HIGHWAY WORK PROPOSAL

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

Proposal Number: 024

STATE ID	FEDERAL ID	PROJECT DESCRIPTION	HIGHWAY	COUNTY
1500-49-60	N/A	Menasha - Harrison, STH 114 - Fire Lane 7	USH 010	Calumet
1500-49-61	N/A	Harrison - Forest Junction, Fire Lane 7 - CTH N	USH 010	Calumet

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: February 10, 2026 Time (Local Time): 11:00 am	Firm Name, Address, City, State, Zip Code **SAMPLE** **NOT FOR BIDDING PURPOSES**
Contract Completion Time 70 Working Days	
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

Type of Work: **For Department Use Only**

Removals, Milling, Aggregate, Concrete Pavement, Asphalt Pavement, Culvert Pipe, Curb and Gutter, Concrete Sidewalk, Beam Guard, Erosion Control, 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 1500-49-60, Menasha – Harrison, STH 114 - Fire Lane 7, USH 10, Calumet County, Wisconsin; and Project 1500-49-61, Harrison - Forest Junction, Fire Lane 7 - CTH N, USH 10, Calumet 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 removing asphaltic surface milling, base aggregate dense, HMA pavement, asphaltic surface, concrete pavement, concrete pavement repairs, continuous diamond grinding, guardrail, culvert, culvert pipe repairs, concrete curb and gutter, concrete sidewalk, riprap, rumble strips, marking and all incidental items necessary to complete the work as shown on the plans and included in the proposal and contract.

104-005 (20090901)

3. Prosecution and Progress.

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

Provide the 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.

USH 10/STH 114

STH 114 runs concurrent with USH 10 from Onedia Street to the STH 114/USH 10 interchange.

USH 10 Shoulders

Complete asphalt shoulder repairs at locations selected by the engineer prior to shifting USH 10 traffic partially onto existing paved shoulders.

South Oneida Street/Fire Lane 1 Closure

Close South Oneida Street/Fire Lane 1 to complete concrete items and traffic signal work on USH 10 EB, STH 114 EB, and South Oneida Street/Fire Lane 1 the as shown in the plans.

Maintain access to Brighton Beach Road and Fire Lane 2 at all times during the closure of South Oneida Street/Fire Lane 1.

Implement the South Oneida Street/Fire Lane 1 closures one time for a maximum of 10 consecutive working days including a maximum of one weekend.

USH 10/CTH LP Intersection Partial Closure

Close the USH 10/CTH LP intersection median opening and left turn lanes to complete concrete items and traffic signal work as shown in the plans. HMA paving may be done during this closure or under flagging conditions.

Do not close the USH 10/CTH LP intersection median opening and left turn lanes at the same time as the Eisenhower Drive and the USH 10/Eisenhower Drive median opening closures.

Implement the USH 10/CTH LP median and left turn lane closures one time for a maximum of 10 consecutive working days including a maximum of one weekend.

Eisenhower Drive Intersection Closure

Close Eisenhower Drive and the USH 10/Eisenhower Drive median opening and maintain at least one USH 10 lane in each direction to complete reconstruction of the Eisenhower Drive pavement and the culvert replacement in the USH 10 median opening as shown in the plans. The upper layer of HMA paving may be done during this closure or under flagging conditions.

Do not close the Eisenhower Drive and the USH 10/Eisenhower Drive median opening at the same time as the USH 10/CTH LP intersection median opening and left turn lane closures.

Implement the Eisenhower Drive and the USH 10/Eisenhower Drive median closures one time for a maximum of 10 consecutive working days including a maximum of one weekend.

USH 10/STH 114 Ramp Closures

Close the STH 114 entrance ramp to USH 10 westbound and the USH 10 eastbound exit ramp to STH 114 and implement the detour routes to complete the ramp taper work and adjacent USH 10 driving lane work as shown in the plans.

The ramp closures may occur at the same or separate times.

Implement ramp closures a maximum of two times per ramp. Limit one closure to a maximum of 10 consecutive working days including a maximum of one weekend. Limit the second closure to a maximum of 5 consecutive working days that do not occur on weekend days.

CTH N Park and Ride Closure

Close the CTH N Park and Ride to complete paving and marking operations. Post fixed message and PCMS signs as shown in the plans prior to the closure. Reopen the Park and Ride upon completion of the paving and marking operations.

Implement the CTH N Park and Ride closure one time for a maximum of 4 consecutive working days.

Race the Lake

Maintain USH 10 EB traffic on the USH 10 EB passing lane and allow bicycle traffic to utilize the USH 10 EB driving lane from Oneida Street to CTH LP/Fire Lane 8 during the Race the Lake event. Ensure the surface of the USH 10 EB driving lane is relatively smooth in this segment as approved by the Engineer. Open all USH 10 EB lanes on paved surfaces and the pedestrian facilities at Fire Lane 8 during time shown in the Holiday and Special Event Work Restrictions article.

Guardrail Replacements

Replace the guardrail at C-08-0035 within 96 hours of removal. Delineate the shoulder with traffic control drums when the guardrail system is not in place.

