

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

August 17, 2023 Standards Committee Meeting

October 26, 2023

TO: Standards Committee

FROM: Scott Trammell, Secretary

RE: Minutes from the August 17, 2023 Standards Committee Meeting

The Standards Committee meeting was called to order by Mr. Pankow, Chair, at 09:00 a.m. on August 17, 2023, which was held virtually via *Teams* (Microsoft application). The meeting was adjourned at 09:33 a.m.

The following committee members were in attendance:

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

Also, the following attendees were present:

Awwad, Nathan, INDOT Bazlamit, Subhi M, INDOT Barney, Bruce, INDOT Cruz, Elena, INDOT Frierson, Tymli, FHWA Duncan, Steve, INDOT Feutz, Douglas, INDOT

Mouser, Elizabeth, INDOT Mueller, Bart, INDOT Nelson, Mike, INDOT Patterson, Patrick, INDOT Podorvanova, Lana, INDOT Perugu, Kshitija, INDOT Reedy, Joseph, INDOT Fisher, Steve, INDOT Hailat, Mahmoud, INDOT Harris, Tom, INDOT Hauser, Derrick, INDOT Aguirre, Frank, INDOT Ritter, John, INDOT Thornton, Donald, INDOT Trammell, Scott, INDOT Yoon, Sung Min (Sean), INDOT

The following items were listed for consideration:

A. GENERAL BUSINESS					
OLD BUSINESS (No items listed) <u>NEW BUSINESS</u>					
1. Approval of the Minutes from the July 20, 2023 meeting					
 Mr. Pankow requested a motion to approve the Minutes from the July 20, 2023 meeting. Motion: Mr. Reilman Second: Mr. Novak Ayes: 10 Nays: 0 					
ACTION:	PASSED AS SUBMITTED				
B. CONCEPTUAL PROPOSAL					
(No items listed)					
C. STANDARD SPECIFICATIONS, SPECIAL PROV	ISIONS, AND STANDARD DRAWINGS PROPOSAL				
OLD BUSINESS (No items listed)					
NEW BUSINESS					
Item No. 1 Recurring Special Provision:	Mr. Boruff pg. 4				
805-T-124	INTEGRATED VIDEO VEHICLE DETECTOR SYSTEM				
ACTION:	PASSED AS SUBMITTED				
Item No. 2	Mr. Reilman pg. 9				
2024 Standard Specifications:	Des often line of				
203.26	Proofrolling				
ACTION:	PASSED AS REVISED				

Item No. 3	Mr. Reilman	pg. 14
2024 Standard Specifications:		
708.02	Materials	
910.01	Reinforcing Bars, Dowel Bars and W	WR
ACTION:	PASSED AS REVISED	
ltem No. 4	Mr. White	pg. 18
2024 Standard Specifications:		
702.28	Basis of Payment	
707.12	Basis of Payment	
711.73	Basis of Payment	
726.04	Method of Measurement	
726.05	Basis of Payment	
ACTION:	PASSED AS REVISED	Y
ltem No. 5	Mr. Novak	pg. 23
Recurring Special Provision:		
603-R-109	GATE BARRICADE	
ACTION:	PASSED AS SUBMITTED	
		27
tem No. 6	Mr. Novak	pg. 27
2024 Standard Specifications: 702.28	Basis of Payment	
ACTION:	WITHDRAWN	
cc: Committee Members		
FHWA		
ICI		
<i>v</i>		

REVISION TO SPECIAL PROVISIONS

PROPOSAL TO STANDARDS COMMITTEE

<u>PROBLEM(S) ENCOUNTERED:</u> RSP 805-T-124 for integrated video vehicle detector systems is obsolete and has not been used since 2009.

PROPOSED SOLUTION: Delete RSP 805-T-124.

APPLICABLE STANDARD SPECIFICATIONS: 805

APPLICABLE STANDARD DRAWINGS: N/A

APPLICABLE DESIGN MANUAL CHAPTER: N/A

APPLICABLE SECTION OF GIFE: N/A

APPLICABLE RECURRING SPECIAL PROVISION: N/A

PAY ITEMS AFFECTED: No, pay item 805-06921 is already marked as obsolete.

APPLICABLE SUB-COMMITTEE ENDORSEMENT: Yes by Traffic Standards Subcommittee

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

Division: Traffic Engineering Division

E-mail: jbruno@indot.in.gov

Date: 7/24/2023

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.

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

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

Will this proposal reduce operational costs or maintenance effort? No

Will this item improve safety:

<u>For motorists?</u> No <u>For construction workers?</u> No

Will this proposal improve quality for:

<u>Construction procedures/processes?</u> Yes <u>Asset preservation?</u> No <u>Design process?</u> 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:

<u>Federal or State regulations?</u>No <u>AASHTO or other design code?</u>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

805-T-124 INTEGRATED VIDEO VEHICLE DETECTOR SYSTEM (proposed to discontinue use)

805-T-124 INTEGRATED VIDEO VEHICLE DETECTOR SYSTEM

(Revised 04-25-21)

The integrated video vehicle detector system shall have a CCD video image sensor and a machine vision processor as a single unit. The system shall be capable of monitoring vehicles on a roadway via processing of video images and shall provide detector outputs to a traffic signal controller.

