HIGHWAY WORK PROPOSAL

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

Proposal Number: 001

STATE ID	FEDERAL ID	PROJECT DESCRIPTION	HIGHWAY	COUNTY
1012-01-62	N/A	Madison - Portage, STH 60 to CTH Cs	IH 039	Columbia

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: $75,000.00 Payable to: Wisconsin Department of Transportation	Attach Proposal Guaranty on back of this PAGE.
Bid Submittal Date: April 14, 2026 Time (Local Time): 11:00 am	Firm Name, Address, City, State, Zip Code **SAMPLE** **NOT FOR BIDDING PURPOSES**
Contract Completion Time December 18, 2026	
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, Milling, Grading, Aggregate, Concrete Pavement, Asphalt Pavement, Structure Rehabilitation, Beam Guard, Traffic Control, Pavement Marking, 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.

Special Provisions

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SPECIAL PROVISIONS

1. General.

Perform the work under this construction contract for Project 1012-01-62, Madison – Portage, STH 60 to CTH CS, IH 39, Columbia County, Wisconsin 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 (20250701)

2. Scope of Work.

The work under this contract shall consist of concrete pavement repair, concrete pavement replacement, concrete stitching, asphalt mill and overlay, placing base aggregate dense 3/4-inch, remove and replace guardrail, lining a culvert pipe, cleaning culvert pipes, 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.

Provide the time frame for construction of the project within the 2026 construction season to the engineer in writing within a month after executing the contract but at least 14 calendar days before the preconstruction conference. Assure that the time frame is consistent with the contract completion time. Upon approval, the engineer will issue the notice to proceed within ten calendar days before the beginning of the approved time frame.

To revise the time frame, submit a written request to the engineer at least two weeks before the beginning of the intended time frame. 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.

The Notice to Proceed will be issued such that work shall not start prior to September 8, 2026, unless otherwise approved by the engineer.

Interim Completion and Liquidated Damages – Asphalt paving: October 15, 2026.

Complete all asphalt paving operations by October 15, 2026.

If the contractor fails to complete all asphalt paving operations by October 15, 2026, the department will assess the contractor $1,500 in interim liquidated damages for each calendar day the contract work remains incomplete beyond 12:01 AM on October 16, 2026. An entire calendar day will be charged for any period of time within a calendar day that the asphalt paving operations have not been completed 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.

Concrete Repair/Replacement

Complete concrete repair/replacement prior to adjacent milling and HMA resurfacing operations on the ramps at the CTH CS interchange. Ramp closures will be needed to do concrete repair/replacement work on the ramps at CTH CS.

The engineer will identify concrete repair/replacement locations in the field. Double lane closures will be required for on IH 39. Single lane closures may remain up during the week for concrete curing. Contractor may not use a single lane closure in the middle lanes on IH 39.

Mill and Overlay

Mill and overlay the existing asphalt on CTH CS and the asphaltic shoulders on the ramps at the IH 39 / CTH CS interchange. Work on CTH CS to be done with a flagging operation. Work on the ramps will need a ramp closure.

Guardrail Replacement

Complete guardrail replacement under a single lane closure. A run of removed existing guardrail, including thrie beam and terminal end treatments, must be replaced prior to removal of that lane closure.

B-11-45 Structure Repair

Complete B-11-45 structure repair under a continuous inside shoulder and weekly single lane closure on NB IH 39. The single lane closure must be taken down in accordance with lane closure times specified in Article 5. Traffic. Existing guardrail near B-11-45 will need to be either salvaged and reinstalled or removed and replaced with new installation prior to removing temporary concrete barrier. Salvaging beamguard is included in 17. Temporary Access for Structure B-11-45 Repair, Item SPV.0060.02.

4. Lane Rental Fee Assessment.

A General

The contract designates some lane closures to perform the work. The contractor will not incur a Lane Rental Fee Assessment for closing lanes during the allowable lane closure times. The contractor will incur a Lane Rental Fee Assessment for each lane closure outside of the allowable lane closure times. If a lane is obstructed at any time due to contractor operations, it is considered a closure. The purpose of lane rental is to enforce compliance of lane restrictions and discourage unnecessary closures.

The allowable lane closure times are shown in the Traffic article.

Submit the dates of the proposed lane, ramp, and roadway restrictions to the engineer as part of the progress schedule.

B Lane Rental Fee Assessment

The Lane Rental Fee Assessment incurred for each lane closure, each ramp closure, and each full closure of a roadway, per direction of travel, is as follows:

- On Peak- $8,100 per lane, per direction of travel, per hour broken into 15-minute increments

The Lane Rental Fee Assessment represents a portion of the cost of the interference and inconvenience to the road users for each closure. All lane, roadway, or ramp closure event increments 15 minutes and less will be assessed as a 15-minute increment.

The engineer, or designated representative, will be the sole authority in determining time period length for the Lane Rental Fee Assessment.

Lane Rental Fee Assessments will not be assessed for closures due to crashes, accidents or emergencies not initiated by the contractor.

The department will assess Lane Rental Fee Assessment by the dollar under the administrative item Failing to Open Road to Traffic. The total dollar amount of Lane Rental Fee Assessment will be computed by multiplying the Lane Rental Assessment Rate by the number of 15-minute increments of each lane closure event as described above.

Lane Rental Fee Assessment will be in effect from the time of the Notice to Proceed until the department issues final acceptance. If interim completion time or contract time expires before the completion of specified work in the contract, additional liquidated damages will be assessed as specified in standard spec 108.11 or as specified within this contract.

stp-108-070 (20161130)

5. Traffic.

Maintain through traffic at all times on IH 39.

IH 39 is an oversize-overweight (OSOW) route. Maintain access along IH 39 for all OSOW movements during all stages of construction. Maintain 18’ available width along IH 39.

Submit any traffic control change request to the engineer at least 72 hours prior to an actual traffic control change. A request does not constitute approval.

Do not close more than one ramp at the CTH CS interchange, unless approved by the engineer.

Maintain emergency vehicle access at all times.

After Labor Day, IH 39 single lane closures are permitted as follows:

Northbound	Southbound
Sunday 10 pm to Friday 8 am	Sunday 10 pm to Friday 8 am
Friday 10 pm to Saturday 8 am	Friday 10 pm to Saturday 8 am
Saturday 8 pm to Sunday 8 am	Saturday 8 pm to Sunday 8 am

After Labor Day, double lane closures on IH 39 are permitted as follows:

Northbound	Southbound
Sunday 10 pm to Monday 6 am	Sunday 10 pm to Monday 6 am
Monday 8 pm to Tuesday 6 am	Monday 8 pm to Tuesday 6 am
Tuesday 8 pm to Wednesday 6 am	Tuesday 8 pm to Wednesday 6 am
Wednesday 8 pm to Thursday 6 am	Wednesday 8 pm to Thursday 6 am
Thursday 9 pm to Friday 6 am	Thursday 9 pm to Friday 6 am
Friday 10 pm to Saturday 8 am	Friday 10 pm to Saturday 8 am
Saturday 8 pm to Sunday 8 am	Saturday 8 pm to Sunday 8 am

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.

Temporary Regulatory Speed Limit Reduction

Reduce the speed limit to 55 mph on IH 39 during single and double lane closures when workers are present. Speed limit to remain 70 mph when lane closures are not in use.

Contact the Region Traffic Section at least 14 calendar days before installing the temporary speed zone. After installation of the temporary speed zone is complete, notify the Region Traffic Section with field locations of temporary speed zones.

6. 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 IH 39, CTH CS, and STH 60 traffic, and entirely clear the traveled way and shoulders of such portions of the highway of equipment, barricades, signs, lights, and any other material that might impede the free flow of traffic during the following holiday and special event periods:

- From noon Friday, September 4, 2026 to 6:00 AM Tuesday, September 8, 2026 for Labor Day.

stp-107-005 (20210113)

7. Utilities.

This contract comes 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.

stp-107-065 (20240703)

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

Alliant Energy – Electricity

Alliant Energy – Gas/Petroleum

AT&T Legacy – Communication Line

ATC Management, Inc. – Electricity/Transmission

Brightspeed of Western Wisconsin, LLC – Communication Line

Everstream – Communication Line

Madison Gas and Electric Company – Gas/Petroleum

Spectrum – Communication Line

8. Hauling Restrictions.

Conduct operations in such a manner that will cause a minimum of inconvenience to the free flow of vehicles on roadways carrying IH 39 traffic. Do not haul on local roads without prior approval from the appropriate jurisdiction.

Equip all vehicles traveling on public roads that are hauling materials that are subject to spillage, by either wind or vibration, with tailgates and adequate sideboards. Use canvas covers and other protective devices to prevent spillage as determined necessary by the engineer. Comply with all local ordinances.

9. Notice to Contractor – Tracking Pad.

Use tracking pads to minimize impacts to nearby habitat as part of culvert work (both cleaning pipes and pipe lining).

