



AGENDA

May 18, 2023 Standards Committee Meeting

MEMORANDUM

May 12, 2023

TO: Standards Committee

FROM: Scott Trammell, Secretary

RE: Agenda for the May 18, 2023 Standards Committee Meeting

A Standards Committee meeting is scheduled for 09:00 a.m. on May 18, 2023 will be held virtually via *Teams* (Microsoft application). Please contact Scott Trammell (strammell@indot.in.gov) for instructions on how to join this event.

The following items are listed for consideration:

A. GENERAL BUSINESS

OLD BUSINESS

(No items on this agenda)

NEW BUSINESS

1. Approval of the Minutes from the [April 20, 2023](#) meeting

B. CONCEPTUAL PROPOSAL

(No items on this agenda)

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

OLD BUSINESS

(No items on this agenda)

NEW BUSINESS

[Item No. 1](#) [Mr. Novak](#) [pg. 3](#)

Standard Specifications:

801.03	General Requirements
801.10	Temporary Traffic Barriers
801.10.1	Construction Zone Energy Absorbing Terminal, CZ

[Item No. 2](#) [Mr. Novak](#) [pg. 15](#)

Recurring Special Provision:

<i>106-C-xxx</i>	<i>E-TICKETING INCENTIVE</i>
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[Item No. 3](#) [Mr. Reilman](#) [pg. 19](#)

Standard Specifications:

901.04	Silica Fume Used as a Pozzolanic Mineral Admixture
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[Item No. 4](#) [Mr. Novak](#) [pg. 23](#)

Standard Specifications:

923.04	Flashing Arrow Sign
923.08(g)	Batteries and Charging System

[Item No. 5](#) [Mr. Novak](#) [pg. 28](#)

Recurring Special Provision:

<i>101-C-xxx</i>	<i>IDIQ WORK ORDERS</i>
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cc: Committee Members
FHWA
ICI

PROPOSAL TO STANDARDS COMMITTEE

PROBLEM(S) ENCOUNTERED: 801.10 has allowed modifications to terminating temporary traffic barrier when field conditions do not allow placement per the construction plans. These modifications to flare rates or termination points without CZ units are being made in the field, many times without approval by the designer. These types of safety modifications should be conservative or reviewed and approved by the designer.

PROPOSED SOLUTION: Eliminate the existing language that allows modification of the flare rate and offset of the termination point of temporary traffic barrier and replace it with more descriptive termination allowances. In addition, clarify what type 1, type 2, and type 3 temporary traffic barrier and CZ units can be used and how they should be placed. To keep language clarifications consistent throughout the section, proposed revisions for RSP 801-T-207 has also been included.

APPLICABLE STANDARD SPECIFICATIONS: 801.10 and 801.03

APPLICABLE STANDARD DRAWINGS: 801-TCCB Series

APPLICABLE DESIGN MANUAL SECTION: 503-3.05(04) and (05)

APPLICABLE SECTION OF GIFE: 2.8, 21.2

APPLICABLE RECURRING SPECIAL PROVISIONS: RSP 801-T-207

PAY ITEMS AFFECTED: N/A

APPLICABLE SUB-COMMITTEE ENDORSEMENT: Ad-Hoc Committee: Joe Novak, John Ritter, Elizabeth Mouser, Dan Osborn (ICI), and Katherine Smutzer

IF APPROVED AS RECURRING SPECIAL PROVISION OR PLAN DETAILS, PROPOSED BASIS FOR USE: Required for all contracts with pay item 801-08400 Temporary Traffic Barrier Type 1, 801-08401 Temporary Traffic Barrier Type 2, 801-08402 Temporary Traffic Barrier Type 3, 801-08403 Temporary Traffic Barrier Type 4, 801-08507 Temporary Traffic Barrier Anchored Type 1, 801-08508 Temporary Traffic Barrier Anchored Type 2, 801-08509 Temporary Traffic Barrier Anchored Type 3.

IMPACT ANALYSIS (attach report): yes

Submitted By: Katherine Smutzer
Title: Work Zone Safety Engineer
Division: Traffic Management
E-mail: ksmutzer@indot.in.gov
Date: 4/24/2023

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:

Construction costs? No

Construction time? No

Customer satisfaction? Yes

Congestion/travel time? No

Ride quality? No

Will this proposal reduce operational costs or maintenance effort? No

Will this item improve safety:

For motorists? Yes

For construction workers? Yes

Will this proposal improve quality for:

Construction procedures/processes? Yes

Asset preservation? No

Design process? No

Will this change provide the contractor more flexibility? No

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

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

Is this proposal needed for compliance with:

Federal or State regulations? No

AASHTO or other design code? No

Is this item editorial? No

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

REVISION TO STANDARD SPECIFICATIONS

SECTION 801 – TRAFFIC CONTROLS FOR CONSTRUCTION AND MAINTENANCE OPERATIONS

801.03 General Requirements

801.10 Temporary Traffic Barriers

801.10.1 Construction Zone Energy Absorbing Terminal, CZ

(Note: Proposed changes shown highlighted gray.
Previously approved changes shown shaded and are in provision:
[801-T-207 Temporary Traffic Barriers](#)
Basis for Use: Required for all contracts with any temporary traffic barrier pay item.)

The Standard Specifications are revised as follows:

SECTION 801, BEGIN LINE 70, DELETE AS FOLLOWS:

801.03 General Requirements

The applicable requirements of the MUTCD shall apply to the installation and materials for traffic control devices subject to the requirements of 107.08 and 107.12. When the plans do not include a maintenance of traffic plan, the Engineer will provide such a plan to the Contractor. The Contractor shall be responsible for the field layout, placement, operation, maintenance, and removal of temporary traffic control devices.

A worksite traffic supervisor certified by the American Traffic Safety Service Association, ATSSA, or approved equal certifying organization, shall direct all field layout, placement, operation, inspection, maintenance, and removal of temporary traffic control devices. The certified worksite traffic supervisor, CWTS, shall ensure that all traffic control devices, ~~except temporary concrete barrier,~~ meet acceptable standards as outlined in the plans, specifications, and ATSSA’s “Quality Standards for Temporary Traffic Control Devices” prior to installation. The CWTS shall also, prior to installation, ensure that all traffic control devices can be installed in accordance with the plans, specifications, and the MUTCD. All problems shall be reported to the Engineer so a resolution can be worked out prior to installation. The field layout will be reviewed and is subject to approval by the Engineer prior to placement of any temporary traffic control devices. The CWTS shall be present for the initial setup and all phase changes during the life of the project. The CWTS may designate responsible Contractor personnel to perform day to day operation, inspection, and maintenance of the temporary traffic control devices. These responsible personnel shall work under the direction of the CWTS and their names shall be given to the Engineer on the project. A copy of the CWTS’s certification shall be provided to the Engineer prior to the start of construction or placement of temporary traffic control devices or if the worksite traffic supervisor changes.

SECTION 801, BEGIN LINE 349 (2022 SS)/354 (2024 SS), DELETE AND INSERT AS FOLLOWS:

801.10 Temporary Traffic Barriers

Temporary traffic barrier shall be one of the following four types as shown on the plans.

