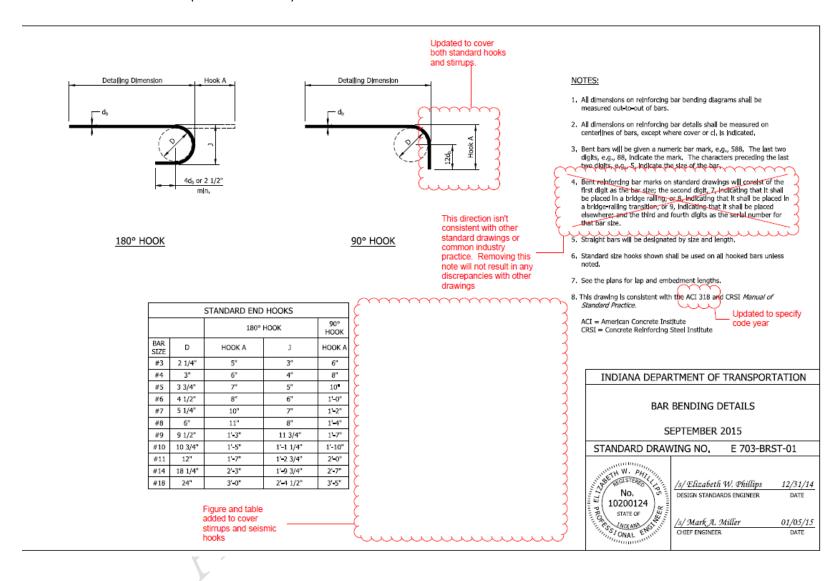
AASHTO or other design code? No

Is this item editorial? No

Provide any further information as to why this proposal should be placed on the Standards Committee meeting Agenda: This update will provide standard hook information for all bar types and will eliminate the potential for information inadvertently being left out of contracts.

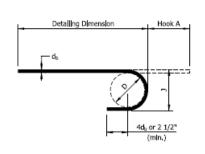
#### **REVISION TO STANDARD DRAWINGS**

#### E 703-BRST-01 BAR BENDING DETAILS (WITH MARKUPS)



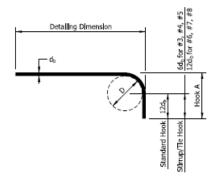
#### **REVISION TO STANDARD DRAWINGS**

# E 703-BRST-01 BAR BENDING DETAILS (DRAFT)

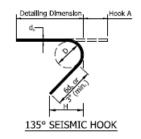


180° HOOK

	STANDARD END HOOKS			
BAR	D	180° HOOK		90° HOOK
SIZE		HOOK A	J	ноок а
#3	2 1/4"	5"	3"	6"
#4	3⁴	6"	4"	8"
#5	3 3/4"	7*	5"	10"
#6	4 1/2"	8°	6"	1'-0"
#7	5 1/4	10"	7"	1'-2"
#8	6"	11"	8"	1'-4"
#9	9 1/2"	1'-3"	11 3/4"	1'-7°
#10	10 3/4 <sup>h</sup>	1'-5"	1'-1 1/4"	1'-10"
#11	12"	1'-7"	1'-2 3/4"	2'-0"
#14	18 1/4"	2'-3"	1-9 3/4"	2'-7"
#18	24"	3'-0"	2'-4 1/2"	3'-5"



90° HOOK



	STIRRUP / SEISMIC HOOKS			
BAR D		135° SEISMIC HOOK		90° HOOK
SIZE	b	HOOK A	н*	HOOK A
#3	1 1/2"	4 1/4"	3"	4"
#4	2"	4 1/2"	3"	4 1/2"
#5	2 1/2"	5 1/2"	3 3/4"	6*
#6	4 1/2°	8"	4 1/2"	1'-0"
#7	5 1/4"	94	5 1/4"	1'-2"
#8	6°	10 1/2"	6"	1'-4"

<sup>\*</sup>H dimension is approximate

#### NOTES:

- All dimensions on reinforcing print bending diagrams shall be measured out-to-out of bars.
- All dimensions on reinforcing bar details shall be measured on centerlines of bars, except where cover or cl. is indicated.
- Bent bars will be given a numeric bar mark, e.g., 588. The last two digits, e.g., 88, indicate the mark. The characters preceding the last two digits, e.g., 5, indicate the size of the bar.
- 4. Straight bars will be designated by size and length,
- Standard size hooks shown shall be used on all hooked bars unless noted.
- 6. See the plans for lap and embedment lengths.
- This drawing is consistent with the ACI 318-14 and CRSI Manual of Standard Practice.

