HIGHWAY WORK PROPOSAL

Wisconsin Department of Transportation
DT1502 01/2020 s.66.0901(7) Wis. Stats

Proposal Number: 014

STATE ID	FEDERAL ID	PROJECT DESCRIPTION	HIGHWAY	COUNTY
5989-03-84	N/A	Southwest Region, Bridge Rehabs, Rock River B-53-172 & B-53-104	STH 081	Rock

This proposal, submitted by the undersigned bidder to the Wisconsin Department of Transportation, is in accordance with the advertised request for proposals. The bidder is to furnish and deliver all materials, and to perform all work for the improvement of the designated project in the time specified, in accordance with the appended Proposal Requirements and Conditions.

Proposal Guaranty Required: $260,000.00 Payable to: Wisconsin Department of Transportation	Attach Proposal Guaranty on back of this PAGE.
Bid Submittal Date: December 8, 2026 Time (Local Time): 11:00 am	Firm Name, Address, City, State, Zip Code **SAMPLE** **NOT FOR BIDDING PURPOSES**
Contract Completion Time August 18, 2028	
Assigned Disadvantaged Business Enterprise Goal 0%	This contract is exempt from federal oversight.

This certifies that the undersigned bidder, duly sworn, is an authorized representative of the firm named above; that the bidder has examined and carefully prepared the bid from the plans, Highway Work Proposal, and all addenda, and has checked the same in detail before submitting this proposal or bid; and that the bidder or agents, officer, or employees have not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding in connection with this proposal bid.

Do not sign, notarize, or submit this Highway Work Proposal when submitting an electronic bid on the Internet.

Subscribed and sworn to before me this date _____

(Signature, Notary Public, State of Wisconsin)	(Bidder Signature)
(Print or Type Name, Notary Public, State Wisconsin)	(Print or Type Bidder Name)
(Date Commission Expires)	(Bidder Title)

Notary Seal

For Department Use Only

Type of Work:
Removals, Grading, Aggregate, Concrete Pavement, Asphalt Pavement, Structure Rehabilitation, Curb and Gutter, Concrete Sidewalk, Storm Sewer, Beam Guard, Erosion Control, Permanent Signing, Traffic Control, Pavement Marking, Lighting, Traffic Signals, Restoration.

Notice of Award Dated	Date Guaranty Returned

PLEASE ATTACH
PROPOSAL GUARANTY HERE

PROPOSAL REQUIREMENTS AND CONDITIONS

The bidder, signing and submitting this proposal, agrees and declares as a condition thereof, to be bound by the following conditions and requirements.

If the bidder has a corporate relationship with the proposal design engineering company, the bidder declares that it did not obtain any facts, data, or other information related to this proposal from the design engineering company that was not available to all bidders.

The bidder declares that they have carefully examined the site of, and the proposal, plans, specifications and contract forms for the work contemplated, and it is assumed that the bidder has investigated and is satisfied as to the conditions to be encountered, as to the character, quality, and quantities of work to be performed and materials to be furnished, and as to the requirements of the specifications, special provisions and contract. It is mutually agreed that submission of a proposal shall be considered conclusive evidence that the bidder has made such examination.

The bidder submits herewith a proposal guaranty in proper form and amount payable to the party as designated in the advertisement inviting proposals, to be retained by and become the property of the owner of the work in the event the undersigned shall fail to execute the contract and contract bond and return the same to the office of the engineer within fourteen (14) days after having been notified in writing to do so; otherwise to be returned.

The bidder declares that they understand that the estimate of quantities in the attached schedule is approximate only and that the attached quantities may be greater or less in accordance with the specifications.

The bidder agrees to perform the said work, for and in consideration of the payment of the amount becoming due on account of work performed, according to the unit prices bid in the following schedule, and to accept such amounts in full payment of said work.

The bidder declares that all of the said work will be performed at their own proper cost and expense, that they will furnish all necessary materials, labor, tools, machinery, apparatus, and other means of construction in the manner provided in the applicable specifications and the approved plans for the work together with all standard and special designs that may be designed on such plans, and the special provisions in the contract of which this proposal will become a part, if and when accepted. The bidder further agrees that the applicable specifications and all plans and working drawings are made a part hereof, as fully and completely as if attached hereto.

The bidder, if awarded the contract, agrees to begin the work not later than ten (10) days after the date of written notification from the engineer to do so, unless otherwise stipulated in the special provisions.

The bidder declares that if they are awarded the contract, they will execute the contract agreement and begin and complete the work within the time named herein, and they will file a good and sufficient surety bond for the amount of the contract for performance and also for the full amount of the contract for payment.

The bidder, if awarded the contract, shall pay all claims as required by Section 779.14, Statutes of Wisconsin, and shall be subject to and discharge all liabilities for injuries pursuant to Chapter 102 of the Statutes of Wisconsin, and all acts amendatory thereto. They shall further be responsible for any damages to property or injury to persons occurring through their own negligence or that of their employees or agents, incident to the performance of work under this contract, pursuant to the Standard Specifications for Road and Bridge Construction applicable to this contract.

In connection with the performance of work under this contract, the contractor agrees to comply with all applicable state and federal statutes relating to non-discrimination in employment. No otherwise qualified person shall be excluded from employment or otherwise be subject to discrimination in employment in any manner on the basis of age, race, religion, color, gender, national origin or ancestry, disability, arrest or conviction record (in keeping with s.111.32), sexual orientation, marital status, membership in the military reserve, honesty testing, genetic testing, and outside use of lawful products. This provision shall include, but not be limited to the following: employment, upgrading, demotion or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation, and selection for training, including apprenticeship. The contractor further agrees to ensure equal opportunity in employment to all applicants and employees and to take affirmative action to attain a representative workforce.

The contractor agrees to post notices and posters setting forth the provisions of the nondiscrimination clause, in a conspicuous and easily accessible place, available for employees and applicants for employment.

If a state public official (section 19.42, Stats.) or an organization in which a state public official holds at least a 10% interest is a party to this agreement, this contract is voidable by the state unless appropriate disclosure is made to the State of Wisconsin Ethics Board.

BID PREPARATION

Preparing the Proposal Schedule of Items

A. General

(1) Obtain bidding proposals as specified in section 102 of the standard specifications prior to 11:45 AM of the last business day preceding the letting. Submit bidding proposals using one of the following methods:

1. Electronic bid on the internet.
2. Electronic bid on a printout with accompanying diskette or CD ROM.
3. Paper bid under a waiver of the electronic submittal requirements.

(2) Bids submitted on a printout with accompanying diskette or CD ROM or paper bids submitted under a waiver of the electronic submittal requirements govern over bids submitted on the internet.

(3) The department will provide bidding information through the department's web site at:

https://wisconsindot.gov/Pages/doing-bus/contractors/hcci/bid-let.aspx

The contractor is responsible for reviewing this web site for general notices as well as information regarding proposals in each letting. The department will also post special notices of all addenda to each proposal through this web site no later than 4:00 PM local time on the Thursday before the letting. Check the department's web site after 5:00 PM local time on the Thursday before the letting to ensure all addenda have been accounted for before preparing the bid. When bidding using methods 1 and 2 above, check the Bid Express™ on-line bidding exchange at http://www.bidx.com/ after 5:00 PM local time on the Thursday before the letting to ensure that the latest schedule of items Expedite file (*.ebs or *.00x) is used to submit the final bid.

(4) Interested parties can subscribe to the Bid Express™ on-line bidding exchange by following the instructions provided at the www.bidx.com web site or by contacting:

Info Tech Inc.
5700 SW 34th Street, Suite 1235
Gainesville, FL 32608-5371
email: mailto:customer.support@bidx.com

(5) The department will address equipment and process failures, if the bidder can demonstrate that those failures were beyond their control.

(6) Contractors are responsible for checking on the issuance of addenda and for obtaining the addenda. Notice of issuance of addenda is posted on the department's web site at:

https://wisconsindot.gov/Pages/doing-bus/contractors/hcci/bid-let.aspx

or by calling the department at (608) 266-1631. Addenda can ONLY be obtained from the department's web site listed above or by picking up the addenda at the Bureau of Highway Construction, 4th floor, 4822 Madison Yards Way, Madison, WI, during regular business hours.

(7) Addenda posted after 5:00 PM on the Thursday before the letting will be emailed to the eligible bidders for that proposal. All eligible bidders shall acknowledge receipt of the addenda whether they are bidding on the proposal or not. Not acknowledging receipt may jeopardize the awarding of the project.

B. Submitting Electronic Bids

B.1 On the Internet

(1) Do the following before submitting the bid:

4. Have a properly executed annual bid bond on file with the department.
5. Have a digital ID on file with and enabled by Info Tech Inc. Using this digital ID will constitute the bidder's signature for proper execution of the bidding proposal.

(2) In lieu of preparing, delivering, and submitting the proposal as specified in 102.6 and 102.9 of the standard specifications, submit the proposal on the internet as follows:

1. Download the latest schedule of items reflecting all addenda from the Bid Express™ web site.
2. Use Expedite™ software to enter a unit price for every item in the schedule of items.
3. Submit the bid according to the requirements of Expedite™ software and the Bid Express™ web site. Do not submit a bid on a printout with accompanying diskette or CD ROM or a paper bid. If the bidder does submit a bid on a printout with accompanying diskette or a paper bid in addition to the internet submittal, the department will disregard the internet bid
4. Submit the bid before the hour and date the Notice to Contractors designates
5. Do not sign, notarize, and return the bidding proposal described in 102.2 of the standard specifications.

(3) The department will not consider the bid accepted until the hour and date the Notice to Contractors designates.

B.2 On a Printout with Accompanying Diskette or CD ROM

(1) Download the latest schedule of items from the Wisconsin pages of the Bid Express web site reflecting the latest addenda posted on the department's web site at:

https://wisconsindot.gov/Pages/doing-bus/contractors/hcci/bid-let.aspx

Use Expedite™ software to prepare and print the schedule of items. Provide a valid amount for all price fields. Follow instructions and review the help screens provided on the Bid Express™ web site to assure that the schedule of items is prepared properly.

(2) Staple an 8 1/2 by 11 inch printout of the Expedite□□ generated schedule of items to the other proposal documents submitted to the department as a part of the bidder's sealed bid. As a separate submittal, not in the sealed bid envelop but due at the same time and place as the sealed bid, also provide the Expedite™ generated schedule of items on a 3 1/2 inch computer diskette or CD ROM. Label each diskette or CD ROM with the bidder's name, the 4 character department-assigned bidder identification code from the top of the bidding proposal, and a list of the proposal numbers included on that diskette or CD ROM as indicated in the following example:

Bidder Name
BN00
Proposals: 1, 12, 14, & 22

(3) If bidding on more than one proposal in the letting, the bidder may include all proposals for that letting on one diskette or CD ROM. Include only submitted proposals with no incomplete or other files on the diskette or CD ROM.

(4) The bidder-submitted printout of the Expedite□□ generated schedule of items is the governing contract document and must conform to the requirements of section 102 of the standard specifications. If a printout needs to be altered, cross out the printed information with ink or typewriter and enter the new information and initial it in ink. If there is a discrepancy between the printout and the diskette or CD ROM, the department will analyze the bid using the printout information.

(5) In addition to the reasons specified in section 102 of the standard specifications, proposals are irregular and the department may reject them for one or more of the following:

1. The check code printed on the bottom of the printout of the Expedite™ generated schedule of items is not the same on each page.
2. The check code printed on the printout of the Expedite™ generated schedule of items is not the same as the check code for that proposal provided on the diskette or CD ROM.
3. The diskette or CD ROM is not submitted at the time and place the department designates.

B Waiver of Electronic Submittal

(1) The bidder may request a waiver of the electronic submittal requirements. Submit a written request for a waiver in lieu of bids submitted on the internet or on a printout with accompanying diskette or CD ROM. Use the waiver that was included with the paper bid document sent to the bidder or type up a waiver on the bidder's letterhead. The department will waive the electronic submittal requirements for a bidding entity (individual, partnership, joint venture, corporation, or limited liability company) for up to 4 individual proposals in a calendar year. The department may allow additional waivers for equipment malfunctions.

(2) Submit a schedule of items on paper conforming to section 102 of the standard specifications. The department charges the bidder a $75 administrative fee per proposal, payable at the time and place the department designates for receiving bids, to cover the costs of data entry. The department will accept a check or money order payable to: "Wisconsin, Dept. of Transportation."

(3) In addition to the reasons specified in section 102 of the standard specifications, proposals are irregular and the department may reject them for one or more of the following:

1. The bidder fails to provide the written request for waiver of the electronic submittal requirements.
2. The bidder fails to pay the $75 administrative fee before the time the department designates for the opening of bids unless the bidder requests on the waiver that they be billed for the $75.
3. The bidder exceeds 4 waivers of electronic submittal requirements within a calendar year.

(4) In addition to the reasons specified in section 102 of the standard specifications, the department may refuse to issue bidding proposals for future contracts to a bidding entity that owes the department administrative fees for a waiver of electronic submittal requirements.

PROPOSAL BID BOND

Wisconsin Department of Transportation

DT1303 1/2006

Proposal Number	Project Number	Letting Date
Name of Principal		
Name of Surety	State in Which Surety is Organized	

We, the above-named Principal and the above-named Surety, are held and firmly bound unto the State of Wisconsin in the sum equal to the Proposal Guaranty for the total bid submitted for the payment to be made; we jointly and severally bind ourselves, our heirs, executors, administrators, successors and assigns. The condition of this obligation is that the Principal has submitted a bid proposal to the State of Wisconsin acting through the Department of Transportation for the improvement designated by the Proposal Number and Letting Date indicated above.

If the Principal is awarded the contract and, within the time and manner required by law after the prescribed forms are presented for signature, enters into a written contract in accordance with the bid, and files the bond with the Department of Transportation to guarantee faithful performance and payment for labor and materials, as required by law, or if the Department of Transportation shall reject all bids for the work described, then this obligation shall be null and void; otherwise, it shall be and remain in full force and effect. In the event of failure of the Principal to enter into the contract or give the specified bond, the Principal shall pay to the Department of Transportation **within 10 business days of demand** a total equal to the Proposal Guaranty as liquidated damages; the liability of the Surety continues for the full amount of the obligation as stated until the obligation is paid in full.

The Surety, for value received, agrees that the obligations of it and its bond shall not be impaired or affected by any extension of time within which the Department of Transportation may accept the bid; and the Surety does waive notice of any such extension.

IN WITNESS, the Principal and Surety have agreed and have signed by their proper officers and have caused their corporate seals to be affixed this date: **(DATE MUST BE ENTERED)**

PRINCIPAL

(Company Name) **(Affix Corporate Seal)**

(Signature and Title)

(Company Name)

(Signature and Title)

(Company Name)

(Signature and Title)

(Company Name)

(Signature and Title)

(Name of Surety) **(Affix Seal)**

(Signature of Attorney-in-Fact)

NOTARY FOR PRINCIPAL

(Date)

State of Wisconsin)
) ss.
_____ County)

On the above date, this instrument was acknowledged before me by the named person(s).

(Signature, Notary Public, State of Wisconsin)

(Print or Type Name, Notary Public, State of Wisconsin)

(Date Commission Expires)

Notary Seal

NOTARY FOR SURETY

(Date)

State of Wisconsin)
) ss.
_____ County)

On the above date, this instrument was acknowledged before me by the named person(s).

(Signature, Notary Public, State of Wisconsin)

(Print or Type Name, Notary Public, State of Wisconsin)

(Date Commission Expires)

Notary Seal

IMPORTANT: A certified copy of Power of Attorney of the signatory agent must be attached to the bid bond.

CERTIFICATE OF ANNUAL BID BOND

Wisconsin Department of Transportation

DT1305 8/2003

Time Period Valid (From/To)
Name of Surety
Name of Contractor
Certificate Holder Wisconsin Department of Transportation

This is to certify that an annual bid bond issued by the above-named Surety is currently on file with the Wisconsin Department of Transportation.

This certificate is issued as a matter of information and conveys no rights upon the certificate holder and does not amend, extend or alter the coverage of the annual bid bond.

Cancellation: Should the above policy be cancelled before the expiration date, the issuing surety will give thirty (30) days written notice to the certificate holder indicated above.

(Signature of Authorized Contractor Representative) (Date)

Effective with March 2010 Letting

LIST OF SUBCONTRACTORS

Section 66.0901(7), Wisconsin Statutes, provides that as a part of the proposal, the bidder also shall submit a list of the subcontractors the bidder proposes to contract with and the class of work to be performed by each. In order to qualify for inclusion in the bidder's list a subcontractor shall first submit a bid in writing, to the general contractor at least 48 hours prior to the time of the bid closing. The list may not be added to or altered without the written consent of the municipality. A proposal of a bidder is not invalid if any subcontractor and the class of work to be performed by the subcontractor has been omitted from a proposal; the omission shall be considered inadvertent or the bidder will perform the work personally.

No subcontract, whether listed herein or later proposed, may be entered into without the written consent of the Engineer as provided in Subsection 108.1 of the Standard Specifications.

Name of Subcontractor	Class of Work	Estimated Value

CERTIFICATION REGARDING DEBARMENT, SUSPENSION, AND OTHER RESPONSIBILITY MATTERS - PRIMARY COVERED TRANSACTIONS

Instructions for Certification

1. By signing and submitting this proposal, the prospective contractor is providing the certification set out below.

2. The inability of a person to provide the certification required below will not necessarily result in denial of participation in this covered transaction. The prospective contractor shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective contractor to furnish a certification or an explanation shall disqualify such person from participation in this transaction.

3. The certification in this clause is a material representation of fact upon which reliance was placed when the department determined to enter into this transaction. If it is later determined that the contractor knowingly rendered an erroneous certification in addition to other remedies available to the Federal Government the department may terminate this transaction for cause or default.

4. The prospective contractor shall provide immediate written notice to the department to whom this proposal is submitted if at any time the prospective contractor learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

5. The terms "covered transaction," "debarred," "suspended," "ineligible," "lower tier covered transaction," "participant," "person," "primary covered transaction," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of the rules implementing Executive Order 12549. You may contact the department to which this proposal is being submitted for assistance in obtaining a copy of those regulations.

6. The prospective contractor agrees by submitting this proposal that, should this contract be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department entering into this transaction.

7. The prospective contractor further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," which is included as an addendum to PR- 1273 - "Required Contract Provisions Federal Aid Construction Contracts," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.

8. The contractor may rely upon a certification of a prospective subcontractor/materials supplier that it is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A contractor may decide the method and frequency by which it determines the eligibility of its principals. Each contractor may, but is not required to, check the Disapproval List (telephone # 608/266/1631).

9. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of a contractor is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

10. Except for transactions authorized under paragraph 6 of these instructions, if a contractor in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department may terminate this transaction for cause or default.

Certification Regarding Debarment, Suspension, and Other Responsibility Matters - Primary Covered Transactions

1. The prospective contractor certifies to the best of its knowledge and belief, that it and its principals:

   (a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;

   (b) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements or receiving stolen property;

   (c) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offense enumerated in paragraph (1)(b) of this certification; and

   (d) Have not within a three-year period preceding this proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

2. Where the prospective contractor is unable to certify to any of the statements in this certification, such prospective contractor shall attach an explanation to this proposal.

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SPECIAL PROVISIONS

1. General.

Perform the work under this construction contract for the following projects:

Project ID 5989-03-84
Southwest Region, Bridge Rehabs
Rock River B-53-172 & B-53-104
STH 081
Rock County

Perform the work as the plans show and execute the work as specified in the State of Wisconsin, Department of Transportation, Standard Specifications for Highway and Structure Construction, 2025 Edition, as published by the department, and these special provisions.

If all or a portion of the plans and special provisions are developed in the SI metric system and the schedule of prices is developed in the US standard measure system, the department will pay for the work as bid in the US standard system.

100-005 (20260701)

2. Scope of Work.

The work under this contract consists of replacement of the deck, joint replacement, spot painting of girders, concrete surface repair, backwall rehab, polymer overlay, approach slab replacement, HMA paving, guardrail replacement, base aggregate, select crushed material, and street lighting on CTH Q (B-53-104); and joint replacement, abutment backwall replacement, concrete surface repair, spot painting of parapets, polymer overlay, and approach slab replacement on STH 81 (B-53-172) and all incidental items necessary to complete the work as shown on the plans and included in the proposal and contract.

104-005 (20090901)

3. Prosecution and Progress.

Begin work within 10 calendar days after the engineer issues a written notice to do so.

Provide the start date to the engineer in writing within a month after executing the contract but at least 14 calendar days before the preconstruction conference. Upon approval, the engineer will issue the notice to proceed within ten calendar days before the approved start date.

To revise the start date, submit a written request to the engineer at least two weeks before the intended start date. The engineer will approve or deny that request based on the conditions cited in the request and its effect on the department's scheduled resources.

Complete polymer overlay and permanent pavement marking on CTH Q in 2028. Close CTH Q for a maximum of 14 calendar days after June 18, 2028 to complete this work.

Interim Completion and Liquidated Damages – CTH Q, All work items except polymer overlay and permanent pavement marking: November 15, 2027

Complete construction operations on CTH Q to the stage necessary to reopen it to through traffic by November 15, 2027. Do not reopen until completing the following work: Complete all work except polymer overlay and permanent pavement marking.

If the contractor fails to complete the work necessary to reopen CTH Q to traffic by November 15, 2027, the department will assess the contractor $2,800 in interim liquidated damages for each calendar day the contract work remains incomplete beyond 12:01 AM on November 16, 2027. An entire calendar day will be charged for any period of time within a calendar day that the road remains closed beyond 12:01 AM.

If contract time expires prior to completing all work specified in the contract, additional liquidated damages will be affixed according to standard spec 108.11.

Migratory Birds

Swallow or other migratory bird nests have been observed on or under the existing structure(s) listed below. All active nests (when eggs or young are present) of migratory birds are protected from purposeful take under the federal Migratory Bird Treaty Act. The nesting season for swallows and other birds is from April 15 to August 31.

Either prevent active nests from becoming established or prevent birds from nesting by installing and/or maintaining one suitable deterrent device on the following structure(s) prior to nesting season under the bid item Installing and Maintaining Bird Deterrent System:

- B-53-172 (STH 81 – West End)
- B-53-072 (STH 81 – East End)
- B-53-104 (CTH Q)

Fish Spawning

There shall be no instream disturbance of the Rock River at Station 23+14.62 on STH 81 (B-53-172) and at Station 31+80 on CTH Q (B-53-104) as a result of construction activity under or for this contract, from March 15th to June 15th both dates inclusive, in order to avoid adverse impacts upon the spawning of aquatic species.

Any change to this limitation will require submitting a written request by the contractor to the engineer, subsequent review and concurrence by the Department of Natural Resources in the request, and final approval by the engineer. The approval will include all conditions to the request as mutually agreed upon by WisDOT and DNR.

Spudding barges at the CTH Q bridge will not be considered an instream disturbance.

Staged Construction

Schedule of operations shall conform to the construction staging concept and schedule provided in the plan unless the engineer approves modifications in writing. The stages listed below are shown in the plan. Major items of work associated with each stage are identified.

STH 81 (Portland Ave) – Stage 1

- Remove and replace concrete approach slabs on EB lanes
- Replace backwall and joint
- Concrete surface repairs

STH 81 (Portland Ave) – Stage 2

- Remove and replace concrete approach slabs on WB lanes
- Replace backwall and joint
- Concrete surface repairs

STH 81 (Portland Ave) – Stage 3A

- Polymer overlay placement on outside EB lane, bike lane, and sidewalk
- Pavement marking

STH 81 (Portland Ave) – Stage 3B

- Polymer overlay placement on inside EB lane
- Pavement marking

STH 81 (Portland Ave) – Stage 4A

- Polymer overlay placement on inside WB lane
- Pavement marking

STH 81 (Portland Ave) – Stage 4B

- Polymer overlay placement on outside WB lane, bike lane, and sidewalk
- Pavement marking

CTH Q (Newark Rd) - Stage 1

- Redeck, joint replacement, replace railing, paint at joints, permanent pavement marking on approaches, temporary pavement marking on bridge

CTH Q (Newark Rd) - Stage 2

- Polymer overlay, permanent pavement marking on bridge

Contractor shall not leave STH 81 site for more than seven (7) calendar days without work occurring except for cure time.

4. Traffic.

Close CTH Q (Newark Rd.) to through traffic during construction. Detour CTH Q through traffic using CTH D, Maple Ave/Henry Ave and USH 51.

STH 81 (Portland Ave.) will be open to through traffic with traffic control during construction.

Traffic Operations

STH 81 – Stage 1

- STH 81 EB lanes closed
- STH 81 EB traffic shifted to existing WB side
- 1 lane of traffic open for STH 81 EB and WB traffic

STH 81 – Stage 2

- STH 81 WB lanes closed
- STH 81 WB traffic shifted to existing EB side
- 1 lane of traffic open for STH 81 EB and WB traffic

STH 81 – Stage 3A

- STH 81 EB outside lane and sidewalk closed and traffic shifted to center of bridge with barrels
- STH 81 WB inside lane closed and traffic on existing outside lane
- 1 lane of traffic open for STH 81 EB and WB traffic

STH 81 – Stage 3B

- STH 81 EB sidewalk and inside lane closed and traffic on existing outside lane
- STH 81 WB inside lane closed and traffic on existing outside lane
- 1 lane of traffic open for STH 81 EB and WB traffic

STH 81 – Stage 4A

- STH 81 EB sidewalk and inside lane closed and traffic on existing outside lane
- STH 81 WB inside lane closed and traffic on existing outside lane
- 1 lane of traffic open for STH 81 EB and WB traffic

STH 81 – Stage 4B

- STH 81 EB inside lane closed and traffic on existing outside lane
- STH 81 WB outside lane and sidewalk closed and traffic shifted to center of bridge with barrels
- 1 lane of traffic open for STH 81 EB and WB traffic

CTH Q (Newark Rd.)

- Bridge will be closed for the duration of the project with a posted detour.

Single lane closures on STH 81 will be allowed for setting concrete barrier wall temporary precast and for permanent pavement marking.

PCMS Prewarn

Place Portable Changeable Message Signs (PCMS) 7 days prior to construction.

Wisconsin Lane Closure System Advance Notification

Provide the following advance notification to the engineer for incorporation into the Wisconsin Lane Closure System (LCS).

TABLE 108-1 CLOSURE TYPE AND REQUIRED MINIMUM ADVANCE NOTIFICATION

Closure type with height, weight, or width restrictions (available width, all lanes in one direction < 16 feet)	**MINIMUM NOTIFICATION**
Lane and shoulder closures	7 calendar days
Full roadway closures	7 calendar days
Ramp closures	7 calendar days
Detours	7 calendar days
Closure type without height, weight, or width restrictions (available width, all lanes in one direction ≥ 16 feet)	**MINIMUM NOTIFICATION**
Shoulder Closures	3 calendar days
Lane closures	3 business days
Ramp closures	3 business days
Modifying all closure types	3 business days

Discuss LCS completion dates and provide changes in the schedule to the engineer at weekly project meetings in order to manage closures nearing their completion date.

5. Holiday and Special Event Work Restrictions.

Do not perform work on, nor haul materials of any kind along or across any portion of the highway carrying STH 81 traffic and CTH Q traffic, but leave traffic control equipment, barricades, signs, and lights in place during the following holiday and special event periods:

- From noon Friday, May 28, 2027 to 6:00 AM Tuesday, June 1, 2027 for Memorial Day;
- From noon Friday, July 2, 2027 to 6:00 AM Tuesday, July 6, 2027 for Independence Day;
- From noon Friday, September 3, 2027 to 6:00 AM Tuesday, September 7, 2027 for Labor Day;
- From noon Friday, June 30, 2028 to 6:00 AM Wednesday, July 5, 20228 for Independence Day.

stp-107-005 (20210113)

6. Utilities.

This contract does not come under the provision of Administrative Rule Trans 220.

The utility work plan includes additional detailed information regarding the location of known discontinued, relocated, or removed utility facilities. These can be requested from the department during the bid preparation process or from the project engineer after the contract has been awarded and executed.

Some of the utility work described below is dependent on prior work being performed by the contractor at a specific site. In such situations, provide the engineer and the affected utility a good faith notice of when the utility is to start work at the site. Provide this notice 14 to 16 calendar days in advance of when the prior work will be completed and the site will be available to the utility. Follow-up with a confirmation notice to the engineer and the utility not less than 3 working days before the site will be ready for the utility to begin its work.

stp-107-066 (20240703)

Any utility facility locations (stations, offsets, elevations, depths) listed in this article are approximate.

Alliant Energy – Electricity has four 6-Inch conduits attached to the underside of the STH 81 bridge. The conduits extend between the girders and through the existing backwalls. The existing 750AL 25KV

cable, occupying two of the existing four conduits, will be removed from the conduits and all bridge abutments. New crossings will be directionally drilled south of the bridge between the existing Alliant Energy-owned lattice towers in December 2026. Work will take approximately 60 days to complete in conjunction with the Alliant Energy gas relocation. Existing conduits attached to the bridge will be discontinued in place.

The existing overhead electric line at approximate Station 123+55, west of the CTH Q bridge, was removed in late 2025.

Alliant Energy – Gas has a 115# 8-Inch steel main, within a casing, attached to the underside of the STH 81 bridge. The line extends between the girders and through the existing backwalls. This gas main will be removed from the bridge and a new crossing directionally drilled south of the bridge between the existing Alliant Energy-owned lattice towers in December 2026. Work will take approximately 60 days to complete in conjunction with the Alliant Energy electric relocation. Existing casing attached to the bridge will be discontinued in place.

City of Beloit – Electricity has a line attached to the underside of the STH 81 bridge. The line extends between the girders and through the existing backwalls. This line will remain in place and active during construction. Work around the line during removal and replacement of the backwalls.

City of Beloit – Water has a 16-Inch line attached to the underside of the STH 81 bridge. The line extends between the girders and through the existing backwalls. This line will remain in place and active during construction. Work around this water line during removal and replacement of the backwalls.

Town of Beloit – Sewer has an unused sewer system on the west approach to CTH Q. The three manholes and two adjoining pipes will remain in place during construction.

Town of Beloit – Electricity has underground conduit and electric lines running from the corner of USH 51 to the CTH Q bridge to feed the bridge lighting. The Town relocated these lines further south of the bridge work as of September 2026. The Town of Beloit will de-energize their lines once CTH Q is closed to traffic and remove their existing pull box and protective posts. New line and conduit will be placed with the project. Contact the Town of Beloit in advance of CTH Q being closed to traffic.