10. Notice to Contractor – Diamond Grinding Concrete Slurry Disposal.

The department clarifies in this notice to contractor that payment for diamond grinding is full compensation for diamond grinding and disposing of all waste materials. Disposal of residue and water at an acceptable material disposal site (as outlined in WisDOT Standard Specification 420.3.4) located off the project limits and as shown in the ECIP.

The contractor should be aware that for concrete slurry disposal, an "acceptable material disposal site" may require a specific Wisconsin Pollutant Discharge Elimination System (WPDES) Wastewater Permit and a compliant Storm Water Pollution Prevention Plan (SWPPP) that covers the acceptance of concrete slurry.

Additional information and contacts related to permit requirements for acceptable disposal sites can be found on the WDNR website below.

https://dnr.wisconsin.gov/topic/Wastewater/GeneralPermits.html

11. Base Aggregate Dense 3/4-Inch, Item 305.0110.

Add the following to standard spec 301.2.4.3:

Furnish only aggregate classified as crushed stone for Dense 3/4-Inch when used in the top 3 inches of the unpaved portion of the shoulder or for unpaved driveways and field entrances.

swr-305-001 (20170711)

12. Rout and Seal, Item 415.6000.S.

A Description

This special provision describes routing, cleaning, drying, and sealing the longitudinal edge of pavement joints in new asphaltic pavement shoulders immediately adjacent to the edge of the concrete mainline pavement.

B Materials

Furnish material that conforms to the requirements of the Specifications for Joint Sealants, Hot-Poured, for Concrete and Asphalt Pavements, ASTM Designation: D 6690, Type II, modified to require that the bond strength test be run at -20 degrees F. (The unmodified ASTM D 6690, Type II allows this test to be run at either 0 degrees F or -20 degrees F.)

Deliver each lot or batch of sealing compound to the jobsite in the manufacturer's original sealed container. Mark each container with the manufacturer's name, batch or lot number, and the safe heating temperature. Present the manufacturer's certification stating that the compound meets the requirements of this specification. Before applying the sealant, furnish to the engineer a certificate of compliance and a copy of the manufacturer's recommendations on heating and applying the sealant.

C Construction

C.1 Equipment

Heat the sealing compound to the pouring temperature recommended by the manufacturer in an approved kettle or tank, constructed as a double boiler, with the space between the inner and outer shells filled with oil or other satisfactory heat transfer medium. If, and when, using the heating kettle on concrete or asphaltic pavement, properly insulate the heating kettle to ensure heat is not radiated to the pavement surface.

Make rout cuts in a single pass. Two-pass cutting will not be allowed. Use a self-propelled mechanical router capable of routing the bituminous pavement to provide a 1.0:1.0 depth to width ratio of all routed cracks. The router blade or blades shall be of such size and configuration to cut the desired joint reservoir in one pass. No spacers between blades shall be allowed unless the contractor can demonstrate to the engineer that the desired reservoir and rout cut can be obtained with them. Either wet or dry routing will

be permitted provided the above conditions are met. Use a pressure distributor for applying sealing material through a hand-operated wand or nozzle according to sealant manufacturer's instructions.

C.2 Methods

Conduct the operation so that the routing, cleaning, and sealing are continuous operations. Traffic shall not be allowed to knead together or damage the routed joints. Rerout, if necessary, routed joints not sealed before traffic is allowed on the pavement when routing and sealing operations resume. Do not perform rout cutting, cleaning, and sealing, within 48 hours of the placement of the shoulder's surface course.

Rout the longitudinal joint to a minimum width of 3/4 inches and a minimum depth of 3/4 inches. Use a power vacuum or equivalent to immediately remove any routing slurry, dirt, or deleterious matter adhering to the joint walls or remaining in the joint cavity, or both. Before sealing, dry the cleaned joints either by air-drying or by using a high capacity torch. Immediately before sealing, blow out the dried crack with a blast of compressed air, 80-psi minimum. Continue cleaning until the joint is dry, and until all dirt, dust, or deleterious matter is removed from the joint and adjacent pavement to the satisfaction of the engineer. If the air compressor produces dirt or other residue in the joint cavity, the contractor shall be required to clean the joint again.

If cleaning operations could cause damage to, or interfere with, traffic in adjacent lanes, or both, provide protective screening that is subject to the approval of the engineer to the cleaning operation.

Following cleaning, dry the routed joints and warm them with a hot air lance. Take care not to burn the pavement surface. Under no circumstances shall more than two minutes elapse between the time the hot air lance is used, and the sealant is placed.

Provide positive temperature control and mechanical agitation. Do not heat the sealant to more than 20 degrees F below the safe heating temperature. The safe heating temperature can be obtained from the manufacturer's shipping container. Provide a direct connecting pressure type extruding device with nozzles shaped for insertion into the joint. Immediately remove sealant spilled on the surface of the pavement.

Seal the joints when the sealant material is at the pouring temperature recommended by the manufacturer. Fill the joint such that after cooling, the sealant is flush with the adjacent pavement surface. Do not overfill the joint; the engineer may allow a very slight overband. Sand shall not be spread on the sealed joints to allow for opening to traffic. Before opening to traffic, the sealant shall be tack free.

D Measurement

The department will measure Rout and Seal in length by the linear foot, completed according to the contract and accepted.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
415.6000.S	Rout and Seal	LF

Payment is full compensation for rout cutting; cleaning the joint; sealing the joint; and cleanup.

stp-415-100 (20210113)

13. Concrete Pavement Repair, Item 416.1710; Concrete Pavement Repair SHES, Item 416.1715; Concrete Pavement Replacement, Item 416.1720; Concrete Pavement Replacement SHES, Item 416.1725.

416.3.6.1 General

Replace standard spec 416.3.6.1 (1) through standard spec 416.3.6.1 (5) with the following:

(1) Place each repair or replacement area in one continuous, full depth operation. Consolidate the concrete in place using an immersion type vibrator. Finish the surface by screeding twice, floating, and texturing. Orient the length of the screed parallel to the pavement centerline unless the repair is over 12 feet in length.

(2) Make transverse edges of the finished repair or replacement area flush with the edges of the existing concrete pavement. For repair or replacement area with 15 feet or less in length, make the longitudinal surface form a straight line from edge to edge with a tolerance of +/- 1/8 inch. For repair or replacement area greater than 15 feet in length, conform the pavement surface as specified in 415.3.10.1.

(3) Finish the final surface of full depth concrete repair or replacement areas to match the longitudinal edge of existing HMA or concrete pavement and, if the abutting pavement is concrete, match the existing pavement texture.

(4) Place each repair or replacement area in conformance to 415.3.6 through 415.3.15; follow opening strength requirements in 416.2.3.

(5) Date each repair or replacement slab with the month and year of construction.

14. Diamond Grinding.

Add the following to standard spec 420.3.4:

An acceptable material disposal site may be one of the following:

- A nonmetallic mining site permitted under WPDES Permit No. WI-0046515-07-2. The site must have a Storm Water Pollution Prevention Plan (SWPPP) that allows for the acceptance and management of the material disposal. The SWPPP must have concurrence from WDNR. If the site does not have the appropriate SWPPP requirements, the landowner/permittee is required to work with the appropriate WDNR WPDES program specialist to amend the SWPPP to accept and manage the material disposal.
- At a licensed landfill if the licensed landfill agrees to accept the material.
- Other sites and alternatives regulated, permitted, and approved by the WDNR for the acceptance of concrete slurry.

The contractor is responsible for all communication with the site owners and operators, including any agreements to accept the material, and ensuring all permitting and SWPPP updates are in place.

15. Cleaning and Sealing Cracks and Joints with Hot-Applied Sealant, Item 492.2020.S.

A Description

This special provision describes sealing primary cracks and joints along the entire length of asphalt or concrete pavements by means of cleaning.

The item Cleaning and Sealing Cracks and Joints with Hot-Applied Sealant consists of cleaning primary cracks and joints prior to sealant application and applying the sealant as the plans show or as directed by the engineer.

Primary cracks are defined as transverse, longitudinal, and centerline cracks greater than or equal to 1/4 inches wide but less than or equal to 1½ inch wide

B Materials

B.1 Sealant Material

Use a sealant material meeting the requirements of ASTM D6690 Type II or Type IV: Joint and Crack Sealants, Hot Applied, for Asphalt and Concrete Pavements. Deliver the sealant in the manufacturer's original sealed container legibly marked with the following information:

- Manufacturer's name
- Trade name of sealant
- Manufacturer's batch or lot number
- ASTM D6690, Type II or Type IV
- Minimum application temperature
- Maximum (or safe) heating temperature

Provide the engineer with a certificate of compliance along with a copy of the manufacturer's recommendations on heating, re-heating and application of the sealant prior to start of work.

Mixing of different manufacturer's brands or different types of sealants is prohibited.