ACI = American Concrete Institute CRSI = Concrete Reinforcing Steel Institute

# BAR BENDING DETAILS SEPTEMBER 2022 STANDARD DRAWING NO. E 703-BRST-01 DESIGN STANDARDS ENGINEER DATE

CHIEF ENGINEER

DATE

INDIANA DEPARTMENT OF TRANSPORTATION

<u>Item No. 6</u> (2022 SS) (contd.)

Mr. Orton Date: 6/17/21

#### **COMMENTS AND ACTION**

# E 703-BRST-01 BAR BENDING DETAILS

# **DISCUSSION:**

This item was introduced and presented by Mr. Orton, assisted by Mr. White, who explained that Standard Drawing series E 703-BRST provides standard hook dimensions for longitudinal reinforcement, but that no information is currently provided for transverse reinforcing or seismic hooks.

Mr. Orton proposed that Standard Drawing E 703-BRST has been updated.

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

Motion: Mr. Orton Second: Mr. Boruff Ayes: 9 Nays: 0	Action:	Passed as Submitted Passed as Revised
FHWA Approval: Yes		Withdrawn
2022 Standard Specifications Sections referenced and/or affected:	_	2024 Standard Specifications
703 begin pg 650 (no changes required)		Revise Pay Items List
Recurring Special Provision references in:	) /	Create RSP (No) Effective:
NONE		RSP Sunset Date:
Standard Drawing affected: E 703-BRST-01	_	Revise RSP (No) Effective:
Design Manual Sections affected:		RSP Sunset Date:
Chapter 405 GIFE Sections cross-references:	<u>X</u>	Standard Drawing Effective: September 1, 2022
NONE	<u>x</u>	Create RPD (No. <u>703-B-316d</u> ) Effective: <u>December 1, 2021</u>
	<u>x</u> 	GIFE Update Frequency Manual Update SiteManager Update

Mr. Novak Date: 6/17/21

# STANDARD SPECIFICATIONS, SPECIAL PROVISIONS AND STANDARD DRAWINGS

**REVISION TO STANDARD SPECIFICATIONS** 

#### PROPOSAL TO STANDARDS COMMITTEE

<u>PROBLEM(S) ENCOUNTERED:</u> Objective is to update the schedule specification to current best practices, and to have a better tool for planning and communication for all parties.

PROPOSED SOLUTION: new specification to include the critical path method.

APPLICABLE STANDARD SPECIFICATIONS: 101, 108.04

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: coordinated with ICI

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

IMPACT ANALYSIS (attach report):

Submitted By: Joe Novak

Title: State Construction Engineer

Organization: INDOT

Phone Number:

Date: 5/21/21

Mr. Novak Date: 6/17/21

#### STANDARD SPECIFICATIONS, SPECIAL PROVISIONS AND STANDARD DRAWINGS

#### **REVISION TO STANDARD SPECIFICATIONS**

#### IMPACT ANALYSIS REPORT CHECKLIST

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

Construction costs? n/a

Construction time? yes

<u>Customer satisfaction?</u> 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? n/a

Design process? n/a

Will this change provide the contractor more flexibility? no, except for initial schedule submission

Will this proposal provide clarification for the Contractor and field personnel? n/a

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

<u>Provide any further information as to why this proposal should be placed on the Standards Committee meeting Agenda:</u> n/a

Item No. 7 (2022 SS) (contd.)

Mr. Novak Date: 6/17/21

#### **REVISION TO SPECIAL PROVISIONS**

108-C-xxx CRITICAL PATH METHOD SCHEDULING PROSECUTION OF WORK (proposed new)

108-C-xxx CRITICAL PATH METHOD SCHEDULING prosecution Of Work

(Adopted xx-xx-21)

The Standard Specifications are revised as follows:

SECTION 101, BEGIN LINE 233, INSERT AS FOLLOWS:

# 101.16.1 Controlling Operation

An activity that, if delayed, will delay the completion of the Project. When a critical path method schedule is required, the controlling operation will be determined from the critical path.

SECTION 108, BEGIN LINE 76, DELETE AND INSERT AS FOLLOWS:

#### 108.04 Prosecution of the Work

A pre-construction conference will be held at the earliest possible date, at which time it will be determined at what pointwhen the Contractor's operations will start.