The following utility companies have facilities within the project area; however, no adjustments or conflicts are anticipated:

- **ATC Management Inc. – Electricity**

7. Other Contracts.

The contractor is notified that the following projects will be going on during this project:

- Project 5989-03-73, USH 51, Southwest Region, ADA Curb Ramps, City of Beloit Various Locations. The WisDOT Construction PM is Adam Kopp, 608-576-8551, adam.kopp@dot.wi.gov. The project will upgrade curb ramps in the City of Beloit, including at the STH 81/USH 51 intersection. Coordinate traffic control for the STH 81 lane closures with the project team.
-

8. Information to Bidders, U.S. Army Corps of Engineers Section 404 Permit.

The department has assumed coverage under the U.S. Army Corps of Engineers Section 404 Transportation Regional General Permit (TRGP). The department has determined that a pre-construction notification (permit application) to U.S. Army Corps of Engineers and their written verification of TRGP coverage is not necessary for this project.

A copy of the Section 404 Transportation Regional General Permit can be obtained on USACE's website:

https://www.mvp.usace.army.mil/Portals/57/docs/regulatory/RGP/Transportation.pdf

If the contractor requires work outside the proposed slope intercepts, based on their method of operation to construct the project, it is the contractor's responsibility to determine whether a pre-construction notification (permit application) and written verification from U.S. Army Corps of Engineers under the Section 404 Transportation Regional General permit is required. If written verification under the TRGP is necessary, submit a pre-construction notification to U.S. Army Corps of Engineers and obtain written verification of permit coverage prior to beginning construction operations requiring the permit. No time extensions as discussed in standard spec 108.10 will be granted for the time required to apply for and

obtain the written verification of permit coverage. The contractor must be aware that the U.S. Army Corps of Engineers may not grant the permit request.

stp-107-054 (20230629)

9. Information to Bidders, WPDES Transportation Construction General Permit (TCGP) for Storm Water Discharges.

The following Project IDs have less than one acre of land disturbing construction activity and do not require coverage under the TCGP:

Project ID	Design Calculated Amount of Land Disturbing Construction Activity (acres)
5989-03-84	0.4

If additional land disturbance is necessitated for the project due to proposed contractor means and methods, including temporary support activity sites, and the additional land disturbance results in a total cumulative land disturbance for the project of one acre or more, TCGP coverage will need to be obtained. The department will be responsible for obtaining TCGP coverage for the project following department approval of the associated ECIP and DNR concurrence that the project has met the requirements for coverage under the TCGP. Do not begin land disturbing construction activity until the ECIP is approved and the DNR conveys TCGP coverage for the project.

Contractor necessitated changes resulting in the need for permit coverage will not be cause for schedule delays or other damages.

Stormwater discharge permit coverage for additional land disturbing construction activities related to contractor means and methods, including temporary support activity sites, will be considered as part of the ECIP review and approval process. Coverage under the TCGP for additional land disturbance areas will be considered if the areas meet all the following:

- Must meet the TCGP applicability criteria.
- Must be for the exclusive use of a WisDOT project.
- Land disturbance first commences after the ECIP approval, and the areas are fully restored to meet the final stabilization criteria of the permit upon completion of the work.

If TCGP coverage is deemed necessary and obtained for the project, conform to all permit requirements and post the “Certificate of Permit Coverage” in a conspicuous place at the construction site.

Permit coverage, if necessary, will be under the Wisconsin Pollutant Discharge Elimination System, Transportation Construction General Permit, (WPDES Permit No. WI-S066796-2), and is located at: :

https://widnr.widen.net/s/s5mwp2gd7s/finalsignedwisdotcsgp

Obtain any permits for areas that are not approved by the department for coverage under the TCGP.

stp-107-056 (20260701)

10. Construction Over or Adjacent to Navigable Waters.

The Rock River is classified as a state navigable waterway under standard spec 107.19.

stp-107-060 (20171130)

Navigational aids in the Rock River are required for construction.

- Please fill out the Waterway Marker Application and Permit form: http://dnr.wi.gov/files/PDF/forms/8700/8700-058.pdf. Please identify The Wisconsin Department of Transportation as the applicant.
- Include an aerial map-diagram or engineered-diagram of the work location and the placement of the waterway markers (buoys). If proposed GPS coordinates for each buoy are not provided, then markers placed on the diagram must show distance (in feet) from each marker location and from one permanent fixture as a benchmark.
- Forward the signed application/permit to the DNR’s Regional WisDOT Liaison.

- If controlling/restrictive navigational markers are required, also provide the completed application/permit to the local municipality having jurisdictional authority over the area in which the waterway markers will be placed. Consult with the local municipality regarding their ordinance adoption process.

The DNR's Regional WisDOT Liaison will communicate with the local Warden and Recreational Safety Warden in processing and finalizing the permit. If the permit application is incomplete, or additional information is needed, the Recreation Safety Warden will work with DNR's Regional WisDOT Liaison to resolve.

11. Notice to Contractor, Contamination Beyond Construction Limits.

The department completed testing for soil and ground water contamination for locations within this project where excavation is required. Testing indicated that petroleum-contaminated soil is present at the following sites:

1. Station 27+20 to 396 feet RT of centerline.

The contaminated soils at the above sites are expected to be beyond the excavation limits necessary to complete the work under this project. Control construction operations at these locations to ensure that they do not extend beyond the excavation limits indicated in the plans. If contaminated soils are encountered at these sites or elsewhere on the project during excavation, terminate excavation in the area and notify the engineer.

The Hazardous Materials Report is available by contacting: Joshua Nelson, Joshua.nelson@dot.wi.gov, 608-246-3857.

stp-107-100 (20230113)

12. Notice to Contractor, Verification of Asbestos Inspection, No Asbestos Found.

John Roelke, License Number AII-119526, inspected Structure B-53-172 for asbestos on April 11, 2023. No regulated Asbestos Containing Material (RACM) was found on this structure. A copy of the inspection report is available from Joshua Nelson, 608-246-3857.

stp-107-127 (20220628)

A copy of the inspection report is available from Joshua Nelson, Joshua.nelson@dot.wi.gov, 608-246-3857.

13. Notice to Contractor – Beloit Dam.

This project falls within the FERC project boundary of the Beloit Dam, commonly referred to as the Blackhawk Dam, located downstream of the STH 81 bridge crossing. This dam is owned by Eagle Creek Renewable Energy and is operated under FERC License 2348. Coordinate in-water work with DNR FERC Coordinator Cheryl Laatsch, 920-387-7869, Cheryl.Laatsch@wisconsin.gov. Access must be maintained to the Beloit Dam walkways at all times.

Contact the Beloit Dam during ECIP coordination and at least 2 weeks prior to in-water work beginning to confirm in-water work approach.

Melissa Rondou

Eagle Creek Renewable Energy

920-293-2628

Melissa.rondou@eaglecreekre.com

14. Coordination with Businesses and Residents.

The contractor shall arrange and conduct a meeting between the contractor, the department, affected residents, local officials and business people to discuss the project schedule of operations including

vehicular and pedestrian access during construction operations. Hold the first meeting at least one week before the start of work under this contract and no further meetings will be required unless directed by the engineer. The contractor shall arrange for a suitable location for meetings that provides reasonable accommodation for public involvement. The department will prepare and coordinate publication of the meeting notices and mailings for meetings. The contractor shall schedule meetings with at least 2 weeks' prior notice to the engineer to allow for these notifications.

stp-108-060 (20141107)

15. Removing Structure over Waterway Minimal Debris B-53-104.

Salvage the bridge railing on CTH Q B-53-104. Contact the Rock County Highway Department at least 2 weeks before salvaged rail is available to coordinate collection.

16. Abatement of Asbestos Containing Material B-53-104, Item 203.0211.S.

A Description

This special provision describes abating asbestos containing material on structures.

B (Vacant)

C Construction

John Roelke, License Number AII-119526, inspected Structure B-53-104 for asbestos on April 11, 2023 Regulated Asbestos Containing Material (RACM) was found on this structure in the following locations and quantities: the gaskets, which are located under the railing attachment plates on the concrete parapets, contain Category I Non-Friable ACM with an estimated quantity of 101 sq ft.

The RACM on this structure must be abated by a licensed abatement contractor. A copy of the inspection report is included in the bid package or available from Joshua Nelson 608-246-3857, Joshua.nelson@dot.wi.gov. According to NR447 and DHS159, ensure that DNR or DHS receives a completed Notification of Demolition and/or Renovation (DNR Form 4500-113 (R 3/20), or subsequent revision) via U.S. mail, hand-delivery, or using the online notification system at least 10 working days before beginning any construction or demolition. Pay all associated fees. Provide a copy of the completed 4500-113 form and the abatement report to Joshua Nelson, 608-246-3857, Joshua.nelson@dot.wi.gov and via email to dothazmatunit@dot.wi.gov or via US mail to DOT BTS-ESS attn: Hazardous Materials Specialist, 5 South S.513.12, PO Box 7965, Madison, WI 53707-7965. In addition, comply with all local or municipal asbestos requirements.

Use the following information to complete WisDNR form 4500-113:

- Site Name: Structure B-53-104, CTH Q, over Rock River
- Site Address: 0.1M W JCT USH 51; Section 14 T01N R 12E, Town of Beloit, Rock County, WI
- Ownership Information: 3715 N Newville Road, Janesville, WI 53545
- Contact: Joshua Nelson
- Phone: 608-246-3857
- Age: 54 years. This structure was constructed in 1972
- Area: 69643 SF of deck

Insert the following paragraph in Section 6.g.:

- If asbestos not previously identified is found or previously non-friable asbestos becomes crumbled, pulverized, or reduced to a powder, stop work immediately, notify the engineer, and the engineer will notify the department's Bureau of Technical Services at (608) 266-1476 for an emergency response as specified in standard spec 107.24. Keep material wet until it is abated or until it is determined to be non-asbestos containing material.

D Measurement

The department will measure Abatement of Asbestos Containing Material B-53-104 by each structure, acceptably completed.

E Payment

The department will pay for measured quantities at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
203.0211.S	Abatement of Asbestos Containing Material B-53-104	EACH

Payment is full compensation for submitting necessary forms; removing all asbestos; and for properly disposing of all waste materials.

stp-203-005 (20220628)

17. Expansion Device Modular, Item 502.3111.S.

A Description

This special provision describes furnishing and installing shop-fabricated waterproof modular expansion devices as the plans show conforming to standard spec 502 as modified in this special provision. Ensure that modular expansion joint devices seal the deck surface, curbs, gutters, and parapet walls as the plans indicate. Leaking or seeping of water through the joint will be cause for rejection of modular expansion devices.

B Materials

B.1 General

Furnish parts and elements that have material properties meeting the physical and chemical requirements shown in their manufacturer's technical data or as noted below, except as modified by the standard spec, this special provision, or the plans. Furnish certified test results from the manufacturer attesting to physical and chemical properties. Do not use any aluminum components or hardware.

B.2 Approved Fabricators

Furnish components for the Modular Expansion Device System from an approved fabricator selected from the department's approved product list of Fabricated Bridge Components – Expansion Devices.

To be eligible for this project, modular expansion devices from other manufacturers must be pre-approved before the bid closing date. Applications for pre-approval may be submitted at any time. Prepare the application according to the department requirements. If needed, obtain information and assistance with the pre-approval process from the Structures Maintenance Section in the Bureau of Structures, by sending an email to the following address: DOTDLStructuresFabrication@dot.wi.gov

B.3 Steel Plates, Bars, Shapes, and Sheets

Furnish steel plates, bars, shapes, and extrusions that have been fabricated from high strength, low alloy grade 50 or grade 50W steel conforming to ASTM A709, or as shown on the accepted shop drawings. Anchor bars and support bar boxes may be fabricated from ASTM A709 grade 36 steel. Furnish anchor bolts, bolts, nuts, and washers that conform to the requirements of ASTM F3125. Secondary shapes or joint components may be assembled with bolts, nuts, and washer conforming to ASTM A490.

Furnish stainless steel sheets for the sliding surfaces of support bars that conform to the requirements of ASTM A240 alloy 304, 2B finish.

B.4 Elastomeric Seal Elements

Furnish preformed elastomeric seal elements that are polychloroprene (neoprene) of a rectangular or strip cross section having a minimum thickness of 1/4 inch and conform to ASTM D3542 modified to omit the recovery test. The elastomeric seal elements shall meet the following physical properties:

Property Requirements	Value	Test Method
Tensile Strength, min	2000 psi	ASTM D412
Elongation @ Break, min	250%	ASTM D412
Hardness, Type A, Durometer	60± 5 pts	ASTM D2240
Compression Set, 70 Hrs @ 212º F, max	35%	D395 Method, B Modified
Ozone Resistance, after 70 hours at 100º F under 20% Strain with 100 pphm ozone	No Cracks	ASTM D1149 & D518, Method A
Mass Change in Oil 3 after 70 hours @ 212º F, Mass Change, max	45%	ASTM D471

Furnish manufacturer's certification for production of polychloroprene represented, showing test results for the cured material supplied and certifying that it meets all specified requirements.

The seal element shall be one piece, and full length of the expansion joint including curb and parapet face projections. The lubricated adhesive for installing the preformed elastomeric elements in place shall be one-part moisture curing polyurethane and hydrocarbon solvent mixture as recommended by the manufacturer.

B.5 Support Bars

Place support bars parallel to the roadway at a maximum support assembly spacing of 4'-0". Furnish support bars that are not less than 1 1/2 inches in width and at least 4 inches in height; each transverse center beam shall have an individual support bar.

Support bars shall incorporate stainless steel sliding surfaces to minimize resistances to joint movements. Stainless steel shall be welded to support bars. Support the support bars above, below, and laterally as required to prevent uplifting, transmit bearing loads, and to maintain positioning of the bar.

Fabricate support bar bearings from polyurethane compound with PTFE self-lubricating surfaces having engineering properties equivalent to Adiprene, Teflon, or cast nylon with MDS. Positively lock the support bar bearings and springs or spacers into the support box by a dowel or pin. The connection must permit subsequent removal and replacement of the bearings and springs. The support bar springs shall be constructed similarly to the bearings but shall provide the required precompressive force to maintain the support bar in place while under traffic loads. Use a suitable equilibrium device that works counter to the compression forces of the sealing elements to maintain equalized expansion properties for each element across the modular joint assembly. Furnish anchor plates for the support bar springs or neoprene blocks that have a minimum thickness of 3/4 inch. The pin (or rod) that passes through these anchor plates and the spring placed between them, shall have a cotter (or hitch) pin at each end to keep these components in their proper position.

B.6 Transverse Center Beams

Transverse center beams shall be at least of 4 1/2 inches in height and have a minimum vertical web thickness of 3/4 inch. Design transverse center beams for an AASHTO HS25 live loading plus 30 percent impact. Make shop splices in the transverse center beam with a full penetration weld. The exterior transverse beams shall have a minimum vertical web thickness of 3/4 inch.

The connections between the transverse center beams and support bars shall be a full penetration weld according to the plan details. Full penetration welds to be tested by ultrasound using the compressive criteria.

B.7 Support Bar Boxes

Furnish support bar boxes that consist of steel plates not less than 1/2 inch in thickness fabricated with continuous welds at all joints. The inside dimensions of the box shall be consistent with all boxes and within +0.040 inches of prescribed height as measured where the bearings and spring compress about the support bar. Fabricate support box plates with a continuous weld. Make anchorage details as the plans show.

B.8 Structural Steel Surfaces

Galvanize after fabrication, according to ASTM A123, all structural steel surfaces of the expansion joint devices and anchorages, except ASTM A-490 bolts, components of stainless steel, and parts coated with polyurethane, Adiprene, nylon, or Teflon.

Galvanize all bolts, nuts and washers conforming to ASTM A153 supplemented by ASTM F2329.

If a retainer clip is used for locking the neoprene strip type seal, continuously weld it on its top side. Due to the galvanizing coating requirement, also make a continuous weld underneath the clip.

All welding shall be according to AWS D1.5 or D1.6 of the welding code and shall be done by certified welders only. A shop certified under AISC category for simple structures shall perform fabrication.

The fabricator will be permitted to shop weld pre-galvanized transverse roadway sections, complete with anchorages, of the expansion device steel extrusions. The pre-galvanized roadway sections shall be not less than 10 feet long. The pre-galvanized roadway side sections shall have additional anchorages, if required, so as to provide an anchorage within 9 inches of each end of the section. Abutting ends shall be beveled 1/4 inch on three sides and deburred. All galvanizing shall be completely removed from the areas to be welded. The pre-galvanized sections shall be groove welded on three sides with care taken to prevent weld material from entering the gland groove. The weld across the top of the extrusion shall be

ground smooth. Repair areas of damaged galvanization with two coats of zinc dust/zinc oxide paint. Clean damaged and adjacent areas by sanding, scraping, chipping, or wire brushing before painting. Make field splices in transverse center roadway sections with a partial penetration weld.

C Construction

The manufacturer of the prefabricated expansion joint assembly shall prepare shop drawings showing details of the assembly and installation. Submit shop drawings to the engineer conforming to standard spec 105.2 with electronic submittal to the fabrication library under standard spec 105.2.2. Department review does not relieve the contractor from responsibility for errors or omissions on shop drawings.

Support the modular joint assembly at 8'-0 minimum spacing along both sides of the joint. Construct the modular expansion device system according to the details shown on the shop drawings. Tolerance requirements shall be according to AASHTO specifications.

Install according to the plan details, the manufacturer's and supplier's approved shop drawings, and as the engineer directs. In addition, the manufacturer shall submit current product literature with the shop drawings and the shop drawings shall reflect that literature.

Remove all modular expansion joint forming material from the joint opening. Pre-set the modular joint assembly according to the approved shop drawings, joint temperature setting data, and specifications. The maximum joint opening for a single modular unit shall be 3 inches.

The joint assembly manufacturer shall furnish technical assistance to the contractor and engineer through the personal services of a technical representative, who is a fulltime employee of the manufacturer during installation of the joint sealing systems. This representative shall be accessible to the engineer and shall be at the site during the work that involves the setting of all parts of each modular expansion joint assembly. The contractor shall be responsible for informing the representative before the date of installation.

D Measurement

The department will measure Expansion Device Modular by the linear foot, acceptably completed, measured from outermost extent of the expansion device not including turn-ups.

E Payment

The department will pay for measured quantities at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
502.3111.S	Expansion Device Modular	LF

Payment is full compensation for furnishing and placing the device complete in place; furnishing and completely installing all elements and parts of the joints, anchors, armor or structural metal; galvanizing materials; furnishing and installing all hardware, pads, bonding material, and reinforcing bars within the blockout not otherwise covered for payment, and barrier railing plates.

stp-502-021 (20210708)

18. Removing Bearings B-53-104, Item 506.7050.S.

A Description

This special provision describes raising the girders and removing the existing bearings, as the plans show.

B (Vacant)

C Construction

Raise the structure's girders and remove the existing bearings as the plans show

Obtain prior approval from the engineer for the method of jacking the girders and of supporting them as required.

D Measurement

The department will measure Removing Bearings B-53-104 by the unit for each bearing removed, acceptably completed.

E Payment

The department will pay for measured quantities at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
506.7050.S	Removing Bearings B-53-104	EACH

Payment is full compensation for raising the bridge girders; and for removing the old bearings.

Cost of furnishing and installing the bearings will be paid for under separate bid items.

stp-506-035 (20130615)

19. Sawing Pavement Deck Preparation Areas, Item 509.0310.S.

A Description

This special provision describes sawing around deteriorated areas requiring deck repairs under the Preparation Decks bid items on decks receiving asphalt or polymer overlays and for deck repairs that will not receive an overlay.

B (Vacant)

C Construction

The department will sound and mark areas of deteriorated concrete that require deck preparation. The engineer may identify and mark additional areas as the work is being performed.

Wet cut a minimum of 1 inch deep and at least 2 inches outside of the marked areas. Bound each marked area by providing cuts aligned parallel and perpendicular to the deck centerline.

Remove sawing sludge after completing each area. Do not allow sludge or resulting residue to enter a live lane of traffic, storm sewer, stream, lake, reservoir, marsh, or wetland. Dispose of sludge at an acceptable material disposal site located off the project limits or, if the engineer allows, within the project limits.

D Measurement

The department will measure Sawing Pavement Deck Preparation Areas by the linear foot, acceptably completed, measured as the total linear feet of bounding cuts.

The department will not measure for payment over-cuts or cuts made beyond what is required to bound engineer-marked deterioration limits.

E Payment

The department will pay for the measured quantity at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
509.0310.S	Sawing Pavement Deck Preparation Areas	LF

Payment is full compensation for making all saw cuts; and for debris disposal.

stp-509-070 (20180628)

20. Concrete Masonry Deck Repair, Item 509.2100.S.

A Description

This special provision describes providing concrete masonry on the sawed deck preparation areas of the concrete bridge deck and in full depth deck, curb, and joint repair areas. Conform to standard spec 502 and standard spec 509.

B Materials

B.1 Neat Cement

Furnish a neat cement bonding grout. Mix the neat cement in a water-cement ratio approximately equal to 5 gallons of water per 94 pounds of cement.

B.2 Concrete

Furnish grade C or E concrete conforming to standard spec 501 for deck preparation, full-depth deck repair, curb repair and joint repair areas except as follows:

1. The contractor may increase slump of grade E concrete to 3 inches.
2. The contractor may use ready-mixed concrete.

Provide QMP for class II ancillary concrete as specified in standard spec 716.

C Construction

C.1 Neat Cement

Immediately before placing the concrete deck patching, coat the prepared surfaces with a neat cement mixture. Ensure the prepared concrete surfaces are moist without any standing water before coating with the neat cement mixture. Brush the neat cement mixture over the prepared concrete surfaces to ensure that all parts receive an even coating, and do not allow excess neat cement to collect in pockets. Apply the neat cement at a rate that ensures the cement does not dry out before being covered with the new concrete.

C.2 Placing Concrete

Place concrete conforming to standard spec 509. As determined by the engineer, consolidate smaller areas by internal vibration, strike them off, and finish the areas with hand floats to produce plane surfaces that conform to the grade and elevation of the adjoining surfaces. Give all deck patching areas a final hand float finish.

C.3 Curing Concrete

Cure the concrete masonry deck patching conforming to standard spec 502.2.6(1).

D Measurement

The department will measure Concrete Masonry Deck Repair by the cubic yard, acceptably completed.

The department will measure concrete used in deck preparation areas and in full depth deck, curb, and joint repair as part of the Concrete Masonry Deck Repair bid item.

The department will not measure wasted concrete.

E Payment

The department will pay for the measured quantity at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
509.2100.S	Concrete Masonry Deck Repair	CY

Payment is full compensation for furnishing, hauling, preparing, placing, finishing, curing, and protecting all materials.

stp-509-060 (20210708)

21. Polymer Overlay, Item 509.5100.S.

A Description

This special provision describes providing two layers of a two-component polymer overlay system to the bridge decks the plans show.

B Materials

B.1 General

Furnish materials specifically designed for use over concrete bridge decks. Furnish polymer liquid binders from the department’s approved product list.

B.2 Polymer Resin

Furnish a polymer resin base and hardener composed of two-component, 100 percent solids, 100 percent reactive, thermosetting compound with the following properties:

Property	Requirements	Test Method
Gel Time[1]	15 - 45 minutes @ 73° to 75° F	ASTM C881
Viscosity[1]	7 - 70 poises	ASTM D2393, Brookfield RVT, Spindle No. 3, 20 rpm
Shore D Hardness[2]	60-75	ASTM D2240
Absorption[2]	1% maximum at 24 hr	ASTM D570
Tensile Elongation[2]	30% - 70% @ 7 days	ASTM D638
Tensile Strength[2]	2000 to 5000 psi @ 7 days	ASTM D638
Chloride Permeability[2]	<100 coulombs @ 28 days	AASHTO T277

[1] Uncured, mixed polymer binder

[2] Cured, mixed polymer binder

Ensure that the polymer resin when mixed with aggregate has the following properties:

Property	Requirement[1]	Test Method
Minimum Compressive Strength	1,000 psi @ 8 hrs 5,000 psi @ 24 hrs	ASTM C579 Method B, Modified[2]
Thermal Compatibility	No Delaminations	ASTM C884
Minimum Pull-off Strength	250 psi @ 24 hrs	ASTM C1583

[1] Based on samples cured or aged and tested at 75°F

[2] Plastic inserts that will provide 2-inch by 2-inch cubes shall be placed in the oversized brass molds.

B.3 Aggregates

Furnish natural or synthetic aggregate that is non-polishing; clean; free of surface moisture; fractured or angular in shape; free from silt, clay, asphalt, or other organic materials; and conform to the following:

Aggregate Properties

Property	Requirement	Test Method
Moisture Content[1]	1/2 of the measured aggregate absorption, %	ASTM C566
Hardness	$\geq$6.5	Mohs Scale
Fractured Faces	100% with at least 1 fractured face & 80% with at least 2 fractured faces of material retained on No.16	ASTM D5821
Absorption	$\leq$1%	ASTM C128

[1] Sampled and tested by the department before placement.

Gradation

Sieve Size	% Passing by Weight
No. 4	100
No. 8	30 – 75
No. 16	0 – 5
No. 30	0 – 1

B.4 Approval of Bridge Deck Polymer Overlay System

A minimum of 20 working days before application, submit product data sheets and specifications from the manufacturer, and a certified report of test or analysis from an independent laboratory to the engineer for approval. The department will sample and test the aggregates for gradation and moisture content before placement. If requested, supply the department with samples of the polymer for the purpose of acceptance testing.

B.4.1 Product Data Sheets and Specifications

Product data sheets and specifications from the manufacture consists of literature from the manufacturer showing general instructions, application recommendations/methods, product properties, general instructions, or any other applicable information.

B.4.2 Certified Report of Test or Analysis

Conform to the following:

Polymer Binder: Submit a certified report of test or analysis from an independent laboratory dated less than 3 years before the date of the project letting showing the polymer binder meets the requirements of section B.2.

Aggregates: Submit a certified report of test or analysis from an independent laboratory dated less than 6 months before the date of the project letting showing the aggregates meet the requirements of section B.3.

C Construction

C.1 General

Ensure that the overlay system is 1/4 inch thick or thicker.

Conform to the following:

Field Review: Conduct a field review of the existing deck to identify any possible surface preparation and material compatibility issues.

Pre-Installation Meeting: Conduct a pre-installation meeting with the manufacturer's representative and the engineer before construction. Discuss the field review findings, verification testing of the surface preparation and establish procedures for maintaining optimum working conditions and coordination of work. Furnish the engineer a copy of the recommended procedures and apply the overlay system according to the manufacturer's instructions. Supply for the engineer's use for the duration of the project, a Concrete Surface Profile (CSP) chip set of 10 from the International Concrete Repair Institute (ICRI).

Manufacturer's Representative: An experienced manufacturer's representative familiar with the overlay system installation procedures shall be present at all times during surface preparation and overlay placement to provide quality assurance that the work is being performed properly. This requirement may be reduced at the engineer's discretion.

Material Storage: Store and handle materials according to the manufacturer's recommendations. Store resin materials in their original containers in a dry area. Store all aggregates in a dry environment and protect aggregates from contaminants on the job site.

C.2 Deck Preparation

C.2.1 Deck Repair

Remove all asphaltic patches and unsound or disintegrated areas of the concrete decks as the plans show, or as the engineer directs. Work performed to remove and repair the concrete deck will be paid for under other items.

Use deck patching products that are compatible with the overlay system. Patching materials with magnesium phosphate shall not be used. Place patches after surface is prepared via shot blasting and cleaning as described in Section C.2.2 of this specification. Portland cement concrete patches shall be used for joint repairs and full depth deck repairs with a plan area larger than 4 sf, unless approved otherwise by the Structures Design Section. If rapid-set concrete is used, place patches per the manufacturer's recommendation. If Portland cement concrete is used, place patches per standard spec 509.3.9.1.

Deck patching shall be filled and properly finished prior to overlay placement. Do not place overlay less than 1 hour, or per the manufacturer's recommendation, after placing rapid-set concrete patches in the repair areas. Do not place overlay less than 28 days after placing Portland cement concrete patches in the repair areas.

C.2.2 Surface Preparation

Determine an acceptable shotblasting machine operation (size of shot, flow of shot, forward speed, and/or number of passes) that provides a surface profile meeting CSP 5 (medium-heavy shotblast) according to the ICRI Technical Guideline No. 310.2. If the engineer requires additional verification of the

surface preparation, test the tensile bond strength according to ASTM C1593. The surface preparation will be considered acceptable if the tensile bond strength is greater than or equal to 250 psi or the failure area at a depth of 1/4 inches or more is greater than 50 percent of the test area. Continue adjustment of the shotblasting machine and necessary testing until the surface is acceptable to the engineer or a passing test result is obtained.

Prepare the entire deck using the final accepted adjustments to the shotblasting machine as determined above. Thoroughly blast clean with hand-held equipment any areas inaccessible by the shotblasting equipment. Do not perform surface preparation more than 24 hours before the application of the overlay system.

Protect drains, expansion joints, access hatches, or other appurtenances on the deck from damage by the shot and sand blasting operations and from materials adhering and entering. Tape or form all construction joints to provide a clean straight edge.

Before shot blasting, remove pavement markings within the treatment area using an approved mechanical or blasting method.

Prepare the vertical concrete surfaces adjacent to the deck a minimum of 2” above the overlay according to SSPC-SP 13 (free of contaminants, dust, and loose concrete) by sand blasting, using wire wheels, or other approved method.

Just before overlay placement, clean all dust, debris, and concrete fines from the prepared surfaces including the vertical surfaces with compressed air. When using compressed air, the air stream must be free of oil. Any grease, oil, or other foreign matter that rests on or has absorbed into the concrete shall be removed completely. If prepared surfaces (including the first layer of the polymer overlay) are exposed to rain or dew, lightly sandblast (brush/breeze blast) the exposed surfaces.

The engineer may consider alternate surface preparation methods per the overlay system manufacture’s recommendations. The engineer will approve the final surface profile and deck cleanliness before the contractor placing the polymer overlay.

C.2.3 Transitional Area

If the plans show, create a transitional area approaching transverse expansion joints and ends of the deck using an approved mechanical or blasting method. Remove 1/4 inch to 5/16 inch of concrete adjacent to the joint or end of deck and taper a distance of 3 feet.

If the plans show, create a transitional area on the approach pavement. Prep and place the first lift 3 feet beyond the end of the deck the same width as the deck. Prep and place the second lift 6 feet beyond the end of the deck the same width as the deck.