Only models from the QPL of Traffic Signal and IT9 Devices shall be used. Integrated video vehicle detector systems will be placed and maintained on the QPL after being evaluated and approved by the Department. Manufacturers wishing to have their system considered should contact the Highway Support Manager, Operations Support Division.

The integrated video vehicle detector system shall include the integrated CCD video image sensor and the machine vision processor, minihub or hub, camera and receiver using integrated wireless technology for communications, set-up and operating software, all connectors, wiring and miscellaneous equipment necessary for the installation and operation of the system.

A 10 year operational warranty or standard manufacturer's warranty, whichever is longer, shall be provided for each:

- (a) integrated CCD video image sensor and machine vision processor and hub or mini-hub; and
- (b) camera and receiver using integrated wireless technology for communications.

The effective date for the beginning of the warranty shall be the traffic signal turn-on date as noted on Traffic Signal Completion Report Form (IC 636). A written copy of the warranty shall be presented to the Engineer prior to final acceptance of the contract.

The warranty shall service all defects in material or workmanship of the equipment. The manufacturer shall not be responsible for damage caused by negligence, severe weather acts such as lightning, flood, etc. or use of the equipment in a manner not originally intended. Temperatures between -30°F and +165°F are not considered severe weather acts. The vendor or manufacturer shall be responsible, during the warranty period, for transportation costs of items requiring warranty service to and from the Operations Support Division, Highway Support Section. A maximum turnaround time for service of defects in material and workmanship of equipment shall be no longer than 60 calendar days. Continued failure, repeated malfunctions, or exceeding the maximum turn-around time for warranty service will be cause to remove that model from the QPD.

The system will be measured and paid for at the contract unit price per each for integrated video vehicle detector system, complete in place.

The integrated CCD video image sensors and machine vision processor, mini-hub or hub, camera and receiver using integrated wireless technology for communications, set-up and operating software, all connectors,

REVISION TO SPECIAL PROVISIONS

805-T-124 INTEGRATED VIDEO VEHICLE DETECTOR SYSTEM (proposed to discontinue use)

wiring, miscellaneous equipment necessary for the installation and operation of the system, and the warranty shall be included in the cost of the integrated video vehicle detector system.

The mounting structure (s) will be measured in accordance with 805.15 and paid for in accordance with 805.16.

<u>Item No. 1</u> (2024 SS) (contd.) Mr. Boruff Date: 08/17/23

COMMENTS AND ACTIONS

805-T-124 INTEGRATED VIDEO VEHICLE DETECTOR SYSTEM

DISCUSSION:

This item was introduced and presented by Mr. Bruno, sitting in as proxy for Mr. Boruff, who stated that RSP 805-T-124 for integrated video vehicle detector systems is obsolete and has not been used since 2009.

Mr. Bruno proposed to delete RSP 805-T-124.

There were no questions or comments and this item passed as submitted.

	_	
Motion: Mr. Bruno	Action:	
Second: Mr. Orton		
Ayes: 10	<u>_X</u>	Passed as Submitted
Nays: 0	—	Passed as Revised
FHWA Approval: <u>YES</u>		Withdrawn
2024 Standard Specifications:		2026 Standard Specifications
NONE	_	Revise Pay Items List
		Notification to Designers if change is not
Recurring Special Provision or Plan Details: 805-T-124		addressed by RSP
	X	Discontinue RSP (No. <u>805-T-124</u>)
Standard Drawings:		Effective:
NONE		
		Revise RSP (No)
Indiana Design Manual Chapter: NONE		Effective:
		Standard Drawing
GIFE Sections:		Effective:
NONE		
		Create RPD (No)
r		Effective:
		GIFE Update
	—	Frequency Manual Update
	—	SiteManager Update
		Sitemanager Opdate
	1	

PROPOSAL TO STANDARDS COMMITTEE

PROBLEMS(S) ENCOUNTERED:

- It was determined that clarification on the requirement of a dump truck was needed.
- It was also determined that the deflection criteria of Proofrolling needed to be updated for further details in 203.26.

PROPOSED SOLUTION:

- Add the details of a dump truck to be used for proofrolling.
- Add the detailed deflection criteria for proofrolling in 203.26.

APPLICABLE STANDARD SPECIFICATIONS: 203

APPLICABLE STANDARD DRAWINGS: NA

APPLICABLE DESIGN MANUAL CHAPTER: NA

APPLICABLE SECTION OF GIFE: NA

APPLICABLE RECURRING SPECIAL PROVISIONS: NA

PAY ITEMS AFFECTED: No

<u>APPLICABLE SUB-COMMITTEE ENDORSEMENT:</u> ICI, Subcontractors, Area Engineers, Material Engineers and Geotechnical Engineers.