Type 1

Type 1 temporary traffic barriers shall be used to separate two-way traffic and shall be precast concrete in accordance with applicable requirements of 707 and 602 and as

REVISION TO STANDARD SPECIFICATIONS

SECTION 801 – TRAFFIC CONTROLS FOR CONSTRUCTION AND MAINTENANCE OPERATIONS

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shown on the plans. Type 1 barriers may also be used ~~to separate traffic from the work areas~~ *type 2 barriers as described below*. The surfaces of individual precast concrete units shall vary no more than 1/4 in. in 10 ft from the specified cross-section, as measured from a longitudinal straightedge. The maximum variation in the vertical and horizontal alignment of adjacent units shall be 1/4 in. across the joint, as measured from a 10 ft longitudinal straightedge. ~~Sections that have obvious defects or visual cracks shall not be used. Sections that develop any of these conditions during the contract shall be repaired with concrete or replaced within a reasonable amount of time.~~ *Unit condition and maintenance shall be in accordance with 801.03.*

~~Type 1~~ *Precast concrete* barrier units ~~precast prior to~~ *shall be manufactured on or after 2003.* ~~shall not be used after January 1, 2012.~~ Units ~~precast after March 1, 2003~~ shall be clearly marked with the name or trademark of the manufacturer, the year of manufacture, and "INDOT". The markings shall be indented on an end or on the top of each barrier section. Units ~~precast~~ *manufactured* after January 1, 2007 shall be from the QPL of Certified Precast Concrete Producers.

Type 2

Type 2 barriers ~~may~~ *shall* be used to separate traffic from the work area. Type 2 temporary traffic barriers shall meet the appropriate test level 2 or 3 ~~MASH or NCHRP 350 or MASH~~ crash test standards ~~and shall be approved for use by the FHWA. A copy of the MASH or NCHRP 350 crash test FHWA eligibility letter shall be provided to the Engineer prior to placing the unit.~~ *A copy of the crash test report confirming the product is NCHRP 350 or MASH compliant for the test level specified, or a copy of the FHWA eligibility letter, shall be furnished to the Engineer prior to the installation of the system.*

[moved to a separate paragraph] The ~~unit~~ *barrier* selected shall be appropriate for the location considering the maximum posted speed limit on the project *prior to construction* and the allowable area for deflection. The ~~unit~~ *barrier* shall be installed according to the manufacturer's recommendations.

If ~~precast~~ concrete barriers are used as Type 2 barriers, they shall be in accordance with the requirements for Type 1 barriers.

Type 3

Type 3 temporary traffic barriers shall be those Type 1 temporary traffic barriers that are to be left in place at the completion of the contract and shall become the property of the Department. They shall be in like-new condition at the completion of the contract. All necessary delineation and required anchor systems shall be left in place.

Type 4

Type 4 temporary traffic barriers shall be those types that are intended to be readily moveable to accommodate the shifting of traffic lanes on a daily basis to better facilitate

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the changing volumes of traffic during the peak hours of a day. Type 4 temporary traffic barriers shall meet the appropriate test level 3 MASH or NCHRP 350 crash test standards and shall be approved for use by the FHWA. A copy of the MASH or NCHRP 350 crash test FHWA eligibility letter shall be provided to the Engineer prior to placing the unit. A copy of the crash test report confirming the product is NCHRP 350 or MASH compliant for the test level specified, or a copy of the FHWA eligibility letter, shall be furnished to the Engineer prior to the installation of the system.

(a) Placement

Temporary traffic barriers shall be located as shown on the plans or as directed. Each run of temporary traffic barrier shall be installed and maintained such that adjoining units form a smooth continuous plane, except for the start and end of a flared section. Temporary traffic barriers used to close a lane of traffic shall be flared at the rates as shown on the plans for the applicable regulatory maximum posted speed within the construction zone prior to construction. If field conditions are such that the required flare rate cannot be utilized, the tapered alignment may be altered, with approval, to a 10:1 flare rate with a 20 ft minimum offset from the edge of the through traffic lane to the approaching end of the flared temporary traffic barrier. If field conditions are such that that the 10:1 flare rate cannot be utilized, the tapered alignment may be further altered, with approval, to a 6:1 flare rate with the 20 ft minimum offset. Flare rates for ends of temporary traffic barriers at locations where a lane of traffic is not being closed to traffic or where the lane has already been closed shall be the same as above, however the minimum offset from the edge of the through traffic lane may be 10 ft. The use of flare rates sharper than those shown on the plans may require additional traffic control devices as directed. Temporary traffic barrier shall be extended parallel to traffic to satisfy the length of need and an appropriate end treatment placed in accordance with 801.10(e).

Type 2 barriers shall not be intermixed with Type 1 or Type 3 barriers in any run. Type 2 barriers from different manufacturers shall not be intermixed in any run.

Where temporary traffic barrier is terminated behind guardrail within 30 ft from the edge of the adjacent travel lane, the ends of the TTB shall not be within 10 ft of the face of guardrail, and the TTB shall overlap:

1. a crashworthy guardrail end treatment by more than 15 ft,
2. a guardrail cable terminal anchor by more than 40 ft, or
3. a run of guardrail that has been broken for construction access by more than 100 ft.

Where temporary traffic barrier, exposed to oncoming traffic, is terminated adjacent to the face of guardrail or concrete barrier an appropriate end treatment shall be placed in accordance with 801.10(e).

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Cross slopes leading to and on which temporary traffic barrier is placed shall be 10:1 or flatter. Where the cross slopes are steeper than 10:1, temporary traffic barrier shall be extended parallel to traffic and an appropriate end treatment placed in accordance with 801.10(e).

Precast concrete barriers shall not be intermixed with precast concrete barriers of a different size or shape or with any non-concrete barrier in any run. Non-concrete barriers shall not be intermixed with barriers from different manufacturers in any run.

(b) Connection

Precast concrete barrier used as Type 1 and Type 3 temporary traffic barrier sections shall be connected as shown on plans and as follows:

1. Smooth Bar Hooks

- 1a.* The adjacent barrier sections shall be placed end to end, with sufficient overlapping of the smooth bar hooks to allow placement of the connecting bolt or threaded rod and the top spacer.
- 2b.* The adjacent barrier sections shall then be moved in opposite directions for a sufficient distance to develop the maximum contact between the smooth bar hooks and the connecting bolt or threaded rod.
- 3c.* The bottom spacer and nut shall then be placed as shown on the plans. The nut shall be sufficiently tightened to eliminate all gaps between the adjacent bolt heads, spacers, nuts, and washers which form the connection.

2. J-J Hook

- a.* *The adjacent barrier sections shall be placed in accordance with the manufacturer's recommendations such that the J-J hooks are engaged.*
- b.* *The adjacent barrier sections shall then be moved in opposite directions for a sufficient distance to develop the maximum separation between the barrier sections.*

Type 1 and Type 3 precast units which have previously been cast meeting earlier Department standards may be used. The Contractor will be allowed to mix Type 1 and Type 3 units in a run as long as the units are in good condition and the connecting devices

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~~are compatible. If units meeting earlier Department standards are used, a 1 in. bolt will be allowed to link the units together. The spacer detail shall, however, be in accordance with the current standard. Units cast after March 1, 2003 shall be linked with the 1 1/4 in. bolt.~~ *Precast concrete barrier connecting devices shall not be intermixed.*

~~Type 2 temporary traffic barriers~~ *Temporary traffic barriers other than concrete* shall be connected as recommended by the barrier manufacturer.

(c) Anchorage

~~Type 1 and Type 3 temporary traffic barriers shall be anchored in accordance with the methods shown on the plans, at the locations described herein. Type 2 barriers shall be anchored as recommended by the barrier manufacturer and at locations described herein. Temporary concrete traffic barriers shall be anchored when located on or within 60 ft of a bridge, and along tapered alignments at the locations shown on the plans. Anchoring at locations in addition to those described herein will shown shall be required when directed. Anchoring shall be in accordance with the NCHRP 350 or MASH crash test. The FHWA eligibility letter shall be provided to the Engineer prior to placing the barrier. Anchoring for precast concrete barriers shall be as shown on plans. Anchoring barriers other than concrete shall be in accordance with the associated NCHRP 350 or MASH crash test. A copy of the crash test report or a copy of the FHWA eligibility letter, shall be furnished to the Engineer prior to the installation of the system.~~

Chemical anchor systems with removable bolts, or mechanical anchors may be used to anchor ~~Type 1~~ barriers to bridge decks, concrete pavement, and concrete shoulders. Mechanical anchors may be ferrous or non-ferrous material. ~~All anchors shall have a shear strength of 10,000 lb and an ultimate pullout strength of 6,500 lb.~~

Non-ferrous mechanical anchors shall be installed such that the top end of the sleeve is a minimum of 2 1/2 in. below the final finished concrete surface.