The Contractor shall furnish the Engineer with a bar graph type schedule which shows the estimated times required to prosecute the major or critical items of work for acceptance unless the contract has less than 60 calendar days completion time, less than 35 work days, or less than 60 days between the date of the notice to proceed and the calendar completion date. This schedule shall incorporate all contract requirements regarding the order of performance of work and each activity. The schedule shall graphically show the calendar time for which each activity is scheduled for work. The schedule may be used as the basis for establishing major construction operations and as a check on the progress of the work. Sufficient materials, equipment, and labor shall be provided to guarantee the completion of the project in accordance with the plans and specifications within the specified completion time. The Engineer shall be notified at least three days in advance of the date on which the work is expected to begin. The schedule shall be submitted at the pre-construction conference.

The Department and the Contractor shall meet at least once each month to review actual and proposed schedules. The Contractor shall submit the correspondence to the district after each monthly meeting addressing each item of work that is behind schedule and as to what action will be taken to get the work back on schedule.

For contracts greater than 60 calendar days in duration, excluding the months of December through March inclusive, or 35 work days, and except for those with an M prefix, the Contractor shall provide a project schedule using the critical path method. The initial schedule shall be provided at the pre-construction conference. The initial schedule shall include at the least the first 90 calendar days of work. The Contractor shall use computer software designed to produce such schedules. Within seven days after the pre-construction conference, the Engineer will either accept the schedule or request a revision. If seven days

<u>Item No. 7</u> (2022 SS) (contd.)

Mr. Novak Date: 6/17/21

#### REVISION TO SPECIAL PROVISIONS

# 108-C-xxx CRITICAL PATH METHOD SCHEDULING PROSECUTION OF WORK (proposed new)

elapse with no comment by the Engineer, the schedule will be considered accepted. All schedule updates will be accepted in the same manner. Acceptance of the schedule does not revise the contract documents. The Engineer will not be responsible for the schedule's completeness, accuracy, or compliance with the plans and specifications. Within 30 calendar days of the pre-construction conference, the initial schedule shall be updated to include the full contract duration.

The schedule shall indicate the order and interdependence of activities needed to complete the project including the critical path. The Contractor shall include the planned hours of work per week as part of the schedule submittal.

The schedule shall reflect the scope of work, construction phasing, maintenance of traffic control, environmental requirements, utility and railroad coordination, coordination with other contractors, and any other work included in the contract. The schedule shall include:

- 1. Activities for all work to be performed by the Contractor and subcontractors.
- 2. Activities specific to the project to be performed by the Department, other units of government, regulatory agencies, utilities and any other parties necessary to complete the work as described in the contract.
- 3. Activities for working drawing preparation, Contractor submittals, material procurement and fabrication, and the delivery of significant materials and equipment and other similar activities.
- 4. Time for submittal review in accordance with 105.02.
- 5. Intermediate and contract completion dates and other milestones established by the contract documents.

For contracts not requiring a critical path method schedule, the Engineer may require the Contractor to furnish a bar chart or narrative at the pre-construction conference. This shall include the start dates and estimated times required to prosecute the significant activities and phases of work.

Sufficient materials, equipment, and labor shall be provided to guarantee the completion of the project in accordance with the plans and specifications within the specified completion time. The Engineer shall be notified at least three days in advance of the date on which the work is expected to begin.

Item No. 7 (2022 SS) (contd.)

Mr. Novak Date: 6/17/21

#### **REVISION TO SPECIAL PROVISIONS**

108-C-xxx CRITICAL PATH METHOD SCHEDULING PROSECUTION OF WORK (proposed new)

The Department and the Contractor shall meet at least twice each month to compare actual progress to the currently accepted schedule. The Contractor shall supply sufficient information for the Department to plan inspection services until the next scheduled meeting. A lookahead schedule may be provided consistent with the project schedule to convey this level of detail.

Schedules shall be provided in a format acceptable to the Engineer.

If, in the opinion of the Engineer, construction progress has been or will be materially affected by changes in the plans or in the quantities of work, or if performance has failed to conform to is two weeks or more behind the current accepted schedule, a revised schedule shall be submitted when requested within five business days of the Engineer's request. Acceptance of the schedules will in no way justify them, but will simply indicate concurrence in their reasonableness and feasibility on the assumption that every effort shall be made to meet them. Existence of a current and accepted schedule will be a condition precedent to the processing and payment of a partial pay estimate.