IMPACT ANALYSIS (attach report): NA

Submitted by: Jim Reilman for Nayyar Siddiki

Title: State Materials Engineer

Organization: INDOT

Phone Number: 317-522 9692

Date: 7/24/2023

REVISION TO STANDARD SPECIFICATIONS

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: NA Construction time: Yes Customer satisfaction? NA Congestion/travel time? NA Ride quality? NA

Will this proposal reduce operational costs or maintenance effort? NA

Will this item improve safety:

For motorists? NA For construction workers? NA

Will this proposal reduce operational costs or maintenance effort? NA

Will this item improve safety:

For motorists? NA For construction workers? NA

Will this proposal improve quality for:

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

Will this change provide the contractor more flexibility? NA

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

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

Is this proposal needed for compliance with:

Federal or State regulations:NoAASHTO 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:

SECTION 203 – EXCAVATION AND EMBANKMENT 203.26 Proofrolling

The Standard Specifications are revised as follows:

SECTION 203, BEGIN LINE 1268, DELETE AND INSERT AS FOLLOWS:

203.26 Proofrolling

When proofrolling is specified for a work productmaterial, the workit shall be performed with an on-highway dump truck with a minimum tire pressure of 90 psi. If equipped, dDrop axles, if equipped, shall be in the raised position. The operating speed of the dump truck shall not exceed 2 mph-and all surfaces to be proofrolled shall be completely covered with a single pass.

All materials in the area requiring proofrolling shall be traversed with as many passes as necessary to achieve coverage of the area. A pass will be defined as a single trip of the dump truck in one direction on the material surface area. Coverage will be defined as the entire width and length of the material surface area required to be proofrolled having been in contact with the pneumatic tires of the dump truck.

The weight of the dump truck and measured deflection or rutting shall be as follows:

Work Product Material Requiring Proofrolling	Dump Truck Weight, minimum	Allowable Deflection or Rutting		
Original ground or embankment foundation	15 t	≤ 1 in.*		
Embankment construction, subgrade, or subbase	33 t	$\leq 1/2$ in.		
Cement stabilized subgrade soil in accordance with 219	33 t	<i>≤ 1/4 in</i> .		
* The Department's Geotechnical Engineering Division will be contacted for deflection or rutting greater than 5 in.				

Proofrolling for original ground or embankment construction shall be performed using a dump truck weighing at least 15 t. Proofrolling for subgrade preparation shall be performed using a dump truck weighing at least 33 t. All proofrolled surfaces shall be covered completely with a single pass. Operating speed of the proofrolling truck shall not exceed 2 mph.

Deflections or rutting in excess of 1/2 in. shall require remediation of the surface as directed. Deflection or rutting in excess of 3 in. shall require corrective remediation measures and the Department's Geotechnical Engineering Division will be contacted. Proofrolling shall be performed after remediation measures on embankment or subgrade prior to the placement of additional material. There shall be one or two complete coverages as directed. Roller marks, irregularities, or failures shall be corrected.

When the measured deflection or rutting exceeds the allowable values for the respective work product material listed in the table above, the Contractor shall repair or

.

SECTION 203 – EXCAVATION AND EMBANKMENT 203.26 Proofrolling

remediate the work product material to bring it in compliance with the specifications. Upon completion of the remediation or repair of the work product material, proof rolling shall be performed again and deflections or rutting rechecked for compliance with the table above. This process shall be repeated until the measured deflection or rutting complies with the specification, prior to the placement of additional material.

Roller marks, irregularities, or failures shall be filled with soils in accordance with 207.02, structure backfill, or B borrow, and compacted in accordance with 203.23 corrected prior to placement of subsequent work.

<u>Item No. 2</u> (2024 SS) (contd.) Mr. Reilman Date: 08/17/23

COMMENTS AND ACTIONS

203.26 Proofrolling

DISCUSSION:

This item was introduced and presented by Mr. Reilman who explained that it was determined that clarification on the requirement of a dump truck was needed. It was also determined that the deflection criteria of Proofrolling needed to be updated for further details in 203.26.

Mr. Reilman proposed to add the details of a dump truck to be used for proofrolling, and add the detailed deflection criteria for proofrolling in 203.26.

Mr. Koch stated that proofrolling is an acceptance test and has not to this point included guidance for how to correct. I favor the existing language that roller marks, irregularities, and failures shall be corrected without including specific materials. For example, if a clay/silt embankment is being constructed do we want to introduce granular material as the fix? The correct fix may be disking & drying.

Following further discussions with Mr. Koch, Mr. Awwad, Mr. Harris, and Mr. Patterson, editorial revisions are as shown.