B.2 Equipment

Furnish all equipment necessary to complete the cleaning, preparing and sealing of cracks in accordance with the requirements specified. Equipment required for this operation includes the following:

- Air Compressor shall be portable and have a minimum rated capacity of 100 CF of air per minute at 90-psi pressure at the nozzle and have sufficient hose to maintain a continuing operation without interruption. The unit shall also be equipped with traps that will maintain the compressed air free of oil and water.
- High Pressure Air Lance or Hot Air Lance shall be designed specifically for use in cleaning highway pavement and to remove debris, dirt, and dust from the cracks.
- Hand tools shall consist of brooms, shovels, metal bars with chisel shaped ends, and any other tools that may be satisfactorily used to accomplish this work.
- Squeegees shall be of a flexible rubber type, in the shape of a "vee" (V), and capable of contacting materials up to 450º F without damage to it or materials.
- Pouring Pots shall be equipped with mobile carriage and have a flow control valve that allows all cracks to be filled to refusal to eliminate all voids or entrapped air and not leave unnecessary surplus crack sealer on pavement surfaces.
- Melting Kettle shall be constructed as a double lined boiler with space between the inner and outer shells filled with oil or other material for heat transfer. The material for transferring heat shall have a flash point of not less than 600º F. Positive temperature control and mechanical agitation will be provided. Direct heating shall not be used. When using, maintain the temperature of the sealing compound within the range specified by the manufacturer. The kettle shall be equipped with thermostatic controls calibrated between 200º F and 550º F.

C Construction

C.1 General

Before commencing work, complete all pavement repairs that are included in the contract and are adjacent to pavement cracks.

Place sealant materials when air and surface temperature at the crack sealing area are 40° F or greater in the shade. Do not place sealant material if temperatures are predicted to drop below 40° F before the sealant is cured.

Do not place sealant material if weather conditions are raining or wet. If sealant is placed and rain falls before the sealant has properly cured, remove and replace the wet/contaminated sealant.

Do not place sealant material when anti-icing or de-icing chemicals agents are present on the pavement. Presence of these materials will negatively affect the ability of the sealant to adhere to the pavement.

Remove failed sealant, dirt, dust and any deleterious material. Dispose of any debris or material removed in the preparation of cracks and any over-heated material in a legal and environmentally safe method.

Prepare cracks for sealing on the same day that are to be sealed. Do not allow traffic to run on cleaned cracks or joints prior to application of sealant material.

At location were crack sealant settles into the crack opening more than ¼ inch below the pavement, apply additional material to meet the requirements.

A low pressure, light spray of water may be used to accelerate cooling of the sealant. Protect the public from potentially objectionable and/or hazardous airborne debris.

Apply an approved de-tacking agent or single ply-toilet paper for use with the specified sealant to the surface of the newly placed sealant if traffic results in tracking of the crack sealing material. Repair any damage by traffic to treated pavement areas.

Place same day pavement markings for centerline that becomes covered or obliterated with the sealant if the road is open to all traffic. Re-mark lane lines and edge lines within a timely manner.

C.2 Clean and Seal

Clean and seal, without routing, longitudinal and transverse cracks that are equal or greater than ¾ inch wide but equal or less than 1 ½ inch wide.

Previously sealed cracks that exhibit signs of failure, allowing water to penetrate the crack, such as missing or loss of existing sealant material, cracking of the existing sealant, loss of adhesion to existing pavement and overband wear shall be cleaned of foreign and loose material and filled without routing.

Use a high-pressure air lance or hot air lance to thoroughly clean cracks to minimum depth of ½ inch of dust, dirt, foreign material, sand, and any other extraneous materials immediately before sealing. Do not burn, scotch, or ignite the adjoining pavement when using a hot air lance.

Install suitable traps or devices on the compressed air equipment to prevent moisture and oil from contaminating the crack surfaces. Maintain these devices and ensure that they are functioning properly.

Seal the crack by placing the applicator wand in or directly over the crack opening and carefully discharge the sealant. Strike-off the sealant flush with the pavement surface using a squeegee or using a sealing shoe pressed firmly against the pavement. Only a narrow thin film of material measuring from 1inches to 3 inches wide is allowed on the pavement surface after sealing the crack.

Cracks intersecting milled rumble strips along the centerline or paved shoulder shall be cleaned of foreign and loose materials and may be filled without routing at the department's discretion and decide to quote. Minimize puddling of sealant in the depressions of the rumble strips.

D Measurement

The department will measure Cleaning and Sealing Cracks and Joints with Hot-Applied Sealant by the mile, measured in length by the centerline mile, 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
492.2020.S	Cleaning and Sealing Cracks and Joints with Hot-Applied Sealant	MI

Payment for Cleaning and Sealing Cracks and Joints with Hot-Applied Sealant is full compensation for cleaning, disposal, furnishing and application of sealant and re-sealing as needed.

The department will pay separately for Pavement Markings.

16. Digital Speed Reduction System (DSRS), Item 643.0370.S.

This special provision describes furnishing, installing, repositioning, operating, maintaining, monitoring, testing and removing a Digital Speed Reduction System (DSRS) per plan or as the engineer directs.

B Materials

B.1 Digital Speed Limit Trailer (DSLT)

Furnish items from the department's approved products list.

B.2 Automated System Manager (ASM)

Furnish an ASM from the department's approved products list to remotely change the speed limit on the DSRS devices.

C Construction

C.1 General

Trailer-mount the speed limit sign so that the bottom is a minimum 7 feet above the roadway.

Provide training to the department as needed on the use and operation of the field hardware and the website for the DSRS.

Ensure the DSRS operates continuously when deployed on the project.

Provide a local specialist to respond to emergency situations within 2 hours of being notified. Equip the local specialist with sufficient resources to correct deficiencies in the DSRS.

The Contractor will be responsible for coordinating with the engineer when the work zone speed limits are to be changed.

Place DSLT at the following locations or per plan:

- 1,500 feet upstream of start of lane closure taper
- At existing post-mounted speed limit sign after the end of the acceleration lane of each entrance ramp. If there is not an existing sign, place 1,500 feet beyond the end of the acceleration lane of each entrance ramp

- Minimum of every 1 mile

Place DSLTs on the right side of the roadway unless located in advance warning area, infeasible or as directed by the engineer.

Place DSLT in a location that does not interfere with the function of existing signs or roadside devices.

R2-1 sign shall be 48” x 60” and follow standard spec 643 for sign requirements.

C.2 Programming

C.2.1 General

Program the DSRS to ensure the following operations are performed:

1. Provide a password protected login to the ASM, website and all other databases.
2. Provide real-time data from the ASM to a website and refresh every 60 seconds. The website should have a full-color mapping feature. Data on the website should be available to the department staff at all times for the duration of the work zone activity and should include:
    - Dates and times of speed limit changes
    - Device locations
3. Archive all data in a spreadsheet format with date and time stamps.
4. Configure the website to quantify system failures which includes DSLT malfunction, loss of power, low battery, etc.
5. Ensure the devices autonomously restart in case of any power failure.
6. Provide the department access to manually override the DSRS for a user-specified duration. Document all override messages.
7. The digital display portion automatically adjusts the brightness under varying light conditions to maintain legibility.
8. Speed limit values shown on the digital display legend continuously displays without animation. Brief blanking may be experienced, up to 10 seconds, only during digital display legend user input utilizing the hard-wired hand control.
9. The digital display changes between the original posted speed limit and the approved temporary speed limit on the digital speed limit trailer when directed by the engineer.
10. The beacon on the DSLT shall flash when the speed limit has been reduced per the temporary speed declaration.

C.2.2 System Operation Strategy

When active work is taking place, the nearest upstream DSLT of the work area and any DSLT in the active work area shall display the work zone speed limit and the beacons on the DSRT shall flash. All other DSLT shall display the posted speed limit.

If there is more than one work area and the distance between the work areas is greater than 3 miles, the DSLT between the work areas shall display the posted speed limit. If the distance between multiple work areas is less than 3 miles, the DSLT between the work areas shall display the work zone speed limit.

C.3 Reports

Provide an electronic copy of a weekly summary report and end of project summary report via email to the engineer and Bureau of Traffic Operations (DOTBTOworkzone@dot.wi.gov). Include timestamped information on the date, time, messages, and speed limit for when the DSRS was changed.

D Measurement

The department will measure DSRS by the day acceptably completed, measured as each complete system per roadway.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
643.0370.S	Digital Speed Reduction System	DAY

Payment is full compensation for furnishing, installing, repositioning, operating, maintaining, monitoring, testing and removing the DSRS consisting of DSLT and ASM.

The department will deduct one day for each calendar day the DSRS is required but out of service for more than 2 hours.