C.3 Overlay Application

Perform the handling and mixing of the polymer resin and hardening agent in a safe manner to achieve the desired results according to the manufacturer’s instructions. Do not apply the overlay system if any of the following exists:

1. Ambient air temperature is below 50 F or above 100 F.
2. Deck temperature is below 50 F.
3. Moisture content in the deck exceeds 4.5 percent when measured by an electronic moisture meter or shows visible moisture after 2 hours when measured in accordance with ASTM D4263.
4. Rain is forecasted during the minimum curing periods listed under C.5.
5. Materials component temperatures below 65 F or above 99 F.
6. Concrete deck age is less than 28 days.
7. The deck temperature exceeds 100 F.
8. If the gel time is 10 minutes or less at the predicted high air temperature for the day.

After the deck has been shotblasted or during the overlay curing period, only necessary surface preparation and overlay application equipment will be allowed on the deck. Provide appropriate protective measures to prevent contamination from equipment allowed on the deck during preparation and application operations. Begin overlay placement as soon as possible after surface preparation operations.

The polymer overlay shall consist of a two-course application of polymer and aggregate. Each of the two courses shall consist of a layer of polymer covered with a layer of aggregate in sufficient quantity to completely cover the polymer. Apply the polymer and aggregate according to the manufacturer’s requirements. Apply the overlay using equipment designed for this purpose. The application machine shall feature positive displacement volumetric metering and be capable of storing and mixing the polymer

resins at the proper mix ratio. Disperse the aggregate using a method that provides a uniform, consistent coverage of aggregate and minimizes aggregate rolling or bouncing into final position. First course applications that do not receive enough aggregate before the polymer gels shall be removed and replaced. A second course applied with insufficient aggregate may be left in place, but will require additional applications before opening to traffic.

After completion of each course, cure the overlay according to the manufacturer's instructions. Follow the minimum cure times listed under C.5 or as prescribed by the manufacturer. Remove the excess aggregate from the surface treatment by sweeping, blowing, or vacuuming without tearing or damaging the surface; the material may be re-used if approved by the engineer and manufacturer. Apply all courses of the overlay system before opening the area to traffic. Do not allow equipment or traffic on the treated area until directed by the engineer.

After the first layer of coating has cured to the point where the aggregate cannot be pulled out, apply the second layer. Before applying the second layer, broom and blow off the first layer with compressed air to remove all loose excess aggregate.

Before opening to traffic, clean expansion joints and joint seals of all debris and polymer. A minimum of 3 days following opening to traffic, remove loosened aggregates from the deck, expansion joints, and approach pavement.

C.4 Application Rates

Apply the polymer overlay in two separate courses in accordance with the manufacturer's instructions, but not less than the following rate of application.

Course	Minimum Polymer Rate[1] (GAL/100 SF)	Aggregate[2] (LBS/SY)
1	2.5	10+
2	5.0	14+

[1] The minimum total applications rate is 7.5 GAL/100 SF.

[2] Application of aggregate shall be of sufficient quantity to completely cover the polymer.

C.5 Minimum Curing Periods

As a minimum, cure the coating as follows:

	Average temperature of deck, polymer and aggregate components in degrees F							
Course	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85-99
1	6 hrs.	5 hrs.	4 hrs.	3 hrs.	2.5 hrs	2 hrs	1.5 hrs.	1 hr.
2	8 hrs.	6.5 hrs.	6.5 hrs.	5 hrs.	4 hrs.	3 hrs.	3 hrs.	3 hrs.

If faster cure times are desired and achievable, submit to the engineer a certified test report from an independent laboratory showing the material is able to reach a compressive strength of 1000 psi as tested per ASTM C 579 Method B within the temperature ranges and cure times for which the product is proposed to be placed. Establish ambient air, material, and substrate temperatures from the manufacturer for field applications. Field applications will not be allowed below the documented temperatures.

C.6 Repair of Polymer Overlay

Repair all areas of unbonded, uncured, or damaged polymer overlay for no additional compensation. Submit repair procedures from the manufacturer to the engineer for approval. Absent a manufacturer's repair procedures and with the approval of the engineer, complete repairs according to the following: Saw cut the limits of the area to the top of the concrete; remove the overlay by scarifying, grinding, or other approved methods; shot blast or sand blast and air blast the concrete before placement of polymer overlay; and place the polymer overlay according to section C.3.

D Measurement

The department will measure Polymer Overlay by the square yard, acceptably completed.

E Payment

The department will pay for measured quantities at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
509.5100.S	Polymer Overlay	SY

Payment is full compensation for preparing the surface; for tensile bond testing; for creating the transitional area; for providing the overlay; for cleanup; and for sweeping/vacuuming and disposing of excess materials.

The department will pay separately for deck repairs.

stp-509-030 (20200629)

22. Epoxy Injection Crack Repair, Item 509.9025.S; Cored Holes 2-Inch Diameter, Item 509.9026.S.

A Description

This special provision describes repairing structural cracks in concrete structures using the epoxy injection method, and coring 2 inch diameter core samples the repaired cracks.

Conform to standard spec 509 as modified in this special provision.

B Materials

Furnish epoxy injection material and surface seal material specifically designed for concrete crack injection.

Furnish epoxy injection material that is insensitive to the presence of water and is composed of a two-component epoxy resin designed specifically for structurally re-bonding cracks in Portland cement concrete. The epoxy injection material shall conform to the following physical properties at 77 degrees F:

	Unmixed		**Mixed**
	Component A (Resin)	**Component B (Catalyst)**	
Weight per gallon, lbs	9.15 ±0.1	8.2 ±0.1	9.15 ±0.1
Viscosity, cps	500-700	120-160	275-350
Specific Gravity, g/cc	1.128 ±0.012	0.984 ±0.012	1.099 ±0.012
Color Straw	Straw	Straw	Straw
Shelf Life (closed containers)	2 years	2 years	---
Solids by Weight	---	---	100%
Pot Life (200 gram mass)	---	---	12-15 mins.
Mixing Ratio (by weight)	80%	20%	---
Mixing Ratio (by volume)	78%	22%	---
Bond Strength	---	---	2000 psi min
Shrinkage Resistance	---	---	ASTM C883
Thermal Compatibility	---	---	ASTM C884

Furnish surface seal material for confining the injected epoxy resin in the cracks that meets the following requirements:

1. Adequate strength to hold the injection fittings firmly in place to resist injection pressures and prevent leakage during injection.
2. Non-sag consistency.
3. Insensitive to the presence of water.
4. Controlled cure time.
5. Two-component epoxy resin.
6. 100% solids by weight.
7. Applicable to wet surfaces.
8. Viscosity should be paste.

C Construction

C.1 Injection Equipment

Use equipment to meter and mix the two-epoxy resin components and to inject the mixture into the cracks. The equipment shall be portable and have positive displacement type pumps equipped with an interlock to provide positive ration control of exact proportions of the two components at the nozzle. Use electric or air powered pumps that provide in-line metering and mixing.

Use injection equipment that has automatic pressure control capable of discharging the mixture at any present pressure up to 160 psi (±5 psi) and is equipped with a manual pressure control override.

The equipment shall have the capability of maintaining the volume ratio for the mixture prescribed by the manufacturer of the epoxy resin material within a tolerance of ±5% by volume at any discharge pressure up to 160 psi.

The injection equipment shall be equipped with sensors on both the Component A and B reservoirs that will automatically stop the machine when only one component is being pumped to the mixing head.

C.2 Surface Area Preparation

Clean the surface areas adjacent to cracks of all dirt, dust, grease, oil, efflorescence, or other foreign matter, which may be detrimental to adhesion of the surface seal material. Acids and corrosives will not be permitted for cleaning.

Install injection ports along the crack at intervals of 4 to 10 inches, or as appropriate to accomplish full penetration of the injection resin. Center the injection ports over the cracks and secure in place using surface seal material. Where possible, install the injection ports over the widest areas of the cracks.

Apply the surface seal material to the face of the crack between the entry ports. For known through cracks, apply the surface seal material to both faces of the member. Before proceeding with the injection operation, allow sufficient time to elapse for the surface seal material to gain adequate strength.

C.3 Epoxy Injection

Install the epoxy injection resin according to the manufacturer’s instructions.

During installation, in general, limit pressures to 35 psi at the point of entry into the crack.

On vertical cracks, start the injection at the lowest point and continue upward along the crack. While injecting, resin should flow to and out of the next higher port. When this flow is established, cap the lower port, and continue the injection until all ports have been injected and flow has been established between them.

On horizontal cracks, follow the same procedures used for vertical cracks; start the injection at one end and continue the injection in succession along the crack until all ports have been injected and flow has been established between them.

C.4 Finishing and Clean-Up

When cracks are completely filled, cure the epoxy resin for a sufficient length of time so that when the surface seal is removed, there is no draining or runback of the epoxy material from the cracks. Grind, or use other appropriate method, to remove surface seal material, excess epoxy material, and injection ports. No epoxy material shall extend beyond the plane of the surfaces of the in-situ concrete.

C.5 Core Sampling

To determine if the crack injection is complete, obtain two 2 inch diameter core samples from the repaired concrete. Take the cores to the depth of the element or at least 12 inches. Take the cores at locations selected by the engineer. The engineer will have the option of increasing or decreasing the number of cores taken.

The injection shall be considered complete if more than 90% of the crack void, to 12 inches deep, is filled with the epoxy resin in each of the samples taken. If the injection is incomplete, re-injection and additional cores may be required.

Repair the core holes left in the member using one of the two following methods:

1. Fill core holes with an epoxy mortar consisting of one part epoxy injection resin to four parts clean, dry, bagged fine aggregate mixed by volume. Match the finish repair to the surrounding surface.
2. Fill core holes with an epoxy mortar consisting of one part epoxy gel to one part clean, dry, bagged fine aggregate mixed by volume. Match the finish repair to the surrounding surface.

D Measurement

The department will measure Epoxy Injection Crack Repair in length by the linear foot crack, acceptably repaired.

The department will measure Cored Holes 2-Inch Diameter as each individual cored hole, as approved by the engineer and acceptably completed. Additional cores taken as required by the engineer after re-injection (due to incomplete injection) will not be measured for payment. Additional cores taken by the contractor that are not ordered by the engineer will not be measured for payment.

E Payment

The department will pay for measured quantities at the contract unit price under the following bid items:

ITEM NUMBER	DESCRIPTION	UNIT
509.9025.S	Epoxy Injection Crack Repair	LF
509.9026.S	Cored Holes 2-Inch Diameter	EACH

Payment is full compensation for furnishing and placing the epoxy sealant, including any cleaning before and after injection; coring samples of the work; inspecting the core samples; and for repairing the core holes left in the member.

stp-509-025 (20240703)

23. Structure Repainting General.

A General

A.1 Inspection

On all structures in this contract, notify the engineer of any missing or broken bolts or nuts, any missing or broken rivets, or of any cracks or flaws in the steel members while cleaning or painting.

A.2 Date Painted

At the completion of all painting work, stencil in black paint or contrasting color paint the date of painting the bridge. The numbers shall be 3 inches (75 mm) in height and shall show the month and year in which the painting was completed: e.g., 11-95 (November 1995). On each bridge painted, stencil the date at two locations. On truss bridges, stencil the date on the cover plates of end posts near and above the top of the railings at the oncoming traffic end. On steel girder bridges, stencil the date on the inside of the outside stringers at the abutments. The date on grade separation bridges shall be readable when going under the structure or at some equally visible surface near the ends of the bridge, as designated by the engineer.

A.3 Graffiti Removal

Remove any graffiti on concrete abutments, piers, pier caps, parapet railings, slope paving or any other location at the direction of the engineer. Use a brush sandblast to remove graffiti.

The above work will not be measured and paid for separately but will be considered incidental to other items in the contract.

B (Vacant)

C Construction

C.1 Repainting Methods

Do not perform blasting, cleaning and painting on days of high winds. Prevailing winds in excess of 15 mph (25 km/hr) shall be considered high winds.

Place the final field coat of paint on the exterior of the exterior beams as a continuous painting operation. Stop at splices, vertical stiffeners or other appropriate locations so that lap marks are not evident or noticeable.

Completely clean and remove spent abrasive and other waste materials resulting from the contractor's operation from bridge deck surfaces, gutter lines, drains, curbs, bridge seats, pier caps, slope paving, roadway below, and all structural members and assemblies.

C.2 Inspection

Add the following to standard spec 105.9:

Furnish, erect and move scaffolding and other equipment to allow the inspector to closely observe all affected surfaces. The scaffolding, with appropriate safety devices, shall meet the approval of the engineer.

stp-517-005 (20150630)

24. Preparation and Coating of Top Flanges B-53-104, Item 517.0901.S.

A Description

This special provision describes thoroughly cleaning and coating the top surface and edges of the top flanges, removing loose paint, rust, mill scale, dirt, oil, grease, or other foreign substances until the specified finish is obtained.

B (Vacant)

C Construction

For top flanges and edges that have no paint on them and according to the department's Pre-Qualified Paint Systems for Structure Overcoating Cleaning and Priming, clean the top surface and edges of the top flanges and paint them with one coat of an approved zinc rich primer. Paint for Solvent Cleaning for Overcoat-minimum Cleaning (SP-1) is not allowed.

For top flanges and edges that have paint on them and according to the department's Pre-Qualified Paint Systems for Structure Overcoating Cleaning and Priming, clean all areas of rust and loose paint on the top surface and edges of the top flanges. Wash the top surface and edges of the top flanges and paint them with one coat of an approved zinc-rich primer according to paint manufacture's recommendations. If flash rusting occurs before the application of the primer, stop painting application, remove the flash rusting and paint cleaned surface. Paint for Solvent Cleaning for Overcoat-minimum Cleaning (SP-1) is not allowed.

Where plans call for the cleaning of other painted structural steel including hanger assemblies, bearings, field splices, and connections, clean areas of loose paint and rust according to the department's Pre-Qualified Paint Systems for Structure Overcoating Cleaning and Priming, or and according to paint manufacture's cleaning recommendations. Sound paint need not be removed with the exception of an area 12 inch on either side of hanger assembly centerlines. Clean this area to base metal according to the paint manufacture's cleaning recommendations and paint them one coat of an approved zinc-rich primer according to paint manufacture's recommendations. Paint for Solvent Cleaning for Overcoat-minimum Cleaning (SP-1) is not allowed.

For areas of exposed steel members that are to be imbedded in new concrete and according to the department's Pre-Qualified Paint Systems for Structure Overcoating Cleaning and Priming, thoroughly clean the surface area of exposed steel members that are to be imbedded in the new concrete and solvent wash and paint one coat of an approved zinc rich primer according to paint manufacture's recommendations to these areas. Paint for Solvent Cleaning for Overcoat-minimum Cleaning (SP-1) is not allowed.

According to the approved project specific hazardous material containment plan, furnish and erect tarpaulins or other materials to collect all of the spent paint containing material resulting from blasting or hand and power tool cleaning and coating. Minimize dust during all clean-up activities. Collect and store waste material at the end of each work day or more often if needed. Store waste materials in the hazardous waste containers provided. Lock and secure all waste containers at the end of each work day. Cover containers at all times except when adding or removing waste material. Store the containers in an accessible and secured area, not located in a storm water runoff course, flood plain or exposed to standing water. Transportation and disposal of such waste material will be the responsibility of the department.

Damage to existing painted surfaces as a result of construction operations, shall be restored to the approval of the engineer at the contractor's expense.

D Measurement

The department will measure Preparation and Coating of Top Flanges (Structure #) as a single unit for each structure, acceptably completed.

E Payment

The department will pay for measured quantities at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
517.0901.S	Preparation and Coating of Top Flanges B-53-104	EACH

Payment is full compensation for preparing and cleaning the designated surfaces; and for furnishing and applying the coating.

stp-517-010 (20210708)

25. Structure Overcoating Cleaning and Priming B-53-104, Item 517.3001.S.

A Description

This special provision describes cleaning and painting with two or three coats of paint the metal surfaces.

A.1 Areas to be Cleaned and Painted

Structure B-53-104

1. Two Coat Area: 2350 SF with SP 1 cleaning.
2. Three Coat Area: 1000 SF with SP 3 cleaning.

B Materials

Furnish an epoxy coating system from the department's APL for Paint- structure maintenance.

C Construction

C.1 Surface Preparation

Before overcoating or power tool cleaning, solvent clean all surfaces to be coated according to SSPC-SP1. A SSPC-SP 3 power Tool Cleaning according to Steel Structures Painting Council Specification 3 will be required on all metal surfaces to be painted with a three-coat system. Prime the same day, or re-clean before application, all metal surfaces receiving a No. 3 cleaning.

Remove all abrasive or paint residue from steel surfaces with a High Efficiency Particulate Abatement (HEPA-VAC) vacuum cleaner equipped with a brush-type cleaning tool, or by double blowing. If the double blowing method is used, vacuum the exposed top surfaces of all structural steel, including flanges, longitudinal stiffeners, splices, plates, and hangers, after the double blowing operations are completed. The air line used for blowing the steel clean shall have an inline water trap and the air shall be free of oil and water as it leaves the air line.

Take care to protect freshly coated surfaces from subsequent cleaning operations. Thoroughly wire brush damaged primed surfaces with a non-rusting tool. Clean and re-prime the brushed surfaces within the time recommended by the manufacturer.

C.2 Painting

Paint by applying two or three coats of an approved coating system as specified herein to the surfaces as described in A.1 from the department's approved products list.

C.3 Coating Application

Apply paint in a neat, workmanlike manner. The resultant paint film shall be smooth and uniform without skips or areas of excessive paint. Apply coating according to the manufacturer's recommendations.

Before applying the prime coat, coat with primer all edges, rivet and bolt heads, nuts and washers by using either a brush, roller, or spray application.

Dry Film Thickness per coat shall be a minimum of 3-mil. The dry film thickness shall be determined by use of a magnetic film thickness gage. The gage shall be calibrated for dry film thickness measurement according to SSPC-PA 2.

During surface preparation and coating application, the ambient and steel temperature shall be between 39 and 100 degrees F. The steel temperature shall be at least 5 degrees F above the dew point temperature, and the relative humidity shall not exceed 85%.

D Measurement

The department will measure Structure Overcoating Cleaning and Priming (Structure #) as a single unit for each structure, acceptably completed.

E Payment

The department will pay for measured quantities at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
517.3001.S	Structure Overcoating Cleaning and Priming B-53-104	EACH

Payment is full compensation for preparing and cleaning the designated surfaces; and for furnishing and applying the paint.

stp-517-036 (20210708)

26. Containment and Collection of Waste Materials B-53-104, Item 517.4001.S.

A Description

This special provision describes furnishing and erecting tarpaulins to contain, collect and store the spent material from surface preparation of steel surfaces, collecting such spent material, and labeling and storing the spent material in waste containers.

B Materials

Provide 5-gallon lidded plastic containers for containing the spent material.

C Construction

Erect tarpaulins or other materials to collect all of the spent material from power tool cleaning. Consider and treat all spent material as hazardous waste.

Collect and store all waste material collected by this operation at the bridge site for disposal. Collect and store all waste materials at the end of each workday or more often if needed. Store materials in 5-gallon lidded plastic containers.

Label each container with the date the first waste was placed in the container and the words "Hazardous Waste – EPA Waste Code D008." Lock and secure all containers at the end of each workday. Keep the containers covered at all times except to add or remove waste material. Store the containers in an accessible and secured area, not located in a storm water runoff course, flood plain or exposed to standing water.

Collect the spent debris by vacuuming, shoveling, sweeping, or by channeling it directly to disposal containers. The enclosure shall be thoroughly cleaned at the end of each work day.

D Measurement

The department will measure Containment and Collection of Waste Materials (Structure) as a single unit for each structure, acceptably completed.

E Payment

The department will pay for measured quantities at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
517.4001.S	Containment and Collection of Waste Materials B-53-104	EACH

Payment is full compensation for designing, erecting, operating, maintaining and disassembling the containment devices; collecting, labeling and storing spent materials in appropriate containers.

stp-517-037 (20230113)

27. Portable Decontamination Facility, Item 517.6001.S.

A Description

This special provision describes furnishing and maintaining weekly, or more often if needed, a single unit portable decontamination facility.

B Materials

Supply and operate all equipment according to OSHA.

Supply adequate heating equipment with the necessary fuel to maintain a minimum temperature of 68° F in the facility.

The portable decontamination facility shall consist of a separate "Dirty Room", "Shower Room" and "Clean Room". The facility shall be constructed so as to permit use by either sex. The facility shall have adequate ventilation.

The "Dirty Room" shall have appropriately marked containers for disposable garments, clothing that requires laundering, worker shoes, and any other related equipment. Each container shall be lined with poly bags for transporting clothing, or for disposal. Benches shall be provided for personnel.

The "Shower Room" shall include self-contained individual showering stalls that are stable and well secured to the facility. Provide showers with a continuous supply of potable hot and cold water. The wastewater must be retained for filtration, treatment, and/or for proper disposal.

The "Clean Room" shall be equipped with secure storage facilities for street clothes and separate storage facilities for protective clothing. The lockers shall be sized to store clothing, valuables and other personal belongings for each worker. Benches shall be provided for personnel.

Supply a separate hand wash facility, either attached to the decontamination facility or outside the containment.

C Construction

Properly contain, store, and dispose of the wastewater.

D Measurement

The department will measure Portable Decontamination Facility by each individual unit, acceptably completed.

E Payment

The department will pay for measured quantities at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
517.6001.S	Portable Decontamination Facility	EACH

Payment is full compensation for furnishing and maintaining a portable decontamination facility.

stp-517-060 (20230113)

28. Traffic Signals General.

Traffic signal facilities exist within the construction limits of the CTH Q bridge east approach. Contact Graham Heitz of the Wisconsin DOT Traffic Signals unit at (608) 246-5362 at least five (5) working days prior to disturbing existing loop detector.

29. Loop Detector Cable, Item 655.0700.

Add to standard spec 655.3.9 (1) the following:

Provide necessary splice kit and connection to existing lead-in cable.

30. Incentive Strength Concrete Structures, Item 715.0502; Incentive Air Content Concrete Structures, SPV.0055.01.

A Description

This special provision describes tolerance analysis and percent within limits (PWL) for pay adjustments for concrete structures. The special provision also specifies providing and maintaining a contractor Quality Control (QC) program, the department Quality Verification (QV) program, required sampling and testing, removal and replacement, dispute resolution, and pay adjustments. Pay is determined by statistical analysis performed on contractor and department test results conducted according to the Quality Management Program (QMP) as specified in the standard specification, except as modified in this special provision. The department will use the “Concrete Structure Tolerance Analysis” spreadsheet to record the data in chronological order, as placed.

Guidance related to this special provision is provided in Appendix A. Contact WisDOT Project Manager, Josh Nelson, Joshua.Nelson@dot.wi.gov, for a copy of Appendix A.

B Materials

Conform to the requirements of the standard specifications except where modified by this special.

Replace standard specification 701.3.2 with the following:

701.3.2 Contractor QC Testing

(1) Generate random numbers, determine sample and test locations according to WTM D3665, and provide to the engineer before placing material within the corresponding test increment. Perform contract required QC tests at the predetermined random location. Also, perform other tests as necessary to control production and construction processes, and additional testing enumerated in the contractor's quality control plan or that the engineer directs. Report test results to the engineer within timeframes specified in QMP specifications or as defined in this special provision.
(2) Notify the engineer when an individual test is outside the specification limit upon completion of the test. Individual test results that do not meet the specification limits are nonconforming. The department may reject or otherwise determine the final disposition of nonconforming material as specified in 106.5.
(3) Notify the department before sampling and testing so the department can observe QC sampling and testing. The department may direct additional contractor sampling and testing at the discretion of the engineer.

Replace standard specification 701.3.3.2(2) with the following:

701.3.3.2 Quality Verification Testing

(2) The department will sample and test randomly at locations independent of the contractor's QC tests and use separate equipment and laboratories. The department may notify the contractor before sampling so the contractor can observe QV sampling. The department will conduct verification testing as specified in 715.3.1.3 of this special provision.

Add to standard specification 710.5.1 the following:

710.5.1 General

(2) The department will witness all QC tests performed. The contractor may witness any QV tests performed by the department.

Replace standard specification 710.5.3 with the following:

710.5.3 Air Content

(1) Provide material conforming to the air content specified in 501.3.2.4.2.
(2) On each day of production, test each mix design at start-up.
(3) Test at the QC testing frequency specified in QMP specifications or as defined in this special provision.
(4) If any random QC air content test is outside of the specification limits, notify the engineer immediately. Investigate the cause and take corrective action to return the air content to within the specification limits. Perform corrective action and do the following:

- Test each subsequent truck for air content, slump, and temperature until the corrective-action test results are within the specification limits. The department may witness these corrective-action tests.
    - If two consecutive corrective-action test results fall outside the specification limits, stop placement, and restart corrective action procedure. Placement may not resume until approved by the engineer.
- Once the contractor corrective-action test results are within the specification limits, the department may test the subsequent truck to verify material conformance.
- If the department corrective-action test results are outside of the specification limits, restart corrective action procedure.

Replace standard specification 710.5.6.3, Table 710-6 with the following:

710.5.6.3 Department Acceptance Testing

TABLE 710-6 QV AGGREGATE TESTING FREQUENCY

CONCRETE CLASSIFICATION	PLACEMENT TESTING [1]
Class I: Structures	One test per 240 CY placed. - Minimum of one test per contract for substructure - Minimum of one test per contract for superstructure

[1] Total contract quantity.

Replace standard specification 715.1 with the following:

715.1 Description

(1) This section describes contractor mix design, testing, and documentation requirements for class I concrete used in structures.

715.1.1 Quality Control Program

715.1.1.1 General

(1) Conform to general requirements under 701 and 710 as well as additional requirements for class I concrete specified in this special provision. The department defines class I concrete as cast-in-place concrete used in pavement, barrier, or structure applications where all of the following apply:

- Mix design requires review and approval by a certified HTCP PCC-MDC technician.
- The contract defines specification limits for strength, air content, temperature, and discharge and delivery times.
- The contractor may earn statistically based incentives for strength and air content.

(2) Class I high early strength (HES) concrete is not eligible for 28-day strength incentives but is eligible for air content incentives. Disincentives are applicable for any nonconforming concrete properties.

715.1.1.2 Small Quantities

(1) The department defines small quantities for class I concrete structures as quantities with less than 240 cubic yards of concrete placed under a single bid item. Small quantities are subject to the reduced requirements under 710.2.

715.1.1.3 Pre-Pour Meetings for Class I Concrete Structures

(1) Attend pre-pour meetings arranged by the department a minimum of 5 business days before placing culvert, retaining wall, or substructure concrete and another pre-pour meeting before placing any superstructure concrete. Provide and discuss the placement schedule, list of personnel roles and responsibilities, testing and quality control documentation, and test results communication process. The department and contractor can agree to an alternative meeting time that is set before placement. Ensure that representatives from all parties involved with concrete work, including contractor, sub-contractor, ready-mix supplier, testers, and the project manager, attend these meetings. Additionally, notify the department Independent Assurance (IA) personnel of the meeting time and location.

715.1.1.4 Quality Control Plan

(1) Submit a quality control plan a minimum of 10 business days before placing concrete, conforming to 701.1.2.2. Additionally, include the following:

1. Concrete mix design documentation as required in 710.4.
2. Proposed methods for monitoring and recording batch weights.
3. Aggregate gradation acceptance method for class I concrete items.
4. Methods for monitoring and adjusting blended aggregate gradations before corrective action is required under 710.5.7; and methods for documenting corrective action.

715.1.1.5 Documentation

(1) Submit results electronically into MRS within 3 business days after those results become available for the following, if required under the contract:

- Process control tests.
- Engineer-directed tests.

(2) Submit aggregate gradation test results as specified in 710.5.6.

(3) Submit QC test results electronically as specified in 715.3.1.1(5).

Replace standard specification 715.2 with the following:

715.2 Materials

715.2.1 General

(1) For class I concrete used under the contract, have a HTCP-certified PCCTEC-II technician develop new concrete mixes qualified based on the results of mix development tests performed by a department-qualified laboratory.

(2) For HES concrete:

- Separate laboratory trial batching is not required for HES concrete modification as specified in 710.4.
- Routine 28-day compressive strength tests during placement are not required.

(3) In addition to the mix information required under 710.4, at least 10 business days before placing concrete, submit the following documentation to the engineer:

- Strength data from trial batching.
- Test dates of each trial batch.
- Name and location of laboratory that performed the trial batching.

(4) The engineer will review the submitted mix design within 3 business days of receiving the mix design submittal and complete and return Project Staff Review section of the mix design certification within DT2220 or DT2221.

715.2.2 Class I Concrete Mixes

715.2.2.1 Structures

(1) Qualify compressive strength according to American Concrete Institute (ACI) 301 - Specifications for Structural Concrete - subsections 4.2.3.1 through 4.2.3.4. Demonstrate that the 28-day compressive strength of the proposed mix will meet the requirements specified in ACI 301-20.

(2) Use a SCM as a partial replacement for cement as specified in 501.3.2.2.2.

(3) Ensure that the target net water to cementitious material (w/cm) ratio for the submitted mix design does not exceed 0.45 by weight. Include free water on the aggregate surface but do not include water absorbed within aggregate particles. Control the w/cm ratio throughout production by adjusting batch weights for changes in the aggregate moisture as required under 715.3.3.

(4) Do not use mixes containing accelerators, except the contractor may use mixes containing non-chloride accelerators in substructure elements. Bureau of Technical Services (BTS) approval is required before use.

Replace standard specification 715.3 with the following:

715.3 Testing and Acceptance

715.3.1 Class I Concrete Structures Testing

715.3.1.1 General

(1) Test concrete for slump, air content, temperature, and strength as specified in 710.5. Conduct QC tests for each specified property, using a single sample randomly located within each sublot. Cast a set of three 6"x12" cylinders for strength evaluation. When testing the random QC sample, record the time taken for concrete to be delivered and completely discharged for the randomly tested truck and ensure it conforms to 501.3.5.2.

(2) Cast strength cylinders required for opening to service according to 502.3.10.1.1. Cylinders shall represent the concrete placed at varying times for the entire day's production.

(3) The contractor will obtain a sample from the first truckload of concrete each day for start-up testing. The contractor and department will split the sample and perform startup testing for comparing temperature, slump, and air content. Continue testing until all conditions listed below are met:

- Contractor start-up test results are within +/-0.4 percent of the department start-up test results for air content test, and
- Contractor start-up test results are within +/-2 F of the department start-up test results for temperature test, and
- Contractor and department start-up test results are within specification limits for slump test, and
- Concrete is conforming to the specification limits.