Mr. Reilman revised his motion, which was seconded by Mr. Dave.

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

Motion: Mr. Reilman Second: Mr. Koch Ayes: 10 Nays: 0 FHWA Approval: <u>YES</u>	Action:	Passed as Submitted Passed as Revised Withdrawn
2024 Standard Specifications: 203.26 pg 182. Recurring Special Provision or Plan Details:	<u>_x</u> 	2026 Standard Specifications Revise Pay Items List Notification to Designers if change is <u>not</u> addressed by RSP
NONE Standard Drawing: NONE	<u>_x</u>	Create RSP (No. <u>203-R-765</u>) Effective: <u>March 1, 2024</u>
Indiana Design Manual Chapter: NONE	_	Revise RSP (No) Effective:
GIFE Sections:	_	Standard Drawing Effective:
	_	Create RPD (No) Effective:
	<u>x</u> 	GIFE Update Frequency Manual Update SiteManager Update

REVISION TO STANDARD SPECIFICATIONS

PROPOSAL TO STANDARDS COMMITTEE

<u>PROBLEM(S) ENCOUNTERED</u>: The specified size of smooth WWR specified does not appear to be a valid size.

PROPOSED SOLUTION: Update the 708 and 910 sections as shown to specify a standard size of WWR and also allow deformed WWR

APPLICABLE STANDARD SPECIFICATIONS: 708, 910

APPLICABLE STANDARD DRAWINGS: none

APPLICABLE DESIGN MANUAL CHAPTER: none

APPLICABLE SECTION OF GIFE: none

APPLICABLE RECURRING SPECIAL PROVISION: create 708 RSP

PAY ITEMS AFFECTED: none

APPLICABLE SUB-COMMITTEE ENDORSEMENT: Ad hoc, David Jacobs, Jim Reilman

IF APPROVED AS RECURRING SPECIAL PROVISION OR PLAN DETAILS, PROPOSED BASIS FOR USE: All contracts with a 708 pay item

IMPACT ANALYSIS (attach report):

Submitted By: Jim Reilman

Title: State Materials Engineer

Organization: INDOT

Phone Number: (317) 522-9692

Date: 7/24/23

REVISION TO STANDARD SPECIFICATIONS

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:

> <u>Construction costs?</u> Yes <u>Construction time?</u> Yes <u>Customer satisfaction?</u> N/A <u>Congestion/travel time?</u> N/A <u>Ride quality?</u> 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:

<u>Construction procedures/processes?</u> N/A <u>Asset preservation?</u> N/A <u>Design process?</u> 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:

<u>Federal or State regulations?</u>No <u>AASHTO or other design code?</u>No

Is this item editorial? No

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

SECTION 708 – PNEUMATICALLY PLACED MORTAR 708.02 Materials SECTION 910 – METAL MATERIALS 910.01 Reinforcing Bars, Dowel Bars and WWR

(Note: Proposed changes shown highlighted gray)

The Standard Specifications are revised as follows:

SECTION 708, BEGIN LINE 10, DELETE AND INSERT AS FOLLOWS:

708.02 Materials

Materials shall be in accordance with the following:

Deformed and Smooth Steel WWR	910.01(a), 910.01(b)5
Fine Aggregate	904.02(d)
Fly Ash	
Portland Cement	901.01(b)
Water	

WWR shall consist of wire, size W 1.2 or approximately No. 12 gauge or larger, or D 1 or larger, spaced and welded at intervals greater than or equal to 2 in., and no greater than 4 in.

SECTION 910, BEGIN LINE 3, DELETE AND INSERT AS FOLLOWS: 910.01 Reinforcing Bars, Dowel Bars and WWR

(a) General

Unless otherwise specified, bars for concrete reinforcement shall be deformed billet steel, grade 60. Tie bar assemblies used in lieu of bent tie bars shall be in accordance with the minimum total ultimate strength and minimum total yield strength requirements specified for bent tie bars; bend test and elongation will not be required. Coiled reinforcing bars shall only be used for fabrication of spiral and ring reinforcement or for rectangular ties and stirrups. When approved by the Engineer, coiled reinforcing bars may also be used for supports in accordance with 703.06.

Reinforcing bars and WWR shall be furnished by selecting materials made by a manufacturer or fabricator on the QPL of Uncoated Reinforcing Bar and WWR Manufacturers in accordance with ITM 301, except for WWR used for pneumatically placed mortar.

[moved to a separate paragraph]WWR used for pneumatically placed mortar will be accepted by a Type A cCertification, Other in accordance with 916.0102(f). When shipped to the project site, the reinforcing bars and WWR shall be accompanied by the type of cCertifications, Other specified in ITM 301 and in accordance with 916.01This certification shall accompany the WWR when it is shipped to the project site.