The engineer will have the sole discretion to assess the deductions for an improperly working DSRS.

stp-643-037 (20250108)

17. Basic Traffic Queue Warning System, Item 643.1205.S.

A Description

This special provision describes providing, repositioning, operating, maintaining, monitoring, calibrating, testing, and removing a basic traffic queue warning system (QWS) capable of measuring vehicular speeds at downstream sections of a roadway, and activating the system.

B Materials

Provide Basic Traffic QWS components and software that is National Transportation Communications for ITS Protocol (NCTIP) compliant.

B.1 Portable Traffic Sensors (PTS)

Provide PTS that are nonintrusive and capable of capturing vehicle speed in miles per hour (mph). Integrate each sensor with a modem to communicate with the automated system manager.

B.2 Static Traffic Control Signs with Temporary Flashing Beacon Signs (FBS)

Provide static traffic control signs with temporary flashing beacon signs conforming to standard spec 658.2(2) for Traffic Signal Faces. Ensure each FBS is integrated with a modem and other equipment (e.g., automated system manager) mounted on it, and acts as a single device for communicating with similarly integrated devices and displaying real-time traffic conditions.

B.3 Automated System Manager (ASM)

Furnish ASM from department's approved products list that assesses current traffic data captured by the PTS and activates/deactivates the FBS based on predetermined speed thresholds.

B.4 System Communications

Ensure Basic Traffic QWS communications meet the following requirements:

1. Perform required configuration of the Basic Traffic QWS's communication system automatically during system initialization.
2. Communication between the server and any individual FBS or PTS are independent through the full range of deployed locations, and do not rely upon communications with any other FBS or PTS.
3. Incorporate an error detection/correction mechanism into the Basic Traffic QWS communication system to ensure the integrity of all traffic condition data.

B.5 System Acceptance

Submit vendor verification to the engineer and Bureau of Traffic Operations (DOTBTOworkzone@dot.wi.gov) 14 calendar days before the pre-construction meeting that the system will adequately perform the functions specified in this special provision.

Provide contact information for a designated representative responsible for monitoring the performance of the system and for making modifications to the operational settings as the engineer directs. Provide all testing and calibration equipment.

C Construction

C.1 General

Install and reposition Basic Traffic Queue Warning System per plan or as the engineer directs. Provide plan to the engineer and Bureau of Traffic Operations (DOTBTOworkzone@dot.wi.gov) 14 calendar days before the pre-construction meeting.

PTS may be mounted on FBS, arrow board or other trailer devices.

Install PTS at the following locations:

1. Place first PTS within the lane closure taper.
2. Place second PTS 5,700 feet upstream of the lane closure taper or on FBS #3.
3. Place third PTS 2 miles upstream of the lane closure taper or on FBS #2.

Install FBS at the following locations, delineated by 5 drums:

1. Place first FBS (FBS #3) 5,700 feet upstream of the lane closure taper.
2. Place second FBS (FBS #2) 2 miles upstream of the lane closure taper.
3. Place third FBS (FBS #1) 3 miles upstream of the lane closure taper.

If there are more than 2 lanes or as specified in the plans, place FBS on both sides of the roadway.

Number the devices in sequential order so they are visible from the shoulder with 6-inch white high reflective sheeting.

Provide technical personnel for all system calibration, operation, maintenance, and timely on-call support services.

Promptly correct the system within 2 hours of becoming aware of a deficiency in the operation or individual part of the system.

Maintain the Basic Traffic QWS for the duration of the project. Ensure the system operates continuously (24 hours, 7 days a week) in the automated mode throughout the duration of the project.

Remove the system upon completion.

C.2 Reports

Provide an electronic copy of a weekly summary report of all data via email to the engineer. Ensure the report includes, at a minimum, the average speed per sensor, time in congestive state per sensor and number of triggers per day.

C.3 Meetings

Attend in-person pre-construction meetings with the department. Attend additional meetings as deemed necessary by the department. These meetings may be held in person or via teleconference, as scheduled by the department.

C.4 Programming

C.4.1 General

Program the Basic Traffic QWS to ensure that the following general operations are performed:

1. Provide a password protected login to the ASM, website and all other databases.
2. Automatic setting of the FBS to reflect current traffic flow status updated every 60 seconds for congestion. Ensure to remove a congestion message when 180 seconds of average traffic speeds above the current level are observed, or utilize a customized frequency as determined by the engineer.
3. The FBS activate based on pre-determined speed thresholds from the next downstream sensor.
    - FBS #3 shall activate based on traffic speeds at the PTS located within the lane closure taper.
    - FBS #2 shall activate based on traffic speeds at the PTS located approximately 1 mile upstream of lane closure taper, or at FBS #3.
    - FBS #1 shall activate based on traffic speeds at the PTS located 2 miles upstream of lane closure taper, or at FBS #2.
4. Provide real-time data from the ASM to a website with a full color mapping feature and refresh every 60 seconds. Make data on website available to the department staff at all times for the duration of the work zone activity. Ensure website includes:
    - Vehicle speeds
    - FBS triggers
    - Device locations
5. Archive all traffic data in a Microsoft Excel format with date and time stamps.
6. Configure the website to quantify system failures which includes communication disruption between any devices in the system configuration, FBS malfunctioning, PTS malfunction, loss of power, low battery, etc.

7. Automatically generate and send an email alert any time a user specified queue is detected by the system.
8. Ensure the system autonomously restarts in case of any power failure.

C.4.2 System Operation Strategy

Arrange for the vendor/manufacturer to coordinate system operation, detection, and trends/thresholds with the engineer.

The sequences below are a minimum requirement, but can be adjusted at the discretion of the engineer, are as follows:

Free Flow:

If the current PTS speed on a downstream section is at or above 40 mph, the next upstream FBS will not flash.

Slow or Stopped Traffic:

If the current PTS speed on a downstream section of the roadway is between the 39 mph and 0 mph (for example, 35 mph), the next upstream FBS shall flash.

C.5 Calibration and Testing

At the beginning of the project perform a successful field test and calibration at the Basic Traffic QWS location to verify the system is detecting accurate vehicle speeds, and accurately relaying the information to the ASM and the FBS.

Send email of successful calibration and testing to the engineer.

D Measurement

The department will measure Basic Traffic Queue Warning System by the day, acceptably completed, measured as each complete system per roadway.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
643.1205.S	Basic Traffic Queue Warning System	DAY

Payment is full compensation for providing, repositioning, operating, maintaining, monitoring, calibrating, testing, and removing the complete system consisting of FBS, PTS, ASM, and system communications.

Failure to correct a deficiency to the FBS, PTS, or ASM within 2 hours after notification from the engineer or the department will result in a one-day deduction of the measured quantity for each day in which the deficiency is not corrected.

Failure to correct the website within 2 hours after notification from the engineer will result in a 10% reduction of the day quantity for each day the website is down.

The engineer will have sole discretion to assess the deductions for an improperly working Basic Traffic QWS.

stp-643-046 (20250108)

18. Cross Stitching Longitudinal Joints and Cracks, Item SPV.0060.01.

A Description

This special provision describes tying existing concrete pavement slabs together by drilling holes, installing and anchoring epoxy coated tie bars diagonally across longitudinal joints or cracks. The work shall conform to the plan details for cross stitching tie bar installation and as hereinafter provided.

B Materials

Use epoxy coated tie bars that conform to the requirements prescribed in standard spec 505.2.6.1 and 505.2.6.3.

Use an epoxy conforming to the requirements on the department’s Approved Products List.

C Construction

Use a drill with tungsten carbide bits. Control the forward and reverse travel of the drills by mechanically applied pressure. Mount the drill on a suitable piece of equipment such that it is quickly transported and positioned. Rest and reference the drill rig frame on and to the pavement surface such that the drilled holes are cylindrical and repeatable in terms of position and alignment on the surface being drilled. Hand-held drills are not permitted.

Install the tie bars as part of the cross stitching operation in the existing concrete pavement as shown in the details and according to the following specifications.

Drill the end holes in a slab at the offset, depth, and angle specified on detail drawing. Drill such that the hole centerlines are perpendicular to the joint or crack (in plan view) at each location being drilled. Adjacent holes are drilled in opposite directions across the joint or crack. Hole diameters are no more than 3/8” larger than the tie bar diameter. Repair cracks and spalls that result from drilling with a partial or full-depth repair as directed by the engineer.

Clean drilling dust, debris, and excess moisture from drill holes before inserting the epoxy grout and tie bar. Clean holes with oil-free and moisture-free compressed air. The compressor must deliver air at a minimum pressure of 120 cubic feet per minute and develop a minimum nozzle pressure of 90 psi. Insert the nozzle to the back of the hole to force out all dust and debris.

Inject the epoxy grout into the back of the drill hole. Use a grout with a workable viscosity, pumpable, yet thick enough to remain in the hole. Insert a sufficient volume of grout into the hole to provide a small quantity of excess material at the face of the concrete after fully inserting the bar.