(4) If the random QC or QV test overlaps with the start-up test, a new random number should be calculated for that sublot. If the random QC or QV test overlaps with the corrective action test, the random test must be performed as scheduled and it may also be used as a corrective action test.

(5) Submit QC test results in the department-provided spreadsheet to the engineer within 1 business day of completing the test.

(6) Document and report in writing at the time of infraction when sampling and testing was not performed in accordance with the MOTP.

(7) Do not continuously operate outside of the specification limits. Stop concrete placement, identify the source of the problem, and make the necessary corrections to produce concrete meeting the specification requirements.

715.3.1.2 Lot and Sublot Definition

715.3.1.2.1 General

(1) Provide the location and size of all lots and sublots to the engineer before placing concrete.

(2) Concrete placed under water must be in a separate lot.

(3) If the contractor combines concrete of varying lower specification limit (LSL) for strengths, as specified in table 715-3, in a single lot, the highest strength LSL shall be used to calculate pay adjustments for the lot.

(4) Do not combine HES concrete mixes with standard concrete mixes within the same lot.

(5) A lot can contain concrete with more than one mix design including any modifications to an existing mix design. Notification of any mix design changes or modifications, except HES, supporting documentation and engineer's approval are still required per 710.4.

715.3.1.2.2 Lots by Cubic Yard

(1) Define standard lots and sublots conforming to the following:

TABLE 715-1 CLASS I CONCRETE STRUCTURES - LOT AND SUBLOT SIZES

CONCRETE CLASSIFICATION	LOT SIZE	SUBLOT SIZE	NUMBER OF SUBLOTS PER LOT
Class I: Structures	240 cubic yards	60 cubic yards	4

(2) The contractor may include sublots less than or equal to 25 percent of the sublot volume in the last sublot of the lot.

(3) Lots with less than 3 sublots will be added to the previous lot for pay adjustments if approved by the engineer. Prior to placement of the partial or new lot, submit written notification with the updated lots and sublot layout to the engineer. Random QC testing will apply to these additional sublots. Lots with 3 or more sublots will be considered as a new lot.

715.3.1.3Department Verification Testing

(1) The department will perform daily startup sampling and testing according to 715.3.1.1(3).

(2) The department will perform verification testing for air content, slump, and temperature, using a single sample randomly located within each sublot. Two of the 4 QV tests will include casting cylinders for strength testing. The department will cast one set of strength cylinders from the first two sublots of the lot, or portion thereof, and another set from the next two sublots of the lot, or portion thereof, as determined from the random locations. The department will perform additional testing as required.

(3) The department will monitor and record the time taken for concrete to be delivered and completely discharged when the random QC sample is taken and will record the time taken for concrete to be delivered and completely discharged when the random QV sample is tested to verify conformance to 501.3.5.2.

(4) The department will maintain a complete record of all QV tests and inspections. The records will contain all QV test results and raw data, random numbers, and resulting calculations.

(5) The department will report QV test results to the contractor within 1 business day after the department obtains QC test results for the lot for each test.

715.3.2 Strength and Air Content Evaluation

715.3.2.1 General

(1) The department will make pay adjustments for strength and air content by comparing contractor and department test results, using tolerance analysis, on a lot-by-lot basis.

715.3.2.2 Removal and Replacement

715.3.2.2.1 Structures

(1) The department may evaluate sublots for removal and replacement (R&R) if any QC or QV test result for a sublot is below the limits specified in table 715-2. The evaluation will be limited to the affected sublot when QC test results are below the R&R limit. All sublots represented by the QV test result in question will be evaluated when QV test result is below the R&R limit. All parameters will be evaluated independently.

TABLE 715-2 REMOVE AND REPLACEMENT (R&R) LIMIT

PARAMETER	TEST TYPE	R&R LIMIT
Sublot Strength	Compressive Strength [1]	< (LSL – 500) psi
Sublot Air	Air Content	< 3.5%

[1] LSL (f'c) is design strength as defined in table 715-3 or the plans or special provisions; 28-day sublot average strength.

(2) The department will direct the contractor to core the affected sublots to determine material acceptance within 7 business days of test result validation.

(3) The strength and air content of the affected sublot will be evaluated independently.

(4) The department will determine core locations that do not interfere with structural steel. Perform coring according to WTM T24. Collect cores for either strength or hardened air content or both for evaluation as directed by the department. Fill specimen voids with a non-shrink grout from the APL or an engineer-approved non-shrink grout. Provide traffic control during operations.

(5) The department will take possession and maintain custody of the cores at all times. The department's central office laboratory or a mutually agreed qualified third-party laboratory will test cores according to WTM T24 for strength or ASTM C457 for hardened air content test. The department will assess concrete for removal and replacement based on a sublot-by-sublot evaluation of either core strength or hardened air content or both.

(6) The compressive strength R&R limit of the affected sublot will be recalculated to evaluate the affected sublot using the following equation:

Recalculated Strength R&R limit (in psi) = (Strength R&R limit as specified in table 715-2) + (10 x n)

where:

n = number of days beyond 28-days; not to exceed 60 days.

(7) Based on the independent evaluation of either core strength or hardened air content or both:

- If the average compressive strength from the cores is greater than or equal to recalculated strength R&R limit or hardened air content from the core is greater than or equal to air content R&R limit, the department will permit the sublot to remain in place.
- If the average compressive strength from the cores is less than recalculated strength R&R limit or hardened air content from the core is less than air content R&R limit, the department will direct the contractor to either:
    1. Remove and replace unacceptable structure sublot with new concrete of conforming strength and air content. When the sublot is removed and replaced, the QC and QV test results of the newly placed material will replace the original data for the sublot. The pay will be adjusted according to 715.5 for the concrete that was removed and replaced as directed by the department. The department will pay once for the area at the full contract price with pay adjustments.
    2. Permit concrete to remain in place if approved by the engineer.

(8) The cores will be compared as follows:

- For strength evaluation, the average compressive strength from the cores for the affected sublot will be compared to the recalculated sublot strength LSL to determine material conformance. The recalculated sublot strength LSL will be calculated using the following equation:

  Recalculated Sublot Strength LSL (in psi) = (LSL as specified in table 715-3) + (10 x n)

  where:

  n = number of days beyond 28-days for the affected sublot; not to exceed 60 days.

  The core test results will replace the original average sublot 28-day strength if the average compressive strength from the cores is less than recalculated sublot strength LSL limit.

- For air content evaluation, the hardened air content from the core will be compared to the air content specification limits to determine material conformance. The core test results will replace the original air content if the hardened air content from the core is not within specification limits.

715.3.3 Aggregate

715.3.3.1 General

(1) Except as allowed for small quantities in 710.2, test aggregate conforming to 710.5.6.

715.3.3.2 Structures

(1) In addition to the aggregate testing required under 710.5.6, determine the fine and coarse aggregate moisture content for each sample.

(2) Calculate target batch weights for each mix when production of that mix begins. Whenever the moisture content of the fine or coarse aggregate changes by more than 0.5 percent, adjust the batch weights to maintain the design w/cm ratio.

715.3.4 Dispute Resolution

715.3.4.1 General

(1) The dispute resolution process for structures will be on a lot-by-lot basis.

(2)The contractor cannot dispute air content, temperature, or delivery and discharge time.

(3)The contractor must submit a request for a dispute resolution in writing within 2 working days of receipt of the department test results for the lot.

(4) The contractor cannot dispute if:
- Contractor QC has not been completed in accordance with 715.1, 715.2 and 715.3, or
- QC test results are used for pay adjustments.

(5) The contractor may dispute in writing when department strength test results are used for pay adjustments, if all of the following conditions for the lot under dispute are met:

- Average QV strength test result is not meeting the LSL.
- Average QC strength test result is meeting the LSL.
- Standard deviation of QV strength test results is greater than 350 psi.
- Standard deviation of QC strength test results is lower than or equal to 350 psi.
- No sublots within the lot are subject to removal and replacement evaluation as specified in 715.3.2.

(6) Dispute resolution testing will include the following:

- If the compressive strength of material is disputed, compressive strength of cores (WTM T24) will be performed.
- If the material subject to dispute cannot be tested, the department test data will be used in pay adjustment calculation for the corresponding lot.

715.3.4.2 Strength Test Results

(1) When strength test results are disputed, at least three cores shall be taken at locations determined by the department that do not interfere with steel reinforcement in the disputed lot. Two of the three cores shall be taken in the same sublot with the lowest QV strength test result in dispute.

(2) Perform coring according to WTM T24. Fill specimen voids with a non-shrink grout from the APL or an engineer-approved non-shrink grout and provide traffic control during operations.

(3) The department will take possession and maintain custody of the cores at all times. The department's central office laboratory or a mutually agreed upon third-party qualified laboratory will test cores according to WTM T24 for compressive strength

(4) The compressive strength LSL of the disputed lot will be recalculated using the following equation:

Recalculated Strength LSL (in psi) = (LSL as specified in table 715-3) + (10 x n)

where:

n = average number of days beyond 28-days for the entire lot; not to exceed 60 days.

(5) The department and the contractor will abide by the strength test result of the cores to resolve the dispute that will replace the disputed test result in pay adjustment calculations.

(6) Based on the evaluation of strength test results from the cores, the core strength pay factor for the lot under dispute will be determined using table 715-4 relative to the recalculated strength LSL.

(7) If any core strength test result does not meet the recalculated strength LSL, the core strength pay factor shall not exceed 100%. This core strength pay factor will be used for pay adjustments for strength test results using the following equation:

Pay Adjustment for Strength Based on Cores = (Core strength pay factor - 100)/100 x (WP_S) x (CY) x ($353/CY)

where:

WP_S = weighted percentage for strength is 0.6. If core strength pay factor is less than 50%, then WP_S is 1.0.

(8) If the core strength pay factor is less than or equal to 100%, all costs associated with the dispute resolution sample testing will be paid by the contractor. If the core strength pay factor is greater than 100%, all costs associated with the dispute resolution sample testing will be paid by the department.

(9) The department and the contractor must sign the dispute resolution tracking form when the dispute resolution process is complete.

C Construction

Replace standard specification 501.3.2.4.2(1) with the following:

501.3.2.4.2 Air Entrainment

(1) Use an admixture conforming to 501.2.5.2 with non-air-entrained cement to produce air-entrained concrete. Ensure that concrete air content conforms to the air content of 6.0 percent +/-1.5 percent.

D Measurement

Replace standard specification 715.4(1) with the following:

715.4 Measurement

(1) The department will measure the Incentive bid items under this section by the dollar, calculated as specified in 715.5.

E Payment

Replace standard specification 715.5 with the following:

715.5 Payment

715.5.1 General

(1) Payment for concrete structures is determined by statistical analysis performed on random QC contractor and random QV department test results. Start-up and process control tests will not be used for pay adjustments.

(2) The department will pay incentive for concrete strength and air content under the following bid items:

ITEM NUMBER	DESCRIPTION	UNIT
715.0502	Incentive Strength Concrete Structures	DOL
SPV.0055.01	Incentive Air Content Concrete Structures	DOL

(3) Incentive payment may be more or less than the amount the schedule of items shows.

(4) The department will administer disincentives for strength, air content, temperature, and delivery and discharge time under the Disincentive Strength Concrete Structures, Disincentive Air Content Concrete Structures, Disincentive Temperature Concrete Structures, and Disincentive Delivery and Discharge Time Concrete Structures administrative items.

(5) The department will adjust pay relative to strength LSL as specified in table 715-3.

TABLE 715-3 CONCRETE STRENGTH LSL

COMPRESSIVE STRENGTH	28-DAY LOT AVERAGE STRENGTH - LSL [2]
Substructure and Culverts	≥ 3500 psi [1]
Superstructure	≥ 4000 psi [1]

[1] Or compressive strength defined in the plans or special provisions.

[2] Average each sublot first, then average the lot.

(6) The department will not pay an incentive for the following:

- properties that are nonconforming,
- ancillary concrete accepted based on tests of class I concrete,
- HES concrete for strength.

(7) Submit QC test results to the department electronically using a department provided spreadsheet. The department will verify contractor data before determining pay adjustments.

(8) All coring and testing costs under 715.3.2.2 including filling core holes and providing traffic control during coring are determined as follows:

- If the core compressive strength is less than the recalculated strength LSL, all costs will be paid by the contractor. If the core compressive strength is greater than or equal to the recalculated strength LSL, as, all costs will be paid by the department.
- If the core hardened air content is not within the specification limits, as defined in 501.3.2.4.2(1), all costs will be paid by the contractor. If the core hardened air content is within the specification limits, as defined in 501.3.2.4.2(1), all costs will be paid by the department.

(9) Do not place concrete if the delivery and discharge time exceeds the limit specified in 501.3.5.2. The engineer may reject material not placed within allowable specification limits. A 25% price reduction will be applied to the entire truckload if concrete placed exceeds the delivery and discharge time. Pay will be adjusted using a unit price of $353/CY.

(10) The department will adjust pay for air content, strength, temperature, and delivery and discharge time. The strength and air content test results will be evaluated independently.

(11) Any material with test results below the R&R limit, as specified in table 715-2, shall be removed and replaced unless the engineer allows for such material to remain in place. The pay adjustment will be calculated on a sublot-by-sublot basis using the following equation if either average compressive strength from the cores is less than recalculated strength LSL limit or hardened air content from the core is not within the specification limits or both:

Pay Adjustment for Cores = (Core Pay Factor-100)/100 x WP x (CY) x (Unit Price/CY)

- Core Pay Factor for strength with 3 or more cores will be determined using table 715-4 relative to the recalculated strength LSL limited to 100% if core strength is less than recalculated sublot LSL.
- Core Pay Factor for strength with less than 3 cores = (Average Strength from Cores) / (Recalculated Sublot Strength LSL) x 100; limited to 105%; if core strength is less than recalculated sublot LSL, the core pay factor is limited to 100%.
- Core Pay Factor for air content will be determined using table 715-5.
- Weighted percentage (WP) value of 0.6 will be used for strength and 0.4 will be used for air content.
- WP will equal 1.0, if the pay factor is equal to or less than 50%.
- Unit Price:
    - Unit price will be $353/CY when either core strength is greater than or equal to the recalculated R&R limit or hardened air content is greater than or equal to the air content R&R limit or both.
    - Unit price will be $706/CY when either core strength is less than the recalculated R&R limit or hardened air content is less than the air content R&R limit or both.

715.5.2 Tolerance Analysis for Strength and Air Content

(1) The engineer will compare the QC and QV test results on a lot-by-lot basis except for sublots subjected to R&R evaluation. The QV test results will be used as the basis for comparison for the tolerance analysis. The QC test results will be used for pay adjustment if the QC lot average test result is within 10.0% of the QV lot average test result. Pay adjustment for strength and air content will be calculated individually on a lot-by-lot basis except for sublots subjected to R&R evaluation using the following equation:

QC Pay Adjustment = (Pay Factor-100)/100 x (WP) x (CY) x ($353/CY)

- Pay factors for strength and air content will be determined using table 715-4.
- Weighted percentage (WP) value of 0.6 will be used for strength and 0.4 will be used for air content.
- WP will equal 1.0, if the pay factor is equal to or less than 50%.

TABLE 715-4 PWL CALCULATIONS FOR CONCRETE STRUCTURES

PERCENT WITHIN LIMITS (PWL)	PAY FACTOR (%)
>= 50 to 100	55 + (0.5 x PWL)
< 50	50 or remove and replace

(2) If the QC lot average test result is not within 10.0% of the QV lot average test result, the QV test results will be used for pay adjustment. Pay adjustment for strength and air content will be calculated individually on a lot-by-lot basis using the following equation:

QV Pay Adjustment = (Pay Factor-100)/100 x (WP) x (CY) x ($353/CY)

- Strength pay factor for less than 3 QV tests:
    - For superstructure = ((average QV lot strength/12) – 233.3); pay factor limited to a maximum value of 105% and a minimum value of 50%.
    - For substructure and culvert = ((average QV lot strength/12) – 191.7); pay factor limited to a maximum value of 105% and a minimum value of 50%.
- Strength pay factor for 3 or more QV tests will be determined using table 715-4.
- Pay factor for air content will be determined using table 715-4.
- Weighted percentage (WP) value of 0.6 will be used for strength and 0.4 will be used for air content.
- WP will equal 1.0, if the pay factor is equal to or less than 50%.

(3) There are no incentives for the following scenarios:

- If average strength test result data used for pay adjustment fails to meet the lot LSL .
- If average air content test result data used for pay adjustment is outside of the specification limits as specified in 501.3.2.4.2.
- If the lot standard deviation of compressive strength test result data used for pay adjustment is greater than 350 psi.
- If the lot standard deviation of air content test result data used for pay adjustment is greater than 1 percent.

(4) The “Concrete Structure Tolerance Analysis” spreadsheet will be made available to the contractor by the department within 1 business day of receiving the QC test results for the given lot.

715.5.2.1 Small Quantities Tolerance Analysis

(1) For small quantities with 3 or more sublots, the engineer will perform tolerance analysis based on average test results within the lot by comparing the QC and QV test results, as specified in 715.5.2.

(2) For small quantities with lots with less than 3 sublots, the engineer will perform tolerance analysis based on average test results within the lot by comparing the QC and QV test results. The pay adjustment will be calculated as specified in 715.5.2.1.1.

715.5.2.1.1 Small Quantities with Less than 3 Sublots

(1) The QC test results will be used for pay adjustment if the QC lot average test result is within 10.0% of the QV lot average test result. If the QC lot average test result is not within 10.0% of the QV lot average test result, the QV test results will be used for pay adjustment. Based on the tolerance analysis results, use the relevant QC or QV test results in the following equations for pay adjustments:

Pay Adjustment = (Pay Factor-100)/100 x (WP) x (CY) x ($353/CY)

- Individual strength pay factor for superstructure = ((average QC or QV lot strength/12) – 233.3); pay factor limited to a maximum value of 100% and a minimum value of 50%.
- Individual strength pay factor for substructure and culvert = ((average QC or QV lot strength/12) – 191.7); pay factor limited to a maximum value of 100% and a minimum value of 50%.
- Individual pay factor for air content will be determined using table 715-5.
- Weighted percentage (WP) value of 0.6 will be used for strength and 0.4 will be used for air content.
- WP will equal 1.0, if the pay factor is equal to or less than 50%.

TABLE 715-5 PAY FACTOR FOR AIR CONTENT

AIR CONTENT (%)	PAY FACTOR (%)
>=8.0 [1]	90
>7.5 to <8.0 [1]	95
>7.0 to <=7.5	100
>6.5 to <=7.0	103 [2]
>=5.5 to <=6.5	105 [2]
>=5.0 to <5.5	103 [2]
>=4.5 to <5.0	100
>=4.0 to <4.5	80
>=3.5 to <4.0	70
<3.5	50 or remove and replace

[1] Evaluate QC or QV strength data. If the strength data used for pay adjustment meets the LSL, do not take a price reduction for high air content.

[2] Pay Factor when using core test results for R&R evaluation. Pay Factor is limited to 100% for small quantities.

715.5.2 Temperature Pay Adjustment

(1) The department will adjust pay for nonconforming temperature tested by the department as specified in table 715-6, for every sublot.

TABLE 715-6 PRICE REDUCTIONS FOR NONCONFORMING TEMPERATURE

CONCRETE TEMPERATURE (F)		PRICE REDUCTION (%)
Upper Temperature Limit [1]	> 80 to <= 85	10
	> 85	25
Lower Temperature Limit	45 to <= 50	10
	< 45	25

[1] If a written temperature control plan outlining the actions by the contractor to control concrete temperature at the point of placement exceeding 80 F is submitted and followed to effectively control the temperature, the upper temperature limit is increased by 10 F for price reductions for nonconforming temperature.

31. Installing and Maintaining Bird Deterrent System Station 20+42, Item 999.2000.S.01; Installing and Maintaining Bird Deterrent System Station 25+86, 999.2000.S.02; Installing and Maintaining Bird Deterrent System Station 32+00, Item 999.2000.S.03.

A Description

This special provision describes inspecting, installing and/or maintaining approved deterrents that prevent migratory bird nesting on bridges and culverts. Swallows or other migratory birds' nests have been observed on or under the existing culvert or bridge at the station identified. All active nests (when eggs or young are present) of migratory birds are protected under the federal Migratory Bird Treaty Act. One deterrent system shall be installed and/or maintained for each applicable structure. Deterrent methods selected shall be appropriate for structure type, size and/or site-specific constraints.

B Materials

B.1 Hardware and Lumber

Lumber, hardware, and fastening devices shall be durable enough to last through the length of the nesting season. Fastening devices and deterrence system must be approved by the engineer prior to installation on culverts and bridges that will remain in service after removal of deterrent systems. The method of fastening should not compromise the culvert or bridge concrete surfaces or steel protection systems. The attachment locations must be restored and repaired as needed by use of engineer approved fillers, sealers and paint systems.

B.2 Netting Materials

Exclusion netting is material either wrapped around or draped and fastened to bridge decks/abutments and culvert corners to prevent bird entry.

Furnish exclusionary netting to deter nesting in bridge decks and abutments and corners of box culverts, consisting of either:

a. 1/2” x 1/2” or 3/4" x 3/4” knotless, flame resistant, U.V. stabilized polyethylene or polypropylene netting with minimum 40-pound breaking strength per strand, or engineer approved equal.

b. Galvanized wire mesh (hardware cloth) with a wire diameter of .040 inches (19-gauge) and opening width of 1/2-inch.

At a minimum, use either 1” x 2” (nominal) lumber or 3/4” x 2” pressure treated plywood strips and of equal length as the netting.

B.3 Plastic Strip Curtain

Plastic strip curtains are strips of plastic attached to vertical surfaces in areas suitable for nesting.

Furnish 3-foot wide lengths of 6 mil minimum plastic sheeting with the lower 2 feet cut into vertical strips 2 inches wide.

At a minimum, use either 1” x 2” (nominal) lumber or 3/4” x 2” pressure treated plywood strips and staples to attach plastic strips to wood to fabricate the strip curtain.

Furnish concrete screws to attach strip curtain to structure.

B.4 Corner Slope Materials

Corner slopes are pieces of curved plastic placed in corners suitable for nesting. They are particularly effective in preventing nesting in top corners of box culverts.

Furnish U.V. stabilized pre-fabricated PVC or polycarbonate corner slopes from commercial bird-deterrent manufacturers or an approved equal.

C Construction

C.1 General

If active nests are observed after construction starts, or if a trapped bird or an active nest is found, stop work that may affect birds or their nests, and notify the engineer to consult with the Wisconsin Department of Natural Resources transportation liaison at Andy Barta, at 608-235-2955, or the department regional environmental coordinator Sara Atwater, at 608-893-8701.

Efforts should be made to release trapped birds, unharmed.

C.2 Nest Removal

Remove unoccupied nests prior to the beginning of the nesting season as designated in Prosecution and Progress. Nest removal involves the removal and disposal of unoccupied or partially constructed nests without eggs or nestlings. Removing all evidence of nesting (e.g. cleaning droppings from structures) eliminates a visual cue for a potential breeding location, especially for first-time breeders. Nest removal is not a type of deterrent and does not prevent nest establishment but can delay the process. As such, it should only be used in conjunction with other methods. It cannot be used on its own to ensure compliance. Nest removal is not required if deterrents are installed before the start of the avoidance window unless nests interfere with successful installation of the deterrent.

Remove nests on the structure by scraping or pressure washing prior to established avoidance windows to deter nesting. Remove only unoccupied or partially constructed nests without eggs or nestlings. Remove newly built nests every two days before eggs are laid. Nest removal is intended to be used prior to and in conjunction with other nesting deterrents.

C.3 Exclusion Netting

C.3.1 Installation

Using concrete screws, anchor lumber to bridge or culvert along perimeter of intended netting. Fasten netting to lumber until netting is held taut. Use the minimum length of lumber and netting necessary to avoid sections of netting that are not flush to the bridge or culvert. Eliminate any loose pockets or wrinkles

that could trap and entangle birds or other wildlife. Ensure the net is pulled taut in order to prevent flapping in the wind, which results in tangles or breakage at mounting points.

For culverts, attach netting at a 45-degree angle at the culvert corner so it extends at least 12 inches below the corner.

C.4 Plastic Curtains

C.4.1 Installation

Attach plastic curtains along the entire length of vertical surface or corner on which nest building is to be deterred. Affix plastic curtain strips to treated lumber with staples spaced a minimum of 1 foot O.C. Wrap plastic curtains around lumber prior to attaching it to the structure to reduce the likelihood of it tearing out at the staples. Screw lumber into the underside of the bridge deck or top of box culvert with concrete screws placed 24-inches O.C. minimum.

C.5 Corner Slopes

C.5.1 Installation

Attach corner slopes to the structure per the manufacturer's recommendations. Use urethane-based adhesives if manufacturer supplied hardware or adhesives are not available or no recommendations are provided. Install end caps or seal ends of corner slopes to prevent entry of birds or other animals.

C.6 Inspection and Maintenance

Inspect bird deterrent devices every two weeks both during and prior to construction when deterrents have been installed to exclude birds prior to nesting windows, and after large storm events or high winds. Ensure that netting is taut, that no gaps or holes have formed, and that the nets are functioning properly. Ensure that corner slopes are not cracked or otherwise damaged and are functioning properly. Ensure that curtains are undamaged, with no tears, holes, or creases. Repair any damaged or loose deterrent devices. Inspect, maintain, and repair nesting deterrents whether installed by the contractor or others. Repair, replace, supplement deterrents as necessary with materials meeting the requirements of this specification.

Remove any unoccupied or partially constructed nests without eggs or nestlings.

Repair deterrents to prevent birds from attempting to nest again.

Record all inspection, removal, and maintenance activities. Provide inspection, removal and maintenance records to the engineer upon request.

C.7 Removal and Structure Repair

Maintain the deterrent until the engineer determines that the deterrent is deemed no longer necessary. Upon completion of the project, remove any remaining migratory bird deterrent from the project site. If the existing bridge or culvert is to remain after construction, restore and repair as needed by use of engineer approved fillers, sealers and paint systems.

D Measurement

The department will measure Installing and Maintaining Bird Deterrent System (Station) as a single unit at each structure, acceptably completed.

The department will measure Maintaining Bird Deterrent System (Station) as a single unit at each structure, acceptably completed.

E Payment

The department will pay for measured quantities at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
999.2000.S.01	Installing and Maintaining Bird Deterrent System Station 20+42	EACH
999.2000.S.02	Installing and Maintaining Bird Deterrent System Station 25+86	EACH
999.2000.S.03	Installing and Maintaining Bird Deterrent System Station 32+00	EACH

Payment for Installing and Maintaining Bird Deterrent System is full compensation for providing and installing deterrents that prevent migratory bird nesting; removing and disposing of unoccupied or partially constructed nests without eggs or nestlings; maintaining, repairing, replacing, supplementing, existing deterrent materials; repairing damage to structures resulting from installation of deterrents; removal and disposal of materials.

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32. Temporary Rectangular Rapid Flashing Beacon With Push Button, Item SPV.0060.01.

A Description

This special provision describes furnishing, installing, and maintaining temporary rectangular rapid flashing beacon with push button for temporary pedestrian crossing locations shown in the plan.

B Materials

Furnish Provide temporary rectangular rapid flashing beacons meeting MUTCD requirements with the following features:

- 30”x30” W11-2 and 24”x12” W16-7 signs
- Single-sided
- Solar powered
- Pedestrian confirmation LED
- Pedestrian push buttons

C Construction

Install and maintain per manufacturer instructions and according to standard specification 637 and 643.

Mount on a temporary break away sign support.

D Measurement

The department will measure Temporary Rectangular Rapid Flashing Beacon with Push Button by each location, acceptably completed.

E Payment

The department will pay for measured quantities at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.01	Temporary Rectangular Rapid Flashing Beacon With Push Button	EACH

Payment is full compensation for furnishing, installing, and maintaining the temporary rectangular rapid flashing beacon with push button, and for removal and disposal of all materials.

33. Top of Girder Survey B-53-104, Item SPV.0060.02.

A Description

This special provision describes survey data acquisition for elevations of the top of the existing steel girders, as detailed in the plans and as hereinafter provided.

B (Vacant)

C Construction

Obtain field survey elevations of top of steel at locations shown on the plans. Use coordinate system consistent with contract plans. One set of data shall be obtained prior to removal of the existing deck. Elevations shall be obtained again at the same locations after removal of the existing deck is complete. Contractor to allow 3 business days for review of data prior to forming and pouring the deck replacement. Submit data to the engineer for review

D Measurement

The department will measure Top of Girder Survey B-53-104 as a single complete unit of work per bridge, acceptably completed.

E Payment

The department will pay for measured quantities at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.02	Top of Girder Survey B-53-104	EACH

Payment is full compensation for any work necessary for obtaining and submitting the top of girder elevation data, including survey equipment, materials, and labor.

34. Salvage Lighting Units, Item SPV.0060.03.

A Description

This special provision describes salvaging existing lighting units and making them available to the Town of Beloit for collection.

B (Vacant)

C Construction

Salvage designated transformer base, pole, arms, and luminaires for reuse in accordance with standard spec 204.

Contact Joe Rose with the Town of Beloit at least 2 weeks before units are salvaged to coordinate collection.

D Measurement

The department will measure Salvage Lighting Units by the each lighting unit acceptably completed.

E Payment

The department will pay for measured quantities at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.03	Salvage Lighting Units	EACH

Payment is full compensation for salvaging the lighting units, coordinating collection, and for all labor, materials, and equipment necessary to complete the work.

35. Cored Holes 6-Inch, Item SPV.0060.04.

A Description

This special provision describes providing labor and equipment necessary to core a hole for Pipe Underdrain 6-Inch.

B (Vacant)

C Construction

Provide a core drilling device that creates a uniform core for the appropriate type and size of underdrain being placed.

Engineer will direct in the field the necessary locations of core holes.

D Measurement

The department will measure Cored Holes 6-Inch by the each cored hole acceptably completed.

E Payment

The department will pay for measured quantities at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.04	Cored Holes 6-Inch	EACH

Payment is full compensation for all labor, materials, and equipment necessary for each individual cored hole for Pipe Underdrain 6-Inch.

36. Concrete Curb and Gutter 60-Inch Type A, Item SPV.0090.01.

A Description

This special provision describes furnishing all labor, materials, and equipment necessary to construct Concrete Curb and Gutter 60-Inch Type A to all dimensions and at the locations indicated on the plans.

B Materials

Furnish materials according to standard spec 601.2.