COMMENTS AND ACTIONS

708.02 Materials 910.01 Reinforcing Bars, Dowel Bars and WWR

DISCUSSION:

Mr. Reilman introduced and presented this item stating that the specified size of smooth WWR specified does not appear to be a valid size.

Mr. Reilman proposed to update the 708 and 910 sections as shown, to specify a standard size of WWR and also allow deformed WWR.

Some discussions arose concerning the certifications in accordance with 916. Editorial revisions are as shown highlighted above.

Mr. Reilman revised his motion, which was seconded by Mr. White.

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

Motion: Mr. Reilman Second: Mr. White Ayes: 10 Nays: 0 FHWA Approval: <u>YES</u>	Action:	Passed as Submitted Passed as Revised Withdrawn
2024 Standard Specifications: 708 pg 677; 910.01 pg. 1051	<u>_x</u>	2026 Standard Specifications Revise Pay Items List Notification to Designers if change is <u>not</u>
Recurring Special Provision or Plan Details: NONE	<u>_x</u> _	addressed by RSP Create RSP (No. <u>708-R-766</u>)
Standard Drawing: NONE		Effective: <u>March 1, 2024</u> Revise RSP (No)
Indiana Design Manual Chapter: NONE	_	Effective:
GIFE Section: NONE	_	Standard Drawing Effective:
	_	Create RPD (No) Effective:
	<u>_x</u> 	GIFE Update Frequency Manual Update SiteManager Update

REVISION TO STANDARD SPECIFICATIONS

PROPOSAL TO STANDARDS COMMITTEE

<u>PROBLEM(S) ENCOUNTERED</u>: Existing rocker bearings are often replaced with elastomeric bearings during bridge preservation projects. The Standard Specifications includes the cost of elastomeric bearings in the cost of structural members, so unique special provisions are frequently used to pay for elastomeric bearings directly. This creates multiple versions of USPs for the same intent that need to go through the USP review process.

PROPOSED SOLUTION: Update the Standard Specifications to pay for elastomeric bearings directly.

APPLICABLE STANDARD SPECIFICATIONS: 702, 707, 711, and 726

APPLICABLE STANDARD DRAWINGS: 726-BEBP (no changes required)

APPLICABLE DESIGN MANUAL: IDM Chapter 409-7.03(01)

APPLICABLE SECTION OF GIFE: N/A

APPLICABLE RECURRING SPECIAL PROVISION: N/A

<u>PAY ITEMS AFFECTED:</u> 726-92406 BEARING ASSEMBLY, ELASTOMERIC will need to be changed from unique to recurring.

<u>APPLICABLE SUB-COMMITTEE ENDORSEMENT:</u> Coordination with Jim Reilman, Joe Novak, Stephanie Wagner, Elizabeth Mouser, and Melissa Russell.

IF APPROVED AS RECURRING SPECIAL PROVISION OR PLAN DETAILS, PROPOSED BASIS FOR USE: All projects that include new elastomeric bearing assemblies.

IMPACT ANALYSIS (attach report):

Submitted By: Pete White

Title: Design Manager

Division: INDOT Bridge Engineering

E-mail: <u>pewhite@indot.in.gov</u>

Date: July 25, 2023

REVISION TO STANDARD SPECIFICATIONS

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> Yes, but no changes required <u>Will approval of this item affect the Qualified Products List (QPL)?</u> No <u>Will this proposal improve:</u>

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

Will this proposal reduce operational costs or maintenance effort? No

Will this item improve safety:

<u>For motorists?</u> No For construction workers? No

Will this proposal improve quality for:

<u>Construction procedures/processes?</u> Yes <u>Asset preservation?</u> No <u>Design process?</u> 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:

<u>Federal or State regulations?</u>No <u>AASHTO or other design code?</u>No

Is this item editorial? No

<u>Provide any further information as to why this proposal should be placed on the Standards Committee</u> <u>meeting Agenda:</u> This change should provide consistency for payment of elastomeric bearing assemblies.

SECTION 702 – STRUCTURAL CONCRETE 702.28 Basis of Payment SECTION 707 – PRECAST CONCRETE AND PRECAST PRESTRESSED CONCRETE STRUCTURAL MEMBERS 707.12 Basis of Payment SECTION 711 – STEEL STRUCTURES 711.73 Basis of Payment SECTION 726 – BEARING ASSEMBLIES 726.04 Method of Measurement 726.05 Basis of Payment

The Standard Specifications are revised as follows:

SECTION 702, BEGIN LINE 1400, DELETE AND INSERT AS FOLLOWS:

<u>Elastomeric bearings</u> assemblies will not be paid for in accordance with 726.05 directly, unless otherwise specified. The cost thereof shall be included in the cost of the structural member they support. The cost of protecting existing footings to be extended shall be included in the cost of concrete, B, footings, unless otherwise specified.