Use a positive fixed displacement dispensing system, equipped with a nozzle of sufficient length to deposit the epoxy at the back of the drilled hole. Use a system equipped with a means of checking the mix ratio of the epoxy components. Use the manufacturer’s recommended mix ratio and check the ratio at least once a day.

For minor quantities of tie bars, the contractor may use hand-powered mixing and injecting equipment capable of thoroughly mixing and depositing the epoxy grout at the back of the drill hole.

Insert the tie bar such that the anchoring material is evenly distributed around the tie bar. Use an amount that slightly extrudes out the hole as the tie bar is inserted. Remove the excess and trowel the anchoring material smooth to the pavement surface, filling any chipped areas.

Do not allow traffic on repaired area until the epoxy is cured as recommended by the manufacturer.

Ensure air temperatures and weather conditions meet manufacturers requirements for installation of epoxy.

D Measurement

The department will measure Cross Stitching Longitudinal Joints and Cracks by each tie bar installed and accepted.

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	Cross Stitching Longitudinal Joints and Cracks	EACH

Payment is full compensation for furnishing all materials, including epoxy coated tie bars; drilling holes; installing tie bars; and furnishing and installing epoxy grout. No payment will be made for extra work required to repair damage to the adjacent pavement that occurred during drilling.

19. Temporary Access for Structure B-11- 45 Repair, Item SPV.0060.02.

A Description

This special provision describes constructing and removing temporary access to the site, from the inside shoulder on northbound IH 39, necessary to provide for the transport of equipment and materials necessary for the repair of B-11-45.

B Materials

B.1 Deliverables

Show temporary access locations on the ECIP.

Prior to placement, obtain approval from the engineer for all materials that are to be used for construction of the temporary access. All materials shall conform to the pertinent requirement of the standard specs.

C Construction

C.1 Restrictions

Stockpile material and equipment must be at least 2 ft offset from the concrete barrier temporary precast when the inside lane on northbound IH 39 is not closed.

C.2 Guardrail

Existing guardrail near B-11-45 will need to be salvaged and reinstalled or removed and replaced with new installation prior to removing temporary concrete barrier. Guardrail must be fully in place prior to removing the concrete barrier temporary precast.

Final Removal of the existing guardrail and installation of the new MGS guardrail will be paid for as their respective items.

C.3 Erosion Control

Implement all temporary erosion control measures required for construction of the temporary access as shown in the ECIP or as directed by the engineer. Ditch checks shall be installed to prevent erosion.

After the temporary access is no longer needed, thoroughly remove all material that has been placed for the purposes of temporary access.

C.4 Restoration

Once structure work B-11-45 is complete, restore the site to preconstruction conditions, as directed by the engineer.

D Measurement

The department will measure Temporary Access for Structure B-11-45 Repair as one unit acceptably completed, in which one unit includes all temporary access locations needed to complete the work.

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	Temporary Access for Structure B-11-45 Repair	EACH

Payment is full compensation for all materials, labor and equipment necessary to complete the work, in which one unit includes all temporary access locations necessary for B-11-45; is full compensation for furnishing all materials; for constructing, maintaining, and removing temporary access; for grading existing or proposed embankments for access; for providing, installing, and removing temporary erosion control and final restoration for all areas disturbed; for salvaging existing guardrail and for repairing slope paving.

20. UV GRP CIPP 48x60-Inch, Item SPV.0090.01.

A Description

This special provision describes furnishing, preparing, installing, and verifying ultraviolet (UV) glass reinforced plastic (GRP) cured-in-place-pipe (CIPP) liners for storm sewer or culvert pipe that when cured provides a structurally sound, smooth, joint less and watertight pipe.

A.1 Referenced Documents

The following documents form a part of this specification to the extent stated herein:

- ASTM F2019 Standard Practice for Rehabilitation of Existing Pipelines and Conduits by the Pulled in Place Installation of Glass Reinforced Plastic (GRP) Cured-in-Place Resin Pipe (CIPP)
- ASTM F1216 Standard Practice for Rehabilitation of Existing Pipelines and Conduits by the Inversion and Curing of a Resin-Impregnated Tube

- ASTM F1743 Standard Practice for Rehabilitation of Existing Pipelines and Conduits by the Pull In and Inflate and Curing of a Resin-Impregnated Tube.
- ASTM D543 Test Method for Resistance of Plastics to Chemical Reagents
- ASTM D578 Standard Specification Glass Fiber Strands
- ASTM D638 Standard Test Method for Tensile Properties of Plastics
- ASTM D790 Standard Test Methods for Flexural Properties of Unreinforced and Reinforced Plastics and Electrical Insulating Materials
- ASTM D2122 Standard 1 Test Method for Determining Dimensions of Thermoplastic Pipe and Fittings
- ASTM D3567 Standard Practice for Determining Dimensions of “Fiberglass” (Glass- Fiber Reinforced Thermosetting Resin) Pipe and Fittings
- ASTM D5813 Standard Specification for Cured-in Place Thermosetting Resin Sewer Pipe

B Materials

B.1 General

Provide a UV cured GRP system adhering to ASTM F2019 that has a minimum 500,000 linear feet or 1000 lined sections of successful installations in the United States and that has been continuously available and in service for a minimum of 5 years. Allow the engineer to inspect all liner to be installed under this work at the manufacturer’s plant(s) and wet-out facility for compliance with these specifications if requested. Require the wet-out facility's cooperation in these inspections.

B.2 Fiberglass Liner

Provide a liner that is homogeneous throughout, uniform in color, free of cracks, holes, foreign materials, blisters, and deleterious faults. Inspect glass fiber tube liner for defects at time of manufacturer and prior to installation.

Obtain compound samples and prepare test specimens according to the latest applicable ASTM standards from the manufacturer if directed by the engineer.

B.3 Tube

Furnish a flexible fiber glass tube meeting the requirements of ASTM F2019 as appropriate that when installed, will tightly fit the internal circumference and length of the original pipe.

Provide a wet out tube that when compressed at installation pressures will meet or exceed the design thickness. Construct the tube to withstand installation pressures and curing temperatures, have sufficient strength to bridge missing pipe, stretch to fit irregular pipe sections, and invert smoothly around bends.

Conduct liner wet out in an indoor environmentally controlled manufacturing setting. No onsite wet out will be allowed. The engineer may inspect the wet out facility at the manufacturer’s plant(s) for compliance with these specifications. Saturate the glass fiber tube with the appropriate resin using a resin bath system to allow for the lowest possible amount of air entrapment.

Fabricate any seams in the tube stronger than the unseamed material. Do not utilize overlapped layers of the liner in longitudinal seams that cause lumps in the final product. Form spirally formed and sewn joints for length as required. Do not form joints perpendicular to the long axis. The tube shall be homogeneous across the entire wall thickness containing no intermediate or encapsulated elastomeric layers. No material included in the tube may cause delamination in the cured CIPP. No dry or unsaturated layers shall be evident.

Utilize an outer and inner film to ensure that the liner remains intact during the insertion process and to protect the resin at all times during the installation and curing process from water and debris contamination, and resin migration. Provide liners that are both impervious to airborne styrene, with the outer material also having UV blocking characteristics.

The liner should be seamless in its cured state to ensure homogenous physical properties around the circumference of the cured liner. The wall color of the interior pipe surface of CIPP after installation shall be a light reflective color so that a clear detailed examination with closed circuit television inspection equipment may be made.

Mark the tube for distance at regular intervals along its entire length, not to exceed 5 feet. Include the manufacturers name or identifying symbol.

B.4 Resin

Furnish a corrosion resistant polyester, vinyl ester, or orthothalic (either ppg or npg grade) and catalyst resin system, compatible with the installation process, that when properly cured within the tube creates a

composite that meets the requirements of ASTM F1216, ASTM D5813, and ASTM F2019, the physical properties in Table 1, and those requirements which are to be utilized in the structural design of the CIPP for this project. Resins created from recycled materials are not allowed.

Table 1 CIPP Minimum Physical Properties

Flexural Modulus (minimum)	725,000 psi
Flexural Strength (minimum)	15,000 psi
Long term E-modulus	675,000 psi
Long term tensile bending strength	13,500 psi

Use resin requiring a UV light to cure the liner. A photo-initiator system must be added to the resin prior to the impregnation. The photo-initiator system shall be tuned to the UV-curing equipment used or vice-versa. The liquid UV resin shall saturate the tube and produce a properly cured liner, which is resistant to abrasion due to solids, grit, and sand.