For other drop-off and hazard protection follow standard spec 104.6.1.2.3 and 104.6.1.2.4 and maintain closures of adjacent lanes when guardrail is not in place.

01: Interim Completion and Liquidated Damages – Stage A-1 - South Oneida Street/Fire Lane 1 Closure: 10 Working Days

At the beginning of the Stage A-1 concrete and traffic signal work at South Oneida Street/Fire Lane 1, close South Oneida Street/Fire Lane 1 for a maximum of 10 working days including a maximum of one weekend. Do not reopen until completing the following work within the Stage A-1 work area: traffic signal work, concrete pavement items, concrete sidewalk, and concrete curb and gutter.

If the contractor fails to complete the work necessary to reopen South Oneida Street/Fire Lane 1 and place traffic onto USH 10 EB and STH 114 EB lanes traffic within 10 working days including a maximum of one weekend, the department will assess the contractor $500 in interim liquidated damages for each working day the contract work remains incomplete beyond 10 working days including a maximum of one weekend. An entire working day will be charged for any period of time within a working day that the road remains closed beyond 12:01 AM.

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

02: Interim Completion and Liquidated Damages – USH 10/CTH LP Intersection Median Opening Closure: 10 Working Days

At the beginning of concrete and traffic signal work at the USH 10/CTH LP intersection median opening and left turn lanes, close the USH 10/CTH LP intersection median opening for a maximum of 10 working days including a maximum of one weekend. Do not reopen until completing the following work: traffic signal work, concrete base patching, adjusting inlets, concrete sidewalk, and concrete curb and gutter.

If the contractor fails to complete the work necessary to reopen the USH 10/CTH LP intersection median opening and left turn lanes to traffic within 10 working days including a maximum of one weekend, the department will assess the contractor $1,000 in interim liquidated damages for each working day the contract work remains incomplete beyond 10 working days including a maximum of one weekend. An entire working day will be charged for any period of time within a working day that the road remains closed beyond 12:01 AM.

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

03: Interim Completion and Liquidated Damages – Eisenhower Drive and the USH 10/Eisenhower Drive Median Opening Closure: 10 Working Days

At the beginning of intersection reconstruction and culvert replacement at the Eisenhower Drive and the USH 10/Eisenhower Drive median opening, close the Eisenhower Drive and the USH 10/Eisenhower Drive median opening for a maximum of 10 working days including a maximum of one weekend. Do not reopen until completing the following work: culvert replacement, base aggregate, lower layers of HMA pavement, and concrete curb and gutter.

If the contractor fails to complete the work necessary to reopen the Eisenhower Drive and the USH 10/Eisenhower Drive median opening to traffic within 10 working days including a maximum of one weekend, the department will assess the contractor $500 in interim liquidated damages for each working day the contract work remains incomplete beyond 10 working days including a maximum of one weekend. An entire working day will be charged for any period of time within a working day that the road remains closed beyond 12:01 AM.

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

04: Interim Completion and Liquidated Damages – STH 114 entrance ramp to USH 10 westbound: 10 Working Days

At the beginning of the concrete pavement repairs at the STH 114 entrance ramp to USH 10 westbound and the adjacent USH 10 driving lane, close the STH 114 entrance ramp to USH 10 westbound for a maximum of 10 working days including a maximum of one weekend. Do not reopen until completing the following work: concrete base patching and concrete joint and crack cleaning and repair.

If the contractor fails to complete the work necessary to reopen the STH 114 entrance ramp to USH 10 westbound to traffic within 10 working days including a maximum of one weekend, the department will assess the contractor $1,000 in interim liquidated damages for each working day the contract work remains incomplete beyond 10 working days including a maximum of one weekend. An entire working day will be charged for any period of time within a working day that the road remains closed beyond 12:01 AM.

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

05: Interim Completion and Liquidated Damages – STH 114 entrance ramp to USH 10 westbound: 5 Working Days

At the beginning of the HMA overlay at the STH 114 entrance ramp to USH 10 westbound and the adjacent USH 10 driving lane, close the STH 114 entrance ramp to USH 10 westbound for a maximum of 5 working days that do not occur on weekend days. Do not reopen until completing the following work: HMA overlay.

If the contractor fails to complete the work necessary to reopen the STH 114 entrance ramp to USH 10 westbound to traffic within 5 working days that do not occur on weekend days, the department will assess the contractor $1,000 in interim liquidated damages for each working day the contract work remains incomplete beyond 5 working days that do not occur on weekend days. An entire working day will be charged for any period of time within a working day that the road remains closed beyond 12:01 AM.

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

06: Interim Completion and Liquidated Damages – USH 10 eastbound exit ramp to STH 114: 10 Working Days

At the beginning of the concrete pavement repairs at the USH 10 eastbound exit ramp to STH 114 and the adjacent USH 10 driving lane, close the USH 10 eastbound exit ramp to STH 114 for a maximum of 10 working days including a maximum of one weekend. Do not reopen until completing the following work: concrete base patching.