C Construction

Construction Concrete Curb and Gutter 60-Inch Type A according to the details shown in the plan and standard spec 601.3.

D Measurement

The department will measure Concrete Curb and Gutter 60-Inch Type A by the linear foot acceptably completed.

E Payment

The department will pay for measured quantities at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.01	Concrete Curb and Gutter 60-Inch Type A	LF

Payment is full compensation for furnishing all labor, materials, and equipment necessary to complete the work as described in standard spec 601.5.

37. Excavation, Hauling, and Disposal of Metals Contaminated Soil, Item SPV.0195.01.

A Description

A.1 General

This special provision describes excavating, loading, hauling, and disposing of metals-contaminated soil at a DNR approved landfill facility. The closest DNR approved landfill facilities are:

Waste Management Deer Track Landfill
N6756 Waldmann Ln
Watertown, WI 53094
(866) 676-7150

GFL Environmental Mallard Ridge Landfill
W8470 WI-11
Delavan, WI 53115
(262) 724-3257

Perform this work conforming to standard spec 205 and with pertinent parts of Chapters NR 700-754 of the Wisconsin Administrative Code, as supplemented herein. Per NR 718.07, a solid waste collection and transportation service-operating license is required under NR 502.06 for each vehicle used to transport contaminated soil.

A.2 Notice to the Contractor – Contaminated Soil Locations

The department completed testing for soil contamination for locations within this project where excavation is required. Testing indicated that metals-contaminated soil is present at the following location where excavation is required, as shown on the plans:

- STH 81 Beloit Bridge Station 25+85 to Station 26+12, from centerline to project limit or RT side of roadway, from 1’ below ground surface (bgs) to 3’ below ground surface. Soil contains lead and must be managed.

Directly load soil excavated by the project at the above locations into trucks that will transport the soil to a WDNR-licensed landfill facility for treatment and disposal.

If contaminated soils are encountered elsewhere on the project, terminate excavation activities in the area and notify the engineer. If dewatering is required at the above locations, conduct the dewatering in accordance with Section C below.

The excavation management plan for this project has been designed to minimize the offsite treatment or disposal of contaminated material. The excavation management plan, including these special provisions, has been developed in cooperation with the WDNR. The WDNR concurrence letter is on file at the Wisconsin Department of Transportation. For further information regarding previous investigation and remediation activities near this project, contact:

Name: Ms. Sara Atwater
Address: 2101 Wright St, Madison, WI 53704
Phone: 608-893-8701

E-mail: Sara.Atwater@dot.wi.gov

A.3 Coordination

Coordinate work under this contract with the environment consultant:

Consultant: Ramboll
Address: 234 W. Florida Street, Fifth Floor, Milwaukee, WI 53204
Contact: Mr. Jim Hutchens, PE
Phone: 414-502-6749
E-mail: jlhutchens@ramboll.com

The role of the environmental consultant will be limited to:

1. Determining the location and limits of contaminated soil to be excavated based on soil analytical results from previous investigations, visual observations, and field screening of soil that is excavated;

2. Identifying contaminated soils to be hauled to the landfill facility;

3. Documenting that activities associated with management of contaminated soil are in conformance with the contaminated soil management methods for this project as specified herein; and

4. Obtaining the necessary approvals for disposal of contaminated soil from the landfill facility.

Provide at least a 14-calendar day notice of the preconstruction conference date to the environmental consultant. At the preconstruction conference, provide a schedule for all excavation activities in the areas of contamination to the environmental consultant. Also notify the environmental consultant at least three calendar days before beginning excavation activities in each of the contaminated areas.

Coordinate with the environmental consultant to ensure that the environmental consultant is present during excavation activities in the contaminated areas. Perform excavation work in each of the contaminated areas on a continuous basis until excavation work is completed.

Identify the DNR approved landfill facility that will be used for disposal of contaminated soils and provide this information to the environmental consultant no later than 30 calendar days before beginning excavation activities in the contaminated areas or at the preconstruction conference, whichever comes first. The environmental consultant will be responsible for obtaining the necessary approvals for disposal of contaminated soils from the landfill facility. Do not transport contaminated soil offsite without prior approval from the environmental consultant.

A.4 Health and Safety Requirements

Add the following to standard spec 107.1:

During excavation activities, expect to encounter soil contaminated with metals. Site workers taking part in activities that will result in the reasonable probability of exposure to safety and health hazards associated with hazardous materials shall have completed health and safety training that meets the Occupational Safety and Health Administration (OSHA) requirements for Hazardous Waste Operations and Emergency Response (HAZWOPER), as provided in 29 CFR 1910.120.

Prepare a site-specific Health and Safety Plan, and develop, delineate, and enforce the health and safety exclusion zones for each contaminated site location as required by 29 CFR 1910.120. Submit the sitespecific health and safety plan and written documentation of up-to-date OSHA training to the engineer before the start of work.

B (Vacant)

C Construction

Add the following to standard spec 205.3:

Control operations in the contaminated areas to minimize the quantity of contaminated soil excavated.

The environmental consultant will periodically evaluate soil excavated from the contaminated areas to determine if the soil will require offsite landfill disposal. The environmental consultant will evaluate excavated soil based on field screening results, visual observations, and soil analytical results from previous environmental investigations. Assist the environmental consultant in collecting soil samples for evaluation using excavation equipment. The sampling frequency shall be a maximum of one sample for every 15 cubic yards excavated.

Directly load and haul soils designated by the environmental consultant for offsite landfill disposal to the DNR approved landfill facility. Use loading and hauling practices that are appropriate to prevent any spills

or releases of contaminated soils or residues. Before transport, sufficiently dewater soils designated for off-site landfill disposal so as not to contain free liquids.

If dewatering is required in areas of known contamination, water generated from dewatering activities will likely contain metals. Such water may be discharged to the storm sewer or surface water with WDNR approval under a Wisconsin Pollution Discharge Elimination System (WPDES) General Permit, or to the sanitary sewer or at the treatment facility with approval from the local wastewater utility. Pretreatment may be required prior to discharge.

Contractor shall meet all applicable requirements, including the control of suspended solids. Perform all necessary monitoring to document compliance with requirements. Furnish, install, operate, maintain, disassemble, and remove treatment equipment necessary to comply with requirements.

Ensure continuous dewatering and excavation safety at all times. Provide, operate, and maintain adequate pumping equipment and drainage and disposal facilities.

Notify the engineer of any dewatering activities and obtain any permits necessary to discharge water. Provide copies of such permits to the engineer. Meet any requirements and pay any costs for obtaining and complying with such permit use. Follow all applicable legislative statutes, judiciary decisions, and regulations of the State of Wisconsin.

Costs associated with excavation dewatering in the contaminated areas are considered incidental to this pay item. The Wisconsin Department of Transportation will be the generator of regulated solid waste from this construction project.

D Measurement

The department will measure Excavation, Hauling, and Disposal of Metals-Contaminated Soil in tons of contaminated soil, accepted by the landfill facility as documented by weight tickets generated by the landfill facility.

E Payment

The department will pay for measured quantities at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0195.01	Excavation, Hauling, and Disposal of Metals Contaminated Soil	TON

Payment is full compensation for excavating, segregating, loading, hauling, and disposal of contaminated soil; obtaining solid waste collection and transportation service operating licenses; assisting in the collection soil samples for field evaluation; and dewatering of soils before transport, if necessary. Management and disposal of contaminated water is considered incidental to other bid items in the contract. The department will not pay directly for management and disposal/treatment of contaminated water.

ADDITIONAL SPECIAL PROVISION 4

This special provision does not limit the right of the department, prime contractor, or subcontractors at any tier to withhold payment for work not acceptably completed or work subject to an unresolved contract dispute.

Payment to First-Tier Subcontractors

Within 10 calendar days of receiving a progress payment for work completed by a subcontractor, pay the subcontractor for that work. The prime contractor may withhold payment to a subcontractor if, within 10 calendar days of receipt of that progress payment, the prime contractor provides written notification to the subcontractor and the department documenting "just cause" for withholding payment.

The prime contractor is not allowed to withhold retainage from payments due subcontractors.

Payment to Lower-Tier Subcontractors

Ensure that subcontracting agreements at all tiers provide prompt payment rights to lower-tier subcontractors that parallel those granted first-tier subcontractors in this provision.

Acceptance and Final Payment

Within 30 calendar days of receiving the semi-final estimate from the department, submit written certification that subcontractors at all tiers are paid in full for acceptably completed work.

Additional Special Provision 6 (ASP-6)
Modifications to the standard specifications

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Additional Special Provision 6 (ASP-6)
Modifications to the standard specifications

Make the following revisions to the standard specifications.

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104 Scope of Work

104.2.2 Issuing Change Orders

Replace subsection 104.2.2 with the following and rearrange to add a 104.2.2.7 effective with the February 2026 letting.

104.2.2.1 Change Orders for Differing Site Conditions

(1) During the progress of the work, if one or more of the following differing conditions are encountered at the site, the party discovering the condition must promptly notify the other party of the specific condition before further disturbing the site and before further performing the affected work.

1. A subsurface or latent physical condition, differing materially from those indicated in the contract.
2. An unknown physical condition of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in the work specified in the contract.

(2) If the contractor discovers the differing condition, the contractor shall provide oral notification as specified in 104.3.2, of the specific differing condition before further disturbing the site and before further performing the affected work.

(3) The project engineer will investigate the conditions. If the project engineer determines the conditions materially differ and cause an increase or decrease in the cost, time, or both, required to perform the work under the contract, the project engineer will adjust the contract price, time, or both, and modify the contract in writing accordingly. The project engineer will respond to the contractor as to whether or not an adjustment is warranted. The project engineer will follow the contractor notification procedures specified in 104.3.

(4) The department will not allow a contract adjustment unless the contractor has provided the required notice as specified in 104.3.

104.2.2.2 Change Orders for Engineer-Ordered Suspensions

(1) If the project engineer suspends or delays the performance of all or any portion of the work in writing for an unreasonable period of time (not originally anticipated, customary, or inherent to the construction industry) and the contractor believes that additional payment, contract time, or both, is due because of the suspension or delay, the contractor shall notify the engineer as specified in 104.3.

(2) The project engineer will evaluate the contractor's request. If the project engineer agrees that the cost, time, or both, required for the performance of the contract has increased due to the suspension or delay and the suspension or delay 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 project engineer will make an adjustment and modify the contract in writing accordingly. The project engineer will respond to the contractor as to whether or not an adjustment is warranted as specified in 104.3.6.

(3) The project engineer will not consider a contract adjustment unless the contractor submits the request for adjustment within the time specified above.

(4) The project engineer will not consider a contract adjustment under this clause to the extent that the performance would have been suspended by any other cause, or for which an adjustment is provided or excluded under any other term or condition of this contract.

104.2.2.3 Change Orders for Altered Work

(1) If original contract work is altered from what is included in the contract, the department will adjust the contract if the character of the work as altered differs materially in kind or nature from that involved or included in the original contract.

(2) Before performing altered work, reach agreement with the project engineer for any price adjustments as specified in 109.4. If the project engineer does not agree that the work has significantly changed and a price adjustment is justified, follow the notification procedures as specified in 104.3.

(3) If the alterations do not significantly change the character of the work under the contract, the department will not adjust the contract.

104.2.2.4 Change Orders for Quantity Variations

(1) If all original contract work for a bid item is completed as required in the contract, and the measured quantity for that bid item varies from the contract quantity, the department will adjust the contract if the department or contractor demonstrates that the quantity variation affects the contractor's unit cost to perform the work and

meets one of the criteria below. If the quantity variation does not significantly change the character of the work under the contract, the department will pay for the work at the contract price.

1. The quantity of a major bid item, as defined in 101.3, is increased in excess of 125 percent or decreased below 75 percent of the original contract quantity. Any allowance for an increase in quantity applies only to that portion in excess of 125 percent of the original contract bid item quantity, or in case of a decrease below 75 percent, to the work actually performed.
2. The quantity of a minor bid item is increased to become a major bid item. An adjustment in the contract unit price for that bid item applies only to the quantity of that bid item having a contract value as follows:

   Original Contract < $8M: In excess of 6.25 percent of the original contract.

   Original Contract >= $8M: In excess of $500,000.
3. The quantity of a minor bid item that is part of an approved subcontract and that exceeds 10 percent of the original value of that subcontract is decreased more than 50 percent from the original contract quantity for that bid item. Either party to the contract may submit a request for a revision to the contract unit price for that bid item. The department's total payment for the final reduced quantity will not exceed 75 percent of the original contract quantity at the contract price.
4. The quantity of a minor bid item that is part of an approved subcontract and that exceeds 10 percent of the original value of that subcontract is increased more than 50 percent from the original contract quantity for that bid item and which as increased does not qualify for adjustment as a major bid item. Either party to the contract may submit a request to the other for a revision of the contract unit price for that quantity of the bid item that is in excess of 125 percent of the original contract quantity.

104.2.2.5 Change Orders for Extra Work

(1) The department has the right to direct extra work not required in the original contract, as defined in 101.3.

(2) The engineer will determine payment for extra work as specified in 109.4.

104.2.2.6 Change Orders for Eliminated Work

(1) The department has the right to partially eliminate or completely eliminate work the project engineer finds to be unnecessary for the project. If the project engineer partially eliminates or completely eliminates work, the project engineer will issue a change order for a fair and equitable amount as specified in 109.5.

104.2.2.7 Change Orders for Revisions to Contract Time

(1) The department will issue a change order to revise the contract time as specified in 108.10.

104.6 Roadway Maintenance and Traffic Control

104.6.1.2.3 Drop-Off Protection

Replace subsection with the following effective with the November 2025 letting.

(1) Eliminate vertical drop-offs greater than 2 inches and edge slopes steeper than 3:1 between adjacent lanes open to traffic.

(2) If the roadway remains open to through traffic during construction and a greater than 2-inch drop-off occurs within 3 feet or less from the edge of the traveled way, eliminate the drop-off within 48 hours after completing that days work. Provide aggregate shoulder material compacted to a temporary 3:1 or flatter cross slope from the surface of the pavement edge.

(3) Unless the engineer allows otherwise address drop-offs when they exist greater than 3 and less than 8 feet from the travelled way as follows:

- Delineate vertical drop-offs 2 inches or greater and edge slopes steeper than 3:1 with drums, barricades, and signs, by the end of the workday.
- Eliminate vertical drop-offs 2 inches or greater and edge slopes steeper than 3:1 within 72 hours or before a weekend or holiday whichever comes first.
- Eliminate or use temporary concrete barrier to protect vertical drop-offs 4-inches or greater after 72 hours or before a weekend or holiday whichever comes first.

(4) If a 4-inch or greater vertical drop-off or an edge slope steeper than 3:1 exists greater than 8 and less than 15 feet from the traveled way, delineate that drop-off or edge slope with drums, barricades, and signs by the end of the workday.

(5) If a 12-inch or greater vertical drop-off exists greater than 8 and less than 15 feet from a traveled way with a posted speed limit of 55 mph or greater, eliminate or use temporary concrete barrier to protect that drop-off within 72 hours or before a weekend or holiday whichever comes first.

104.6.1.2.4 Hazard Protection on Roads Open to All Traffic

Replace subsection with the following effective with the November 2025 letting.

(1) On roads open to all traffic; conform to the following construction clear zone requirements:

- Posted speeds 45 mph or less: within 8 feet of the travelled way.
- Posted speeds from 45 mph to 55 mph inclusive: within 10 feet of the travelled way.
- Posted speeds above 55 mph: within 15 feet of the travelled way.

(2) Remove all construction debris, stored materials, and equipment not in use from the construction clear zone; or if the engineer allows, delineate and shield with concrete barrier.

(3) Delay removal of existing permanent roadside safety devices until necessary. When located within the construction clear zone and not shielded by concrete barrier, use temporary traffic control drums to delineate bridge abutments, concrete barrier blunt ends, sign bridge foundations, drainage structures, and slopes exposed by removing permanent protective measures.

- For exposed bridge abutments, concrete barrier blunt ends, sign bridge foundations, and drainage structures, eliminate the need for delineation within 5 calendar days.
- For exposed slopes steeper than 3:1, eliminate the need for delineation within 14 calendar days , or duration approved by the engineer.

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105 Control of the Work

105.13 Claims Process for Unresolved Changes

Replace subsection with the following effective with the February 2026 letting.

105.13.3 Submission of Claim

(1) Submit the claim to the project engineer as promptly as possible following the submission of the Notice of Claim. If the contractor does not submit the claim prior to the earlier of the following dates, the department will deny the claim:

1. 120 calendar days from the date of the Notice of Claim.
2. The end of the time allowed under 109.7 for the contractor to respond in writing to the engineer issued semi-final estimate.

(2) The department will not accept the submission of a claim until the resolution process in 104.3 has been completed and the contractor makes no further requests to submit updated information that may affect the region's final decision.

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107 Legal Relations and Responsibility to the Public

Add section 107.27 (Drones or Unmanned Aircraft Systems (UAS)) effective with the November 2024 letting.

107.27 Drones or Unmanned Aircraft Systems (UAS)

107.27.1 Licensing and Compliance

Add paragraph 107.27.1(5) to the information included with the November 2024 ASP-6, effective with the February 2026 letting.

(1) Obtain and possess the necessary Federal Aviation Administration (FAA) licenses and certifications to operate drones commercially (https://www.faa.gov/uas).

(2) Comply with all FAA regulations, airspace restrictions, and local laws. Operators of small drones that are less than 55 pounds for work or business must follow all requirements as listed in Title 14, Chapter 1, Subchapter F, Part 107 of the Code of Federal Regulations (14 CFR) and obtain a remote pilot certificate (https://www.faa.gov/uas/commercial_operators).

(3) Comply with Wisconsin State Statute 942.10. Limit operations to the specific approved purpose and employ reasonable precautions to avoid capturing images of the public except those that are incidental to the project.

(4) Provide copies of waivers required for specific project conditions to the engineer prior to any flight.

(5) UAS and UAS components are required to be compliant with federal guidelines outlined in the American Security Drone Act of 2023 (ASDA) and the OMB memorandum M-26-02.

107.27.2 Flight Approval, Safety, and Incident Reporting

(1) Submit information in 107.27.2(2) to obtain written drone flight approval from the engineer at least 3 business days prior to operating a drone within the right-of-way. Do not operate a drone within the right-of-way unless approved by the engineer.

(2) Drone flight application for review and approval must include:

- UAS pilot information and qualifications, images of certification
- UAS drone information and FAA tail numbers
- Max/ Min allowable flight parameters (weather)
- Specifics of flight mission: capture scope

- Estimated flight duration
- Pre-flight checklist
- Site-specific parameters
- Notification protocols - Federal/Local/Agency/Owner/Responsible in Charge
- Confirmation and verification of approved operators and hardware
- Flight plan map diagram (including launch and landing location)
- FAA-Airspace flight map classification and confirmation with graphics
- UAS incident management protocol

(3) If contractor is requesting multiple types of the same flight, a simplified request can be submitted listing weekly flight plan.

(4) Safety measures must include but are not limited to:

- Regular training and updates on drone regulations are required and must be provided upon request.
- Drones must be operated in accordance with safety guidelines, including maintaining a safe distance from people, structures, vehicles, etc.
- Conduct a pre-flight safety assessment, considering weather conditions, airspace restrictions, and potential hazards.
- Emergency procedures (e.g., drone malfunction, loss of control) must be documented and followed.
- All incidents must be reported to the engineer.

(5) If the drone has an incident during flight, report the following to the engineer:

- Incident background and details.
- FAA (14 CFR 107.9) and NTSB (49 CFR 870) notification protocol.
- Contractor internal notification protocol.

107.27.3 Insurance Requirements

(1) Maintain drone liability insurance with the following limits.

1. For drones weighing 10 pounds or less, a liability policy with a minimum limit of $1,000,000.00 is required.
2. For drones weighing more than 10 pounds and less than or equal to 20 pounds, a liability policy with a minimum limit of $2,000,000.00 is required.
3. For drones weighing more than 20 pounds, notify engineer and department will determine appropriate liability policy coverage levels based on size, use, location, and other risk factors.

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305 Dense Graded Base

305.3.3.3 Shoulders Adjacent to Asphaltic Pavement or Surfacing

Replace subsection with the following effective with the November 2025 letting.

(1) If the roadway is closed to through traffic during construction, construct the aggregate shoulders before opening the road.

(2) If the roadway remains open to through traffic during construction, conform as specified in 104.6.1.2.3.

(3) Provide and maintain signing and other traffic protection and control devices, as specified in 643, until completing shoulder construction to the required cross-section and flush with the asphaltic pavement or surfacing.

310 Open-Graded Base

310.2 Materials

Replace paragraph (2) with the following effective with the November 2025 letting.

(2) The contractor may substitute material conforming to the gradation requirements for crushed aggregate specified in table 310-01 if that material conforms to the fracture requirements for open-graded crushed gravel specified in 301.2.4.5.

TABLE 310-01 COARSE AGGREGATE (% passing by weight)

AASHTO No. 67 [1]

SIEVE	COARSE AGGREGATE (% PASSING by WEIGHT) AASHTO No. 67
2-inch	-
1 1/2-inch	-
1-inch	100
3/4-inch	90 - 100
1/2-inch	-
3/8-inch	20 - 55
No. 4	0 - 10
No. 8	0 - 5
No. 16	-
No. 30	-
No. 50	-
No. 100	-
No. 200	-

[1] Size according to AASHTO M43.

415 Concrete Pavement

415.3.16 Tolerance in Pavement Thickness

415.3.16.4.1.2 Magnetic Pulse Induction

Replace subsection with the following effective with the November 2025 letting.

(1) The department will measure thickness within 10 business days of paving. Upon completion of the project thickness testing, the department will provide the test results to the contractor within 5 business days.

(2) The department will establish a project reference plate at the start of each paving stage. The department will notify the contractor of project reference plate locations before testing. The department will measure the project reference plate before each day of testing.

(3) If the random plate test result falls within 80 to 50 percent pay range specified in 415.5.2, the department will measure the second plate in that unit. The department will notify the contractor immediately if the average of the 6 readings fall within the 80 to 50 percent pay range.

(4) If an individual random plate test result is more than 1 inch thinner than contract plan thickness, the pavement is unacceptable. Department will determine limits of unacceptable pavement by performing the following:

- The engineer will test each consecutive plate stationed ahead and behind until the thickness test result is plan thickness or greater.
- The engineer will direct the contractor to core the hardened concrete to determine the extent of the unacceptable area. In each direction, the contractor shall take cores at points approximately 20 feet from the furthest out of specification plate towards the plate that is plan thickness of greater. Once a core is within 80 to 100 percent pay range, the coring is complete and the limits of unacceptable pavement extend from the stationing between the core test results of 80 to 100 percent payment, inclusive of all unacceptable core and plate test results.
- Perform coring according to WTM T24. The department will evaluate the results according to AASHTO T148
- Fill core holes with concrete or mortar.

416 Concrete Pavement - Repair and Replacement

416.2 Materials

416.2.1 General

Replace paragraph (3) with the following effective with the November 2025 letting.

(3) The contractor may use accelerating admixtures for concrete placed under SHES bid items as follows:

1. If using calcium chloride,
   - AASHTO M144, type S as grade N1 or grade N2, class A.
   - AASHTO M144, type L in a concentration of approximately 30 percent for premixed solutions.
2. If using non-chloride accelerators, conform to:
   - AASHTO M194, type C accelerating admixtures.
3. Do not exceed the manufacturer's recommended maximum dosage.
4. If the engineer requests, provide a written copy of the manufacturer's dosage recommendations.

416.2.4 Special High Early Strength Concrete Pavement Repair and Replacement

416.2.4.1 Composition and Proportioning of Concrete

Add paragraph (4) to subsection effective with the November 2025 letting.

(4) The contractor may use pre-packaged horizontal rapid set concrete patch material from the APL for partial and full-depth pavement repairs instead of specified grades of concrete.

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420 Diamond Grinding

420.3.4 Residual Disposal

Replace subsection with the following effective with the November 2026 letting.

(1) Remove solid and liquid grinding residues from the roadway by vacuuming. Leave the roadway in a clean, damp condition immediately behind the grinding machine. Remove residue immediately in areas of cross traffic. Do not allow residue and water to flow or blow across lanes used by public traffic.

(2) Do not allow solid and liquid grinding residues to enter any storm sewer, waterway, wetland, or other drainage conveyance system.

(3) Contractor is responsible for the disposal of solid and liquid grinding residues. Dispose of solid and liquid grinding residues in accordance with regulatory requirements at an acceptable disposal site. Perform all necessary coordination with the regulatory agency and disposal site owners and operators.

(4) Submit disposal methods and proposed disposal site information with the ECIP.

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506 Steel Bridges

506.1 Description

Replace paragraph (1) with the following effective with the November 2026 letting.

(1) This section describes fabricating, furnishing, casting, machining or preparing otherwise, delivering, installing, and erecting the steel and miscellaneous metals required for steel bridges, or metal parts of other bridges.

506.2.6 Elastomeric Bearings

506.2.6.1 General

Replace subsection with the following effective with the November 2026 letting.

(1) Furnish laminated bearings from the APL of laminated elastomeric bearings

(2) Manufacture bearings according to AASHTO M251 except replace the requirements of sections 4.1 and 4.2 with the following:

- Use virgin crystallization resistant polychloroprene, or virgin natural polyisoprene as the raw polymer. Use only new material with no reclaimed material incorporated in the finished bearing.
- Provide elastomer with durometer hardness of 60 on the Shore "A" scale. Provide elastomer compounds classified as low-temperature zone D, grade 4 or 5, meeting the requirements of AASHTO LRFD Bridge Design Specifications, table 14.7.5.2-1.
- Conform to the following physical properties:

	POLYISOPRENE (NATURAL RUBBER)	POLYCHLOROPRENE (NEOPRENE)
Grade (durometer)	60±5	60±5
Physical properties		
Hardness (ASTM D2240)	60+/-5	60+/-5
Tensile strength (ASTM D412), psi	2500	2500
Ultimate elongation, minimum percent	400	400
Low temperature brittleness (ASTM D2137, Test method C)		
Grade 4, test at -54°F	No Failure	No Failure
Grade 5, test at -71°F	No Failure	No Failure
Laminated pad adhesion test (ASTM D429, method B)		
Bond strength, psi	40	40

506.2.7 Welded Stud Shear Connectors

Replace paragraph (3) with the following effective with the November 2026 letting.

(3) Determine tensile properties according to ASTM A370. Perform tensile tests of finished studs on studs welded to test plates using a test fixture similar to figure 9.2 of clause 9 of AWS D1.5 (2025). If fracture occurs outside the middle half of the gauge length, repeat the test.

506.3 Construction

506.3.1 General

506.3.1.1 Primary Members

Replace subsection with the following effective with the November 2026 letting.

(1) Components not listed in 506.3.1.2 or 506.3.1.3 are considered primary members unless otherwise noted in the contract documents. Ensure that primary members are fabricated by an approved fabricator selected from the APL for primary members.

(2) Ensure that the fabricator does the following:

- Submits department form DT2330 electronically to the department's fabrication library for each structure before fabrication.
- Submits and updates weekly fabrication progress reports on department form DT2172 electronically to the department's fabrication library for each structure during fabrication.

506.3.1.2 Secondary Members

Replace subsection with the following and retitle subsection effective with the November 2026 letting.

(1) Materials used in the following applications are considered secondary members

- Fabricated Bridge Components: steel diaphragms for concrete bridges, diaphragms and cross-frames for steel bridges (except for horizontally curved bridges), railing assemblies (including guard rail connections), expansion joint devices (including protection angles), and bearing assemblies (including sole plates, masonry plates).
- Laminated elastomeric bearings
- Stud shear connectors
- Fill plates
- Ballast plates
- Drainage systems

(2) Ensure that fabricated bridge components are manufactured by an approved fabricator selected from the APL for fabricated bridge components.

(3) For fabricated bridge components, ensure the fabricator submits a fabrication progress report on department form DT2334 electronically to the department's fabrication library. Update this form weekly for each component in fabrication.

(4) Ensure that sole plates and ballast systems are fabricated by an approved fabricator selected from the APL for fabricated bridge components or primary members.

(5) Ensure that stud shear connectors meet the requirements of 506.2.7 and 506.3.20.

506.3.1.3 Other Structural Steel Components

Add subsection effective with the November 2026 letting.

(1) Ensure that soldier pile walls with tieback anchor assemblies are fabricated by an approved fabricator selected from the APL for soldier pile wall with tie back anchors. Tieback anchor assemblies include but is not limited to the cover plates and extra strong steel pipe.

506.3.2 Shop Drawings

Replace paragraphs (2) and (3) with the following effective with the November 2026 letting.

(2) Submit shop drawings to the engineer conforming to 105.2 with electronic submittal to the fabrication library under 105.2.2. Also certify that shop drawings conform to quality control standards before fabrication by submitting department form DT2333 for primary members and department form DT2327 for fabricated bridge components with each set of shop drawings. Department review does not relieve the contractor from responsibility for errors or omissions on shop drawings. Shop drawings for drainage systems do not need to be submitted to the fabrication library under 105.2.2.

(3) Shop drawings are part of the contract. The department must approve differences between shop drawings and contract plans. The contractor bears the costs of department-approved substitutions. Do not deviate from or revise drawings without notifying the department and resubmitting revised drawings and an updated department form DT2333 and DT2327 for primary members and fabricated bridge components respectively.

506.3.4.2 Camber

Replace paragraph (1) with the following effective with the November 2026 letting.

(1) If the plans show, camber rolled beams conforming to a uniform, approximately circular curve for the entire length of the beam or between designated points. Ensure the camber is within the tolerance specified in the current editions of the American Institute of Steel Construction Manual and AWS D1.5 Bridge Welding Code.

506.3.12.3 High-Strength Bolts

506.3.12.3.1 Materials

Replace subsection with the following effective with the November 2025 letting.

(1) Install bolts according to AASHTO LRFD Bridge Construction Specifications, article 11.5.5, with the following exceptions:

1. If connections are assembled, install bolts with a hardened washer under the nut or bolt head, whichever is the element turned in tightening.
2. If using oversized holes, 2 hardened washers are required, one under the bolt head and one under the nut.
3. Bring the bolted parts into solid contact bearing before final tightening. Use not less than 25 percent of the total number of bolts in a joint to serve as fitting up bolts.
4. For steel diaphragms on prestressed concrete bridges do the following:
   4.1. For steel-to-steel connections within diaphragms:
      - Tension by the turn-of-nut method.
   4.2. For steel-to-concrete girder connections:
      - No PIV or field rotational capacity (RoCAP) testing is required.
      - Tighten as the plan details specify.