If the prosecution of the work is discontinued, the Engineer shall be notified at least 24 h in advance of resuming operations.

During the progress of the work, the Engineer shall be notified at least 24 h in advance of undertaking construction operations. This advance notification shall also apply anytime a DBE is scheduled to work on a project or deliver material or supplies to a project site.

If the plans for a road contract provide for the construction of an interchange, interchanges, or approaches at bridge locations, regardless of the actual date of completion on the bridge contract or contracts, the road contractor will be required, unless otherwise directed, to complete the planned pavement, including approaches and interchanges, as planned and set out in the road contract. The road contract may be modified to allow additional compensation or time if the bridge contract has delays which affect the work of the road contractor and was not under the control of, or caused by, the road contractor.

<u>Item No. 7</u> (2022 SS) (contd.)

Mr. Novak Date: 6/17/21

#### **COMMENTS AND ACTION**

#### 108-C-XXX CRITICAL PATH METHOD SCHEDULING PROSECUTION OF WORK

# DISCUSSION:

This item was introduced and presented by Mr. Novak who explained that the objective is to update the scheduling specification to the current best practices, and to have a better tool for planning and communication for all parties.

Mr. Novak proposed the new specification to include the critical path method, as shown above.

Ms. Beaucaire asked if there is a way to distinguish this from the existing RSP. Mr. Novak stated that we will need to change the name of this RSP to **Prosecution of Work**, with a Basis for Use stating that this RSP will be for all contracts.

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

Motion: Mr. Novak Second: Mr. Koch Ayes: 10 (Mr. Feagans joined the meeting) Nays: 0 FHWA Approval: Yes	Action:	Passed as Submitted Passed as Revised Withdrawn
Standard Specifications Sections referenced and/or affected:  101.16 pg 6 and 108.04 begin pg 85.	<u>x</u>	2024 Standard Specifications Revise Pay Items List
Recurring Special Provision references in:  NONE	x	Create RSP (No. <u>108-C-272</u> ) Effective: <u>December 1, 2021</u> RSP Sunset Date:
Standard Drawing affected:  NONE  Design Manual Sections affected:	_	Revise RSP (No) Effective: RSP Sunset Date:
NONE GIFE Sections cross-references:	_	Standard Drawing Effective:
NONE		Create RPD (No) Effective:
		GIFE Update Frequency Manual Update SiteManager Update

Mr. Novak Date: 6/17/21

#### STANDARD SPECIFICATIONS, SPECIAL PROVISIONS, AND STANDARD DRAWINGS

**REVISION TO SPECIAL PROVISIONS** 

#### PROPOSAL TO STANDARDS COMMITTEE

PROBLEM(S) ENCOUNTERED: As INDOT transitions from measuring smoothness on contracts from profilograph to inertial profiler, this USP has been used on IRI pilot contracts. Sending this USP through the new USP process unnecessarily ties up valuable resources.

PROPOSED SOLUTION: Convert this USP to RSP.

APPLICABLE STANDARD SPECIFICATIONS: 401.18, 401.19(c), 401.22, 402.18

APPLICABLE STANDARD DRAWINGS: N/A

APPLICABLE DESIGN MANUAL SECTION: N/A

APPLICABLE SECTION OF GIFE: 13.4, 13.7, 13.17, 13.18, 13.21

APPLICABLE RECURRING SPECIAL PROVISIONS: N/A

PAY ITEMS AFFECTED: 401-12169 (Inertial Profiler, HMA)

APPLICABLE SUB-COMMITTEE ENDORSEMENT: APAI, Jacob Blanchard, Nate Pfeiffer

IF APPROVED AS RECURRING SPECIAL PROVISION OR PLAN DETAILS, PROPOSED BASIS FOR USE: Approval from State Construction Engineer

IMPACT ANALYSIS (attach report): Attached

Submitted By: Joe Novak

Title: State Construction Engineer

Organization: INDOT Construction Management

Phone Number: 317-501-7805

Date: 5/27/2021

Mr. Novak Date: 6/17/21

#### STANDARD SPECIFICATIONS, SPECIAL PROVISIONS, AND STANDARD DRAWINGS

**REVISION TO SPECIAL PROVISIONS** 

#### IMPACT ANALYSIS REPORT CHECKLIST

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

Construction costs? Yes

Construction time? Yes

Customer satisfaction? Yes

Congestion/travel time? Yes

Ride quality? Yes

Will this proposal reduce operational costs or maintenance effort? No

Will this item improve safety:

For motorists? Yes

For construction workers? Yes

Will this proposal improve quality for:

Construction procedures/processes? Yes

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? N/A

<u>Is this proposal needed for compliance with:</u>

Federal or State regulations? No

AASHTO or other design code? No

Is this item editorial? No

<u>Provide any further information as to why this proposal should be placed on the Standards</u> Committee meeting Agenda: Advantageous to move frequently-used USP's to RSP's.

Item No. 8 (2022 SS) (contd.)

Mr. Novak Date: 6/17/21

#### **REVISION TO SPECIAL PROVISIONS**

401-R-xxx INERTIAL PROFILER WITH SMOOTHNESS PAY ADJUSTMENTS FOR HMA, FIXED INTERVAL (proposed new)

401-R-xxx INERTIAL PROFILER WITH SMOOTHNESS PAY ADJUSTMENTS FOR HMA, FIXED INTERVAL

(Adopted xx-xx-xx)

The Standard Specifications are revised as follows:

SECTION 401, DELETE LINES 593 THROUGH 705.

SECTION 401, AFTER LINE 705, INSERT AS FOLLOWS:

#### 401.18 Pavement Smoothness

Pavement smoothness will be accepted by means of an inertial profiler, a 16 ft long straightedge, or a 10 ft long straightedge as described below. The 10 ft long straightedge will be used to check transverse slopes, across travel lanes and shoulders, approaches, and crossovers. When the 10 ft straightedge is used, the pavement variations shall be corrected to 1/8 in. or less.

# (a) Inertial Profiler with Smoothness Pay Adjustments

When a pay item for Inertial Profiler, HMA is included in the contract, the Contractor shall furnish, calibrate, and operate an approved inertial profiler in accordance with ITM 917 on the mainline traveled way, including adjacent acceleration or deceleration lanes, where all of the following conditions are met:

- 1. The posted speed is greater than 45 mph.
- 2. The traveled way width and slope are constant and is at least 0.5 mi in length.
- 3. The HMA is placed on a milled surface and the planned lay rate for a single lift is 165 lb/sq yd or greater, or the total combined planned lay rate of surface, intermediate, and base courses is 385 lb/sq yd or greater.

The profiles, International Roughness Index, IRI, results including areas of localized roughness, and fixed interval IRI results produced shall become the property of the Department. The inertial profiler shall remain the property of the Contractor.

The paving exceptions and areas exempt from inertial profiler operation will be in accordance with ITM 917.

If the posted speed limit for an entire smoothness section is less than or equal to 45 mph, the section will be exempt from IRI operation and the smoothness within the section will be accepted in accordance with 401.18(b).

<u>Item No. 8</u> (2022 SS) (contd.)

Mr. Novak Date: 6/17/21

#### **REVISION TO SPECIAL PROVISIONS**

401-R-xxx INERTIAL PROFILER WITH SMOOTHNESS PAY ADJUSTMENTS FOR HMA, FIXED INTERVAL (proposed new)

If the posted speed limit is greater than 45 mph for a portion of a smoothness section and is less than or equal to 45 mph for the remainder, the section smoothness acceptance will be as follows:

- 1. By inertial profiler for the portion of the section with a posted speed limit greater than 45 mph.
- 2. In accordance with 401.18(b) or 401.18(c) for the portion of the section with a posted speed limit less than or equal to 45 mph.

At locations where the inertial profiler is required, it shall be used on the surface course and on any dense graded intermediate course immediately below the surface course.

# (b) 16 ft Straightedge

The Contractor shall furnish and operate 16 ft straightedges as described below. The 16 ft straightedge is used to accept smoothness along the direction of mainline traffic.

For contracts which include the Inertial Profiler, HMA pay item, the 16 ft long straightedge or the Inertial Profiler simulating the 16 ft long straightedge shall be used to accept longitudinal smoothness on surface courses at the following locations:

- 1. All mainline traveled way lanes shorter than 0.5 mi.
- 2. All mainline traveled way lanes at locations exempted from inertial profiler operation in accordance with ITM 917.
- 3. All mainline traveled way lanes within smoothness sections with posted speed limits less than or equal to 45 mph throughout the entire section length.
- 4. All tapers.
- 5. All ramps.
- 6. All turn lanes, including bi-directional left turn lanes shorter than 0.5 mi.
- 7. All acceleration and deceleration lanes associated with ramps with posted speeds of 45 mph or less.
- 8. All shoulders.