If the contractor fails to complete the work necessary to reopen the USH 10 eastbound exit ramp to STH 114 to traffic within 10 working days including a maximum of one weekend, the department will assess the contractor $1,000 in interim liquidated damages for each working day the contract work remains incomplete beyond 10 working days including a maximum of one weekend. An entire working day will be charged for any period of time within a working day that the road remains closed beyond 12:01 AM.

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

07: Interim Completion and Liquidated Damages – USH 10 eastbound exit ramp to STH 114: 5 Working Days

At the beginning of the HMA overlay at the USH 10 eastbound exit ramp to STH 114 and the adjacent USH 10 driving lane, close the USH 10 eastbound exit ramp to STH 114 for a maximum of 5 working days that do not occur on weekend days. Do not reopen until completing the following work: HMA overlay.

If the contractor fails to complete the work necessary to reopen the USH 10 eastbound exit ramp to STH 114 to traffic within 5 working days that do not occur on weekend days, the department will assess the contractor $1,000 in interim liquidated damages for each working day the contract work remains incomplete beyond 5 working days that do not occur on weekend days. An entire working day will be charged for any period of time within a working day that the road remains closed beyond 12:01 AM.

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

4. Traffic.

General

Maintain at least one 16-foot clear lane of traffic on all roadways except when width restrictions are allowed to stage the USH 10/Oneida Street intersection and Stage 2 from Station 846+00 to Station 848+00 as shown in the plans.

Open all lanes of USH 10, ramps, and side roads and provide an even cross-sectional profile across all lanes and shoulders during the holiday periods shown in the Holiday and Special Event Work Restrictions.

Maintain local and emergency traffic on USH 10 at all times.

Provide and maintain existing, temporary, or permanent edge line and lane line pavement marking on all surfaces on USH 10 throughout the project if marking is impacted for greater than 1,000-feet

USH 10 Shoulders

Do not close the shoulders on both sides of USH 10 at the same time in each work area.

Minimize the duration USH 10 traffic is temporarily shifted onto paved shoulders. Only shift USH 10 traffic when work is occurring immediately adjacent to an open lane. Return shifted USH 10 traffic to existing travel lanes as soon as practicable or as directed by the engineer.

USH 10/Oneida Street Intersection

Construct the USH 10/Oneida Street intersection concrete rehabilitation under traffic as shown in the plans. Cover existing traffic signals and implement all way stops during Stages A-1, A-2A, A-2B, A-2C, and A-2D.

USH 10/CTH LP Intersection Partial Closure

Cover existing traffic signals and implement all way stops during the USH 10/CTH LP intersection median opening and left turn lane closures as shown in the plans. Maintain USH 10 right-in/right-out movements to CTH LP and Fire Lane 8 as shown in the plans and close the existing median crossover near Station 944+75 'EB', LT.

Eisenhower Drive Intersection Closure

Implement the closure of Eisenhower Drive and USH 10/Eisenhower Drive intersection median opening as shown in the plans.

USH 10/STH 114 Ramp Detour

Implement the detour route as shown in the plans during closure of the USH 10/STH 114 ramps to complete ramp tapers and adjacent USH 10 driving lane work. Utilize USH 10 to CTH N for the detour route as shown in the plans.

USH 10 Two-Lane Segment

Complete all work including concrete base patching and curing with single lane bi-directional traffic controlled by flagging or shoulder closures.

Side Roads

Maintain full access to and from USH 10 at all side roads except as allowed at South Oneida Street/Fire Lane 1 and Eisenhower Drive. Utilize traffic control devices or flagging operations to control traffic as required during work operations within and at the intersections unless otherwise allowed by the engineer. Maintain existing lane configurations on side roads when work is not occurring.

Pedestrian Access

Maintain the pedestrian and bicycle access through the USH 10/Oneida Street intersection and the USH 10/CTH LP intersection when completing all work as shown in the plans.

Open all pedestrian crossings and sidewalks and bicycle facilities during the time periods noted in "Holiday and Special Event Work Restrictions" unless otherwise approved by the engineer.

Provide temporary audible message devices during work that requires changes to pedestrian routes or crossings at location shown in the plans. Adjust and modify the following example messages as approved by the engineer:

- Attention *direction* *roadway* pedestrians
- You are at the *direction* corner of *roadway* and *roadway*
- The *roadway* corner of *roadway* and *roadway* is closed
- Cross *roadway* for access *direction* of *roadway*

Driveways

Notify the property owners of the anticipated construction schedule of any driveway at least seven calendar days prior to reconstruction of the driveways.

Maintain access to all entrances on a minimum of a base aggregate surface at the end of each working day. Construct driveways in stages as required to maintain traffic.

Coordinate daily access with property owners and businesses.

Temporary Work Zone Clear Zone Working Restrictions.

Replace 104.6.1.2.4(1) with the following:

On roads open to all traffic, remove construction debris, stored materials, including stockpiles, and equipment not in use a minimum of 15-feet from the edge of the traveled way unless protected by concrete barrier temporary precast.