(2) Before fasteners are delivered to the site, provide documentation of rotational capacity testing in accordance with ASTM F3125, Annex A2, Rotational Capacity (RoCap)Test. The fasteners must be received in packages that match the fastener assembly combination as tested. If documentation of RoCap testing is not received; then perform this testing in the field prior to installation.

(3) Install bolt, nut, and washer combinations from the same rotational-capacity lot.

(4) Check galvanized nuts to verify that a visible dyed lubricant is on the threads and at least one bolt face.

(5) Ensure that uncoated bolts are oily to the touch over their entire surface when delivered and installed.

(6) Provide and use a Skidmore-Wilhelm Calibrator or an acceptable equivalent tension measuring device at each job site during erection. Perform pre-installation verification (PIV) testing in the field conforming to the procedures enumerated in department form DT2114 no earlier than 14 calendar days prior to permanent bolting. Submit 2 copies of form DT2114 to the engineer.

(7) Prior to installation, ensure that the fastener condition has not changed due to accumulation of rust or dirt, weathering, mixture of tested assembly lots, or other reasons. If changes have occurred, including cleaning and re-lubricating of weathered bolts, the engineer will require re-qualification using RoCap testing in the field, for a minimum of two fastener assemblies of each combination to be used in permanent bolting, and PIV re-testing.

(8) Additional RoCap or PIV tests are required whenever the condition of the fasteners or understanding of the bolting crew is in question by the Engineer. Do not allow permanent bolting until PIV testing is completed.

(9) Tighten threaded bolts by the turn-of-nut method while holding the bolt head. Where clearance is an issue, the contractor may tighten the bolt head while holding the nut.

(10) The contractor may use alternate tightening methods if the engineer approves before use.

(11) The contractor may use a flat washer if the surface adjacent to and abutting the bolt head or nut does not have a slope of more than 1:20 with respect to a plane normal to the bolt axis. For slopes greater than 1:20, use smooth, beveled washers to produce parallelism.

(12) Snug all bolts during installation according to AASHTO LRFD Bridge Construction Specifications, article 11.5.5.4.1.

(13) Tighten each fastener to provide, if all fasteners in the joint are tight, at least the minimum bolt tension as follows:

TABLE 506-1 BOLT TENSION

BOLT SIZE	REQUIRED MINIMUM BOLT TENSION[1]
1/2-inch	12 kips
5/8-inch	19 kips
3/4-inch	28 kips
7/8-inch	39 kips
1-inch	51 kips
1 1/8-inch	64 kips
1 1/4-inch	81 kips
1 3/8-inch	97 kips
1 1/2-inch	118 kips

[1] Equal to the proof load by the length measurement method as specified in ASTM F3125 for grade A325 bolts.

(14) Do not reuse galvanized F3125 A325 bolts. The contractor may reuse uncoated F3125 A325 bolts, if the engineer approves, but not more than once. The department will not consider re-tightening previously tightened bolts that become loosened by the tightening of adjacent bolts as reuse.

506.3.19 Welding

506.3.19.3 Procedure Qualifications

Replace paragraph (1) with the following effective with the November 2026 letting.

(1) Ensure that procedure qualifications conform to Clause 7 of AWS D1.5 (2025).

506.3.19.4 Welding Inspection

Replace subsection title and text with the following effective with the November 2025 letting.

Add paragraph (3) effective with the November 2026 letting.

(1) Inspect welding according to the current edition of AWS D1.5. Unless specified otherwise, test butt welds in main members by either the radiographic or the ultrasonic method.

(2) Test fillet welds and groove welds not covered otherwise in main members in a non-destructive manner by the magnetic particle method according to ASTM E709, utilizing the yoke method. This includes, but is not limited to, a minimum of 12 inches in every 10 feet or portion thereof of each weld connecting web to flange, bearing stiffener to web or flange, framing connection bar to web or flange, and longitudinal stiffener to web or vertical bar.

(3) Ensure fabrication and inspection for soldier pile walls with tie back anchors follow the requirements of the current edition of AWS D1.1 Structural Welding Code, modified as follows:

- Test all welds for surface and near-surface discontinuities using magnetic particle testing according to ASTM E709, utilizing the yoke method.

506.3.20 Stud Shear Connectors

Replace paragraph (1) with the following effective with the November 2026 letting.

(1) Use studs for shear connectors if the plans show. Weld conforming to Clause 9 of AWS D1.5 (2025) except as follows:

1. Fillet welds varying in size from 3/16 to 5/16 inch are satisfactory provided the studs pass other required tests. Make adequate provision in structural member fabrication to compensate for camber loss due to shear connector welding.
2. Ensure the studs are free from rust, scale, rust pits, and oil at the time of welding and immediately before placing the concrete.
3. Longitudinal and lateral spacing of studs with respect to each other and to edges of beam or girder flanges must not vary more than 1/2 inch from the dimensions the plans show, except that the engineer will allow a variation of one inch if required to avoid obstruction of other attachments on the beam, or if welding a new stud to replace a defective one. Ensure a minimum distance from the edge of a stud shank to the edge of a beam or plate of one inch exists, but preferably 1 1/2 inch or more.

4. Notify the engineer promptly of any changes in the welding procedure at any time during construction.
5. If welding the studs reduces their height to less than normal, immediately stop welding and do not resume until correcting the cause.
6. After welding the studs to the beams, perform a visual inspection and give each stud a light blow with a hammer. Bend test studs without a complete 360-degree end weld, studs that do not ring when given a light blow with a hammer, studs repaired by welding, or studs reduced to less than normal in height due to welding. The bend test consists of bending the stud 15 degrees from its correct installation axis by striking with a hammer. In cases of a defective or a repaired weld, bend the stud in the direction that places the weld's defective portion in the greatest tension. Replace studs that crack either in the weld or in the shank.
7. The engineer may select additional studs to subject to the bend test specified in item 6 above.

506.3.31 Cleaning of Surfaces

506.3.31.2 Coated Surfaces

Replace subsection with the following effective with the November 2025 letting.

(1) Blast clean structural steel and ferrous metal products to be coated as specified in 517.3.1.3.3.

(2) Blast clean steel that will be encased in concrete to SSPC-SP 6 standards or cleaner.

506.3.32 Painting Metal

Replace subsection with the following effective with the November 2026 letting.

(1) The steel fabricator performing the coating application must demonstrate qualification by obtaining the AISC Complex Coating Endorsement (CCE), or a quality certification system acceptable to the Engineer and a Quality Manual (QM) that is acceptable to the Engineer.

(2) Unless the contract provides otherwise, apply 3 coats of paint to structural steel and ferrous metal products. Furnish and apply paints according to the epoxy system or as specified in the special provisions. The requirements for this system are set forth in 517.

(3) For structural steel, including weathering steel, and miscellaneous metals that will be encased in concrete, paint as specified in 517.3.1.

(4) For galvanized surfaces paint as specified in 517.3.1.

(5) Use the 3-coat epoxy system to paint the end 6 feet of structural weathering steel at the abutments, the 6 feet on each side of piers, joints, downspouts, hinges, and galvanized bearings in contact with weathering steel. Use a coat of brown urethane matching AMS Standard 595A: AMS-STD 20059. Apply one coat of zinc-rich paint to surfaces of expansion joint assemblies and other surfaces not in contact with the weathering steel but inaccessible after assembly or erection.

(6) Do not paint structural steel to be welded before completing welding. If welding only in the fabricating shop and subsequently erecting by bolting, coat it after completing shop welding. Apply one coat of weldable primer or other engineer-approved protective coating to steel surfaces to be field welded after completing shop welding and shop fabrication. Protect machine-finished surfaces that do not receive a paint or galvanizing from contamination during the cleaning and painting process.

(7) Upon fabrication and acceptance, coat pins and pinholes with a plastic or other engineer-approved coating before removing from the shop.

(8) Mark members weighing 3 tons or more with their weights on areas that will be encased in concrete, or paint with a compatible paint on zinc-rich primer, or mark with soapstone on an epoxy-coated surface. Wait until material is dry, inspected, and approved for shipment before loading for shipment.

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509 Concrete Overlay and Structure Repair

509.2 Materials

Replace subsection with the following effective with the November 2025 letting.

(1) Furnish a neat cement bonding grout. Mix the neat cement in a water-cement ratio approximately equal to 5 gallons of water per 94 pounds of cement. Pre-packaged non-shrink grout from the APL may be used instead of site mixed or ready mixed grout.

(2) Furnish grade E conforming to 501 for overlays.

(3) Furnish grade C or E concrete conforming to 501 for surface repairs. The contractor may increase the slump for grade E concrete to a maximum of 4 inches. For vertical and overhead repairs, use pre-packaged vertical and overhead repair material from the APL unless a different material is approved by the engineer in writing.

(4) Furnish grade C or E concrete conforming to 501 for joint repairs, curb repairs, and full-depth deck repairs; except as follows:

1. The contractor may increase slump of grade E concrete to 3 inches.

2. The contractor may use ready-mixed concrete.

(5) Provide QMP for class II ancillary concrete as specified in 716 if using concrete mixtures conforming to 501.

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513 Railing

513.2.3 Steel Railing

Replace subsection with the following effective with the November 2025 letting.

(1) Furnish steel railing components as follows:

Structural steel	506.2.2
High strength bolts	506.2.5
Steel guardrail	614.2
Round structural steel tubing for steel pipe railing	ASTM A500 grade B
Structural steel tubing used with other steel railings	ASTM A500 grade B or C

(2) Furnish a two-coat paint system from the APL for structure painting systems under paint - galvanized surfaces.

513.3 Construction

513.3.5 Welding

Replace paragraph (1) with the following effective with the November 2026 ASP-6.

(1) Weld railing as the plans show and conforming to the following:

For steel railing: AWS D1.1, Structural Welding Code (current edition).

For aluminum railing: AWS D1.2, Structural Welding Code - Aluminum.

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517 Paint and Painting

517.3.1.3.3 Blast Cleaning

517.3.1.3.3.2 Epoxy Coating System

Replace subsection with the following effective with the November 2025 letting.

(1) Blast clean structural steel receiving this coating to a near-white finish according to SSPC-SP 10.

(2) Solvent clean oil and grease on surfaces receiving this coating according to SSPC-SP 1 and blast clean to a near-white finish according to SSPC-SP 10.

(3) Remove fins, tears, slivers, and burred or sharp edges present on any steel member, or that appears during blasting, by grinding then re-blast the area to a one to 2 mils surface shape.

(4) If using abrasives for blast cleaning, use either clean dry sand, steel shot, mineral grit, or manufactured grit of a gradation that produces a uniform one to 2 mils profile as measured with a department-approved impregnated surface profile tape.

(5) Remove abrasive and paint residue from steel surfaces with a commercial grade vacuum cleaner equipped with a brush-type cleaning tool, or by double blowing. If using the double blowing method, vacuum the top surfaces of structural steel, including top and bottom flanges; longitudinal stiffeners, splice plates, and hangers after completing the double blowing operations. Ensure that the steel is dust free when applying primer. Apply the primer within 8 hours after blast cleaning.

(6) Protect freshly coated surfaces from later blast cleaning operations. Brush any blast damaged primed surfaces with a non-rusting tool, or if visible rust occurs, re-blast to a near white condition. Clean the brushed or blast cleaned surfaces and re-prime within the manufacturer’s recommended time.

(7) When coating galvanized surfaces, ensure tie-coat adhesion by brush blasting the cleaned surface according to SSPC-SP7 to create a slight angular surface profile according to manufacturer’s recommendations of 1 mil to 1.5 mils. Blasting must not fracture the galvanized finish or remove dry film thickness. For the tie- and top-coat, furnish an epoxy coating system from the APL for paint systems for galvanized surfaces.

517.3.1.3.5 Galvanizing

Add subsection effective with the November 2025 letting.

(1) After fabrication, blast clean assemblies per SSPC-SP6 and galvanize according to ASTM A123.

526 Temporary Structures

526.3.4 Construction, Backfilling, Inspection and Maintenance

Replace subsection with the following effective with the November 2025 letting.

(1) Construct temporary structures conforming to 500. Backfill conforming to 206.3.13 with structure backfill conforming to 210.2.

(2) Temporary highway bridges open to traffic less than or equal to 24 months: inspect temporary bridges conforming to the National Bridge Inspection Standards (NBIS) and the department's Structure Inspection Manual (SIM) before opening to traffic. Perform additional inspections, as the department's SIM requires, based on structure type, condition, and time in service. Submit inspection reports on department form DT2007 to the engineer and electronic copies to the BOS Maintenance Section. Ensure that a department-certified qualified team leader performs the inspections.

(3) Temporary highway bridges open to traffic greater than 24 months: complete additional inspections and inventory data collection per the NBIS and SIM within 27 months of the bridge being opened to traffic. Contact the Bureau of Structures to have a structure number assigned. Enter the inventory data and element level bridge inspection data in accordance with the SIM into WisDOT's Highway Structures Information System (HSIS) within 90 days of completing the field portion of the inspection. Continue to complete required inspections and data submittal at intervals according to the requirements of the NBIS and SIM.

(4) Maintain temporary structures and approaches in place until no longer needed. Unless the engineer directs otherwise, completely remove and dispose of as specified in 203.3.5; do not place on the finished surface.

526.5 Payment

Replace paragraph (2) with the following effective with the November 2025 letting.

(2) Payment for the Temporary Structure bid items is full compensation for providing a temporary structure including design and construction; for construction staking; for temporary shoring and other secondary structure items; for backfilling with structure backfill; for maintaining; and for removing when no longer needed. The department will pay 70 percent of the contract amount when open to traffic and the balance after structure removal and associated site restoration.

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550 Driven Piles

550.3.9 Pre-Boring

550.3.9.1 General

Add paragraph (2) effective with the February 2026 letting.

(1) Pre-bore holes to the depth the plans or special provisions require. Submit written requests for pre-boring not required under the contract to the engineer for review and approval. Do not impair the capacity of in-place piles or damage adjacent structures by pre-boring operations.

(2) Contractor may elect to not perform pre-boring, subject to written approval from the engineer as specified in 104.2.1(2). If the contractor elects to not perform pre-boring and subsequently pre-boring is necessary at any point throughout the project, no additional time or compensation will be granted.

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608 Storm Sewer

608.4 Measurement

608.4.2 Rock Excavation for Storm Sewer

Replace paragraph (3) with the following effective with the November 2026 letting.

(3) The department will measure this work vertically from the top of the rock to the bottom of the rock, or to an elevation 6 inches below the bottom of the pipe or storm sewer structure, whichever is higher. The department will measure this work horizontally as the outside diameter of the pipe or outside dimension of the structure, plus 3 feet, 1 1/2 feet on either side, regardless of actual width required under 608.3.1.1.

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611 Catch Basins, Manholes, and Inlets

611.4 Measurement

Replace subsection with the following to add paragraph (2) effective with the November 2026 letting.

(1) The department will measure the bid items under this section as each individual unit acceptably completed.

(2) The department will measure rock excavation as specified for storm sewer rock excavation in 608.4.

611.5 Payment

611.5.1 General

Add paragraph (2) effective with the November 2026 letting.

(2) The department will pay separately for rock excavation as specified for storm sewer rock excavation in 608.4.

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621 Landmark Reference Monuments

Remove Standard Specification 621 (Landmark Reference Monuments) effective with the November 2025 letting. Refer to updated information in this ASP-6 for standard specifications 680 and 682.

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633 Delineators and Markers

633.2.4 Barrier Wall Delineators

Replace paragraph (1) with the following effective with the November 2026 letting.

(1) Furnish aluminum for barrier wall delineators conforming to ASTM B221, alloy 6061-T6 with sheeting from the APL. Furnish stainless steel stud bolts, self-locking nuts, and washers conforming to ASTM F593, type 316 stainless steel.

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643 Traffic Control

643.1 Description

Replace paragraph (1) with the following effective with the November 2025 letting. Replace paragraph (1) with revised information effective with the November 2026 letting.

(1) This section describes providing, maintaining, repositioning, and removing temporary traffic control devices as follows:

Drums	Warning lights	42-inch cones
Barricades type III	Connected arrow boards	Portable changeable message signs
Flexible tubular markers	Signs	Channelizing curb system
Speed feedback trailers	Connected work zone end location marker	

643.2.2 Department's Approved Products List (APL)

Replace paragraph (1) with the following effective with the November 2025 letting. Replace paragraph (1) with revised information effective with the November 2026 letting.

(1) Furnish materials from the APL as follows:

- Drums
- Barricades type III
- Flexible tubular marker posts including bases
- Warning lights and attachment hardware
- Channelizing curb systems
- Connected work zone end location marker
- Connected arrow boards
- Sign sheeting
- 42-inch cone assemblies
- Portable changeable message signs
- Speed feedback trailers

643.3 Construction

643.3.1 General

Add paragraphs (10), (11), (12) and (13) effective with the November 2025 letting.

(10) For connected devices provide a local specialist to respond to emergency situations within 2 hours of being notified. Equip local specialists with sufficient resources to correct deficiencies in the connected work zone devices.

(11) Prior to deployment, test all connected devices with the engineer to ensure the device is showing in the WisDOT approved data feed. Send an email to *DOTBTOworkzone@dot.wi.gov* to notify BTO that the devices have been turned on.

(12) Provide a WisDOT approved data feed from connected devices and the remote management software, updated at least every minute.

(13) If requested by the engineer, provide real-time status change alerts to a list of designated personnel via text or email or both. Send an alert each time a connected device is switched between operating modes which include the current operating mode, the previous operating mode, the date and time of the mode switch, and the location (latitude and longitude) of the device at the time of the mode switch in the alert.

643.3.3 Connected Arrow Boards

Revise subsection title and add paragraphs (3) and (4) effective with the November 2025 letting.

(3) The connected arrow board may be switched between the following pattern displays per the plan:

- Blank
- Right arrow static
- Right arrow flashing
- Right arrow sequential
- Left arrow static
- Left arrow flashing
- Left arrow sequential
- Line flashing
- Bi-directional arrow flashing.

(4) When the connected arrow board is not displaying a pattern, the display shall be blank, and the connected arrow board transmits its status to the data feed. When a connected arrow board is switched to a pattern, the connected arrow board transmits its location and its current operating mode to the data feed.

643.3.7 Temporary Pavement Marking

Add paragraph (9) effective with the November 2025 letting.

(9) Install temporary markings on the final surface in the same location as permanent markings will be placed or as the plans show.

643.3.10 Connected Work Zone Location Marker

Add subsection effective with the November 2025 letting. Replace subsection with revised subsection title and text information effective with the November 2026 letting.

(1) Place work zone location marker at the end of the work zone per plan or as the engineer directs. Clearly label the work zone end location marker so that it is easily distinguishable by field personnel.

(2) Ensure the connected work zone location marker operates continuously when deployed on the project.

(3) Ensure the work zone location marker and connected arrow board are from the same manufacturer.

(4) When the work zone end location marker is switched to the ON mode, verify the location marker transmits location and identity as end marker to the data feed.

(5) Switch the work zone end location marker to OFF mode when temporary traffic control is removed, and the normal traveled way is restored.

643.4 Measurement

643.4.1 Items Measured by the Day

Add paragraphs (3) and (4) effective with the November 2025 letting.

(3) The department will measure Traffic Control Connected Arrow Boards by day for the days the device is reporting correct data.

(4) The department will measure Traffic Control Connected Work Zone End Location Marker by day per roadway segment for the days the devices are reporting correct data.

643.5 Payment

643.5.1 General

Replace paragraph (1) with the following effective with the November 2025 letting. Replace revised paragraph (1) with the following effective with the November 2026 letting.

(1) The department will pay for measured quantities at the contract unit price under the following bid items:

ITEM NUMBER	DESCRIPTION	UNIT
643.0300	Traffic Control Drums	DAY
643.0420	Traffic Control Barricades Type III	DAY
643.0500	Traffic Control Flexible Tubular Marker Posts	EACH
643.0600	Traffic Control Flexible Tubular Marker Bases	EACH
643.0650	Traffic Control Channelizing Curb System	LF
643.0700 - 0799	Traffic Control Warning Lights (type)	DAY
643.0810	Traffic Control Connected Arrow Boards	DAY
643.0900	Traffic Control Signs	DAY
643.0910	Traffic Control Covering Signs Type I	EACH

643.0920	Traffic Control Covering Signs Type II	EACH
643.1000	Traffic Control Signs Fixed Message	SF
643.1050	Traffic Control PCMS	DAY
643.1051	Traffic Control PCMS with TMC Communications	DAY
643.1070 - 1079	Traffic Control Cones (height)	DAY
643.1222	Traffic Control Connected Work Zone End Location Marker	DAY
643.1500	Traffic Control Speed Feedback Trailer	DAY
643.3100 - 3299	Temporary Marking Line (material/type) (width)	LF
643.3300 - 3399	Temporary Marking Crosswalk (material) 6-Inch	LF
643.3500 - 3599	Temporary Marking Arrow (material)	EACH
643.3600 - 3699	Temporary Marking Word (material)	EACH
643.3700 - 3799	Temporary Marking Raised Pavement Marker (type)	EACH
643.3800 - 3899	Temporary Marking Stop Line (material) 18-Inch	LF
643.3900 - 3959	Temporary Marking Diagonal (material) 12-Inch	LF
643.3960 - 3999	Temporary Marking Removable Mask Out Tape (width)	LF
643.4100	Traffic Control Interim Lane Closure	EACH
643.5000	Traffic Control	EACH

646 Pavement Marking

646.3.1.1 General Marking

Replace paragraph (7) with the following effective with the November 2025 letting. Add paragraph (8) effective with the February 2026 letting.

(7) Apply marking to the width and color the bid item indicates. Distribute beads uniformly across the line. Provide a sharp cutoff for both sides and ends of the marking with a uniform cross-section. Achieve straight alignment, not to exceed a 3/8-inch variation in any 40-foot section of travelled way. Do not damage existing marking that will remain in place.

(8) Apply both lines of the centerline marking simultaneously to ensure a consistent gap.

646.3.1.5 Marking Acceptance

Replace paragraph (4) with the following effective with the November 2026 letting.

(4) Remove and replace all marking in sections with failing initial retroreflectivity. Remove and replace marking that the engineer deems improperly constructed. Remove existing marking in the groove before replacement. If post-acceptance inspections uncover evidence of defective material or improper construction, the department may revoke acceptance under 105.11.2.3.

646.3.1.6 Proving Period

646.3.1.6.1 General

Replace paragraph (1) with the following effective with the February 2026 letting.

(1) The engineer may conduct post acceptance inspections periodically during a proving period to evaluate the physical presence of pavement marking and, for permanent markings, the retroreflectivity. The proving period begins on the last day of the week, for all marking placed within that week. The proving period extends through April 15 of the next calendar year or 180 days, whichever is longer. If weather or road surface conditions prevent the engineer from fully evaluating the marking at the end of the proving period, the engineer may extend the proving period.

646.3.1.6.2 Retroreflectivity

Replace paragraph (1), included with the November 2025 ASP-6, with the following effective with the February 2026 letting.

(1) For permanent markings, the engineer will also evaluate the percent failing retroreflectivity at the end of the proving period. Ensure that the 180-day reflectivity, in millicandelas/lux/m^2, meets or exceeds the following:

MATERIAL	COLOR	180 DAY DRY RETROREFLECTIVITY
Epoxy	White	150
	Yellow	100
Wet Reflective Epoxy	White	250
	Yellow	150
Permanent Tape	White	400
	Yellow	335

646.3.2 Long Line Marking

646.3.2.3 Grooving

646.3.2.3.2 Wet Reflective Epoxy

Replace paragraph (1) with the following effective with the February 2026 letting.

(1) Apply wet reflective epoxy binder in a grooved slot and provide a double drop bead system at the application rate specified in the APL.

646.3.2.4 Black Epoxy

Replace paragraph (1) with the following effective with the November 2026 letting.

(1) Apply black epoxy in a grooved slot directly after the white marking. Apply epoxy at a wet mil thickness of 20. Apply black aggregate or glass beads at or exceeding 25 pounds per gallon of epoxy.

646.3.3 Special Marking

Replace subsection with the following effective with the February 2026 letting.

(1) Fill in any breaks left from the stencil with the same material to ensure there are no gaps.

(2) Under the Marking Railroad Crossings bid items, apply the RXR symbol and 3 transverse lines as the plans show.

(3) Under the Marking Curb bid items, mark the vertical face and the top of the curb.

(4) Under the Marking Aerial Enforcement Bars bid items, the department will locate the marking. Notify the engineer at least one week before marking so the State Patrol can provide exact locations.

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650 Construction Staking

650.3.12 Supplemental Control Staking

Replace paragraph (2) with the following effective with the November 2026 letting.

(2) Document and provide to the engineer complete descriptions and reference ties of the control points, alignment points, and benchmarks to allow for quick reestablishment of the plan data at any time during construction and upon project completion. Document additional control as described in CMM 710, table 710-1.

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680 Public Land Survey Monuments

Add section 680 (Public Land Survey Monuments) effective with the November 2025 letting.

680.1 Description

(1) This section describes perpetuating US Public Land Survey System (USPLSS) monuments.

680.2 Materials

(1) Furnish magnetic survey nails with center point a minimum of 2-1/2 inches long or engineer approved alternative.

(2) Furnish minimum 3/4-inch reinforcement or 1 inch outside diameter (OD) iron pipe at least 24 inches long.

(3) Furnish plastic survey marker cap with lettering that reads “Witness Monument”.

(4) Use alternative materials if requested and furnished by the county surveyor.

680.3 Construction

680.3.1 General

(1) Perform work under the direction and control of a professional land surveyor registered in the state of Wisconsin, following Wisconsin Administrative Code A-E 7 (https://docs.legis.wisconsin.gov/code/admin_code/a_e/7).

(2) Preserve existing USPLSS monuments and witness monuments (ties) within the construction limits in their original position until monuments are verified and sufficiently tied off.

680.3.2 Pre-Construction

(1) Notify the county surveyor at least 30 days prior to start of construction operations about all USPLSS monuments within the construction limits that might be disturbed.

(2) Obtain the existing USPLSS Monument Record from the county surveyor. Verify existing monuments and witness monuments are in place and undisturbed.

(3) Replace witness monuments that are missing or that could be disturbed by construction operations. Locate new witness monuments near the USPLSS monument but outside the construction limits. Submit a monument record as specified in 680.3.5.

(4) Temporarily mark the location of all witness monuments to protect them during construction.

680.3.3 Removals

(1) Remove or abandon existing monument and monument cover that interfere with construction operations. Remove and dispose of surplus excavation and materials as specified in 205.3.12.

680.3.4 Post-Construction

(1) Verify the location of monuments and witness monuments when construction operations are complete.

(2) Set new monuments and witness monuments where necessary. Recess magnetic survey nails 1/4 inch below the pavement surface for monuments located in pavement. Use reinforcement or iron pipe for monuments not in pavement and for witness monuments. Locate new witness monuments near the USPLSS monument and outside the roadbed. Install plastic caps on witness monuments.

(3) Install marker posts next to all witness monuments if required and supplied by the county surveyor.

(4) Omit setting monuments in the pavement if approved by the department's regional survey coordinator and county surveyor due to traffic or safety concerns.

(5) Submit a monument record as specified in 680.3.5.

680.3.5 Monument Records

(1) Submit a monument record on department form DT1291 to the county surveyor at locations where monuments were set. Provide a copy to the engineer and regional survey coordinator.

680.4 Measurement

(1) The department will measure bid items under this section as each individual monument acceptably completed.

680.5 Payment

(1) The department will pay for measured quantities at the contract unit price under the following bid items:

ITEM NUMBER	DESCRIPTION	UNIT
680.0100	Public Land Survey Monument Verify and Reset	EACH

(2) Payment for the Public Land Survey Monument Verify and Salvage bid item is full compensation for providing all materials; for coordinating with county surveyors; for obtaining existing monument records; for verifying the existing location of monuments and witness monuments; for removing or abandoning existing monuments and monument covers; for resetting monuments; for setting or resetting temporary and permanent witness monuments; and for submitting monument records.

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682 Geodetic Survey Monuments

Add section 682 (Geodetic Survey Monuments) effective with the November 2025 letting.

682.1 Description

(1) This section describes salvaging geodetic survey discs and constructing geodetic survey monuments.

682.2 Materials

(1) Furnish materials conforming to the following:

Concrete.....501

Reinforcement 505.2
Foundation backfill 520.2

(2) Furnish grade A concrete as modified in 716. Provide QMP for class III ancillary concrete as specified in 716.

682.3 Construction

(1) Contact the WisDOT Geodetic Surveys Unit at (866) 568-2852 or “geodetic@dot.wi.gov” as required below.

682.3.1 Salvage Geodetic Survey Discs

(1) Remove and salvage geodetic survey discs from existing structures or survey monuments being removed at the locations shown in the plan.

(2) Notify the WisDOT Geodetic Surveys Unit 7 calendar days prior to removal operations.

(3) Ship or deliver salvaged discs to following address:

WisDOT Bureau of Technical Services
Geodetic Surveys Unit
3502 Kinsman Boulevard
Madison, WI 53704

Provide a tracking number to the Geodetic Surveys Unit upon shipment or contact the Geodetic Surveys Unit to schedule in-person delivery.

682.3.2 Geodetic Survey Monuments

682.3.2.1 Monument Location

(1) Stake the approximate location of monuments provided in the plan and contact the WisDOT Geodetic Surveys Unit 30 days prior to excavating holes for field verification and delivery of department furnished geodetic survey discs.

682.3.2.2 Placing Monuments

(1) Excavate holes for monuments by use of a circular auger at the size and depth the plans show or as the engineer directs.

(2) Remove and dispose of surplus excavation and materials as specified in 205.3.12.

(3) Fill holes with concrete and strike off flush with the ground surface. Place circular forms and steel reinforcement in the concrete as the plans show. Place geodetic survey discs on monuments while the concrete is still plastic.

682.3.2.3 Protecting and Curing

(1) Cure exposed portions of cast in place concrete monuments as specified in 415.3.12 except the contractor may use curing compound conforming to 501.2.8.

(2) Protect placed concrete monuments as specified for concrete pavement as specified in 415.3.14

(3) Protect cast in place concrete monuments from freezing for 7 days.

682.4 Measurement

(1) The department will measure bid items under this section as each individual monument acceptably completed.