Ferrous mechanical anchors shall be completely removed when no longer required. All damage to the pavement shall be repaired as directed.

Non-ferrous anchor sleeves and the chemical adhesive component of chemical anchor systems may remain in place when no longer required. The holes remaining in the pavement shall be filled with appropriate material as directed.

(d) Delineation

~~Type 1~~ *Temporary traffic* barriers used to separate two-way traffic shall be delineated with top mounted temporary barrier delineators and with side mounted delineators. The top mounted delineators shall be two-sided, shall be yellow, and shall be placed on every other section of barrier wall. The top mounted delineators shall be mounted perpendicular to the direction of traffic flow. The side mounted delineators shall be yellow

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and shall be mounted in accordance with 602.03(f).

Temporary traffic barriers in locations other than separating two-way traffic shall be delineated with either Type C construction warning lights or top mounted temporary barrier delineators and with side mounted barrier delineators. The Type C lights or the top mounted barrier delineators shall be spaced at the number of feet equal to the number of miles per hour in the ~~posted~~ *regulatory* speed limit with a minimum spacing of 20 ft. Bi-directional lenses will be required on the warning lights when the barrier is adjacent to a lane that is carrying alternating one-way traffic. The color of the barrier delineators shall be white when located on the right side of the traffic lane, and yellow when located on the left side of the traffic lane. The color of the barrier delineators shall be white when located adjacent to a lane that is carrying alternating one-way traffic.

Where the temporary traffic barrier is located along a tapered alignment and is located behind drums or other reflective delineation devices, the Type C construction warning lights and barrier delineators shall not be used.

(e) End Treatment

Where possible, the ends of temporary traffic barriers shall be ~~flared~~ in accordance with 801.10(a). Where conditions do not allow the temporary traffic barrier to be ~~flared~~ in accordance with 801.10(a), appropriate end treatments shall be ~~incorporated to protect vehicles from the ends of the barriers installed.~~ *All end treatments shall be installed parallel to traffic and the first unit of temporary traffic barrier immediately downstream shall be parallel to the end treatment.* The end treatments shall have ~~re-direct capability and shall meet the appropriate test level 2 or 3 NCHRP 350 crash test standards and be approved for use by the FHWA~~ *be in accordance with 801.10.1.*

(f) Storage

No barrier ~~segments~~ *units* shall be stored on the right-of-way unless written permission is given by the Department. Requests for permission to store traffic barrier ~~segments~~ *units* on the right-of-way will not be accepted until after the contract has been awarded.

801.10.1 Construction Zone Energy Absorbing Terminal, CZ

The construction zone energy absorbing terminal, CZ, shall ~~have passed NCHRP 350 level 3 crash test~~ *meet the test level 3 NCHRP 350 or MASH crash test criteria* for all Interstate and other construction sites having a ~~construction zone~~ *regulatory* speed limit ~~prior to construction~~ in excess of 45 mph, ~~and level 2~~ *The CZ shall meet test level 2* for non-Interstate construction sites having a *regulatory speed limit prior to construction zone speed limit* of 45 mph or less. ~~All energy absorbing terminal, CZ, shall have redirect capabilities and shall be approved by the FHWA.~~

All energy absorbing terminal, CZ, shall have redirect capabilities. A copy of the

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crash test report confirming the product is NCHRP 350 or MASH compliant for the test level specified, or a copy of the FHWA eligibility letter, shall be furnished to the Engineer prior to the installation of the unit.

BACKUP 1

PROPOSED FIGURE TO BE SHOWN IN GENERAL INSTRUCTIONS TO FIELD EMPLOYEES (GIFE)

PORTABLE BARRIER (PB)

- MA. A tapered end section may be used in place of the impact attenuator at locations where the last full section of NCHRP 350 PB can be extended outside of the clear zone for approaching traffic. See Table II for clear zone widths.
- MB. If it is necessary to provide the Contractor with access to the work area behind the PB flare, the PB end treatment shall include an impact attenuator. The maximum width of the opening shall be 9' between the impact attenuator and the outside edge of the paved shoulder.
- MC. If Contractor access is provided per Note MB, the length of PB shall be adequate to shield the work area from the motorist. This length of need of PB shall be determined from the calculations provided in SCD MT-101.75 and the L&D Manual, Volume I, Figure 602-E, and shall require the approval of the Engineer.
- MD. When used, impact attenuators shall be installed parallel to traffic. Also, the last full section of PB, adjacent to the impact attenuator, shall be located parallel to traffic.
- ME. Where narrow medians are provided, see Table II to determine whether or not the downstream end of the PB is located within the clear zone of opposing traffic. If the PB is located within the clear zone of opposing traffic, the downstream end shall be flared away from opposing traffic to shield the work area from potential errant vehicles crossing the median.
- MF. If the NCHRP 350 PB is located beyond the clear zone of opposing traffic, the downstream end of the NCHRP 350 PB may be provided with a tapered end, located 10' beyond the work area.
- MG. Where PB is located beyond the edge of the paved shoulder, the cross slope within the clear zone, including the surface on which the PB is placed, shall be graded at 10%, or flatter. If the cross slope is steeper than 10%, the PB shall be terminated on the paved shoulder. The PB shall be extended along the paved shoulder as necessary to satisfy the length of need, and then terminated using an impact attenuator.
- MH. The work area shall be adequately protected from traffic approaching from intersections and driveway approaches using PB and impact attenuators as called for by the Engineer.
- MI. For installation procedures, refer to the manufacturer's installation instructions.
- MI. For details on delineation of PB, see Standard Construction Drawing MT-101.70.

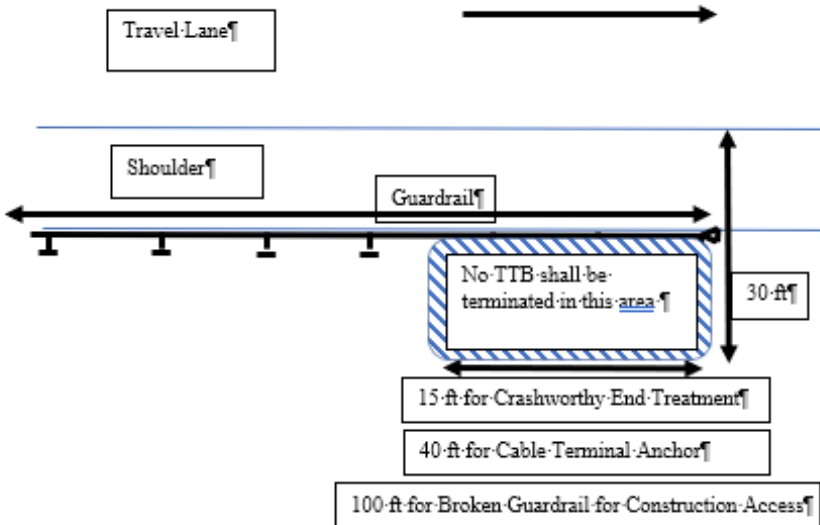
BACKUP 1

PROPOSED FIGURE TO BE SHOWN IN GENERAL INSTRUCTIONS TO FIELD EMPLOYEES (GIFE)

Where temporary traffic barrier is terminated behind guardrail within 30 ft from the edge of the adjacent travel lane, the ends of the TTB shall not be within 10 feet of the face of guardrail, and the TTB shall overlap:

- → a crashworthy guardrail end treatment by more than 15 ft,
- → a guardrail cable terminal anchor by more than 40 ft, or
- → a run of guardrail that has been broken for construction access by more than 100 ft.