B.5 Structural Requirements

A minimum of 14 days prior to delivery of the liner materials, submit design calculations prepared by an engineer licensed in the State of Wisconsin that meet the requirements of the manufacturer and that are designed as suggested by ASTM F2019, Appendix X1. The designer may use ASTM F1216, Appendix XI as modified in ASTM F2019 X1.1.2 for each pipe segment with less than 10% ovality. If the ovality is 10% or greater, use either the ASCE or the WRc Sewerage Rehabilitation Manual, Type II Design, Section 5.3.2.iii for non-round pipe. Assume the fully deteriorated condition and assume no bonding to the original pipe wall for the CIPP design. Verify the Long-Term Flexural Modulus used in design by independent testing and provide documentation to the Department per Section B.6.1. Do not exceed 50% of the short-term values for the Long-Term Modulus in design. CIPP thickness shall not be less than that which is computed from the design requirements in the table below, for resin systems with physical properties shown.

Table 2 - CIPP Design Criteria

Design Variable	Value
Culvert Inside Diameter	48x60 Inches
Soil Density: w	120 pcf
Live Load: Ws	Follow AASHTO LRFD Bridge Design Specifications (AASHTO, 2012) Article 3.6.1.2.6
Minimum Height of Water above Culvert Crown: Hw	Depth of Water Above Culvert
Height of Soil above Culvert Crown: H	Culvert Depth of Cover
Culvert Deflection: Δ	2% minimum. To be verified by liner designer.
Modulus of Soil Reaction E's	Follow AASHTO LRFD Bridge Design Specifications (AASHTO, 2012) Article 12.12.3.5.1
Long-term Modulus of Elasticity of CIPP Liner: E_L	362,500 psi minimum, 50% of initial value in ASTM F2019. Actual value per the manufacturer can be used. Provide supporting data verified by independent testing.
Factor of Safety: N	2
Flexural Stress	15,000 psi Actual value per the manufacturer can be used. Provide supporting data verified by independent testing

B.6 Experience and Quality Control

B.6.1 Experience

Demonstrate a minimum of five (5) years experience in the installation of cured in place liners by the installation contractor with at least 5 projects in that time totaling over 50,000 feet of installed liner. The installing contractor must be trained and certified by the UV GRP manufacturer and have documented experience with a fiberglass UV cured liner.

Provide an experienced inspector or supervisor to oversee the installation of the CIPP liner, who completed the NASSCO cured-in-place-pipe inspector training class or equivalent and has at least three (3) years experience with cured in place pipe liner installation having previously supervised a minimum of 50,000 linear feet of CIPP lining using a similar resin and flexible tube and using the specific method of installation and curing proposed.

If the contractor does not have 50,000 linear feet of CIPP lining experience with the UV curing system being used, then a manufacturer's onsite representative must be present during installations of the CIPP system until such time the Department is confident in the contractor's ability. The contractor is to provide the engineer with the manufacturer representative's work experience for approval. Do not begin prior to the engineer's approval of the manufacturer's onsite representative.

Provide five (5) references of completed projects of similar installations by the contractor.

B.6.2 Installation and Quality Control Plan

Furnish a detailed installation and quality control plan, to be discussed at the preconstruction meeting outlining measures to assure the quality requirements of the contract are met including but not limited to:

- A summary table of CIPP material properties, including short-term flexural modulus of elasticity, 50-year flexural modulus of elasticity, short-term flexural strength (bending stress), 50-year flexural strength (bending stress), and chemical resistance.
- Manufacturer's product certifications and available standard written warranty for materials used in the liner system including documentation of testing to confirm a minimum 50-year design life for the liner, adherence to applicable ASTM standards and safety data sheets
- Liner and resin/catalyst type including, manufacturer, product names and mixing ratios, the location of the facility where each was manufactured, and a list of appurtenant materials and accessories to be furnished.
- Independent third-party certified laboratory test reports demonstrating that the exact resin/liner combination to be used for this project meets the requirements for initial structural properties and chemical resistance (performed according to ASTM F1216).
- Independent third-party certified laboratory test reports demonstrating that the exact resin and liner to be used for this project has been tested for long-term flexural modulus of elasticity and long-term flexural strength (i.e. 10,000-hour creep testing performed according to ASTM 2990 or DIN 761 for design conditions applicable to this project). When filled resins are proposed, complementary data of the same data for unfilled resin shall also be provided. If the data submitted is not for the exact liner to be used on this project, submit a detailed description of the physical properties of both the liner used in the test and the liner to be used for this project to demonstrate that the two liners are comparable in terms of physical properties.
- Perform testing for 10,000 hours under test conditions and loadings described below. The data points from 1,000 hours to 10,000 hours, or such other time period as determined by the engineer based on the curve or slope of the plotted data, of the long-term flexural modulus shall be extrapolated using a log-log scale linear regression analysis to determine the minimum service life performance of the resin-tube.
- Testing shall be conducted at:
    - Temperature 21°C to 25°C
    - Relative humidity: 50% minimum
    - Load: Load shall be calculated at 0.25% of the short-term E-modulus as tested per ASTM D790 or ISO 178, or as approved by engineer.
- Perform wet out at a facility with a quality management system registered according to and conforming with the current ISO 9001 standard or having implemented a quality system similar to that in the ISO 9001 requirements. Ensure that proper materials and amounts are used in the resin saturation process and in liner shipping and storage. At a minimum, the quality control documentation shall include resin lot numbers, volumes of resin, catalyst, enhancers, date of wet-out, storage / transportation controls, and quality assurance procedures.
- Method of installation.
- Proposed quality controls checks that will be performed and in place by the contractor

- Method of curing and monitoring including:
    - Curing speed
    - Light source size and wattage
    - Inner air pressure
    - Curing temperatures

These parameters are to be controlled and documented during installation and curing and provided to the engineer including date and time and length of installed liner.

- Manufacturer's product literature, and application and installation requirements for materials used in the liner including:
    - Maximum, minimum, and ideal installation temperatures
    - Minimum pressure required to hold tube tight to the host conduit and maximum pressure so not damage the tube
    - Curing times
    - Maximum pulling forces as applicable
- Product sampling, liner thickness compliance, and notification/resolution of observed liner defects and/or wrinkling observed by the contractor during post lining televising operations.
- Defined responsibilities, as assigned to specific contractor's personnel, for assuring that all the quality assurances are met.
- An outline of specific repair or replacement procedures for potential defects that may occur in the installed CIPP. Provide recommended repair/replacement procedures per the CIPP system manufacturer.
- Bypass flow plan if required.
- An odor control plan that will show project specific odors will be minimized at the project site and surrounding area.

B.7 Quality and Inspection Report

Submit a report of the inspection and quality activities performed during and after lining. Inspect pipes with a color pan and tilt, 360° rotating head camera specifically designed and constructed for sewer inspection. Provide pre and post lining video inspection files upon completion of the lining. Format files for viewing on a standard PC without additional media software. Perform video work in accordance with NASSCO PACP standards or engineer approved equal.

B.8 Cured Liner Properties

B.8.1 Color

Provide a tube where the cured interior pipe surface after installation is a light reflective color so that a clear, detailed examination with closed circuit television inspection can be made.

B.8.2 Chemical Resistance

Provide a chemically resistance tube. Evaluate the inner surface of the cured resin/fiberglass liner matrix in a laminate for qualification testing of long-term chemical exposure to a variety of chemical effluents in a manner consistent with 6.4.1 and 6.4.2 of ASTM D5813.

Provide samples of tube and resin similar to that proposed for actual construction. It is required that CIPP samples with and without plastic coating meets these chemical testing requirements.

B.8.3 Hydraulic Capacity

Maintain the overall hydraulic profile as large as possible with the CIPP having a minimum of the full flow capacity of the original pipe before rehabilitation. Calculated capacities may be derived using a commonly accepted roughness coefficient for the existing pipe material taking into consideration its age and condition.

C Construction

C.1 General

No change of material, design values, or procedures as developed before bidding the contract may be made during the course of the work without the prior written approval of the engineer.

Coordinate with the engineer to field verify pipe lining locations and lengths before beginning work. The department will locate and designate all right of way areas open and accessible for the work and provide

rights of access to these points. If a shoulder must be closed to traffic because of the work, institute the actions necessary to do this upon concurrence of the Department for the mutually agreed time period.

C.2 Handling and Storage

Take care in shipping, handling and storage to avoid damaging the liner. Store liner as recommended by manufacturer and as approved by the engineer. Avoid exposure to light prior to installation. Any liner damaged in shipment, storage, or installation shall be replaced as directed by the Engineer at no additional cost.

C.3 Accessibility of Water

This site is rural and without access to public waters systems. Supply water for cleaning the host pipe or other processes.

C.4 Cleaning Existing Conduits

Remove internal debris from the existing pipeline including any roots and protruding service connections. Clean the pipes with hydraulically powered equipment, high-velocity jet cleaners, or mechanically powered equipment capable of sufficiently cleaning and clearing the existing pipe. Use precautions during the cleaning operations to prevent additional damage to the existing pipe. Properly dispose of all sediment removed from the cleaning process.

C.5 Inspection of Pipeline

Inspect the interior of the pipeline carefully to determine the location of any conditions which may prevent proper installation of CIPP into the pipelines, note these so that these conditions can be corrected. Keep a digital video and suitable log for later reference by the Department.