If the contractor is unsure whether an individual work operation will meet the safety requirements for working within the clear zone, review the proposed work operation with the engineer before proceeding with the work.

ner-104-005 (20230206)

Portable Changeable Message Signs - Message Prior Approval

After coordinating with department construction field staff, notify the Northeast Region Traffic Section at 920-366-8033 (secondary contact number is 920-360-3107) 3 business days before deploying or changing a message on a PCMS to obtain approval of the proposed message. The Northeast Region Traffic Unit will review the proposed message and either approve the message or make necessary changes.

PCMS boards must be deployed 7 days before the project starts, traffic change, or closure.

ner-643-035 (20171213)

Wisconsin Lane Closure System Advance Notification

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

TABLE 108-1 CLOSURE TYPE AND REQUIRED MINIMUM ADVANCE NOTIFICATION

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

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

5. Coordination with Businesses.

The contractor will arrange and conduct a meeting between the contractor, the department, local officials and business people to discuss the project schedule of operations including vehicular and pedestrian access during construction operations. Hold the first meeting 14 days prior to the start of work under this contract and two meetings per month thereafter. The contractor shall notify all parties in writing a minimum of 10 days before the first meeting being held.

ner-105-005 (20180212)

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 USH 10 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, May 22, 2026 to 6:00 AM Tuesday, May 26, 2026 Memorial Day;
- From noon Friday, July 3, 2026 to 6:00 AM Monday, July 6, 2026 Independence Day;
- From noon Friday, August 21, 2026 to 6:00 AM Monday, August, 2026 Race the Lake;
- From noon Friday, September 4, 2026 to 6:00 AM Tuesday, September 8, 2026 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.

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

stp-107-065 (20240703)

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

Project 1500-49-60

Harrison Utilities has existing underground **water** facilities located along the left side of USH 10 from near Station 816+50'EB' to the end project limits with crossings throughout the project.

Harrison Utilities will adjust the water valve boxes as shown on the plans near Station 871+75'WB', LT to match the new finished pavement elevation. Notify Harrison Utilities as noted above prior to needing the water valve box adjustments. Harrison utilities anticipates the work to take less than one working day.

Harrison Utilities has existing underground **sewer** facilities located along the left side of USH 10 from the begin project limits to end project limits. The underground sewer facilities cross USH 10 at the Oneida Street intersection.

Adjust the sanitary sewer manholes as shown on the plans to match the new finished pavement elevation. Perform this work according to the requirements of the Adjusting Sanitary Manhole Covers bid item. Arrange for an observer to be on site during the sanitary manhole cover adjustments by notifying Harrison Utilities as noted above prior to beginning the work.

We Energies has existing underground **gas** facilities along the left side of USH 10 from the begin project limits to end project limits. The underground gas facilities cross USH 10 and STH 114 at the Oneida Street intersection.

Arrange for a watchdog to be present during work within 10 feet of the gas facilities near Station 814+93'WB' to Station 819+50'WB' for concrete rehabilitation and curb and gutter repairs. Notify We Energies as noted above prior to beginning work in these areas

The following utility owners have facilities within the construction limits, however no conflicts are anticipated:

- **AT&T Local Network (communications)**
- **AT&T Wisconsin (communications)**
- **ATC Management, Inc (electric - transmission)**
- **City of Appleton (water)**
- **Fox Crossing Utilities (sewer)**
- **Fox Crossing Utilities (water)**
- **Spectrum (communications)**
- **TDS Metrocom, LLC (communications)**
- **We Energies (electric)**

Project 1500-49-61

The following utility owners have facilities within the construction limits, however no conflicts are anticipated:

- **AT&T Local Network (communications)**
- **AT&T Wisconsin (communications)**
- **ATC Management, Inc (electric - transmission)**
- **Harrison Utilities (sewer)**
- **Harrison Utilities (water)**
- **Net Lec, LLC (communications)**
- **Spectrum (communications)**
- **TDS Telecom (communications)**
- **We Energies (electric)**
- **We Energies (gas/petroleum)**

8. Municipality Acceptance of Sanitary Sewer and Water Main Construction.

Both the department and Village of Harrison (Harrison Utilities) personnel will inspect materials placement of sanitary sewer and water main under this contract. However, construction staking, post-placement testing of the system, and final acceptance of the sanitary sewer and water main construction will be by the Village of Harrison (Harrison Utilities).

stp-105-001 (20250701)

9. Work by Others.

At the intersection of USH 10/STH 114/Oneida Street and USH 10/STH 114/CTH LP, the Wisconsin Department of Transportation Northeast Region Electrical Unit, (920) 366-7521, will perform the following work:

- Terminate all electrical wire in the signal control cabinet

At the intersection of USH 10/STH 114/Oneida Street and USH 10/STH 114/CTH LP, Jeff Rickert at the Wisconsin Department of Transportation Northeast Region Electrical Unit, (920) 360-6238, will perform the following temporary work:

- Temporary covering and uncovering of the traffic signals

Notify the Wisconsin Department of Transportation Northeast Region Electrical Unit 14 to 16 calendar days in advance of when the work can begin. Coordinate the work duration and subsequent scheduling needs with the Northeast Region Electrical Unit.