No portion of the temporary traffic barrier shall be within 10 ft behind the face of guardrail.



COMMENTS AND ACTION

801.03 General Requirements
801.10 Temporary Traffic Barriers
801.10.1 Construction Zone Energy Absorbing Terminal, CZ

DISCUSSION:

	Action:
<p>Motion:</p> <p>Second:</p> <p>Ayes:</p> <p>Nays:</p> <p>FHWA Approval:</p> <hr/> <p>2022 Standard Specifications Sections referenced and/or affected: 801.03 and 801.10 begin pg. 863 (2022 SS)/867 (2024 SS)</p> <p>Recurring Special Provisions or Plan Details: RSP 801-T-207</p> <p>Standard Drawing affected: 801-TCCB Series</p> <p>Design Manual Sections affected: 503-3.05(04) and (05)</p> <p>GIFE Sections cross-references: 2.8, 21.2</p>	<p>— Passed as Submitted</p> <p>— Passed as Revised</p> <p>— Withdrawn</p> <hr/> <p>— 2026 Standard Specifications Revise Pay Items List</p> <p>— Create RSP (No. __) Effective:</p> <p>— Revise RSP (No. __) Effective:</p> <p>— Standard Drawing Effective:</p> <p>— Create RPD (No. __) Effective:</p> <p>— GIFE Update</p> <p>— Frequency Manual Update</p> <p>— SiteManager Update</p>

PROPOSAL TO STANDARDS COMMITTEE

PROBLEM(S) ENCOUNTERED: The industry is beginning to implement electronic ticketing (e-ticketing) as a result of the 2022 RSP allowing e-ticketing in place of paper and a 2022 memo describing the implementation. However, greater opportunities for e-ticketing adoption exist. Especially with HMA, Concrete Ready Mix, and Aggregate e-ticketing which forms the bulk of highway construction material jobsite delivery. CM Dept is interested in increasing the total number of suppliers and contractors participating in e-ticket material delivery. CM Dept is also interested in increasing the total number of contracts utilizing e-ticketing even for those suppliers and contractors that have already started e-ticketing.

PROPOSED SOLUTION: Implement an e-ticket Incentive RSP for a period of time to encourage adoption and supplement the technology costs associated with implementing and maintaining e-ticketing systems. A new pay item "e-ticket incentive" will be applied on a per ticket basis for all e-tickets furnished and marked delivered in the INDOT e-ticket portal. This incentive is expected to increase the number of suppliers and contractors adopting e-ticketing technology while also increasing the scale of adoption of e-ticketing by suppliers and contractors that have already started e-ticketing with the Department.

APPLICABLE STANDARD SPECIFICATIONS: 106.01(b),

APPLICABLE STANDARD DRAWINGS: N/A

APPLICABLE DESIGN MANUAL SECTION: N/A

APPLICABLE SECTION OF GIFE: 13.19

APPLICABLE RECURRING SPECIAL PROVISIONS: N/A

PAY ITEMS AFFECTED: N/A

APPLICABLE SUB-COMMITTEE ENDORSEMENT: The potential for an e-ticket incentive has been shared with ICI and APAI.

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

IMPACT ANALYSIS (attach report):

Submitted By: Joe Novak
Title: State Construction Engineer
Organization: INDOT
Phone Number: 317-501-7805
Date:

IMPACT ANALYSIS REPORT CHECKLIST

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

Does this item appear in any other specification sections? No

Will approval of this item affect the Approved Materials List? No

Will this proposal improve:

Construction costs? No

Construction time? Yes

Customer satisfaction? Yes

Congestion/travel time? No

Ride quality? No

Will this proposal reduce operational costs or maintenance effort? No

Will this item improve safety:

For motorists? No

For construction workers? Yes

Will this proposal improve quality for:

Construction procedures/processes? Yes

Asset preservation? No

Design process? No

Will this change provide the contractor more flexibility? Yes

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

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

Is this proposal needed for compliance with:

Federal or State regulations? No

AASHTO or other design code? No

Is this item editorial? No

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

REVISION TO SPECIAL PROVISIONS

PROPOSED NEW: 106-C-xxx E-TICKETING INCENTIVE

106-C-xxx E-TICKETING INCENTIVE

(Adopted xx-xx-23)

Description

This work shall consist of furnishing an electronic material delivery ticket, e-ticket, and delivering the e-ticket to the Department's e-ticketing portal, MyDOTportal, in accordance with 105.03.

Requirements

The Department will pay an incentive for each e-ticket which is delivered to the Department's e-ticketing portal. The incentive will only apply to e-tickets which are:

- (a) Submitted on or after 7/1/2023,
- (b) Marked "Delivered" by Department personnel in MyDOTportal, and
- (c) Utilized as the basis of payment or source document in the final construction record.

The e-ticket furnished and delivered to the Department's e-ticketing portal shall be in accordance with 106.01(b)1. The information provided on each e-ticket furnished shall be in accordance with 106.01(b)2.

Method of Measurement

The e-ticket incentive will be measured by the number of tickets, furnished and delivered to the Department's e-ticketing portal.

Basis of Payment

The e-ticket incentive will be paid for at the contract unit price per each ticket, furnished and delivered to the Department's e-ticketing portal. The unit price for this incentive will be \$2.00 per ticket.

Payment will be made under:

Pay Item	Pay Unit Symbol
E-Ticket Incentive.....	EACH

The cost of all labor, materials, equipment, software, hardware, IT upgrades, internet or cellular upgrades, and all other necessary incidentals required to furnish and deliver an e-ticket to the Department's e-ticketing portal shall be included in the cost of the incentive pay item.

The incentive will not apply to alternate e-ticket systems selected by the Contractor or Supplier that do not furnish and deliver e-tickets to the Department's e-ticketing portal.

COMMENTS AND ACTION

106-C-xxx E-TICKETING INCENTIVE

DISCUSSION:

	<u>Action:</u>
<p>Motion:</p> <p>Second:</p> <p>Ayes:</p> <p>Nays:</p> <p>FHWA Approval:</p> <hr/> <p>2024 Standard Specifications Sections referenced and/or affected: 106.01(b) pg 64.</p> <p>Recurring Special Provisions or Plan Details: proposed new</p> <p>Standard Drawing affected: NONE</p> <p>Design Manual Sections affected: NONE</p> <p>GIFE Sections cross-references: 13.19</p>	<p>— Passed as Submitted</p> <p>— Passed as Revised</p> <p>— Withdrawn</p> <hr/> <p>— 2026 Standard Specifications</p> <p>— Revise Pay Items List</p> <p>— Create RSP (No. __)</p> <p>Effective:</p> <p>— Revise RSP (No. __)</p> <p>Effective:</p> <p>— Standard Drawing</p> <p>Effective:</p> <p>— Create RPD (No. __)</p> <p>Effective:</p> <p>— GIFE Update</p> <p>— Frequency Manual Update</p> <p>— SiteManager Update</p>

PROPOSAL TO STANDARDS COMMITTEE

PROBLEM(S) ENCOUNTERED: Repulpable bags or shreddable bags that silica fume is provided in often do not completely break down in a concrete mix resulting in pieces of bags or packaging in the concrete.

PROPOSED SOLUTION: Prohibit the inclusion of repulpable bags, shreddable bags, or any other type of packaging from being incorporated in a concrete mix.