682.5 Payment

(1) The department will pay for measured quantities at the contract unit price under the following bid items:

ITEM NUMBER	DESCRIPTION	UNIT
682.0100	Salvage Geodetic Survey Disc	EACH
682.0200	Geodetic Survey Monument	EACH

(2) Payment for the Salvage Geodetic Survey Disc bid item is full compensation for removing and salvaging; and shipping or delivering the disc to the Geodetic Surveys Unit. Removing existing survey monuments will be paid separately under the Removing Concrete Bases bid item. Removing existing survey marker posts will be paid separately under the Removing Delineators and Markers bid item.

(3) Payment for the Geodetic Survey Monument bid item is full compensation for staking; providing concrete; providing steel reinforcement; for placing department-furnished geodetic discs; and for excavating and backfilling.

710 General Concrete QMP

710.3 Certification Requirements

Replace paragraph (1) and add paragraph (2) effective with the November 2025 letting.

(1) Have a person certified from the Highway Technician Certification Program Portland Cement Concrete Technician 1 (HTCP - PCCTEC-1) or Assistant Certified Technician Program - Portland Cement Concrete (ACT-PCC) working under a certified technician, on the project site, prepared and equipped to perform required sampling and testing whenever placing concrete.

(2) The department will have a certified HTCP Portland Cement Concrete Mix Design Certification (PCC MDC) technician to review and approve concrete mixes.

710.4 Concrete Mixes

Replace subsection with the following effective with the November 2025 letting.

(1) The contractor is responsible for mix performance.

(2) At least 7 business days before producing concrete, document that materials conform to 501 unless the engineer allows or individual QMP specifications provide otherwise. Include the following:

1. For mixes: quantities per cubic yard expressed as SSD weights and net water, water to cementitious material ratio, air content, and SAM number.
2. For cementitious materials and admixtures: type, brand, and source.
3. For aggregates: absorption, oven-dried specific gravity, SSD bulk specific gravity, wear, soundness, light weight pieces, freeze thaw test results if required, and air correction factor. Submit component aggregate gradations, aggregate proportions, and target combined blended aggregate gradations using the following:
    - DT2220 for combined aggregate gradations.
    - DT2221 for optimized aggregate gradations.
4. For optimized concrete mixtures:
    - Complete the worksheets within DT2221 according to the directions.
    - Ensure the optimized aggregate gradations and the optimized mix design conform to WisDOT specifications and pass the built-in tests within DT2221.
    - Verify slip-form mixture workability and conformance to specifications through required trial batching.
    - Submit the completed DT2221 to the engineer electronically. Include the trial batch test results with the mix design submittal.
5. For high early strength (HES) concrete mixtures required by contract, complete the HES mix modification section in the DT2220 or DT2221 form.

(3) Document mix adjustments daily during concrete production.

(4) Prepare, notify, and submit mixture design modifications to the engineer. Do not place material until the documentation is submitted and, when required, written approval of the mixture design modifications.

(5) Report concrete mix design modifications as classified in levels as specified in table 710-1.

TABLE 710-1 MIX DESIGN MODIFICATION NOTIFICATION

NOTIFICATION	LEVEL I	LEVEL II	NEW MIX DESIGN DURING PROJECT
Prepare, notify, and submit mix design to Engineer	Prior to use	3 business days prior to use	5 business days prior to use
Approval required before placement	No	Yes	Yes

(6) A mix design modification is when any modification occurs for a specific level as specified in table 710-2.

(7) Dependent on the modification performed, documentation is required to be submitted to the engineer as specified in table 710-3.

(8) For HES concrete, conform as specified in table 710-4.

(9) HES concrete is not eligible for 28-day strength incentives.

(10) Submit concrete mix designs into MRS as specified in 701.1.2.7.

TABLE 710-2 MATERIAL MIX DESIGN MODIFICATIONS

Replace Table 710-2, included with the November 2025 ASP-6, with the following effective with the February 2026 letting.

MODIFICATION TYPE		LEVEL I	LEVEL II	NEW MIX DESIGN DURING PROJECT
Change in:	Water source	X		
	Cement source, type, or brand			X
	Total cementitious		X [1]	X
	Aggregate blend	X		
	Aggregate source			X
	SCM replacement rate		X	
	SCM type and supplier			X
	Fly ash source (different class)			X
	Fly ash source (same class for pavements and cast-in-place barriers)		X	
	Fly ash source (same class for structures)			X
	Slag source (same grade)		X	
	Slag source (different grade)		X	
	Chemical admixture manufacturer or product name [2]			X
	Chemical admixture dosage rates	X [3]		X
Removal of:	SCM			X
	Chemical admixture other than Type B or D			X [3,4]
	Type B or Type D chemical admixture	X [3]	X [4]	
Addition of:	Non-fading, color pigment	X		
	Chemical admixture other than Type B or D			X [3,4]
	Type B or Type D chemical admixture	X [3]	X [4]	
	New SCM			X

[1] For HES/SHES concrete modification only.

[2] Not including Type B or Type D chemical admixture.

[3] When admixture is from the concrete admixture APL and the dosage rate is within recommended dosage rates as specified in the APL. If the admixture dosage rate is outside of recommended dosage rates as specified in the APL, BTS approval is required before use.

[4] Not furnished from the APL.

TABLE 710-3 MIX DESIGN MODIFICATION DOCUMENTATION

Replace Table 710-3, included with the November 2025 ASP-6, with the following effective with the February 2026 letting.

NEW REQUIRED DOCUMENTATION	LEVEL I	LEVEL II	NEW MIX DESIGN DURING PROJECT
Results from trial batching if required			X
Amendment to the quality control plan	X	X	X
Water source name and report	X [1]		
Cement mill certification			X
WisDOT aggregate quality report			X
SCM mill certification		X	X
Chemical additive product data sheet	X	X	X
Updated DT2220 or DT2221 form	X	X	
New DT2220 or DT2221 form			X
New mixture ID: Contractor ID and WisDOT ID		X	X
New maturity curve	X [2]	X	X
New lot/sublot layout [3]		X [3,4,5]	X

[1] Water for concrete report conforming to 501.2.6 for private wells or surface water sources.

[2] Required only when using a retarder.

[3] Required for HES concrete.

[4] Required when changing the SCM replacement rate.

[5] Not required for SCM source change of same Class/Grade in pavements and cast-in-place barrier projects.

TABLE 710-4 OPTIONS FOR HES CONCRETE

SCENARIO	MIXTURE MODIFICATION	
When the contract requires, or the HES is directed by the department	OPTION 1 [1]	Add 94 to 282 lb/cy of cement [2]
	OPTION 2	Use Type III cement
When the engineer allows HES when requested by the contractor in writing	Add up to 282 lb/cy of cement [1.2]	

[1] Adjust water to maintain workability without raising the w/cm ratio.

[2] Add to a previously accepted mixture.

710.5.6.2 Contractor Control Charts

710.5.6.2.1 General

Replace subsection with the following effective with the November 2025 letting.

(1) Test aggregate gradations during concrete production except as allowed for small quantities under 710.2. Perform required contractor testing using non-random samples.

(2) Sample aggregates from either the conveyor belt or from the working face of the stockpiles.

(3) Complete aggregate testing as specified in table 710-5. Submit one pre-placement test within five days before anticipated placement. Include this gradation on the control charts.

(4) Report gradation test results and provide control charts to the engineer within 1 business day of obtaining the sample. Submit results to the engineer and electronically into MRS as specified in 701.1.2.7.

(5) Conduct aggregate testing at the minimum frequency specified in table 710-5 for each mix design, except as allowed for small quantities in 710.2. The contractor's concrete production tests can be used for the same mix design on multiple contracts.

TABLE 710-5 QC AGGREGATE TESTING FREQUENCY

Replace Table 710-5, included with the November 2025 ASP-6, with the following effective with the February 2026 letting.

<table>
<tr><th>CONCRETE CLASSIFICATION</th><th>PRE-PLACEMENT TESTING</th><th colspan="2">PLACEMENT TESTING</th></tr>
<tr><td rowspan="2">Class I: Pavement [1]</td><td rowspan="3">One pre-placement test per aggregate source</td><td>Hand Placement:
≤ 250 CY
> 250 CY
Slip Formed Placement
≤ 1500 CY
> 1500 CY</td><td>One test per cumulative 250 CY
One test per day

One test per day
Two tests per day</td></tr>
<tr><td>Class I: Structures [2], [3], [4]</td><td colspan="2">One test per cumulative 150 CY, maximum one test per day</td></tr>
<tr><td>Class I: Cast-in Place Barrier [1]</td><td>≤ 250 CY
> 250 CY</td><td>One test per cumulative 250 CY
One test per day</td></tr>
<tr><td>Class II: Base</td><td rowspan="8">One pre-placement test per aggregate source</td><td colspan="2">One test per calendar week of production</td></tr>
<tr><td>Class II: Structure Repair - Joints</td><td colspan="2" rowspan="2">One test per cumulative 150 CY, maximum one test per day</td></tr>
<tr><td>Class II: Concrete Overlay</td></tr>
<tr><td>Class II: Pavement Repair</td><td colspan="2" rowspan="4">One test per 400 CY, minimum one test per 10 business days, maximum one test per day</td></tr>
<tr><td>Class II: Pavement Replacement</td></tr>
<tr><td>Class II: Base Patching</td></tr>
<tr><td>Class II: Ancillary</td></tr>
<tr><td>Class II: Structure Repair – Curb & Surface [5]</td><td colspan="2">Preplacement testing only</td></tr>
</table>

[1] Frequency is based on project daily production rate.

[2] Aggregate gradation testing must be performed on a per contract basis. If multiple structures are on the same contract and use the same aggregate source, then the samples must be collected based on cumulative concrete contract quantities within the same concrete classification.

[3] WTM T255 (Fine and Coarse) required for each aggregate sample.

[4] Calculate trial batch weights for each mix design when production begins and whenever the moisture content of the fine or coarse aggregate changes by more than 0.5 percent, adjust the batch weights to maintain the design w/cm ratio.

[5] Aggregate gradation must meet the gradation previously approved by the engineer.

710.5.6.3 Department Acceptance Testing

Replace subsection with the following effective with the November 2025 letting. Replace Table 710-6 with the following effective with the November 2026 letting.

(1) Department testing frequency is based on the quantity of each mix design placed under each individual WisDOT contract as specified table 710-6. Aggregate gradation testing must be performed on a per contract basis.

(2) The department will split each sample, test for acceptance, and retain the remainder for a minimum of 10 calendar days.

(3) The department will obtain the sample and deliver to the regional testing lab in the same day. The department will report gradation test results to the contractor within 1 business day of being delivered to the lab. The department and contractor can agree to an alternative test result reporting timeframe. Document alternative timeframes in the contractor's quality control plan.

(4) Additional samples may be taken at the engineer’s discretion due to a changed condition.

(5) If multiple bid items on the same contract use the same aggregate source, then the samples must be collected based on cumulative concrete contract quantities within the same concrete classification.

(6) Department will test small quantities at the minimum frequency specified in table 710-7.

TABLE 710-6 QV AGGREGATE TESTING FREQUENCY

CONCRETE CLASSIFICATION	PLACEMENT TESTING
Class I: Pavement	One test per placement day for first 2 days of placement. - If all samples are passing, reduced testing frequency is applied. - Reduced frequency: One test per calendar week of placement
Class I: Structures	One test per 250 CY placed, maximum one test per day. - Minimum of one test per contract for substructure - Minimum of one test per contract for superstructure
Class I: Cast-in-Place Barrier	One test per 500 CY placed, maximum one test per day.
Class II: Concrete Overlay	One test per 250 CY placed, maximum one test per day.
Class II: Base	No minimum testing
Class II: Structure Repair	
Class II: Pavement Repair	
Class II: Pavement Replacement	
Class II: Base Patching	
Class II: Ancillary	

TABLE 710-7 QV AGGREGATE TESTING FREQUENCY FOR SMALL QUANTITIES

CONCRETE CLASSIFICATION	PLACEMENT TESTING
Class I: Pavement	One test on the first day of placement.
Class I: Structures	
Class I: Cast-in-Place Barrier	

710.5.7 Corrective Action

710.5.7.1 Optimized Aggregate Gradations

Replace subsection with the following effective with the November 2025 letting.

(1) If the contractor's 4-point running average or a department test result of the volumetric percent retained exceeds the tarantula curve limits by less than or equal to 1.0 percent on a single sieve size or limits listed in the additional requirements for optimized aggregate gradation in 501.2.7.4.2 table 501-4, notify the other party immediately and do the following:

Option A:

1. Perform corrective action documented in the QC plan or as the engineer approves.
2. Document and provide corrective action results to the engineer as soon as they are available.
3. Department will conduct two tests within the next business day after corrective action. Department will provide test results to contractor after each test is complete.
4. If blended aggregate gradations are within the tarantula curve limits by the second department test:
   - Continue with concrete production.
   - Include a break in the 4-point running average.
   - For Class I Pavements: The department will discontinue reduced frequency testing and will test at a frequency of 1 test per placement day. Once 5 consecutive samples are passing at the 1 test per placement day frequency, the reduced frequency testing will be reapplied.
5. If blended aggregate gradations are not within the tarantula curve limits by the second department test:
   - If the contract does not require optimized aggregate gradation under 501.2.7.4.2.1(2), stop concrete production and submit either a modified optimized aggregate gradation mix design or a new optimized aggregate gradation mix design or a new combined aggregate gradation mix design.
   - If the contract requires optimized aggregate gradations under 501.2.7.4.2.1(2), stop concrete production and submit a modified optimized aggregate gradation mix design or a new optimized aggregate gradation mix design.

Option B:

1. Submit a modified optimized aggregate gradation mix design or a new optimized aggregate gradation mix design.
2. Restart control charts for new mix design.

(2) If the contractor's 4-point running average or a department test result of the volumetric percent retained exceeds the tarantula curve limits by more than 1.0 percent on one or more sieves, stop concrete production and submit a modified mix design or a new mix design.

(3) Both the department and contractor must sample and test aggregate of the modified mix design or a new mix design at the frequency specified in 710.5.6.1.

710.5.7.2 Combined Aggregate Gradations

Replace subsection with the following effective with the November 2025 letting.

(1) If the contractor's 4-point running average or a department test result of the percent passing by weight exceeds the combined aggregate gradation limits by less than or equal to 1.0 percent on a single sieve size, do the following:

1. Notify the other party immediately.
2. Perform corrective action documented in the QC plan or as the engineer approves.
3. Document and provide corrective action results to the engineer as soon as they are available.
4. The department will conduct two tests within the next business day after corrective action is complete.
5. If blended aggregate gradations are within the combined aggregate gradation limits by the second department test:
   - Continue with concrete production.
   - Include a break in the 4-point running average.
   - For Class I Pavements: The department will discontinue reduced frequency testing and will test at a frequency of 1 test per placement day. Once 5 consecutive samples are passing at the 1 test per placement day frequency, the reduced frequency testing will be reapplied.
6. If blended aggregate gradations are not within the combined aggregate gradation limits by the second department test, stop concrete production and submit a modified mix design or a new mix design.

(2) If the contractor's 4-point running average or a department test result of the percent passing by weight exceeds the combined aggregate gradation limits by more than 1.0 percent on one or more sieves, stop concrete production and submit a modified mix design or a new mix design.

(3) Both the department and contractor must sample and test aggregate of the modified mix design or a new mix design at the frequency specified in 710.5.6.1.

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715 QMP Concrete Pavement, Cast-in-Place Barrier and Structures

715.3.1.2 Lot and Sublot Definition

715.3.1.2.1 General

Replace subsection with the following effective with the November 2025 letting.

(1) Designate the location and size of all lots before placing concrete. Ensure that no lot contains concrete of more than one mix design or placement method defined as follows:

Mix design change	A modification to the mix requiring the engineer's approval under 710.4(5). For paving and barrier mixes, follow 710.4(4) and 710.4(5) for concrete mixture design modifications.
Placement method	Either slip-formed, not slip-formed, or placed under water.

(2) Lots and sublots include ancillary concrete placed integrally with the class I concrete.

715.3.1.2.3 Lots by Cubic Yard

Replace paragraph (3) with the following effective with the November 2025 letting.

(3) An undersized lot is eligible for incentive payment under 715.5 if the lot has 4 or more sublots for that lot.

715.3.2 Strength Evaluation

715.3.2.1 General

Replace subsection with the following effective with the November 2025 letting.

(1) The department will make pay adjustments for strength on a lot-by-lot basis using the compressive strength of contractor QC cylinders or the flexural strength of contractor QC beams.

(2) The department will evaluate the sublot for possible removal and replacement if the 28-day sublot average strength is:

- Pavement (Compressive): < 2500 psi
- Pavement (Flexural): < 500 psi
- Structure: < f'c - 500 psi [1]
- Cast-in-Place Barrier: < f'c - 500 psi [1]

[1] f'c is design strength found in plans or specials.

715.5.4 Pay Adjustments for Nonconforming Air Content, Temperature, and Delivery Time

Add subsection 715.5.4 (Pay Adjustments for Nonconforming Air Content, Temperature, and Delivery Time) effective with the November 2025 letting. Replace paragraph (1) and Table 715-2 with the following effective with the November 2026 letting.

(1) The department will adjust pay for each sublot with nonconforming QC air content and temperature test results as specified in table 715-2 and table 715-3. If the quantity in question is subject to more than one of the price reductions, apply the adjustment with the greater price reduction. The following unit prices shall be used in pay adjustment equations specified in table 715-2:

- Pavement: $55 per SY.
- Structure and cast-in-place barrier: $350 per CY.

(2) For high temperatures, the engineer may consider the effectiveness of the contractor's temperature control plan and the contractor's compliance with their temperature control plan before taking a price reduction.

(3) A 25% price reduction to the concrete invoice price will be applied if concrete is placed after the delivery time exceeds the limit specified in 501.3.5.2.

TABLE 715-2 PRICE REDUCTIONS FOR NONCONFORMING AIR CONTENT

LIMITS (%)		PAY FACTOR (PF) [1]	PAY ADJUSTMENT ($) [2]
Above Specification [3]	0.1 and above	$(0.15 \times ASL^2) + (0.125 \times ASL)$	PF x Quantity (SY or CY) x Unit Price
Below Specification	>= 0.1 to =< 1.0	$(0.30 \times BSL^2) + (0.02 \times BSL)$	PF x Quantity (SY or CY) x Unit Price
	1.1 and below	50 or remove and replace	0.5 x Quantity (SY or CY) x Contract Unit Price

[1] ASL = % air content above specification limit.
BSL = % air content below specification limit.

[2] "Unit price" is specified in 715.5.4(1). "Contract unit price" is the bid item unit price for the awarded contract.

[3] Evaluate the strength data. If the strengths are acceptable, do not assess a price reduction for high air content. Contractor is responsible for providing additional strength data, if necessary.

TABLE 715-3 PRICE REDUCTIONS FOR NONCONFORMING TEMPERATURE

Replace Table 715-3, included with the November 2025 ASP-6, with the following effective with the February 2026 letting.

CONCRETE TEMPERATURE (F) [1]		PRICE REDUCTION (%)
Upper Temperature Limit [2]	> 80 to <= 85	10
	> 85	25
Lower Temperature Limit	45 to <= 50	10
	< 45	25

[1] Applies only for Concrete Structures and Cast-in-Place Barrier.

[2] If a written temperature control plan outlining the actions by the contractor to control concrete temperature at the point of placement exceeding 80 F is submitted and followed to effectively control the temperature, the upper temperature limit is increased by 10 F for price reductions for nonconforming temperature.

716 QMP Ancillary Concrete

716.2 Materials

716.2.1 Class II Concrete

Replace paragraph (2) with the following effective with the November 2025 letting. Replace paragraph (2) with the following to add paragraph at end of item 4 effective with the November 2026 letting.

(2) Perform random QC testing at the following frequencies:

1. Test air content, temperature, and slump a minimum of once per 100 cubic yards for each mix design and placement method.
2. Cast one set of 3 cylinders per 200 cubic yards for each mix design and placement method. Cast a minimum of one set of 3 cylinders per contract for each mix design and placement method. Random 28-day compressive strength cylinders are not required for HES or SHES concrete.
3. For deck overlays, perform tests and cast cylinders once per 50 cubic yards of grade E concrete placed.
4. For concrete base, one set of tests and one set of cylinders per 250 cubic yards.

The department will allow concrete startup test results for small quantities as specified in 710.2(1). Cast one set of 3 cylinders if using startup testing for acceptance.

The contractor may include sublots less than or equal to 25 percent of the standard length in the previous sublot. For partial sublots exceeding 25 percent of the standard length, notify the engineer who will direct additional testing to represent that partial sublot.

716.2.2 Class III Concrete

Replace paragraph (1) with the following effective with the November 2025 letting.

(1) Acceptance of class III concrete is based on DT2220/ DT2221 certification page. Submit the certificate of compliance at least 3 business days before producing concrete along with the initial concrete mix documentation as required under 710.4(2).

730 QMP Base Aggregate

730.5 Payment

Replace paragraph (2) with the following effective with the November 2026 letting.

(2) The department will calculate pay reductions for base aggregate with nonconforming gradation and fracture. The pay reduction percentage as specified in table 730-1 will be applied to the nonconforming quantity that remains in place using a unit price of $15/TON or $30/CY. The department will administer a 50 percent pay reduction for base aggregate with nonconforming plasticity or liquid limit that remains in place.

TABLE 730-1 Pay Reductions for Nonconforming Base Aggregate

% PAY REDUCTION	NONCONFORMING GRADATION		NONCONFORMING FRACTURE
	NO 200 SIEVE	SIEVES OTHER THAN NO 200	
5% to 10%	<= 1.5%	<= 3%	<= 5%
10% to 20%	> 1.5% to <= 3%	> 3% to <= 5%	> 5% to <= 10%
SIGNIFICANTLY OUT OF SPEC[1]			
20% to 40%	> 3%	> 5%	> 10%

[1] The engineer may assess pay reductions for individual QC or QV test results that are significantly out of spec even if the running average is within spec limits.

Bid Items

500 Bid Items

Remove the following bid items effective with the February 2026 letting.

522.2363	Culvert Pipe Reinforced Concrete Horizontal Elliptical Class HE-III 63x98-Inch	LF
522.2663	Apron Endwalls for Culvert Pipe Reinforced Concrete Horizontal Elliptical 63x98-Inch	EACH

600 Bid Items

Remove the following bid item effective with the February 2026 letting.

608.2363	Storm Sewer Pipe Reinforced Concrete Horizontal Elliptical Class HE-III 63x98-Inch	LF

Add the following bid item effective with the November 2025 letting.

611.0613	Inlet Covers Type DW	EACH

Remove the following bid items effective with the November 2025 letting.

621.0100	Landmark Reference Monuments	EACH
621.1100	Landmark Reference Monuments and Cast-Iron Covers	EACH
621.1200	Landmark Reference Monuments and Aluminum Covers	EACH

Remove the following bid items effective with the November 2025 letting.

643.0405	Traffic Control Barricades Type I	DAY
643.0410	Traffic Control Barricades Type II	DAY
643.0800	Traffic Control Arrow Boards	DAY

Add the following bid items effective with the November 2025 letting. Replace bid item number and description for traffic control connected work zone end location marker effective with the November 2026 letting.

643.0810	Traffic Control Connected Arrow Boards	DAY
643.1222	Traffic Control Connected Work Zone End Location Marker	DAY

Remove the following bid items effective with the November 2026 letting.

643.3760	Temporary Marking Raised Pavement Marker Type I	EACH
643.3770	Temporary Marking Raised Pavement Marker Type II	EACH

Add the following bid items effective with the November 2026 letting.

643.3764	Temporary Marking Raised Pavement Marker Type I 4-Inch	EACH
643.3766	Temporary Marking Raised Pavement Marker Type I 6-Inch	EACH
643.3774	Temporary Marking Raised Pavement Marker Type II 4-Inch	EACH
643.3776	Temporary Marking Raised Pavement Marker Type II 6-Inch	EACH

Add the following bid item effective with the February 2026 letting.

657.0348	Poles Type 9 - Special Over Height	EACH
657.0353	Poles Type 10 - Special Over Height	EACH

Add the following bid items effective with the November 2025 letting.

680.0100	Public Land Survey Monument Verify and Reset	EACH
682.0100	Salvage Geodetic Survey Disk	EACH
682.0200	Geodetic Survey Monuments	EACH

ERRATA

204.3.1.3 Salvaging or Disposal of Materials

Replace paragraph (2) to correct link from 203.3.4 to 203.3.5 effective with the November 2024 letting.

(2) Dispose of concrete, stone, brick, and other material not designated for salvage as specified for disposing of materials under 203.3.5.

204.3.2.3 Removing Buildings

Replace paragraph (2) to correct link from 203.3.4 to 203.3.5 effective with the November 2024 letting.

(2) Buildings removed and materials resulting from building removal become the contractor's property unless the contract specifies otherwise. Dispose of unclaimed and removed material as specified for disposing of materials in 203.3.5.

335.3.2 Rubblizing

Replace paragraph (6) to correct link from 203.3.4 to 203.3.5 effective with the November 2024 letting.

(6) Remove reinforcing steel exposed at the surface by cutting below the surface and disposing of the steel as specified in 203.3.5. Do not remove unexposed reinforcing steel.

335.3.3 Compacting

Replace paragraph (2) to correct link from 203.3.4 to 203.3.5 effective with the November 2024 letting.

(2) Remove loose asphaltic patching material, joint fillers, expansion material, or other similar materials from the compacted surface. Also remove pavement or patches that have a maximum dimension greater than or equal to 6 inches that are either not well seated or projecting more than one inch. Dispose of removed material as specified in 203.3.5.

460.3.3.2 Pavement Density Determination

Replace change description annotation with the following to revise implementation date. This change is effective with the November 2025 letting.

Add information to 460.3.3.2(1) and (3). Add reference to CMM, WTM, and WTP H-002. WTP H-002 contains the sublot layouts formerly in CMM 815. Definition of a lot is now defined here (460.3.3.2(3)) instead of CMM. This change was implemented via ASP-6 with the February 2024 letting.

602.3.6 Concrete Rumble Strips

Replace paragraph (5) to correct link from 203.3.4 to 203.3.5 effective with the November 2024 letting.

(5) At the end of each workday, move equipment and material out of the clear zone and sweep or vacuum the traveled way pavement and shoulder areas. Sweep away or vacuum up milling debris before opening adjacent lanes to traffic. Dispose of waste material as specified in 203.3.5; do not place on the finished shoulder surface.

604.2 Materials

Replace paragraph (1) with the following information to remove line and link for crushed aggregate effective with the November 2024 letting. The crushed aggregate gradation information for slope paving is now found in 604.2(3).

(1) Furnish materials conforming to the following:

Water	501.2
Select crushed material	312.2
Concrete	501
Reinforcement	505
Expansion joint filler	415.2.3
Asphaltic materials	455.2

ADDITIONAL SPECIAL PROVISION 7

A. Reporting 1st Tier and DBE Payments During Construction

1. Comply with reporting requirements specified in the department's Civil Rights Compliance, Contractor's User Manual, Sublets and Payments.
2. Report payments to all DBE firms within 10 calendar days of receipt of a progress payment by the department or a contractor for work performed, materials furnished, or materials stockpiled by a DBE firm. Report the payment as specified in A(1) for all work satisfactorily performed and for all materials furnished or stockpiled.
3. Report payments to all first tier subcontractor relationships within 10 calendar days of receipt of a progress payment by the department for work performed. Report the payment as specified in A(1) for all work satisfactorily performed.
4. All tiers shall report payments as necessary to comply with the DBE payment requirement as specified in A(2).
5. DBE firms must enter all payments to DBE and non-DBE firms regardless of tier.
6. Require all first tier relationships, DBE firms and all other tier relationships necessary to comply with the DBE payment requirement in receipt of a progress payment by contractor to acknowledge receipt of payment as specified in A(1), (2), (3) and (4).
7. All agreements made by a contractor shall include the provisions in A(1), (2), (3), (4), (5), and (6), and shall be binding on all first tier subcontractor relationships, all contractors and subcontractors utilizing DBE firms on the project, and all payments from DBE firms.

B. Costs for conforming to this special provision are incidental to the contract.

NOTE: CRCS Prime Contractor payment is currently not automated and will need to be manually loaded into the Civil Rights Compliance System. Copies of prime contractor payments received (check or ACH) will have to be forwarded to paul.ndon@dot.wi.gov within 5 days of payment receipt to be logged manually.

***Additionally, for information on Subcontractor Sublet assignments, Subcontractor Payments and Payment Tracking, please refer to the CRCS Payment and Sublets manual at:

https://wisconsindot.gov/Documents/doing-bus/civil-rights/labornwage/crcs-payments-sublets-manual.pdf

ADDITIONAL SPECIAL PROVISION 9

Electronic Certified Payroll or Labor Data Submittal

(1) Use the department's Civil Rights Compliance System (CRCS) for projects with a LET date on or before December 2024 and AASHTOWare Project Civil Rights and Labor (AWP CRL) for projects with a LET date on or after January 2025 to electronically submit Certified Payroll Reports for contracts with federal funds and labor data for contracts with state funds only. Details are available online through the department's Highway Construction Contractor Information (HCCI) site on the Labor, Wages, and EEO Information page at: https://wisconsindot.gov/Pages/doing-bus/civil-rights/labornwage/default.aspx

(2) Ensure that all tiers of subcontractors, including all trucking firms, either submit their weekly certified payroll reports (contracts with federal funds) or labor data (contracts with state funds only) electronically through CRCS or AWP CRL. These payrolls or labor data are due within seven calendar days following the close of the payroll period. Every firm providing physical labor towards completing the project is a subcontractor under this special provision.

(3) Upon receipt of contract execution, promptly make all affected firms aware of the requirements under this special provision and arrange for them to receive CRCS or AWP CRL training as they are about to begin their submittals. The department will provide training either in a classroom setting at one of our regional offices, via the online AWP Knowledge Base, or by telephone. to schedule CRCS specific training. The AWP Knowledge Base is at: https://awpkb.dot.wi.gov/

(4) The department will reject all paper submittals for information required under this special provision. All costs for conforming to this special provision are incidental to the contract.

(5) For firms wishing to export payroll/labor data from their computer system, have their payroll coordinator contact:

- For CRCS: Paul Ndon at paul.ndon@dot.wi.gov. Information about exporting payroll/labor data. Not every contractor's payroll system can produce export files. For details, see Section 4.8 CPR Auto Submit (Data Mapping) on pages 49-50; 66-71 of the CRCS Payroll Manual at: https://wisconsindot.gov/Documents/doing-bus/civil-rights/labornwage/crcs-payroll-manual.pdf
- For AWP CRL: Contact AWP Support at awpsupport@dot.wi.gov. Additional information can be found in the AWP Knowledge Base at https://awpkb.dot.wi.gov/Content/crl/Payrolls-PrimesAndSubs/PayrollXMLFileCreationProcess.htm

NON-DISCRIMINATION PROVISIONS

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees as follows:

1. Compliance with Regulations: The contractor (hereinafter includes consultants) will comply with the Acts and the Regulations relative to Non-discrimination in Federally-assisted programs of the U.S. Department of Transportation, Federal Highway Administration, as they may be amended from time to time, which are herein incorporated by reference and made a part of this contract.