SECTION 707, BEGIN LINE 558, DELETE AND INSERT AS FOLLOWS:

Reinforcing bars, WWR, prestressing strands, elastomeric bearing pads, modifications to bearing pads, bearing beams required for box beams, bearing assemblies required for I-beams, bulb-T beams, U-beams, box beams, bearing plates, steel bearing assemblies for integral end bents, threaded reinforcing bars, threaded inserts in fascia beams, hex bolts, sealer on the outside face and bottom flange of fascia beams and on the tops of all beams, working drawings and design calculations, and necessary incidentals shall be included in the cost of the pay items of this section. *Elastomeric bearing pads, bearing assemblies, and bearing plates, will be paid for in accordance with 726.05*.

SECTION 711, BEGIN LINE 1273, DELETE AND INSERT AS FOLLOWS:

The cost of drilling holes for anchor bolts, elastomeric bearings, bridge bearing pads, steel bearing assemblies for integral end bents, fabrication, painting, erecting falsework, welding material, Charpy V-Notch toughness tests, and necessary incidentals shall be included in the cost of the pay items in this section. *Elastomeric bearings, and bridge bearing pads, will be paid for in accordance with 726.05.*

SECTION 726, BEGIN LINE 3, DELETE AND INSERT AS FOLLOWS: 726.01 Description

This work shall consist of furnishing and installing bearing assemblies, *elastomeric* or *PTFE*, in accordance with 105.03. Elastomeric *bB*earings assemblies shall include bearing plates, side retainers, anchor bolts, shim plates, bolsters, and plain bearings

SECTION 726, BEGIN LINE 43, DELETE AND INSERT AS FOLLOWS:

restrained at their interfaces by bonded laminates, as shown on the plans.

726.04 Method of Measurement

Elastomeric bearing padsassemblies will not be measured for payment by the number of bearing assemblies placed. PTFE bearing devicesassemblies will be measured by the number of devicesassemblies placed.

consisting of elastomer only, and laminated bearings consisting of layers of elastomer

SECTION 702 – STRUCTURAL CONCRETE 702.28 Basis of Payment SECTION 707 – PRECAST CONCRETE AND PRECAST PRESTRESSED CONCRETE STRUCTURAL MEMBERS 707.12 Basis of Payment SECTION 711 – STEEL STRUCTURES 711.73 Basis of Payment SECTION 726 – BEARING ASSEMBLIES 726.04 Method of Measurement 726.05 Basis of Payment

726.05 Basis of Payment

Elastomeric bBearing padsassemblies will not be paid for separately at the contract unit price per each for the type specified, complete in place.

PTFE bearing devices will be paid for at the contract unit price per each device, complete and in place.

Payment will be made under:

Pay Item

Pay Unit Symbol

The cost of the pads, side retainers, anchor bolts, shim plates, *bearing plates, bolster assemblies,* and other incidentals shall be included in the cost of the structural member, or for PTFE bearing assemblies *pay items*.

COMMENTS AND ACTIONS

702.28 Basis of Payment 707.12 Basis of Payment 711.73 Basis of Payment 726.04 Method of Measurement 726.05 Basis of Payment

DISCUSSION:

This item was introduced and presented by Mr. White who exclaimed that existing rocker bearings are often replaced with elastomeric bearings during bridge preservation projects. The Standard Specifications includes the cost of elastomeric bearings in the cost of structural members, so unique special provisions are frequently used to pay for elastomeric bearings directly. This creates multiple versions of USPs for the same intent that need to go through the USP review process.

Mr. White proposed to update the Standard Specifications to pay for elastomeric bearings directly.

Further editorial revisions have been incorporated for clarification, as shown above.

Mr. White revised his motion, which was seconded by Mr. Reilman. Mr. White asked that the effective date for this RSP be scheduled for June.

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

Motion: Mr. White Second: Mr. Reilman Ayes: 10 Nays: 0 FHWA Approval: <u>YES</u>	<u>Action:</u> 	Passed as Submitted Passed as Revised Withdrawn
2024 Standard Specifications: 702 pg. 649; 707 pg. 676; 711 pg. 714; and 726 pg. 818.	<u>x</u> <u>x</u> —	2026 Standard Specifications Revise Pay Items List Notification to Designers if change is <u>not</u> addressed by RSP
Recurring Special Provision or Plan Details: NONE Standard Drawing:	<u>_x</u>	Create RSP (No. <u>726-B-323)</u> Effective: <u>June 1, 2024</u>
726-BEBP (no changes required) Indiana Design Manual:		Revise RSP (No) Effective:
409-7.03(01) GIFE Section:	_	Standard Drawing Effective:
NONE	_	Create RPD (No) Effective:
		GIFE Update Frequency Manual Update SiteManager Update

REVISION TO SPECIAL PROVISIONS

PROPOSAL TO STANDARDS COMMITTEE

<u>PROBLEM(S) ENCOUNTERED</u>: RSP 603-R-109 GATE BARRICADE is outdated and should not be an RSP. The last time the pay item was used was back in December 2017, and only 2 times in the past 10 years. The pay item has been used with a USP and without the RSP, and with a supplemental description. The RSP is not in proper format.