APPLICABLE STANDARD SPECIFICATIONS: 901.04

APPLICABLE STANDARD DRAWINGS: None

APPLICABLE DESIGN MANUAL SECTION: None

APPLICABLE SECTION OF GIFE: None

APPLICABLE RECURRING SPECIAL PROVISIONS: create new 901 RSP

PAY ITEMS AFFECTED: None

APPLICABLE SUB-COMMITTEE ENDORSEMENT: INDOT/IRMCA

IF APPROVED AS RECURRING SPECIAL PROVISION OR PLAN DETAILS, PROPOSED BASIS FOR USE:
all contracts except mowing, herbicide, etc...

IMPACT ANALYSIS (attach report):

Submitted By: Jim Reilman

Title: State Materials Engineer

Organization: INDOT

Phone Number: (317) 522-9692

Date: 5/10/23

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? Yes

Will this proposal improve:

Construction costs? N/A

Construction time? N/A

Customer satisfaction? Yes

Congestion/travel time? N/A

Ride quality? Yes

Will this proposal reduce operational costs or maintenance effort? Yes

Will this item improve safety:

For motorists? N/A

For construction workers? N/A

Will this proposal improve quality for:

Construction procedures/processes? Yes

Asset preservation? Yes

Design process? 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

Is this proposal needed for compliance with:

Federal or State regulations? No

AASHTO or other design code? No

Is this item editorial? No

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

REVISION TO STANDARD SPECIFICATIONS

SECTION 901 – PCC MATERIALS

901.04 Silica Fume Used as a Pozzolanic Mineral Admixture

The Standard Specifications are revised as follows:

SECTION 901, BEGIN LINE 346, INSERT AS FOLLOWS:

901.04 Silica Fume Used as a Pozzolanic Mineral Admixture

(a) General

Silica fume will be accepted from one of the suppliers on the QPL of Pozzolan Sources. Silica fume from more than one of these suppliers shall not be mixed or used alternatively in the same construction unless authorized in writing. *Repulable bags, shreddable bags, or any other type of bags or packaging shall not be incorporated into the concrete mixture.* Silica fume will be subject to random assurance sampling and testing by the Department. Failure of the random samples to meet the specified requirements will be cause for removal of the silica fume supplier from the QPL.

COMMENTS AND ACTION

901.04 Silica Fume Used as a Pozzolanic Mineral Admixture

DISCUSSION:

<p>Motion: Second: Ayes: Nays: FHWA Approval:</p>	<p><u>Action:</u></p> <p>— Passed as Submitted — Passed as Revised — Withdrawn</p>
<p>2024 Standard Specifications Sections referenced and/or affected: 901.04 pg. 974</p> <p>Recurring Special Provisions or Plan Details: NONE</p> <p>Standard Drawing affected: NONE</p> <p>Design Manual Sections affected: NONE</p> <p>GIFE Sections cross-references: NONE</p>	<p>— 2026 Standard Specifications Revise Pay Items List</p> <p>— Create RSP (No. __) Effective:</p> <p>— Revise RSP (No. __) Effective:</p> <p>— Standard Drawing Effective:</p> <p>— Create RPD (No. __) Effective:</p> <p>— GIFE Update — Frequency Manual Update — SiteManager Update</p>

PROPOSAL TO STANDARDS COMMITTEE

PROBLEM(S) ENCOUNTERED: The spec for flashing arrow signs is outdated so it doesn't represent advancements over the past quarter century. This stifles potential innovation for new energy storage systems. The spec was originally written in the late 90s and there have been many advancements in battery technology that INDOT should allow in our spec. Additionally, the AC power and diesel aren't relevant anymore. The only power source available on present QPL options is solar in conjunction with 12-volt lead acid batteries.

PROPOSED SOLUTION: Remove AC and diesel specification on power source. Relax battery requirements to allow for more efficient modern battery chemistries.

APPLICABLE STANDARD SPECIFICATIONS: 923.04 and 923.08(g)

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:
Usage of pay item 801-06710

IMPACT ANALYSIS (attach report):

Submitted By: Patrick Patterson (via Joe Novak)

Title: Field Engineer

Division: Construction Management

E-mail: ppatterson1@indot.in.gov

Date: 4/27/23

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)? Yes. It will allow for submittal of additional solar powered flashing arrow signs with more efficient battery subsystems.

Will this proposal improve:

Construction costs? No

Construction time? No

Customer satisfaction? No

Congestion/travel time? No

Ride quality? No

Will this proposal reduce operational costs or maintenance effort? No

Will this item improve safety:

For motorists? No

For construction workers? No

Will this proposal improve quality for:

Construction procedures/processes? No

Asset preservation? No

Design process? No

Will this change provide the contractor more flexibility? Yes

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

Can this item improve/reduce the number of potential change orders? 1

Is this proposal needed for compliance with:

Federal or State regulations? No

AASHTO or other design code? No

Is this item editorial? No

[continued]

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

While there may not be manufacturers or contractors asking for this change, it aligns with one of INDOT's core values, innovation. This change allows for manufactures to be innovative with their energy storage systems rather than indirectly being forced to use lead acid or similar chemistry. 48-volts is the highest commonly utilized nominal battery voltage that remains under the 60-volt limit set by NFPA 79 Chapter 6 article 6.4.

REVISION TO STANDARD SPECIFICATIONS

SECTION 923 – TEMPORARY TRAFFIC CONTROL DEVICES

923.04 Flashing Arrow Sign

923.08(g) Batteries and Charging System

(Note: Proposed changes shown highlighted gray)

The Standard Specifications are revised as follows:

SECTION 923, BEGIN LINE 177, DELETE AND INSERT AS FOLLOWS:

The battery bank shall ~~consist of 12V, deep cycle, batteries.~~ *have a maximum nominal voltage of 48V and be rated for a minimum of 80% depth of discharge.* The battery bank shall be of sufficient capacity to power the unit for 15 days with no assistance from the sun. A battery condition indicator and a test switch shall be provided to monitor the system's battery charge. The batteries shall be secured in a well ventilated, weatherproof lockable housing. A low battery charge indicator which shall be visible to maintenance personnel driving past the sign shall be provided to indicate the need to recharge the batteries. The battery bank shall be at full charge when delivered to the project site.

The unit shall be equipped with a sign/solar panel lifting mechanism. The lifting mechanism shall be designed to safely carry the capacity of the sign's load. The lifting mechanism shall incorporate a positive locking device to secure the panel in a raised or lowered position.

Solar power assisted flashing arrow signs to be used shall be selected from the QPL of Solar Power Traffic Control Devices.

(b) Diesel Powered

~~Flashing arrow sign shall be fueled by diesel fuel only.~~

(c) AC Powered

~~When connected to an AC electrical power source, provisions shall be made to prevent electrocution.~~

SECTION 923, BEGIN LINE 280, DELETE AND INSERT AS FOLLOWS:

(g) Batteries and Charging System

The battery bank shall have a maximum voltage of 60V. If lead acid or AGM chemistry is used, it shall be rated at least 80% depth of discharge. Batteries shall be ~~deep cycle type and be~~ capable of operating the AFAD continuously for two days, 24 hrs per day without a need of re-charging. An audible low battery voltage alarm sound system shall be provided. The battery charging system shall consist of a solar panel. Solar panels shall be UL 1703 certified.