10. Railroad Insurance and Coordination - Wisconsin Central Ltd (CN).

A. Description

Comply with standard spec 107.17 for all work affecting Wisconsin Central Ltd (CN) property and any existing tracks.

A.1 Railroad Insurance Requirements

In addition to standard spec 107.26, provide railroad protective liability insurance coverage as specified in standard spec 107.17.3 Insurance is filed in the name of Wisconsin Central Ltd and Its Parents (CN).

Notify evidence of the required coverage, and duration to Thomas Brasseur, Manager of Public Works, 700 Pershing Road, Pontiac MI, 48340; Telephone (715) 544-9145; E-mail: Thomas.brasseur@cn.ca

Also send a copy to the following: Jared Kinziger, NE Region Railroad Coordinator; 944 Vanderperren Way, Green Bay, WI 54304; Telephone (920) 492-7713; E-mail: jared.kinziger@dot.wi.gov.

Include the following information on the insurance document:

- Project ID: 1500-49-60/61
- Work Performed on or within 50' of RR ROW: Concrete repair, asphalt paving, curb ramp upgrades, beam guard replacement, pavement marking.

#	Route Name	City/County	Crossing ID	RR Subdivision	RR Milepost
1	Fire Lane 5	Menasha/Calumet	386675T	Manitowoc	5.52
2	Private Road	Menasha/Calumet	386676A	Manitowoc	5.67
3	Fire Lane 6	Menasha/Calumet	386677G	Manitowoc	5.75

A.2 Train Operation

#	Passenger Train Volume	Passenger Train Speed	Freight Train Volume	Freight Train Speed	Frequency	Switch Train Comment*
1	Na	Na	2	35	Daily	No switch trains
2	Na	Na	2	35	Daily	No switch trains
3	Na	Na	2	35	Daily	No switch trains

* Switch trains are in addition to freight and passenger trains.

A.3 Names and Addresses of Railroad Representatives for Consultation and Coordination

Construction Contact

Thomas Brasseur, Manager of Public Works, 700 Pershing Road, Pontiac MI, 48340; Telephone (715) 544-9145; E-mail: Thomas.brasseur@cn.ca for consultation on railroad requirements during construction.

Amend standard spec 108.4 to include the railroad in the distribution of the initial bar chart, and monthly schedule updates. The bar chart shall specifically show work involving coordination with the railroad.

Flagging Contact

Submit by US Mail a "Request for Flagging Services and Cable Location" form with prepayment to: Flagging-US, 17641 South Ashland Avenue, Homewood, IL 60430; Flagging_US@CN.CA . The form can be obtained at: https://www.cn.ca/en/safety/regulations

Requests for flagging and cable locates can take up to five business days after the railroad receives the paperwork. Reference the Wisconsin Milepost and Subdivision located in A.1. Advise Wisconsin Central Ltd (CN) that the flagging services are to be billed at the rate for a public highway project.

Cable Locate Contact

In addition to contacting Diggers Hotline, follow the procedure listed under Flagging Contact.

Wisconsin Central Ltd (CN) will only locate railroad owned facilities buried in the railroad right-of-way. The railroad does not locate any other utilities.

A.4 Work by Railroad

The railroad will perform the work described in this section, except for work described in other special provisions, and will be accomplished without cost to the contractor. None.

A.5 Temporary Grade Crossing

If a temporary grade crossing is desired, submit a written request to the railroad representative named in A.3 at least 40 days prior to the time needed. Approval is subject to the discretion of the railroad. The department has made no arrangements for a temporary grade crossing.

stp-107-026 (20250108)

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

The department has received written verification of coverage under the Section 404 Transportation Regional General Permit from the U.S. Army Corps of Engineers. Comply with the requirements of the permit in addition to requirements of the special provisions.

A copy of the permit is available from the regional office by contacting Kristen Berg at 920-492-0139.

If the contractor requires work outside the proposed slope intercepts, based on their method of operation to construct the project, it is the contractor's responsibility to determine whether a U.S. Army Corps of Engineers Section 404 permit modification is required. If a Section 404 permit modification is necessary, obtain the permit modification prior to beginning construction operations requiring the permit. No time extensions as discussed in standard spec 108.10 will be granted for the time required to apply for and obtain the permit modification. The contractor must be aware that the U.S. Army Corps of Engineers may not grant the permit modification request.

stp-107-054 (20230629)

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

The calculated land disturbance for the project site is 1.7 acres.

The department has obtained permit coverage through the Wisconsin Department of Natural Resources to discharge storm water associated with land disturbing construction activities under this contract. Conform to all permit requirements for the project.

This permit is the Wisconsin Pollutant Discharge Elimination System, Transportation Construction General Permit, (WPDES Permit No. WI-S066796-2). The permit can be found at:

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

A "Certificate of Permit Coverage" is available from the regional office by contacting Kristen Berg at 920-492-0139. Post the "Certificate of Permit Coverage" in a conspicuous place at the construction site.