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9. All intersections with significant change in cross slope.

For contracts where the inertial profiler is not used for smoothness acceptance, the 16 ft straightedge will be used to accept longitudinal smoothness on all dense graded courses at the above locations as well as all mainline travel way lanes and ramps with posted speeds of greater than 45 mph. Smoothness acceptance on ramp acceleration or deceleration lanes will also be based on operation of the 16 ft straightedge.

# (c) Areas of Localized Roughness

At locations where the inertial profiler is being used on an intermediate course, all areas having a localized roughness in excess of 160 in./mi utilizing continuous IRI with a 25 ft window shall be corrected subject to review by the Engineer.

At locations where the inertial profiler is being used on a surface course, all areas under category Type A, as defined in 401.19(c), having a localized roughness in excess of 160 in./mile or category Type B in excess of 170 in./mile utilizing continuous IRI with a 25 ft window shall be corrected subject to review by the Engineer.

# (d) Smoothness Correction

The width of the corrected area may be partial or full lane width, depending on the respective wheel path profiles. Underlying courses that are exposed by corrective action shall be milled to a depth of 1 1/2 in. and replaced with surface course. After the corrective action is taken on a surface course, the inertial profiler shall be operated throughout the entire affected smoothness section to verify the adequacy of the corrective action.

At locations where the 16 ft straightedge is used, the pavement variations shall be corrected to 1/4 in. or less.

If grinding of an intermediate course is used for pavement smoothness corrections, the grinding shall not precede the surface placement by more than 30 calendar days if open to traffic.

SECTION 401, DELETE LINES 805 THROUGH 843.

SECTION 401, AFTER LINE 843, INSERT AS FOLLOWS:

#### (c) Smoothness

Smoothness pay adjustments will only be applied when the smoothness is measured by an inertial profiler in accordance with 401.18(a).

The Mean Roughness Index, MRI, will be determined for each lane for each 0.1 mile section of paving. The MRI for a 0.1 mile section will be the average of the IRI of the two wheel paths. Categorized segments shall be as follows:

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- 1. Type A. Pavement on a non-interstate with more than a single opportunity to achieve a smooth ride or asphalt pavement on an interstate with a single opportunity or more. The following operations, if performed on the contract, will be considered opportunities.
  - a. A layer of HMA base, intermediate, and surface; each layer is an opportunity. Wedge and level will not be considered an opportunity.
  - b. Profile milling to correct cross slope is considered an opportunity prior to placing base, intermediate, or surface HMA.
- 2. Type B. Pavement that is not included in the description above under Type A.

At locations where an inertial profiler is used to accept smoothness, a quality assurance adjustment will be determined for each lane. This adjustment will be applied to all QC/QA HMA pay items within the pavement section. The adjustment will be calculated using the following formula:

$$q_s = (PF_s - 1.00) \sum_{i=1}^{n} \left( A \times \frac{S}{T} \times U \right)$$

where:

 $q_s$  = quality assurance adjustment for smoothness for one section

 $PF_s = pay factor for smoothness$ 

n = number of layers

A = area of the section, sq yd

S = planned spread rate for material, lb/sq yd

T = conversion factor: 2,000 lb/ton

U = unit price for the material, \$/ton.

The quality assurance adjustment for smoothness,  $Q_s$ , for the contract will be the total of the quality assurance adjustments for smoothness,  $q_s$ , on each section by the following formula:

$$Q_s = \sum q_s$$

When smoothness is measured by an inertial profiler, payment adjustments will be made for any 0.1 mile section based on initial MRI generated on the surface course only

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and in accordance with the following table. The IRI pay factors for smoothness will be determined prior to any required smoothness correction in accordance with 401.18(c).