COMMENTS AND ACTION

923.04 Flashing Arrow Sign
923.08(g) Batteries and Charging System

DISCUSSION:

<p>Motion: Second: Ayes: Nays: FHWA Approval:</p>	<p><u>Action:</u></p> <p>— Passed as Submitted — Passed as Revised — Withdrawn</p>
<p>2024 Standard Specifications Sections referenced and/or affected: 923 pg. 1195 and 1198.</p> <p>Recurring Special Provisions or Plan Details: NONE</p> <p>Standard Drawing affected: NONE</p> <p>Design Manual Sections affected: NONE</p> <p>GIFE Sections cross-references: NONE</p>	<p>— 2026 Standard Specifications — Revise Pay Items List</p> <p>— Create RSP (No. __) Effective:</p> <p>— Revise RSP (No. __) Effective:</p> <p>— Standard Drawing Effective:</p> <p>— Create RPD (No. __) Effective:</p> <p>— GIFE Update — Frequency Manual Update — SiteManager Update</p>

PROPOSAL TO STANDARDS COMMITTEE

PROBLEM(S) ENCOUNTERED: IDIQ contracts have IDIQ specific special provisions, and they are currently being administered at USPs. This results in significant time resources to submit them through the USP approval process.

PROPOSED SOLUTION: Turn the IDIQ specific Work Order Supplemental USP into and RSP to increase statewide consistency and reduce approval time.

APPLICABLE STANDARD SPECIFICATIONS: 101, 104, 108, 109, 110

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: All IDIQ contracts

IMPACT ANALYSIS (attach report):

Submitted By: Patrick Patterson via Joe Novak

Title: Field Engineer

Division: Construction Management

E-mail: ppatterson1@indot.in.gov

Date: 4/26/23

IMPACT ANALYSIS REPORT CHECKLIST

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

Does this item appear in any other specification sections? N/A

Will approval of this item affect the Qualified Products List (QPL)? 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? No

Is this proposal needed for compliance with:

Federal or State regulations? No

AASHTO or other design code? No

Is this item editorial? No

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

REVISION TO SPECIAL PROVISIONS

101-C-xxx IDIQ WORK ORDERS

101-C-xxx IDIQ WORK ORDERS

(Adopted xx-xx-23)

The Standard Specifications are revised as follows:

SECTION 101, AFTER LINE 215, INSERT AS FOLLOWS:

The contract shall also include all Work Orders and related documentation including, but not limited to, the scope of work, the Contractor's Work Order Request Form, and Supplemental Work Orders.

101.13 Contract Information Book

A document which includes a contract information sheet, ~~an estimate of quantities,~~ special provisions, and additional contract requirements. Such document may include the plans.

SECTION 101, BEGIN LINE 225, DELETE AND INSERT AS FOLLOWS:

101.15 Contract Time

~~The number of work days or calendar days allowed for completion of the contract or phase of the contract, including authorized time extensions.~~

~~If a calendar date of contract completion or contract phase completion is shown in the Proposal in lieu of the number of work or calendar days, the contract shall be completed by that date.~~ *The Base Term of the Contract is one year.*

There is one bilateral Option Term. The duration of the Option Term is one year. Both parties shall agree to extend the Contract for the Option Term. The Department and the Contractor will agree whether to extend the Contract for the Option Term at least 90 days prior to the start of the Option Term.

101.15.1 Work Order Completion Time

The Work Order Completion Time is the time within which the Contractor shall complete the detailed scope of work. The Work Order Completion Time will be identified with each Work Order on the Work Order Request Form.

SECTION 101, BEGIN LINE 270, DELETE AND INSERT AS FOLLOWS:

101.23 Extra Work

An item of work not ~~provided for in the contract as awarded~~ *in the original scope of work when the Work Order was issued* but found essential to the satisfactory completion of the ~~contract~~ *Work Order*.

SECTION 101, BEGIN LINE 345, DELETE AND INSERT AS FOLLOWS:

101.34 Notice to Proceed

Written notice to the Contractor to proceed with the contract work including, when applicable, the date of beginning of ~~contract~~ *work order completion time*.

SECTION 101, BEGIN LINE 378, INSERT AS FOLLOWS:

REVISION TO SPECIAL PROVISIONS

101-C-xxx IDIQ WORK ORDERS

101.41 Project

The specific section of the highway where work is to be performed under the contract. *A project may consist of one or more related Work Orders and Supplemental Work Orders.*

SECTION 101, BEGIN LINE 459, DELETE AND INSERT AS FOLLOWS:

101.59 Specified Completion Date

The date on which the ~~contract work~~ *detailed scope of work* is specified to be complete.

SECTION 101, BEGIN LINE 541, DELETE AND INSERT AS FOLLOWS:

101.76 Work

The furnishing of labor, materials, equipment, and incidentals necessary or convenient to the successful completion of the project and the carrying out of the duties and obligations imposed by the contract and work orders.

SECTION 101, AFTER LINE 560, INSERT AS FOLLOWS:

101.79 Base Term

The initial period of the Contract and does not include any Option Terms.

101.80 Estimated Annual Value

An estimate of the value of Work Orders that could be issued to the Contractor each year.

101.81 Work Order

A written order issued by the Engineer, and the Work Order Request Form, requiring the Contractor to complete the scope of work within the Work Order Completion Time for the Work Order Price. A project may consist of one or more Work Orders.

101.82 Work Order Price

The value of the approved Work Order Price Proposal and the amount the Contractor will be paid for completing a Work Order.

101.83 Work Order Price Proposal

A price proposal prepared by the Contractor that includes the pay items required to complete the scope of work.

101.84 Work Order Request Form

A set of documents including at least: (a) Work Order Price Proposal; (b) required drawings or sketches; (c) list of anticipated Subcontractors; (d) Construction schedule; and (e) other requested documents.

101.85 Joint Scope Meeting

A site meeting to discuss the work before the scope of work is finalized.

REVISION TO SPECIAL PROVISIONS

101-C-xxx IDIQ WORK ORDERS

101.86 Maximum Contract Value

The maximum value of Work Orders that the Contractor may receive under this Contract.

101.87 Minimum Contract Value

The minimum value of Work Orders that the Contractor is guaranteed the opportunity to perform under this Contract.

101.88 Normal Working Hours

The hours from 7:00 a.m. to 4:00 p.m. Monday through Friday, except for holidays as specified in 108.08.

101.89 Option Term

An additional period of time beyond the Contract Term which extends the termination date of the Contract.

101.90 Other than Normal Working Hours

The hours of 4:01 p.m. to 6:59 a.m. Monday through Friday and all day Saturday, Sunday, and Holidays.

101.91 Supplemental Work Order

A secondary Work Order developed after the initial Work Order has been issued for the purpose of changing, deleting, or adding work to the initial scope of work, or changing the Work Order Completion Time.

101.92 Unit Price

The price published in the schedule of pay items for a specific construction or construction related work task. Each Unit Price is comprised of labor, equipment, and material costs to accomplish that pay item.

101.93 Work Order Notice to Proceed

A written notice issued by the Engineer directing the Contractor to proceed with construction activities to complete the Work Order.

SECTION 104, BEGIN LINE 38, DELETE AND INSERT AS FOLLOWS:

104.02 Changed Conditions

A changed condition causes the work to substantially differ in kind or nature from the work as required in the original contract scope of work. The Department will adjust the contract for changed conditions as described herein issue a Supplemental Work Order to alter, add to or deduct from the work for the changed conditions. A contract adjustment Supplemental Work Order may revise one or more of the following:

SECTION 104, BEGIN LINE 50, DELETE AND INSERT AS FOLLOWS:

Changed conditions that will be considered as reason for a contract adjustment supplemental work order are differing site conditions, suspensions of work ordered by the Engineer, and significant changes in the character of the work. A request by the

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101-C-xxx IDIQ WORK ORDERS

Contractor for a contract adjustment shall be based on one or more of the changed conditions described herein.