C.6 Repair Techniques & Material Installation

Fill any voids in the host pipe that can not be bridged prior to the installation of the CIPP liner. Small gaps and offsets in the pipe culvert joints can be bridged by the CIPP liner. Repair significant gaps and offsets and stop water infiltration that may impact CIPP curing.

C.7 Installation

C.7.1 Installation of Glass Fiber Tubing

Use a constant tension winch, as specified by the liner manufacturer, to pull the glass fiber liner into position in the pipe. Provide a longitudinal fiberglass reinforcement band which runs the entire length of the liner ensuring that the pulling force is transferred to the band and not the fiberglass liner. Pull the liner keeping the force below the system recommendation for the tubing installed. Provide end plugs to cap each end of the glass fiber liner to prepare for pressurizing the liner. Secure the end caps to prevent them from being expelled due to pressure. Use liner restraints in manholes.

Use a slip sheet/gliding foil on the bottom one third to one half of the pipe prior to liner insertion (if it is not already part of the manufactured outer film of the liner), for the purpose of protecting the liner during insertion and reduce the drag, or as recommend by the liner manufacturer.

C.7.2 Curing Liner

Cure the glass fiber liner with UV light sources at a constant inner pressure. Hold the liner tight to the host pipe per the manufacturer's recommended equipment and methods. Do not release liner inner pressure until liner reaches curing parameters specified by the manufacturer.

Assemble the UV light sources according to the manufacturer's specifications for the liner diameter. Draw a multi-lamp ultraviolet light curing assembly fitted with CCTV equipment through the pipe while the tube is expanded under pressure. Verify that the liner is properly fitted to the host pipe without any wrinkles or fins that should be avoidable given the current cross-sectional configuration (geometry) of the host pipe. Correct defects before proceeding on to the UV-light curing process. Take care not to damage the liner or inner film material when inserting the curing equipment.

Use curing speeds as recommended by the manufacturer and determined by contractor based on various site specific field conditions. The optimal curing speed, or travel speed of the energized UV light sources, is determined for each length of liner based on liner diameter, liner thickness, and exothermic reaction temperature. Use infrared sensors during the curing process to record curing data that will be submitted to the engineer with a post CCTV inspection. Monitor and control the parameters stated in the quality control plan, giving the engineer a record of the curing parameters over every segment of the entire length of the liner.

Remove the inner film material if the liner is manufactured with a removable inner film as recommended by the manufacturer after curing and discard.

Once cured, the cured-in-place pipe should be continuous and tight fitting. Cut the pipe liner neatly and smoothly at each end of the host pipe to prevent snagging and collection of debris.

C.8 Quality Control and Testing

Prepare cured liner samples and test physical properties in accordance with ASTM F2019, Section 7. Test for conformance with the manufacturer's final CIPP design values and the CIPP Design Criteria requirement of this special provision including flexural properties listed.

Provide documentation of quality checks performed according to this part and as described in the project quality control plan.

C.9 Workmanship and Inspection

Perform an initial visual and final television inspection to document the as-built condition after the completion of the liner installation Inspect the CIPP in accordance with ASTM F2019, Section 7.3 and this part. Provide copies of as-built inspection documentation to the engineer in digital format that can be read without specialized software.

Provide a finished liner that is continuous over the entire length of the conduit section and that tightly conforms to the walls of the existing (host) conduit pipe that is homogeneous throughout and free of any dry spots, lifts, delaminations, wrinkles, protrusions, holes, cracks, foreign material, blisters, or other deleterious faults or defects, which in the opinion of the engineer, will affect the liner's structural integrity, hydraulic performance, future maintenance access, and overall liner performance. Provide a finished liner with no visible gaps or annular space between the finished liner and the existing (host) pipe at the manhole, sewer service connection, or other exposed points within the finished lined section. Where the CIPP does not meet the requirements of Section 7 of ASTM F2019 or this specification, the affected portions of the CIPP shall be removed and replaced with an acceptable repair as specified in 6.2 of ATSM Specification D5813 as approved by the engineer. Any excavation or restoration necessary is incidental with no additional payment.

Upon acceptance of the installation work and testing, restore the project area affected by the operations to its original condition.

D Measurement

The department will pay for UV GRP CIPP 48x60-Inch 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	UV GRP CIPP 48x60-Inch	LF

Payment is full compensation for furnishing all labor, tools, equipment, materials, testing, reports and incidentals, including any required bypass pumping or flow diversion, cleaning of the host pipe, gap, void and offset repair in the host pipe, and disposal of wastes including curing or cleaning water necessary to complete the contract work according to the above stated specifications.

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

415.3.16.4.1.2 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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506 Steel Bridges

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 A35 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

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

506.3.19.4 Welding Inspection

(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.

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 2025 letting.

(1) 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.

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

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

(4) 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.

(5) 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.

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

(7) 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.

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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.

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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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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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643 Traffic Control

643.1 Description

Replace paragraph (1) with the following effective with the November 2025 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 start and end location markers	

643.2.2 Department's Approved Products List (APL)

Replace paragraph (1) with the following effective with the November 2025 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 start and end location markers
- 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 Start and End Location Markers

Add subsection effective with the November 2025 letting.

(1) Place work zone start location marker at the beginning of the work zone per plan or as the engineer directs. Clearly label the work zone start location marker so that it is easily distinguishable by field personnel.

(2) Place work zone end 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.

(3) Ensure the connected work zone start and end location markers operate continuously when deployed on the project.

(4) Ensure the work zone location markers and connected arrow board are from the same manufacturer.

(5) When the work zone start and end location markers are switched to the ON mode, verify the begin and end location markers transmit their location and identity as begin or end markers to the data feed.

(6) Switch the work zone start and end location markers 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 Start and End Location Markers 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.

(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
643.1220	Traffic Control Connected Work Zone Start and End Location Markers	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.

646.3.1.6 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

646.3.2.3.2 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 2024 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 at or exceeding 25 pounds per gallon of epoxy. Do not apply glass beads to black 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 2025 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 on department form DT1291 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.

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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.

CONCRETE CLASSIFICATION	PRE-PLACEMENT TESTING	PLACEMENT TESTING	
Class I: Pavement [1]	One pre-placement test per aggregate source	Hand Placement: ≤ 250 CY > 250 CY Slip Formed Placement ≤ 1500 CY > 1500 CY	One test per cumulative 250 CY One test per day One test per day Two tests per day
Class I: Structures [2], [3], [4]		One test per cumulative 150 CY, maximum one test per day	
Class I: Cast-in Place Barrier [1]		≤ 250 CY > 250 CY	One test per cumulative 250 CY One test per day
Class II: Base	One pre-placement test per aggregate source	One test per calendar week of production	
Class II: Structure Repair - Joints		One test per cumulative 150 CY, maximum one test per day	
Class II: Concrete Overlay			
Class II: Pavement Repair		One test per 400 CY, minimum one test per 10 business days, maximum one test per day	
Class II: Pavement Replacement			
Class II: Base Patching			
Class II: Ancillary			
Class II: Structure Repair – Curb & Surface [5]		Preplacement testing only	

[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.

(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 5 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. - 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
Class II: Concrete Overlay	One test per 250 CY - 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 Payment

715.5.1 General

Replace paragraph (4) and add paragraphs (8) and (9) effective with the November 2025 letting.

(4) The department will adjust pay for each lot using PWL of the 28-day sublot average strengths for that lot. The department will measure PWL relative to strength lower specification limits as follows:

- Compressive strength of 3700 psi for pavements.
- Flexural strength of 650 psi for pavements.
- Compressive strength of 4000 psi for super structures and barrier, or as shown in the plan details.
- Compressive strength of 3500 psi for substructures and culverts, or as shown in the plan details.

(5) The department will not pay a strength incentive for concrete that is nonconforming in another specified property, for ancillary concrete accepted based on tests of class I concrete, or for high early strength concrete unless placed in pavement gaps as allowed under 715.3.1.2.2.

(6) Submit test results to the department electronically using MRS software. The department will verify contractor data before determining pay adjustments.

(7) All coring and testing costs under 715.3.2.2 including filling core holes and providing traffic control during coring are incidental to the contract.

(8) If the contractor combines concrete of varying specified strengths in a single lot/sublot, the highest specified strength of the related concrete shall be used to calculate pay incentive/disincentive.

(9) The department will apply one price adjustment to a given quantity of material. If the quantity in question is subject to more than one nonconforming test, apply the adjustment with the greater price reduction. In the absence of exact quantities affected by the sublot test results, pay reductions will be applied to the entire sublot.

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.

(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 following conditions, apply the adjustment with the greater price reduction.