PROPOSED SOLUTION: Delete RSP 603-R-109

APPLICABLE STANDARD SPECIFICATIONS: N/A

APPLICABLE STANDARD DRAWINGS: N/A

APPLICABLE DESIGN MANUAL CHAPTER: N/A

APPLICABLE SECTION OF GIFE: N/A

APPLICABLE RECURRING SPECIAL PROVISION: N/A

PAY ITEMS AFFECTED: 603-01947 GATE BARRICADE can be deleted

APPLICABLE SUB-COMMITTEE ENDORSEMENT: N/A

IF APPROVED AS RECURRING SPECIAL PROVISION OR PLAN DETAILS, PROPOSED BASIS FOR USE: $\mathrm{N/A}$

IMPACT ANALYSIS (attach report): Yes

Submitted By: Joe Novak

Title: State Construction Engineer

Division: Construction Management

E-mail: jnovak@indot.in.gov

Date: 8/1/23

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.

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

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

Will this proposal reduce operational costs or maintenance effort? No

Will this item improve safety:

<u>For motorists?</u> No <u>For construction workers?</u> No

Will this proposal improve quality for:

<u>Construction procedures/processes?</u> No <u>Asset preservation?</u> No <u>Design process?</u> No

Will this change provide the contractor more flexibility? No

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:

<u>Federal or State regulations?</u> No <u>AASHTO or other design code?</u> No

Is this item editorial? No

<u>Provide any further information as to why this proposal should be placed on the Standards Committee</u> <u>meeting Agenda:</u> Reduce website clutter and potential confusion when preparing estimates. 603-R-109 GATE BARRICADE (proposed to discontinue use)

603-R-109 GATE BARRICADE

(Revised 05-23-13)

This work shall consist of furnishing and placing a wooden gate barricade as shown on the plans or as otherwise directed.

The posts, bracing, and beam shall be fabricated from No. 2 dense stress rated grade yellow pine and pressure treated in accordance with 911.02. Posts, bracing, and beam shall be rough sawn timber cut and shaped as shown on the plans. Fasteners shall be galvanized with two washers per bolt. The steel collars shall have a corrosion resistant coating. The 10 ft chain shall be made from galvanized steel.

This work will be measured per each. This work will be paid for at the contract unit price per each for gate barricade. The costs of all labor, equipment, and necessary materials shall be included in the cost of this work.

<u>Item No. 5</u> (contd.) Mr. Novak Date: 08/17/23

COMMENTS AND ACTIONS

603-R-109 GATE BARRICADE

DISCUSSION:

This item was introduced and presented by Mr. Novak, who stated that RSP 603-R-109, GATE BARRICADE, is outdated and should not be an RSP. The last time the pay item was used was back in December 2017, and only 2 times in the past 10 years. The pay item has been used with a USP and without the RSP, and with a supplemental description. The RSP is also not in proper format.

Mr. Novak proposed to delete RSP 603-R-109. And the pay will be made obsolete.

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

Motion: Mr. Novak	Action:	
Second: Mr. Novak Ayes: 10 Nays: 0 FHWA Approval: <u>YES</u>	<u>x</u> —	Passed as Submitted Passed as Revised Withdrawn
2024 Standard Specifications Section: 603 begin pg. 497. Recurring Special Provision or Plan Details: 603-R-109 GATE BARRICADE	<u></u>	2026 Standard Specifications Revise Pay Items List Notification to Designers if change is <u>not</u> addressed by RSP
Standard Drawing:	<u>_X_</u>	Discontinue RSP (No. <u>609-R-109</u>) Effective:
Indiana Design Manual: NONE	_	Revise RSP (No) Effective:
GIFE Section: NONE	_	Standard Drawing Effective:
		Create RPD (No) Effective:
	<u> </u>	GIFE Update Frequency Manual Update SiteManager Update

REVISION TO STANDARD SPECIFICATIONS

PROPOSAL TO STANDARDS COMMITTEE

<u>PROBLEM(S) ENCOUNTERED</u>: The basis of payment for foundation seal and excavation for foundation seal is lacking clarity. A recent claim on the subject brought this to the attention of Construction Management.

<u>PROPOSED SOLUTION:</u> Clarify the basis of payment language in 702.28 to account for an increased cofferdam size and a corresponding increased foundation seal size due to constructability concerns allowed for in 206.09. Also clarify the basis of payment language to account for payment of foundation seal and foundation seal excavation when it is added to a contract due to adverse dewatering site conditions.