SECTION 104, BEGIN LINE 65, DELETE AND INSERT AS FOLLOWS:

Upon written notification, the Engineer will investigate the conditions, and if it is determined that the conditions materially differ and cause an increase or decrease in the cost or time required for the performance of any work under the contract, an adjustment, excluding anticipated profits, will be made and the ~~contract modified~~ *supplemental work order will be made* in writing accordingly. The Engineer will notify the Contractor of the determination whether or not an ~~adjustment of the contract~~ *supplemental work order* is warranted.

No ~~contract adjustment~~ *supplemental work order* which results in a benefit to the Contractor will be allowed unless the Contractor has provided the required written notice of a changed condition in accordance with 105.16.

No ~~contract adjustment~~ *supplemental work order* will be allowed under this clause for any effects caused on unchanged work.

No supplemental work order will be written for work exceeding the initial scope of work that is not necessary for the completion of the work order.

(b) Suspensions of Work Ordered by the Engineer

If the performance of all or any portion of the work is suspended or delayed by the Engineer in writing for an unreasonable period of time (not originally anticipated, customary, or inherent to the construction industry) and the Contractor believes that additional compensation, and/or ~~contract~~ *work order completion* time is due as a result of such suspension or delay, the Contractor shall submit to the Engineer in writing a request for adjustment within seven calendar days of receipt of the notice to resume work. The request shall set forth the reasons and support for such adjustment.

Upon receipt, the Engineer will evaluate the Contractor's request. If the Engineer agrees that the cost and/or time required for the performance of the contract has increased as a result of such suspension and the suspension was caused by conditions beyond the control of and not the fault of the Contractor, its suppliers, or subcontractors at any approved tier, and not caused by weather, the Engineer will ~~make an adjustment (excluding profit) and modify the contract~~ *issue a supplemental work order* in writing accordingly. The Contractor will be notified of the Engineer's determination whether or not an ~~adjustment of the contract~~ *supplemental work order* is warranted.

No ~~contract work order adjustment~~ *supplemental work order* will be allowed unless the Contractor has submitted the request for adjustment within the time prescribed in accordance with 105.16.

No ~~contract work order adjustment~~ *supplemental work order* will be allowed under this clause to the extent that performance would have been suspended or delayed by any

REVISION TO SPECIAL PROVISIONS

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other cause, or for which an adjustment is provided or excluded under any other term or condition of this contract.

(c) Significant Changes in the Character of Work

The Engineer reserves the right to make, in writing, at any time during the work, such changes in quantities and such alterations in the work as are necessary to satisfactorily complete the ~~project~~ *scope of work of the work order*. Such changes in quantities and alterations shall not invalidate the ~~contract~~ *work order* nor release the surety, and the Contractor agrees to perform the work as altered.

If the alterations or changes in quantities significantly change the character of the work under the ~~contract~~ *work order*, whether such alterations or changes are in themselves significant changes to the character of the work or by affecting other work cause such other work to become significantly different in character, an adjustment, excluding anticipated profit, will be made to the ~~contract~~ *work order*. The basis for the adjustment shall be agreed upon prior to the performance of the work. If a basis cannot be agreed upon, then an adjustment will be made either for or against the Contractor in such amount as the Engineer may determine to be fair and equitable.

If the alterations or changes in quantities do not significantly change the character of the work to be performed under the contract, the altered work will be paid for as provided elsewhere in the contract.

No ~~contract adjustment~~ *supplemental work order* which results in a benefit to the Contractor will be allowed unless the Contractor has provided the required written notice of a changed condition in accordance with 105.16.

The term "significant change" shall be construed to apply only to ~~the following circumstances: when the character of the work as altered differs materially in kind or nature from that involved or included in the original proposed construction.~~

- ~~1. When the character of the work as altered differs materially in kind or nature from that involved or included in the original proposed construction; or~~
- ~~2. When a major item of work, as defined elsewhere in the contract, is increased in excess of 125% or decreased below 75% of the original contract quantity. Any allowance for an increase in quantity shall apply only to that portion in excess of 125% of the original contract item quantity, or in case of a decrease below 75%, to the actual amount of work performed.~~

(d) Pre-established Remedies to Changed Conditions

The Contractor and the Department shall cooperatively work to resolve a request for a ~~contract adjustment~~ *supplemental work order* due to a changed condition by means

REVISION TO SPECIAL PROVISIONS

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of the pre- established remedies described herein.

After receipt of a notice of a changed condition in accordance with 105.16, the Engineer will determine if the Contractor's request for a ~~contract adjustment~~ *supplemental work order* is justified. The Engineer will respond to the Contractor in writing within two business days of the receipt of notification, or other time as mutually agreed, as to whether the request is justified and as to how the changed condition will be remedied.

If the Engineer determines that a request for a ~~contract adjustment~~ *supplemental work order* is justified, the changed condition will be remedied by means of a ~~contract adjustment~~ *supplemental work order* based on one or more of the following pre-established remedies.

1. Calculations and payment involving existing pay items in the contract.
2. Payment for extra work in accordance with 104.03.
3. Extension of ~~contract~~ *the work order completion time in accordance with 108.08.*
4. Payment for delay costs in accordance with 109.05.2 as allowed by 108.08(b).

If the impact of a changed condition will not be known for some length of time, the following procedure shall be followed in order to expedite a ~~contract adjustment~~ *supplemental work order* until the impact of the change can be determined.

SECTION 104, BEGIN LINE 189, DELETE AND INSERT AS FOLLOWS:

5. Refusal by the Contractor to attend any weekly meeting or to submit daily records at a weekly meeting will constitute a waiver to any objections to the accuracy of the Engineer's records and the Engineer's records will control for purposes of computing any ~~contract adjustment~~ *supplemental work order* for the changed condition.

If the Contractor accepts the Engineer's remedy for a changed condition, the ~~contract adjustment~~ *supplemental work order* will be considered to be full and complete compensation for the changed condition and no further contract adjustment will be made for the circumstances that gave rise to the Contractor's request.

SECTION 108, BEGIN LINE 280, DELETE AND INSERT AS FOLLOWS:

108.08 Determination and Extension of Contract Time

~~The number of days allowed for the completion of the work included in the contract will be stated in the Proposal book and will be known as the contract time~~ *The time for completion of the scope of work will be stated in the Work Order and will be known as the Work Order Completion Time.*

If the ~~contract~~ *work order completion time* is on a work day basis, as defined in

REVISION TO SPECIAL PROVISIONS

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101.77, a weekly statement showing the number of days charged to the contract to date and for the preceding week, the number of days specified for completion of the ~~contract~~*work order*, and the days remaining and the controlling operation will be furnished. The Contractor will be allowed one week from the date it receives the statement in which to file a written protest setting forth in what respect said weekly statement is incorrect. Otherwise, the statement will be deemed to have been accepted by the Contractor as correct. For the purpose of computation, work days will be considered as beginning on the fifteenth calendar day after the date of the notice to proceed. All calendar days elapsing between the effective dates of orders to suspend work and to resume work for suspensions which are not the fault of the Contractor will be excluded.

If the ~~contract~~*work order completion* time is on a calendar day basis, it shall consist of the number of calendar days stated in the contract including all Sundays, holidays, and non-work days counting from the date of the notice to proceed. All calendar days elapsing between the effective dates of any orders to suspend work and to resume work for suspensions not the fault of the Contractor will be excluded. A weekly statement showing the controlling operation will be furnished. The Contractor will be allowed one week from the date it receives the statement in which to file a written protest setting forth in what respect said weekly statement is incorrect. Otherwise, the statement will be deemed to have been accepted by the Contractor as correct.