Permit coverage for additional land disturbing construction activities related to contractor means and methods will be considered as part of the ECIP review and approval process. Coverage under the TCGP for additional land disturbance areas will be considered if the areas meet all of the following:

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

The contractor is responsible for obtaining any permits for areas that are not approved by the department for coverage under the TCGP.

stp-107-056 (20250108)

13. Environmental Protection, By-Pass Pumping.

Add the following to standard spec 107.18:

If by-pass pumping is required, the means and methods proposed to be used during construction shall be submitted for approval as part of the Erosion Control Implementation Plan for each location it is required. The submittal shall include how the intake will be managed to not cause an increase in the background level turbidity during pumping; equipment pumping rate capabilities; discharge energy dissipation; and erosion controls. For by-pass pumping that will extend beyond one working day, the submittal should also include how the work zone will be managed and protected should the pump fail; be shut down due to unacceptable water quality; or storm water flows exceed the pumping rate of equipment. After setup of the approved by-pass pumping operation, the contractor shall demonstrate that the means and methods will pump the water at an acceptable water quality before starting work that necessitates the by-pass pumping. The cost of all work and materials associated with by-pass pumping is incidental to the bid

items the work is associated with. Erosion control devices beyond the discharge energy dissipation point will be paid for at the contract unit prices for the items that are included in the plan.

ner-107-035 (20180212)

14. Environmental Protection, Dewatering.

Add the following to standard spec 107.18:

If dewatering is required, treat the water to remove suspended sediments by filtration, settlement or other appropriate best management practice before discharge. The means and methods proposed to be used during construction shall be submitted for approval as part of the Erosion Control Implementation Plan for dewatering at each location it is required. The submittal shall also include the details of how the intake will be managed to not cause an increase in the background level turbidity before treatment and any additional erosion controls necessary to prevent sediments from reaching the project limits or wetlands and waterways. Guidance on dewatering can be found on the Wisconsin Department of Natural Resources website located in the Storm Water Construction Technical Standards, Dewatering Code #1061, “Dewatering”. This document can be found at the WisDNR website:

http://dnr.wi.gov/topic/stormwater/standards/const_standards.html

The cost of all work and materials associated with water treatment and/or dewatering is incidental to the bid items the work is associated.

ner-107-040 (20180212)

15. Environmental Protection, Aquatic Exotic Species Control.

Exotic invasive organisms such as VHS, zebra mussels, purple loosestrife, and Eurasian water milfoil are becoming more prolific in Wisconsin and pose adverse effects to waters of the state. Wisconsin State Statutes 30.07, "Transportation of Aquatic Plants and Animals; Placement of Objects in Navigable Waters", details the state law that requires the removal of aquatic plants and zebra mussels each time equipment is put into state waters.

At construction sites that involve navigable water or wetlands, use the follow cleaning procedures to minimize the chance of exotic invasive species infestation. Use these procedures for all equipment that comes in contact with waters of the state and/or infested water or potentially infested water in other states.

Ensure that all equipment that has been in contact with waters of the state, or with infested or potentially infested waters, has been decontaminated for aquatic plant materials and zebra mussels before being used in other waters of the state. Before using equipment on this project, thoroughly disinfect all equipment that has come into contact with potentially infested waters. Guidelines from the Wisconsin Department of Natural Resources for disinfection are available at:

http://dnr.wi.gov/topic/invasives/disinfection.html

Use the following inspection and removal procedures:

1. Before leaving the contaminated site, wash machinery and ensure that the machinery is free of all soil and other substances that could possibly contain exotic invasive species;
2. Drain all water from boats, trailers, bilges, live wells, coolers, bait buckets, engine compartments, and any other area where water may be trapped;
3. Inspect boat hulls, propellers, trailers and other surfaces. Scrape off any attached mussels, remove any aquatic plant materials (fragments, stems, leaves, seeds, or roots), and dispose of removed mussels and plant materials in a garbage can before leaving the area or invested waters; and
4. Disinfect your boat, equipment and gear by either:
    - 4.1. Washing with ~212 F water (steam clean), or
    - 4.2. Drying thoroughly for five days after cleaning with soap and water and/or high pressure water, or
    - 4.3. Disinfecting with either 200 ppm (0.5 oz per gallon or 1 Tablespoon per gallon) Chlorine for 10-minute contact time or 1:100 solution (38 grams per gallon) of Virkon Aquatic for 20- to 30-minute contact time. Note: Virkon is not registered to kill zebra mussel veligers nor invertebrates like spiny water flea. Therefore, this disinfect should be used in conjunction with a hot water (>104º F) application.

Complete the inspection and removal procedure before equipment is brought to the project site and before the equipment leaves the project site.

stp-107-055 (20130615)

16. Construction Over or Adjacent to Navigable Waters.

The following waterways are classified as state navigable waterway under standard spec 107.19.

- Unnamed stream at existing C-8-21 near Station 946+25'WB'
- Unnamed stream at existing C-8-22 near Station 995+35'EB'
- Unnamed stream at existing C-8-35 near Station 1023+50'EB'

stp-107-060 (20171130)

17. Erosion Control.

Add the following to standard spec 107.20:

Perform construction operations in a timely and diligent manner, continuing all construction operations methodically from the initial topsoil stripping operation through the subsequent grading and finishing to minimize the period of exposure to erosion.