PAY FACTORS FOR SMOOTHNESS			
Poste	Posted Speed greater than 45 mph		
IRI, in./mi.	Pay Factor, PF		
over 0 to 35	1.06		
over 35 to 40	1.05		
over 40 to 45	1.04		
over 45 to 50	1.03		
over 50 to 55	1.02		
over 55 to 60	1.01		
over 60 to 70	1.00		
over 70 to 75	0.99		
over 75 to 80	0.98		
over 80 to 85	0.96		
over 85 to 90	0.95		
over 90	For Type A, the pay factor will be 0.95 and the section shall be corrected to 70 or less.		
over 90 to 110	For Type B, the pay factor will be 0.95 and the section does not require correction.		
over 110	For Type B, the pay factor will be 0.95 and the section shall be corrected to 90 or less.		

SECTION 401, BEGIN LINE 916, DELETE AND INSERT AS FOLLOWS:

#### **401.22 Basis of Payment**

The accepted quantities for this work will be paid for at the contract unit price per ton for QC/QA-HMA, of the type specified, complete in place.

Payment for furnishing, calibrating, and operating the <del>profilograph</del>inertial profiler, and furnishing profile information will be made at the contract lump sum price for <del>profilograph</del>inertial profiler, HMA.

Adjustments to the contract payment with respect to mixture, density, and smoothness for *the* mixture produced will be included in a quality adjustment pay item in accordance with 109.05.1.

SECTION 401, BEGIN LINE 940, DELETE AND INSERT AS FOLLOWS:

Profilograph/Inertial Profiler, HMA......LS

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SECTION 401, BEGIN LINE 964, DELETE AND INSERT AS FOLLOWS:

The price for ProfilographInertial Profiler, HMA will be full compensation regardless of how often the profilographinertial profiler is used or how many profilograms are produced often the IRI is determined.

SECTION 402, BEGIN LINE 344, DELETE AND INSERT AS FOLLOWS:

# **402.18 Pavement Smoothness**

Pavement smoothness will be in accordance with 401.18 except profilographinertial profiler requirements will not apply.

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#### COMMENTS AND ACTION

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#### **DISCUSSION:**

This item was introduced and presented by Mr. Novak who explained that as the Department transitions from measuring smoothness on contracts from profilograph to inertial profiler, this USP has been used on IRI pilot contracts. Sending this USP through the new USP process unnecessarily ties up valuable resources.

Mr. Novak therefore proposed to convert this USP to an RSP.

Mr. Koch asked if this excludes superelevated sections and if designers are expected to define cross-slope corrections, or is the intention to tie it to the profile milling. Mr. Novak replied that yes, the superelevated sections are excluded, and that we are not expecting anything different from the designers. Mr. Novak further clarified that if profile milling is specified, we will count that as an opportunity for the Contractor to achieve a smoothness improvement.

Mr. Koch stated that a benefit of IRI is to minimize interactions with the public. Excluding supers requires the Contractor to run a straight edge, which is another potential traffic setup and a loose smoothness requirement. In accordance with 401.18(c), Areas of Localized Roughness is roughly equivalent to the profilogram's 0.30 inch bump; should mainline supers be required to meet this? A 0.30 inch profilogram bump is quite noticeable yet is typically not picked up by a straightedge. Mr. Novak asked to strike the reference to 401.18(c). Mr. Novak acknowledged that further revisions may be required as this process continues, which is why it is not recommended for inclusion, yet, into the spec book.

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

The Basis for Use will be as approved for use by the State Construction Engineer.

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# COMMENTS AND ACTION

401-R-xxx INERTIAL PROFILER WITH SMOOTHNESS PAY ADJUSTMENTS FOR HMA, FIXED INTERVAL (proposed new)

# [continued]

Motion: Mr. Novak	Action:	
Second: Mr. Koch Ayes: 10		Passed as Submitted
Nays: 0	X	Passed as Revised
FHWA Approval: Yes		Withdrawn
2022 Standard Specifications Sections referenced and/or affected:	- <	2024 Standard Specifications
401.18, 401.19(c), 401.22, 402.18.		Revise Pay Items List
Recurring Special Provision affected:	<u>x</u>	Create RSP (No. <u>401-R-577</u> )
NONE	) <sup>y</sup>	Effective: <u>December 1, 2021</u> RSP Sunset Date:
Standard Drawing affected:		
NONE	_	Revise RSP (No) Effective:
		RSP Sunset Date:
Design Manual Sections affected:		
NONE		Standard Drawing
		Effective:
GIFE Sections cross-references:		Create RPD (No)
13.4, 13.7, 13.17, 13.18, 13.21		Effective:
		GIFE Update
	_	Frequency Manual Update SiteManager Update
		Sitemanager Opuate