2. Non-discrimination: The contractor, with regard to the work performed by it during the contract, will not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The contractor will not participate directly or indirectly in the discrimination prohibited by the Acts and the Regulations, including employment practices when the contract covers any activity, project, or program set forth in Appendix B of 49 CFR Part 21.

3. Solicitations for Subcontracts, Including Procurements of Materials and Equipment: In all solicitations, either by competitive bidding, or negotiation made by the contractor for work to be performed under a subcontract, including procurements of materials, or leases of equipment, each potential subcontractor or supplier will be notified by the contractor of the contractor's obligations under this contract and the Acts and the Regulations relative to Non-discrimination on the grounds of race, color, or national origin.

4. Information and Reports: The contractor will provide all information and reports required by the Acts, the Regulations, and directives issued pursuant thereto and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Recipient or the Federal Highway Administration to be pertinent to ascertain compliance with such Acts, Regulations, and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish the information, the contractor will so certify to the Recipient or the Federal Highway Administration, as appropriate, and will set forth what efforts it has made to obtain the information.

5. Sanctions for Noncompliance: In the event of a contractor's noncompliance with the Non-discrimination provisions of this contract, the Recipient will impose such contract sanctions as it or the Federal Highway Administration may determine to be appropriate, including, but not limited to:

a. Withholding payments to the contractor under the contract until the contractor complies; and/or
b. Cancelling, terminating, or suspending a contract, in whole or in part.

6. Incorporation of Provisions: The contractor will include the provisions of paragraphs one through six in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts, the Regulations and directives issued pursuant thereto. The contractor will take action with respect to any subcontract or procurement as the Recipient or the Federal Highway Administration may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if the contractor becomes involved in, or is threatened with litigation by a subcontractor, or supplier because of such direction, the contractor may request the Recipient to enter into any litigation to protect the interests of the Recipient. In addition, the contractor may request the United States to enter into the litigation to protect the interests of the United States.

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees to comply with the following non-discrimination statutes and authorities; including but not limited to:

Pertinent Non-Discrimination Authorities:

- Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d et seq., 78 stat. 252), (prohibits discrimination on the basis of race, color, national origin); and 49 CFR Part 21.
- The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 U.S.C. § 4601), (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);
- Federal-Aid Highway Act of 1973, (23 U.S.C. § 324 et seq.), (prohibits discrimination on the basis of sex);
- Section 504 of the Rehabilitation Act of 1973, (29 U.S.C. § 794 et seq.), as amended, (prohibits discrimination on the basis of disability); and 49 CFR Part 27;
- The Age Discrimination Act of 1975, as amended, (42 U.S.C. § 6101 et seq.), (prohibits discrimination on the basis of age);
- Airport and Airway Improvement Act of 1982, (49 USC § 471, Section 47123), as amended, (prohibits discrimination based on race, creed, color, national origin, or sex);
- The Civil Rights Restoration Act of 1987, (PL 100-209), (Broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, The Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms "programs or activities" to include all of the programs or activities of the Federal-aid recipients, sub-recipients and contractors, whether such programs or activities are Federally funded or not);
- Titles II and III of the Americans with Disabilities Act, which prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities (42 U.S.C. §§ 12131-12189) as implemented by Department of Transportation regulations at 49 C.F.R. parts 37 and 38;
- The Federal Aviation Administration's Non-discrimination statute (49 U.S.C. § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex);
- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, which ensures Non-discrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations;
- Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of Limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs (70 Fed. Reg. at 74087 to 74100);
- Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 U.S.C. 1681 et seq).

DOMESTIC MATERIALS PREFERENCE PROVISION

Domestic Materials Preference (in accordance with the Buy America Act per 23 CFR 635.410, and the Build America-Buy America Act (BABA) per 2 CFR Part 184, and 2 CFR Part 200) shall be articles, materials, or supplies permanently incorporated in this project as classified in the following four categories, and as described in the Construction and Materials Manual (CMM):

1. Iron and Steel

   To be considered domestic, all steel and iron products used, and all products predominantly manufactured from steel or iron must be produced in the United States in accordance with the steel and iron product standards in 23 CFR 635.410.

   This includes smelting, coating, bending, shaping, and all other manufacturing processes performed on the product. Coating includes all processes which protect or enhance the value of the material to which the coating is applied.

Products that are predominantly iron or steel or a combination of both as defined in 23 CFR 635.410 are considered Steel and Iron products and must comply with this section.

2. Construction Materials

   To be considered domestic, all construction materials used must be produced in the United States in accordance with the construction material standards in 2 CFR 184.6:

   - Non-ferrous metals: All manufacturing processes, from initial smelting or melting through final shaping, coating, and assembly, occurred in the United States.
   - Plastic and polymer-based products: All manufacturing processes, from initial combination of constituent plastic or polymer-based inputs, or, where applicable, constituent composite materials, until the item is in its final form, occurred in the United States.
   - Glass. All manufacturing processes, from initial batching and melting of raw materials through annealing, cooling, and cutting, occurred in the United States.
   - Fiber optic cable (including drop cable): All manufacturing processes, from the initial ribboning (if applicable), through buffering, fiber stranding and jacketing, occurred in the United States. All manufacturing processes also include the standards for glass and optical fiber, but not for non-ferrous metals, plastic and polymer-based products, or any others.
   - Optical fiber: All manufacturing processes, from the initial preform fabrication stage through the completion of the draw, occurred in the United States.
   - Lumber: All manufacturing processes, from initial debarking through treatment and planning, occurred in the United States.
   - Drywall: All manufacturing processes, from initial blending of mined or synthetic gypsum plaster and additives through cutting and drying of sandwiched panels, occurred in the United States.
   - Engineered wood: All manufacturing processes from the initial combination of constituent materials until the wood product is in its final form, occurred in the United States.

3. Manufactured Products

   To be considered domestic, all manufactured products used must be produced in the United States as defined in 23 CFR 635.410(c)(1)(vii):

   - For projects with let dates on or after October 1, 2025, the final step in the manufacturing process must occur in the United States.
   - For projects with let dates on or after October 1, 2026, the final step in the manufacturing process must occur in the United States and the cost of the components of the manufactured product that are mined, produced, or manufactured in the United States must be greater than 55 percent of the total cost of all components of the manufactured product.

Manufactured products means articles, materials, or supplies that have been processed into a specific form and shape, or combined with other articles, materials, or supplies to create a product with different properties than the individual articles, materials, or supplies. If an item is classified as an iron or steel product, an excluded material, or construction material, then it is not a manufactured product. An article, material, or supply classified as a manufactured product may include components that are iron or steel

products, excluded materials, or construction materials. Mixtures of excluded materials delivered to a work site without final form for incorporation into a project are not a manufactured product.

Items that consist of two or more construction materials that have been combined together through a manufacturing process, and items that include at least one construction material combined with a material that is not a construction material (including steel/iron) through a manufacturing process are treated as manufactured products, rather than as construction materials.

Products that are classified as predominantly iron or steel do not meet the definition of a manufactured product and must comply with section 1.

With respect to precast concrete products **that are classified as manufactured products**, components of precast concrete products that consist wholly or predominantly of iron or steel or a combination of both shall meet the requirements of section 1. The cost of such components shall be included in the applicable calculation for purposes of determining whether the precast concrete product is produced in the United States.

With respect to intelligent transportation systems and other electronic hardware systems that are installed in the highway right of way or other real property **and classified as manufactured products**, the cabinets or other enclosures of such systems that consist wholly or predominantly of iron or steel or a combination of both shall meet the requirements of section 1. The cost of cabinets or other enclosures shall be included in the applicable calculation for purposes of determining whether systems referred to in the preceding sentence are produced in the United States.

4. Temporary and Excluded Materials

> Temporary materials, and excluded materials meeting the definition of Section 70917(c) Materials as defined in 2 CFR 184, do not have any domestic materials requirements. Section 70917(c) Materials means cement and cementitious materials; aggregates such as stone, sand, or gravel; or aggregate binding agents or additives. Mixtures of excluded materials delivered to a work site without final form for incorporation into a project are not a manufactured product.

The classification of an article, material, or supply as falling into one of the categories listed in this section will be made based on its status at the time it is brought to the work site for incorporation into the project. Except as otherwise provided, an article, material, or supply incorporated into an infrastructure project must meet the Domestic Material Preference for only the single category in which it is classified.

Requirements do not preclude a minimal use of foreign steel and iron provided the cost of such materials do not exceed 0.1 percent (0.1%) of the total contract cost or $2500 whichever is greater. The total contract cost is the contract amount at award.

For each iron or steel product subject to meeting domestic materials requirements, that doesn't fully meet Buy America Act requirements, the following documentation must be provided by the Contractor to verify the foreign steel value. Ensure the threshold is not exceeded and place the documentation in the project files.

- Pay Item,
- Description of associated foreign iron or steel product, or component,
- Invoiced cost of associated foreign iron or steel product, or component, and
- Current cumulative list of all foreign iron or steel products with the total dollar amount of foreign products in relation to the total contract amount.

The minimal use of foreign iron or steel under the minimal usage threshold must be approved by the Engineer prior to incorporation into the project and any associated payment under the contract. The use of foreign iron or steel under the minimal usage threshold does not need to be approved by FHWA. This amount is not considered a waiver to the domestic materials requirements. The Contractor must ensure that the minimal usage amount is not exceeded.

The contractor shall take actions and provide documentation conforming to CMM 228.5 to ensure compliance with this Domestic Material provision.

https://wisconsindot.gov/rdwy/cmm/cm-02-28.pdf

Upon completion of the project, certify to the engineer, in writing using department form DT4567 that all iron and steel, construction materials, and manufactured products conform to this domestic material provision.

Form DT4567 is available at: https://wisconsindot.gov/Documents/formdocs/dt4567.docx

Attach a list of foreign iron or steel and their associated costs to the certification form using the Domestic Material Exemption Tracking Tool, available at:

https://wisconsindot.gov/hccidocs/contracting-info/buy-america-exemption-tracking-tool.xlsx

Proposal ID: 20261208014 **Project(s):** 5989-03-84

Federal ID(s): N/A

SECTION: 0001 Contract Items

Alt Set ID: **Alt Mbr ID:**

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0002	201.0105 Clearing	3.000 STA	_____.____	_____.____
0004	201.0205 Grubbing	3.000 STA	_____.____	_____.____
0006	203.0100 Removing Small Pipe Culverts	1.000 EACH	_____.____	_____.____
0008	203.0211.S Abatement of Asbestos Containing Material (structure) 01. B-53-104	1.000 EACH	_____.____	_____.____
0010	203.0260 Removing Structure Over Waterway Minimal Debris (structure) 01. B-53-172	1.000 EACH	_____.____	_____.____
0012	203.0260 Removing Structure Over Waterway Minimal Debris (structure) 02. B-53-104	1.000 EACH	_____.____	_____.____
0014	204.0100 Removing Concrete Pavement	621.000 SY	_____.____	_____.____
0016	204.0150 Removing Curb & Gutter	1,212.000 LF	_____.____	_____.____
0018	204.0155 Removing Concrete Sidewalk	200.000 SY	_____.____	_____.____
0020	204.0165 Removing Guardrail	233.000 LF	_____.____	_____.____
0022	205.0100 Excavation Common	3,870.000 CY	_____.____	_____.____
0024	205.0200 Excavation Rock	25.000 CY	_____.____	_____.____
0026	206.1001 Excavation for Structures Bridges (structure) 01. B-53-172	1.000 EACH	_____.____	_____.____
0028	206.1001 Excavation for Structures Bridges (structure) 02. B-53-104	1.000 EACH	_____.____	_____.____
0030	210.1500 Backfill Structure Type A	664.000 TON	_____.____	_____.____

Proposal ID: 20261208014 **Project(s):** 5989-03-84

Federal ID(s): N/A

SECTION: 0001 Contract Items

Alt Set ID: **Alt Mbr ID:**

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0032	211.0101 Prepare Foundation for Asphaltic Paving (project) 01. 5989-03-84	1.000 EACH	_____.____	_____.____
0034	213.0100 Finishing Roadway (project) 01. 5989-03-84	1.000 EACH	_____.____	_____.____
0036	305.0110 Base Aggregate Dense 3/4-Inch	145.000 TON	_____.____	_____.____
0038	305.0120 Base Aggregate Dense 1 1/4-Inch	2,945.000 TON	_____.____	_____.____
0040	310.0110 Base Aggregate Open-Graded	26.000 TON	_____.____	_____.____
0042	312.0110 Select Crushed Material	2,530.000 TON	_____.____	_____.____
0044	415.0100 Concrete Pavement 10-Inch	114.000 SY	_____.____	_____.____
0046	415.0410 Concrete Pavement Approach Slab	325.000 SY	_____.____	_____.____
0048	416.0620 Drilled Dowel Bars	64.000 EACH	_____.____	_____.____
0050	455.0605 Tack Coat	294.000 GAL	_____.____	_____.____
0052	460.2000 Incentive Density HMA Pavement	640.000 DOL	1.00000	640.00
0054	460.6224 HMA Pavement 4 MT 58-28 S	985.000 TON	_____.____	_____.____
0056	465.0105 Asphaltic Surface	66.000 TON	_____.____	_____.____
0058	502.0100 Concrete Masonry Bridges	2,609.000 CY	_____.____	_____.____
0060	502.3101 Expansion Device	285.000 LF	_____.____	_____.____

Proposal ID: 20261208014 **Project(s):** 5989-03-84

Federal ID(s): N/A

SECTION: 0001 Contract Items

Alt Set ID: **Alt Mbr ID:**

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0062	502.3111.S Expansion Device Modular	65.000 LF	_____.____	_____.____
0064	502.3200 Protective Surface Treatment	7,141.000 SY	_____.____	_____.____
0066	502.3210 Pigmented Surface Sealer	1,790.000 SY	_____.____	_____.____
0068	502.4112 Adhesive Anchors 1 1/2-Inch	14.000 EACH	_____.____	_____.____
0070	502.4204 Adhesive Anchors No. 4 Bar	1,392.000 EACH	_____.____	_____.____
0072	502.4205 Adhesive Anchors No. 5 Bar	704.000 EACH	_____.____	_____.____
0074	505.0600 Bar Steel Reinforcement HS Coated Structures	623,670.000 LB	_____.____	_____.____
0076	505.0905 Bar Couplers No. 5	42.000 EACH	_____.____	_____.____
0078	506.6000 Bearing Assemblies Expansion (structure) 01. B-53-104	7.000 EACH	_____.____	_____.____
0080	506.7050.S Removing Bearings (structure) 01. B-53-104	7.000 EACH	_____.____	_____.____
0082	509.0301 Preparation Decks Type 1	12.000 SY	_____.____	_____.____
0084	509.0302 Preparation Decks Type 2	6.000 SY	_____.____	_____.____
0086	509.0310.S Sawing Pavement Deck Preparation Areas	120.000 LF	_____.____	_____.____
0088	509.1000 Joint Repair	68.000 SY	_____.____	_____.____
0090	509.1200 Curb Repair	150.000 LF	_____.____	_____.____

Proposal ID: 20261208014 **Project(s):** 5989-03-84

Federal ID(s): N/A

SECTION: 0001 Contract Items

Alt Set ID: **Alt Mbr ID:**

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0092	509.1500 Concrete Surface Repair	155.000 SF	_____.____	_____.____
0094	509.2100.S Concrete Masonry Deck Repair	2.000 CY	_____.____	_____.____
0096	509.5100.S Polymer Overlay	11,310.000 SY	_____.____	_____.____
0098	509.9025.S Epoxy Injection Crack Repair	40.000 LF	_____.____	_____.____
0100	509.9026.S Cored Holes 2-Inch Diameter	5.000 EACH	_____.____	_____.____
0102	511.1200 Temporary Shoring (structure) 01. B-53-172	150.000 SF	_____.____	_____.____
0104	513.8011 Railing Steel Pedestrian Type C2	1,071.000 LF	_____.____	_____.____
0106	514.0445 Floor Drains Type GC	14.000 EACH	_____.____	_____.____
0108	514.0460 Floor Drains Type H	7.000 EACH	_____.____	_____.____
0110	514.2625 Downspout 6-Inch	120.000 LF	_____.____	_____.____
0112	516.0500 Rubberized Membrane Waterproofing	54.000 SY	_____.____	_____.____
0114	517.0901.S Preparation and Coating of Top Flanges (structure) 01. B-53-104	1.000 EACH	_____.____	_____.____
0116	517.3001.S Structure Overcoating Cleaning and Priming (structure) 01. B-53-104	1.000 EACH	_____.____	_____.____
0118	517.4001.S Containment and Collection of Waste Materials (structure) 01. B-53-104	1.000 EACH	_____.____	_____.____
0120	517.6001.S Portable Decontamination Facility	1.000 EACH	_____.____	_____.____

Proposal ID: 20261208014 **Project(s):** 5989-03-84

Federal ID(s): N/A

SECTION: 0001 Contract Items

Alt Set ID: **Alt Mbr ID:**

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0122	522.1018 Apron Endwalls for Culvert Pipe Reinforced Concrete 18-Inch	1.000 EACH	_____.____	_____.____
0124	531.8990 Anchor Assemblies Poles on Structures	8.000 EACH	_____.____	_____.____
0126	601.0205 Concrete Gutter 24-Inch	74.000 LF	_____.____	_____.____
0128	601.0405 Concrete Curb & Gutter 18-Inch Type A	30.000 LF	_____.____	_____.____
0130	601.0407 Concrete Curb & Gutter 18-Inch Type D	670.000 LF	_____.____	_____.____
0132	601.0409 Concrete Curb & Gutter 30-Inch Type A	30.000 LF	_____.____	_____.____
0134	601.0411 Concrete Curb & Gutter 30-Inch Type D	367.000 LF	_____.____	_____.____
0136	601.0584 Concrete Curb & Gutter 4-Inch Sloped 30-Inch Type TBT	147.000 LF	_____.____	_____.____
0138	602.0405 Concrete Sidewalk 4-Inch	1,320.000 SF	_____.____	_____.____
0140	603.8000 Concrete Barrier Temporary Precast Delivered	770.000 LF	_____.____	_____.____
0142	603.8125 Concrete Barrier Temporary Precast Installed	1,485.000 LF	_____.____	_____.____
0144	606.0100 Riprap Light	24.000 CY	_____.____	_____.____
0146	608.0005 Storm Sewer Rock Excavation	13.000 CY	_____.____	_____.____
0148	608.0318 Storm Sewer Pipe Reinforced Concrete Class III 18-Inch	87.000 LF	_____.____	_____.____
0150	611.0627 Inlet Covers Type HM	1.000 EACH	_____.____	_____.____

Proposal ID: 20261208014 **Project(s):** 5989-03-84

Federal ID(s): N/A

SECTION: 0001 Contract Items

Alt Set ID: **Alt Mbr ID:**

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0152	611.0642 Inlet Covers Type MS	1.000 EACH	_____.____	_____.____
0154	611.3901 Inlets Median 1 Grate	1.000 EACH	_____.____	_____.____
0156	612.0106 Pipe Underdrain 6-Inch	370.000 LF	_____.____	_____.____
0158	612.0206 Pipe Underdrain Unperforated 6-Inch	48.000 LF	_____.____	_____.____
0160	612.0406 Pipe Underdrain Wrapped 6-Inch	125.000 LF	_____.____	_____.____
0162	614.0150 Anchor Assemblies for Steel Plate Beam Guard	4.000 EACH	_____.____	_____.____
0164	614.0397 Guardrail Mow Strip Emulsified Asphalt	40.000 SY	_____.____	_____.____
0166	614.2300 MGS Guardrail 3	187.500 LF	_____.____	_____.____
0168	614.2500 MGS Thrie Beam Transition	118.200 LF	_____.____	_____.____
0170	614.2610 MGS Guardrail Terminal EAT	3.000 EACH	_____.____	_____.____
0172	618.0100 Maintenance and Repair of Haul Roads (project) 01. 5989-03-84	1.000 EACH	_____.____	_____.____
0174	619.1000 Mobilization	1.000 EACH	_____.____	_____.____
0176	624.0100 Water	47.000 MGAL	_____.____	_____.____
0178	625.0500 Salvaged Topsoil	1,590.000 SY	_____.____	_____.____
0180	628.1504 Silt Fence	690.000 LF	_____.____	_____.____

Proposal ID: 20261208014 **Project(s):** 5989-03-84

Federal ID(s): N/A

SECTION: 0001 Contract Items

Alt Set ID: **Alt Mbr ID:**

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0182	628.1520 Silt Fence Maintenance	690.000 LF	_____.____	_____.____
0184	628.1905 Mobilizations Erosion Control	6.000 EACH	_____.____	_____.____
0186	628.1910 Mobilizations Emergency Erosion Control	3.000 EACH	_____.____	_____.____
0188	628.2008 Erosion Mat Urban Class I Type B	1,740.000 SY	_____.____	_____.____
0190	628.7005 Inlet Protection Type A	3.000 EACH	_____.____	_____.____
0192	628.7010 Inlet Protection Type B	10.000 EACH	_____.____	_____.____
0194	628.7015 Inlet Protection Type C	7.000 EACH	_____.____	_____.____
0196	628.7504 Temporary Ditch Checks	80.000 LF	_____.____	_____.____
0198	629.0210 Fertilizer Type B	1.100 CWT	_____.____	_____.____
0200	630.0140 Seeding Mixture No. 40	79.000 LB	_____.____	_____.____
0202	630.0500 Seed Water	38.000 MGAL	_____.____	_____.____
0204	634.0614 Posts Wood 4x6-Inch x 14-FT	10.000 EACH	_____.____	_____.____
0206	637.2210 Signs Type II Reflective H	74.250 SF	_____.____	_____.____
0208	637.2230 Signs Type II Reflective F	9.000 SF	_____.____	_____.____
0210	638.2102 Moving Signs Type II	2.000 EACH	_____.____	_____.____
0212	638.2602 Removing Signs Type II	12.000 EACH	_____.____	_____.____

Proposal ID: 20261208014 **Project(s):** 5989-03-84

Federal ID(s): N/A

SECTION: 0001 Contract Items

Alt Set ID: **Alt Mbr ID:**

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0214	638.3000 Removing Small Sign Supports	12.000 EACH	_____.____	_____.____
0216	638.4000 Moving Small Sign Supports	1.000 EACH	_____.____	_____.____
0218	642.5201 Field Office Type C	1.000 EACH	_____.____	_____.____
0220	643.0300 Traffic Control Drums	14,617.000 DAY	_____.____	_____.____
0222	643.0420 Traffic Control Barricades Type III	5,163.000 DAY	_____.____	_____.____
0224	643.0705 Traffic Control Warning Lights Type A	6,732.000 DAY	_____.____	_____.____
0226	643.0715 Traffic Control Warning Lights Type C	2,086.000 DAY	_____.____	_____.____
0228	643.0810 Traffic Control Connected Arrow Boards	70.000 DAY	_____.____	_____.____
0230	643.0900 Traffic Control Signs	46,046.000 DAY	_____.____	_____.____
0232	643.0920 Traffic Control Covering Signs Type II	8.000 EACH	_____.____	_____.____
0234	643.1050 Traffic Control Signs PCMS	28.000 DAY	_____.____	_____.____
0236	643.1070 Traffic Control Cones 42-Inch	1,113.000 DAY	_____.____	_____.____
0238	643.1220 Traffic Control Connected Work Zone Start and End Location Markers	70.000 DAY	_____.____	_____.____
0240	643.3105 Temporary Marking Line Paint 4-Inch	4,833.000 LF	_____.____	_____.____
0242	643.3180 Temporary Marking Line Removable Tape 6-Inch	8,465.000 LF	_____.____	_____.____

Proposal ID: 20261208014 **Project(s):** 5989-03-84

Federal ID(s): N/A

SECTION: 0001 Contract Items

Alt Set ID: **Alt Mbr ID:**

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0244	643.5000 Traffic Control	1.000 EACH	_____.____	_____.____
0246	644.1810 Temporary Pedestrian Barricade	2,535.000 LF	_____.____	_____.____
0248	644.1900.S Temporary Audible Message Devices	140.000 DAY	_____.____	_____.____
0250	645.0111 Geotextile Type DF Schedule A	440.000 SY	_____.____	_____.____
0252	646.1020 Marking Line Epoxy 4-Inch	8,582.000 LF	_____.____	_____.____
0254	646.2020 Marking Line Epoxy 6-Inch	4,409.000 LF	_____.____	_____.____
0256	646.5020 Marking Arrow Epoxy	2.000 EACH	_____.____	_____.____
0258	646.5120 Marking Word Epoxy	4.000 EACH	_____.____	_____.____
0260	646.5220 Marking Symbol Epoxy	2.000 EACH	_____.____	_____.____
0262	646.7420 Marking Crosswalk Epoxy Transverse Line 6-Inch	116.000 LF	_____.____	_____.____
0264	646.9010 Marking Removal Line Water Blasting 4-Inch	3,480.000 LF	_____.____	_____.____
0266	650.4000 Construction Staking Storm Sewer	2.000 EACH	_____.____	_____.____
0268	650.4500 Construction Staking Subgrade	890.000 LF	_____.____	_____.____
0270	650.5000 Construction Staking Base	890.000 LF	_____.____	_____.____
0272	650.5500 Construction Staking Curb Gutter and Curb & Gutter	1,195.000 LF	_____.____	_____.____

Proposal ID: 20261208014 **Project(s):** 5989-03-84

Federal ID(s): N/A

SECTION: 0001 Contract Items

Alt Set ID: **Alt Mbr ID:**

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0274	650.6501 Construction Staking Structure Layout (structure) 01. B-53-104	1.000 EACH	_____.____	_____.____
0276	650.6501 Construction Staking Structure Layout (structure) 02. B-53-172	1.000 EACH	_____.____	_____.____
0278	650.7000 Construction Staking Concrete Pavement	112.000 LF	_____.____	_____.____
0280	650.8501 Construction Staking Electrical Installations (project) 01. 5989-03-84	1.000 EACH	_____.____	_____.____
0282	650.9500 Construction Staking Sidewalk (project) 01. 5989-03-84	1.000 EACH	_____.____	_____.____
0284	650.9911 Construction Staking Supplemental Control (project) 01. 5989-03-84	1.000 EACH	_____.____	_____.____
0286	650.9920 Construction Staking Slope Stakes	1,077.000 LF	_____.____	_____.____
0288	652.0125 Conduit Rigid Metallic 2-Inch	72.000 LF	_____.____	_____.____
0290	652.0225 Conduit Rigid Nonmetallic Schedule 40 2-Inch	5,130.000 LF	_____.____	_____.____
0292	652.0800 Conduit Loop Detector	60.000 LF	_____.____	_____.____
0294	653.0164 Pull Boxes Non-Conductive 24x42-Inch	2.000 EACH	_____.____	_____.____
0296	653.0222 Junction Boxes 18x12x6-Inch	16.000 EACH	_____.____	_____.____
0298	653.0905 Removing Pull Boxes	1.000 EACH	_____.____	_____.____
0300	655.0610 Electrical Wire Lighting 12 AWG	1,296.000 LF	_____.____	_____.____

Proposal ID: 20261208014 **Project(s):** 5989-03-84

Federal ID(s): N/A

SECTION: 0001 Contract Items

Alt Set ID: **Alt Mbr ID:**

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0302	655.0620 Electrical Wire Lighting 8 AWG	4,975.000 LF	_____.____	_____.____
0304	655.0625 Electrical Wire Lighting 6 AWG	3,800.000 LF	_____.____	_____.____
0306	655.0800 Loop Detector Wire	225.000 LF	_____.____	_____.____
0308	657.0255 Transformer Bases Breakaway 11 1/2-Inch Bolt Circle	8.000 EACH	_____.____	_____.____
0310	657.0322 Poles Type 5-Aluminum	8.000 EACH	_____.____	_____.____
0312	657.0615 Luminaire Arms Single Member 4 1/2-Inch Clamp 8-FT	8.000 EACH	_____.____	_____.____
0314	659.1120 Luminaires Utility LED B	8.000 EACH	_____.____	_____.____
0316	690.0150 Sawing Asphalt	112.000 LF	_____.____	_____.____
0318	690.0250 Sawing Concrete	203.000 LF	_____.____	_____.____
0320	715.0502 Incentive Strength Concrete Structures	9,392.000 DOL	1.00000	9,392.00
0322	715.0720 Incentive Compressive Strength Concrete Pavement	500.000 DOL	1.00000	500.00
0324	999.2000.S Installing and Maintaining Bird Deterrent System (station) 01. 20+42	1.000 EACH	_____.____	_____.____
0326	999.2000.S Installing and Maintaining Bird Deterrent System (station) 02. 25+86	1.000 EACH	_____.____	_____.____
0328	999.2000.S Installing and Maintaining Bird Deterrent System (station) 03. 32+00	1.000 EACH	_____.____	_____.____

Proposal ID: 20261208014 **Project(s):** 5989-03-84

Federal ID(s): N/A

SECTION: 0001 Contract Items

Alt Set ID: **Alt Mbr ID:**

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0330	SPV.0055 Special 01. Incentive Air Content Concrete Structures	6,262.000 DOL	1.00000	6,262.00
0332	SPV.0060 Special 01. Temporary Rectangular Rapid Flashing Beacon With Push Button	4.000 EACH	_____._____	_____._____
0334	SPV.0060 Special 02. Top of Girder Survey B-53-104	1.000 EACH	_____._____	_____._____
0336	SPV.0060 Special 03. Salvage Lighting Units	6.000 EACH	_____._____	_____._____
0338	SPV.0060 Special 04. Cored Holes 6-Inch	2.000 EACH	_____._____	_____._____
0340	SPV.0090 Special 01. Concrete Curb and Gutter 60-Inch Type A	103.000 LF	_____._____	_____._____
0342	SPV.0195 Special 01. Excavation, Hauling, and Disposal of Metals Contaminated Soil	125.000 TON	_____._____	_____._____
	Section: 0001		**Total:**	_____._____

Total Bid: _____._____

PLEASE ATTACH ADDENDA HERE