Replace topsoil on disturbed areas, including spot locations such as cross drains, driveways, guardrail and terminals, and intersections, immediately after grading is completed within those areas. Complete finishing operations, which includes seed, fertilizer, erosion mat, mulch, and any other permanent erosion control measures required, within seven (7) calendar days after the placement of topsoil.

ncr-107-050 (20141015)

18. Electrical Meetings.

No later than 5 working days prior to starting any electrical installation construction activities, arrange and conduct an on-site electrical kickoff meeting between the contractor, engineer, region electrical unit, and electrical subcontractors to discuss the construction of the electrical elements of the project including traffic signals, roadway lighting systems, Intelligent Transportation Systems (ITS), and all other electrical facilities.

During the electrical kickoff meeting, the contractor may be requested to provide additional workplan information related to the electrical installation activities. Upon completion of the electrical kickoff meeting and acceptance of any additional requested workplan information, the contractor will be given authorization to proceed with electrical construction activities.

Arrange and conduct additional electrical progress meetings no later than 5 working days prior to energizing new systems, opening the roadway, and final inspection.

The contractor and electrical subcontractor are required to attend all electrical meetings. Electrical meetings are considered incidental to the electrical work.

19. Removing Apron Endwalls, Item 204.9060.S.01.

A Description

This special provision describes removing Apron Endwalls conforming to standard spec 204.

B (Vacant)

C (Vacant)

D Measurement

The department will measure Removing Apron Endwalls as each endwall, acceptably completed.

E Payment

Add the following to standard spec 204.5:

ITEM NUMBER	DESCRIPTION	UNIT
204.9060.S.01	Removing Apron Endwalls	EA

stp-204-025 (20230113)

20. HMA Percent Within Limits (PWL) Test Strip Volumetrics, Item 460.0105.S; HMA Percent Within Limits (PWL) Test Strip Density, Item 460.0110.S.

A Description

This special provision describes the Hot Mix Asphalt (HMA) density and volumetric testing tolerances required for an HMA test strip. An HMA test strip is required for contracts constructed under HMA Percent Within Limits (PWL) QMP. A density test strip is required for each pavement layer placed over a specific, uniform underlying material, unless specified otherwise in the plans. Each contract is restricted to a single mix design per mix type per layer (e.g., upper layer and lower layer may have different mix type specified or may have the same mix type with different mix designs). Each mix design requires a separate test strip. Density and volumetrics testing will be conducted on the same test strip whenever possible.

Perform work according to standard spec 460 and as follows.

B Materials

Use materials conforming to HMA Pavement Percent Within Limits (PWL) QMP special provision.

C Construction

C.1 Test Strip

Submit the test strip start time and date to the department in writing at least 5 calendar days in advance of construction of the test strip. If the contractor fails to begin paving within 2 hours of the submitted start time, the test strip is delayed, and the department will assess the contractor $2,000 for each instance according to Section E of this document. Alterations to the start time and date must be submitted to the department in writing a minimum of 24 hours prior to the start time. The contractor will not be liable for changes in start time related to adverse weather days as defined by standard spec 101.3 or equipment breakdown verified by the department.

On the first day of production for a test strip, produce approximately 750 tons of HMA. (Note: adjust tonnage to accommodate natural break points in the project.) Locate test strips in a section of the roadway to allow a representative rolling pattern (i.e. not a ramp or shoulder, etc.).

C.1.1 Sampling and Testing Intervals

C.1.1.1 Volumetrics

Laboratory testing will be conducted from a split sample yielding three components, with portions designated for QC (quality control), QV (quality verification), and retained.

During production for the test strip, obtain sufficient HMA mixture for three-part split samples from trucks prior to departure from the plant. Collect three split samples during the production of test strip material. Perform sampling from the truck box and three-part splitting of HMA according to WTM R47. These three samples will be randomly selected by the engineer from each *third* of the test strip tonnage (T), excluding the first 50 tons:

Sample Number	Production Interval (tons)
1	50 to 1/3 T
2	1/3 T to 2/3 T
3	2/3 T to T

C.1.1.2 Density

Required field tests include contractor QC and department QV nuclear density gauge tests and pavement coring at ten individual locations (five in each half of the test strip length) according to Appendix A: *Test*

Methods and Sampling for HMA PWL QMP Projects. Both QV and QC teams shall have two nuclear density gauges present for correlation at the time the test strip is constructed. QC and QV teams may wish to scan with additional gauges at the locations detailed in Appendix A, as only gauges used during the test strip correlation phase will be allowed.