If the ~~contract~~*work order completion* time is a fixed calendar date, it shall be the date on which all work on the contract shall be completed. For such contracts, an extended date of completion will be considered for delay in the issuance of the notice to proceed if the notice to proceed is not issued within 30 days of the letting, except if the delay is due to the failure of the Contractor to furnish requested forms or information. Unless otherwise determined, an extension to the contract completion date and intermediate completion date will be allowed for each calendar day from 30 days after the date of the letting to and including the date of the notice to proceed. A weekly statement showing the controlling operation will be furnished. The Contractor will be allowed one week from the date it receives the statement in which to file a written protest setting forth in what respect said weekly statement is incorrect. Otherwise, the statement will be deemed to have been accepted by the Contractor as correct.

The number of days for performance shown in the ~~contract work order as awarded~~ will be based on the original quantities as defined in 104.02.

- (a) ~~For a completion date contract, unless otherwise determined, an increase in quantities will not increase the time specified for the performance of the contract.~~*Blank*
- (b) ~~If intermediate completion times are specified, unless otherwise determined, an increase in quantities will not increase the time specified.~~

If an intermediate completion time is specified for road closure or

REVISION TO SPECIAL PROVISIONS

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restriction, the first day or portion thereof of the closure or restriction will constitute the first chargeable day. The date the road is opened to unrestricted traffic will be counted as a chargeable day, regardless of the time of day when the roadway is opened. Open to unrestricted traffic shall be as defined in 101.35. Temporary pavement marking materials in accordance with 801.12 shall be placed if the final marking materials cannot be placed in accordance with 808.07(b).

SECTION 108, BEGIN LINE 339, DELETE AND INSERT AS FOLLOWS:

If the Contractor finds it impossible for reasons beyond its control to complete the work within the ~~contract~~ *work order completion* time as specified prior to the expiration of the contract time, a written request in accordance with 105.16 may be made for an extension of time setting forth therein the reasons which will justify the granting of the request. A plea that insufficient time was allotted is not a valid reason for extension of time. If the Engineer finds that the ~~contract~~ *work order* controlling operation was delayed due to an excusable delay under 108.08(a) or 108.08(b), the Department will extend the ~~contract~~ *work order completion* time for completion in such amount as the conditions justify. The extended time for completion shall then be in full force and effect, the same as though it were the original time for completion. The Department will not extend ~~contract~~ *work order completion* time for a non-excusable delay under 108.08(c).

SECTION 108, BEGIN LINE 429, DELETE AND INSERT AS FOLLOWS:

~~Contract~~ *Work order completion* time will not be charged during the required cure period for concrete surfaces requiring a sealer, provided all other ~~contract~~ *work order* work is completed and all lanes are open to traffic. Charging of ~~contract~~ *work order* time will resume after the required cure period. The ~~contract~~ *work order completion* time will be adjusted as follows:

- (a) If the ~~contract~~ *work order completion* time is on a work day basis, work days will not be charged for those days on which work is suspended.
- (b) If the ~~contract~~ *work order completion* time is on a calendar day basis, all calendar days on which work is suspended will be excluded.
- (c) If the ~~contract~~ *work order completion* time is a fixed calendar date, the ~~contract~~ *work order* will not be extended.

SECTION 108, BEGIN LINE 535, DELETE AND INSERT AS FOLLOWS:

The Department will extend the ~~contract~~ *work order completion* time for completion and will pay for delay costs covered under item 1 above in accordance with 104.03.

The Department will make payment for delay costs under items 2 and 3 above in accordance with 109.05.2.

(c) Non-Excusable Delays

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Non-excusable delays are delays that are the fault or responsibility of the Contractor. The Department will not extend the ~~contract~~ *work order completion* time or compensate the Contractor for delay costs due to non-excusable delays.

(d) Concurrent Delays

Concurrent delays are separate delays to the controlling operation or critical path that occur at the same time. When an excusable, non-compensable delay is concurrent with an excusable, compensable delay, the Department will extend the ~~contract~~ *work order completion* time but will not make payment for delay costs. When a non-excusable delay is concurrent with an excusable delay, the Department will not extend the ~~contract~~ *work order completion* time and will not make payment for delay costs.

SECTION 108, BEGIN LINE 591, DELETE AND INSERT AS FOLLOWS:

When the ~~contract~~ *work order completion* time is on either the calendar day or fixed calendar date basis, the schedule for calendar days shall be used. *When the work order completion time is on a work day basis, the schedule for work days shall be used.*

Adjustments to the contract payment with respect to liquidated damages will be included in a liquidated damages pay item. The unit price for this pay item will be \$1.00 and the quantity will be in units of dollars. The quantity ~~is the total calculated in accordance with the above schedule~~ *shall be \$1,500 daily.*

SECTION 109, DELETE LINE 292, THROUGH 637.

SECTION 109, AFTER LINE 637, INSERT AS FOLLOWS:

109.03 Blank

109.04 Blank

SECTION 109, BEGIN LINE 1008, INSERT AS FOLLOWS:

109.07 Partial Payments

The Department will make one payment for all Work Orders that have a Work Order Completion Time of 45 days or less, or a Work Order Price of \$25,000 or less. For all other Work Orders, the Owner may make partial, monthly payments based on a percentage of the work completed.

Before submitting for Payment, Final or Partial, the Contractor shall reach an agreement with the Engineer concerning the percentage complete of the detailed scope of work and the dollar value for which the Payment may be submitted.

The contract may contain more than one project. Partial payments may be made once each month as the work progresses or twice each month if it is determined that the amount of work performed is sufficient to warrant such payment. These payments will be based on estimates, prepared by the Engineer, of the value of the work performed and materials complete in place in accordance with the contract. No partial payment will be made or estimates will not be submitted when the total value of the work done since the last estimate amounts to less than \$500.

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SECTION 110, BEGIN LINE 09, DELETE AND INSERT AS FOLLOWS:

110.02 Limitations~~Blank~~

~~For the purpose of payment, the mobilization portion of this work will be limited to 5% of the original total contract price. The remainder of the work will be considered demobilization. The first progress estimate will include a percentage payment of the pay item for mobilization and demobilization that is equal to the lesser of 5% of the original total contract price or the contract lump sum price for the pay item mobilization and demobilization. The balance of the lump sum price will be paid when the contract has been completed and accepted.~~

SECTION 110, BEGIN LINE 23, DELETE AS FOLLOWS:

110.04 Basis of Payment

~~This work will be paid for at the contract lump sum price for mobilization and demobilization.~~

~~Payment will be made under:~~

Pay Item	Pay Unit Symbol
Mobilization and Demobilization	LS

~~The cost of all materials, equipment, tools, labor, transportation, operations, and incidentals required for mobilization and demobilization shall be included in the cost of this work.~~

~~If no pay item for mobilization and demobilization is shown in the Schedule of Pay Items, the cost of the work described above shall be included in the total cost of the contract, with no direct payment for the work.~~

COMMENTS AND ACTION

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DISCUSSION:

<p>Motion: Second: Ayes: Nays: FHWA Approval:</p>	<p><u>Action:</u></p> <p>— Passed as Submitted — Passed as Revised — Withdrawn</p>
<p>Standard Specifications Sections referenced and/or affected: 101, 104, 107, 109, and 110.</p> <p>Recurring Special Provisions or Plan Details: proposed new</p> <p>Standard Drawing affected: NONE</p> <p>Design Manual Sections affected: NONE</p> <p>GIFE Sections cross-references: NONE</p>	<p>— 2026 Standard Specifications — Revise Pay Items List</p> <p>— Create RSP (No. __) Effective:</p> <p>— Revise RSP (No. __) Effective:</p> <p>— Standard Drawing Effective:</p> <p>— Create RPD (No. __) Effective:</p> <p>— GIFE Update — Frequency Manual Update — SiteManager Update</p>