APPLICABLE STANDARD SPECIFICATIONS: 702.28

APPLICABLE STANDARD DRAWINGS: N/A

APPLICABLE DESIGN MANUAL CHAPTER 408-2.12

APPLICABLE SECTION OF GIFE: 5.6

APPLICABLE RECURRING SPECIAL PROVISION: N/A

PAY ITEMS AFFECTED: 702-51046 Concrete, Foundation Seal

APPLICABLE SUB-COMMITTEE ENDORSEMENT: Ad Hoc of: Pete White, Don Shaw, Jacob Blanchard

IF APPROVED AS RECURRING SPECIAL PROVISION OR PLAN DETAILS, PROPOSED BASIS FOR USE: All Contracts with the Cofferdam pay item (206-51235).

IMPACT ANALYSIS (attach report):

Submitted By: Joe Novak

Title: State Construction Engineer

Organization: INDOT

Phone Number: 317-501-7805

Date:

REVISION TO STANDARD SPECIFICATIONS

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? 206.09, 206.11 Will approval of this item affect the Approved Materials List? No Will this proposal improve:

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

Will this proposal reduce operational costs or maintenance effort? No

Will this item improve safety:

<u>For motorists?</u> No <u>For construction workers?</u> No

Will this proposal improve quality for:

<u>Construction procedures/processes?</u> Yes <u>Asset preservation?</u> No <u>Design process?</u> 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:

<u>Federal or State regulations?</u> 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> <u>Committee meeting Agenda:</u> N/A

SECTION 702 - STRUCTURAL CONCRETE 702.28 Basis of Payment

The Standard Specifications are revised as follows:

SECTION 702, BEGIN LINE 1353, DELETE AND INSERT AS FOLLOWS:

If a foundation seal is constructed as shown on the plans, it will be paid for at the contract price per cubic yard for concrete, foundation seal. If ordered to be done, or allowed to be donea foundation seal is added to the contract due to adverse dewatering conditions in accordance with 702.20(f), payment will be made at a unit price per cubic yard equal to 75% of the contract unit price per cubic yard for class B concrete in footings and the pay limits for foundation seal will extend to the inside face of sheeting as detailed on the approved cofferdam working drawings with no allowance for sheeting corrugation.

[moved to a separate paragraph] The excavation for the foundation seal will be paid for at the contract unit price per cubic yard for the class of excavation specified for the footing. Unless otherwise provided If the foundation seal is constructed as shown on the contract plans, the pay quantity for excavation for foundation seal will be equal to the theoretical volume bounded by the bottom of the proposed footing, the bottom of the approved excavation, and vertical planes 18 in. outside the neat line of the footing and parallel thereto, regardless of the quantity actually removed. If design of the structure requires sheeting to be outside these limits, the limits will be extended to 6 in. beyond the neat lines required by the design of the structure. If the Contractor chooses to construct a rectangular cofferdam around a U-shaped abutment in lieu of following the outline of the footing, the maximum allowable increase in the pay quantity above the theoretical shall not exceed 25%. The pay quantity for the foundation seal will be equal to the excavation volume described above If a foundation seal is added to the contract due to adverse dewatering conditions in accordance with 702.20(f), the pay limits for excavation for foundation seal will extend to the inside face of sheeting as detailed on the approved cofferdam working drawings with no allowance for sheeting corrugation.

If the planned cofferdam footprint is increased in size due to constructability concerns in accordance with 206.09, the maximum allowable increase in the foundation seal and excavation for foundation seal pay quantities above the original planned quantities will not exceed an additional 25%.

<u>Item No. 6</u> (contd.) Mr. Novak Date: 08/17/23

COMMENTS AND ACTIONS

702.28 Basis of Payment

DISCUSSION:

Mr. Novak introduced and presented this item stating that the basis of payment for foundation seal and excavation for foundation seal is lacking clarity. A recent claim on the subject brought this to the attention of Construction Management.

Mr. Novak proposed to clarify the basis of payment language in 702.28 to account for an increased cofferdam size and a corresponding increased foundation seal size due to constructability concerns allowed for in 206.09. Also, clarify the basis of payment language to account for payment of foundation seal and foundation seal excavation when it is added to a contract due to adverse dewatering site conditions.

Mr. Novak withdrew this item pending further review of concerns from industry.

Mr. Reilman asked about redundancies in the two paragraphs, and Mr. Novak will look into that.

Motion: Mr. Novak Second: Mr. Ayes: Nays: FHWA Approval:	Action:	Passed as Submitted Passed as Revised Withdrawn
2024 Standard Specifications: 702 begin 618. Recurring Special Provision or Plan Details:	_	2026 Standard Specifications Revise Pay Items List Notification to Designers if change is <u>not</u> addressed by RSP
Standard Drawing:	_	Create RSP (No) Effective:
Indiana Design Manual: NONE		Revise RSP (No) Effective:
GIFE Section: NONE	_	Standard Drawing Effective:
×		Create RPD (No) Effective: GIFE Update
		Frequency Manual Update SiteManager Update