(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 (%)		PERCENT PRICE REDUCTION OF THE CONTRACT UNIT PRICE
Above Specification	>= 0.5 [1]	10
	0.1 to 0.4 [1]	5
Below Specification	0.1 to 0.5	20
	0.6 to 1.0	30
	> 1.0	50 or remove and replace

[1] Evaluate the strength data. If the strengths are acceptable, do not take a price reduction for high air content. Contractor is responsible to provide 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.

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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.

(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.

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).

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.

643.0810	Traffic Control Connected Arrow Boards	DAY
643.1220	Traffic Control Connected Work Zone Start and End Location Markers	DAY

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: 20260414001 **Project(s):** 1012-01-62

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	203.0220 Removing Structure (structure) 01. B-11-45	1.000 EACH	_____.____	_____.____
0004	204.0120 Removing Asphaltic Surface Milling	11,761.000 SY	_____.____	_____.____
0006	204.0165 Removing Guardrail	9,529.000 LF	_____.____	_____.____
0008	206.2001 Excavation for Structures Culverts (structure) 01. B-11-45	1.000 EACH	_____.____	_____.____
0010	206.5001 Cofferdams (structure) 01. B-11-45	1.000 EACH	_____.____	_____.____
0012	210.2500 Backfill Structure Type B	118.000 TON	_____.____	_____.____
0014	211.0101 Prepare Foundation for Asphaltic Paving (project) 01. 1012-01-62	1.000 EACH	_____.____	_____.____
0016	213.0100 Finishing Roadway (project) 01. 1012-01-62	1.000 EACH	_____.____	_____.____
0018	305.0110 Base Aggregate Dense 3/4-Inch	1,438.000 TON	_____.____	_____.____
0020	305.0500 Shaping Shoulders	7.000 STA	_____.____	_____.____
0022	311.0115 Breaker Run	29.000 CY	_____.____	_____.____
0024	415.6000.S Rout and Seal	2,677.000 LF	_____.____	_____.____
0026	416.0610 Drilled Tie Bars	938.000 EACH	_____.____	_____.____
0028	416.0620 Drilled Dowel Bars	8,880.000 EACH	_____.____	_____.____
0030	416.1710 Concrete Pavement Repair	2,735.000 SY	_____.____	_____.____

Proposal ID: 20260414001 **Project(s):** 1012-01-62

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	416.1715 Concrete Pavement Repair SHES	2,437.000 SY	_____.____	_____.____
0034	416.1720 Concrete Pavement Replacement	1,233.000 SY	_____.____	_____.____
0036	416.1725 Concrete Pavement Replacement SHES	366.000 SY	_____.____	_____.____
0038	420.1000 Continuous Diamond Grinding Concrete Pavement	9,721.000 SY	_____.____	_____.____
0040	450.4000 HMA Cold Weather Paving	330.000 TON	_____.____	_____.____
0042	455.0605 Tack Coat	82.000 GAL	_____.____	_____.____
0044	460.2000 Incentive Density HMA Pavement	850.000 DOL	1.00000	850.00
0046	460.6224 HMA Pavement 4 MT 58-28 S	1,318.000 TON	_____.____	_____.____
0048	492.2020.S Cleaning and Sealing Cracks and Joints with Hot-Applied Sealant	0.090 MI	_____.____	_____.____
0050	504.0100 Concrete Masonry Culverts	20.000 CY	_____.____	_____.____
0052	505.0600 Bar Steel Reinforcement HS Coated Structures	2,620.000 LB	_____.____	_____.____
0054	511.1200 Temporary Shoring (structure) 01. B-11-45	320.000 SF	_____.____	_____.____
0056	516.0500 Rubberized Membrane Waterproofing	7.000 SY	_____.____	_____.____
0058	520.8700 Cleaning Culvert Pipes	8.000 EACH	_____.____	_____.____
0060	603.8000 Concrete Barrier Temporary Precast Delivered	400.000 LF	_____.____	_____.____

Proposal ID: 20260414001 **Project(s):** 1012-01-62

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	603.8125 Concrete Barrier Temporary Precast Installed	400.000 LF	_____.____	_____.____
0064	604.0500 Slope Paving Crushed Aggregate	1,620.000 SY	_____.____	_____.____
0066	606.0300 Riprap Heavy	8.000 CY	_____.____	_____.____
0068	614.0905 Crash Cushions Temporary	1.000 EACH	_____.____	_____.____
0070	614.2300 MGS Guardrail 3	6,068.000 LF	_____.____	_____.____
0072	614.2330 MGS Guardrail 3 K	2,429.000 LF	_____.____	_____.____
0074	614.2500 MGS Thrie Beam Transition	391.000 LF	_____.____	_____.____
0076	614.2610 MGS Guardrail Terminal EAT	15.000 EACH	_____.____	_____.____
0078	614.2620 MGS Guardrail Terminal Type 2	11.000 EACH	_____.____	_____.____
0080	618.0100 Maintenance and Repair of Haul Roads (project) 01. 1012-01-62	1.000 EACH	_____.____	_____.____
0082	619.1000 Mobilization	1.000 EACH	_____.____	_____.____
0084	624.0100 Water	14.000 MGAL	_____.____	_____.____
0086	642.5401 Field Office Type D	1.000 EACH	_____.____	_____.____
0088	643.0300 Traffic Control Drums	11,250.000 DAY	_____.____	_____.____
0090	643.0370.S Digital Speed Reduction System (DSRS)	30.000 DAY	_____.____	_____.____

Proposal ID: 20260414001 **Project(s):** 1012-01-62

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	643.0420 Traffic Control Barricades Type III	135.000 DAY	_____.____	_____.____
0094	643.0705 Traffic Control Warning Lights Type A	270.000 DAY	_____.____	_____.____
0096	643.0715 Traffic Control Warning Lights Type C	1,543.000 DAY	_____.____	_____.____
0098	643.0810 Traffic Control Connected Arrow Boards	109.000 DAY	_____.____	_____.____
0100	643.0900 Traffic Control Signs	1,060.000 DAY	_____.____	_____.____
0102	643.0920 Traffic Control Covering Signs Type II	10.000 EACH	_____.____	_____.____
0104	643.1050 Traffic Control Signs PCMS	102.000 DAY	_____.____	_____.____
0106	643.1205.S Basic Traffic Queue Warning System	67.000 DAY	_____.____	_____.____
0108	643.1220 Traffic Control Connected Work Zone Start and End Location Markers	79.000 DAY	_____.____	_____.____
0110	643.5000 Traffic Control	1.000 EACH	_____.____	_____.____
0112	645.0120 Geotextile Type HR	23.000 SY	_____.____	_____.____
0114	645.0140 Geotextile Type SAS	43.000 SY	_____.____	_____.____
0116	646.1020 Marking Line Epoxy 4-Inch	4,450.000 LF	_____.____	_____.____
0118	646.2020 Marking Line Epoxy 6-Inch	3,600.000 LF	_____.____	_____.____
0120	646.3020 Marking Line Epoxy 8-Inch	627.000 LF	_____.____	_____.____
0122	646.4020 Marking Line Epoxy 10-Inch	100.000 LF	_____.____	_____.____

Proposal ID: 20260414001 **Project(s):** 1012-01-62

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
0124	646.4520 Marking Line Same Day Epoxy 4-Inch	4,080.000 LF	_____._____	_____._____
0126	646.5020 Marking Arrow Epoxy	3.000 EACH	_____._____	_____._____
0128	646.5120 Marking Word Epoxy	1.000 EACH	_____._____	_____._____
0130	646.6466 Cold Weather Marking Epoxy 6-Inch	500.000 LF	_____._____	_____._____
0132	650.6501 Construction Staking Structure Layout (structure) 01. B-11-45	1.000 EACH	_____._____	_____._____
0134	650.8000 Construction Staking Resurfacing Reference	4,071.000 LF	_____._____	_____._____
0136	650.9911 Construction Staking Supplemental Control (project) 01. 1012-01-62	1.000 EACH	_____._____	_____._____
0138	690.0150 Sawing Asphalt	94.000 LF	_____._____	_____._____
0140	690.0250 Sawing Concrete	21,826.000 LF	_____._____	_____._____
0142	715.0502 Incentive Strength Concrete Structures	500.000 DOL	1.00000	500.00
0144	740.0440 Incentive IRI Ride	3,000.000 DOL	1.00000	3,000.00
0146	SPV.0060 Special .01 Special Cross Stitching Longitudinal Joints and Cracks	150.000 EACH	_____._____	_____._____
0148	SPV.0060 Special .02 Temporary Access For Structure B-11-45 Repair	1.000 EACH	_____._____	_____._____
0150	SPV.0090 Special .01 UV GRP CIPP 48x60-Inch	157.000 LF	_____._____	_____._____

Section: 0001 **Total:** _____._____

Proposal ID: 20260414001 **Project(s):** 1012-01-62

Federal ID(s): N/A

Total Bid: _____.____

PLEASE ATTACH ADDENDA HERE