C.1.2 Field Tests

C.1.2.1 Density

For contracts that include STSP 460-020 QMP Density in addition to PWL, a gauge comparison according to WTM T355 shall be completed prior to the day of test strip construction. Daily standardization of gauges on reference blocks and a project reference site shall be performed according to WTM T355. A standard count shall be performed for each gauge on the material placed for the test strip, prior to any additional data collection. Nuclear gauge readings and pavement cores shall be used to determine nuclear gauge correlation according to Appendix A. The two to three readings for the five locations across the mat for each of two zones shall be provided to the engineer. The engineer will analyze the readings of each gauge relative to the densities of the cores taken at each location. The engineer will determine the average difference between the nuclear gauge density readings and the measured core densities to be used as a constant offset value. This offset will be used to adjust raw density readings of the specific gauge and shall appear on the density data sheet along with gauge and project identification. An offset is specific to the mix and layer; therefore, a separate value shall be determined for each layer of each mix placed over a differing underlying material for the contract. This constitutes correlation of that individual gauge for the given layer. Two gauges per team are not required to be onsite daily after completion of the test strip. Any data collected without a correlated gauge will not be accepted.

The contractor is responsible for coring the pavement from the footprint of the density tests and filling core holes according to Appendix A. Coring and filling of pavement core holes must be approved by the engineer. The QV team is responsible for the labeling and safe transport of the cores from the field to the QC laboratory. Testing of cores shall be conducted by the contractor and witnessed by department personnel. The contractor is responsible for drying the cores following testing. The department will take possession of cores following laboratory testing and will be responsible for any verification testing at the discretion of the engineer.

The target maximum density to be used in determining core density is the average of the three volumetric/mix Gmm values from the test strip multiplied by 62.24 lb/ft^3. In the event mix and density portions of the test strip procedure are separated, or if an additional density test strip is required, the mix portion must be conducted prior to density determination. The target maximum density to determine core densities shall then be the Gmm four-test running average (or three-test average from a PWL volumetric-only test strip) from the end of the previous day's production multiplied by 62.24 lb/ft^3. If no PWL production QV volumetric test is to be taken in a density-only test strip, a non-random QV test will be taken according to 460.2.8.3.1.4 as modified in HMA Pavement Percent Within Limits (PWL) QMP and if non-conforming to C.2.1 herein, follow corrective action outlined in 460.2.8.2.1.7(4) as modified in HMA Pavement Percent Within Limits (PWL) QMP.

Exclusions such as shoulders and appurtenances shall be tested and reported according to CMM 815. However, all acceptance testing of shoulders and appurtenances will be conducted by the department, and average lot (daily) densities must conform to standard spec Table 460-3. No density incentive or disincentive will be applied to shoulders or appurtenances. However, unacceptable shoulder material will be handled according to standard spec 460.3.3.1 and CMM 815.11.

C.1.3 Laboratory Tests

C.1.3.1 Volumetrics

Obtain random samples according to C.1.1.1 and Appendix A. Perform tests the same day as taking the sample.

Theoretical maximum specific gravities of each mixture sample will be obtained. Bulk specific gravities of both gyratory compacted samples and field cores shall be determined. The bulk specific gravity values determined from field cores shall be used to calculate a correction factor (i.e., offset) for each QC and QV nuclear density gauge. The correction factor will be used throughout the remainder of the layer.

C.2 Acceptance

C.2.1 Volumetrics

Produce mix conforming to the following limits based on individual QC and QV test results (tolerances based on most recent JMF):

ITEM	ACCEPTANCE LIMITS
Percent passing given sieve:	
37.5-mm	+/- 8.0
25.0-mm	+/- 8.0
19.0-mm	+/- 7.5
12.5-mm	+/- 7.5
9.5-mm	+/- 7.5
2.36-mm	+/- 7.0
75-µm	+/- 3.0
Asphaltic content in percent[1]	- 0.5
Air Voids	-1.5 & +2.0
VMA in percent[2]	- 1.0
Maximum specific gravity	+/- 0.024

[1] Asphalt content more than -0.5% below the JMF will be referee tested by the department's AASHTO accredited laboratory and HTCP certified personnel using automated extraction.

[2] VMA limits based on minimum requirement for mix design nominal maximum aggregate size in table 460-1.

QV samples will be tested for Gmm, Gmb, and AC. Air voids and VMA will then be calculated using these test results.

Calculation of air voids shall use either the QC, QV, or retained split sample test results, as identified by conducting the paired t-test with the WisDOT PWL Test Strip Spreadsheet.

If QC and QV test results do not correlate as determined by the split sample comparison, the retained split sample will be tested by the department's AASHTO accredited laboratory and HTCP certified personnel as a referee test. Additional investigation shall be conducted to identify the source of the difference between QC and QV data. Referee data will be used to determine material conformance and pay.

C.2.2 Density

Compact all layers of test strip HMA mixture according to Table 460-3.

Nuclear density gauges are acceptable for use on the project only if correlation is completed for that gauge during the time of the test strip and the department issues documentation of acceptance stating the correlation offset value specific to the gauge and mix design. The offset is not to be entered into any nuclear density gauge as it will be applied by the department-furnished Field Density Worksheet.

C.2.3 Test Strip Approval and Material Conformance

All applicable laboratory and field testing associated with a test strip shall be completed prior to any additional mainline placement of the mix. All test reports shall be submitted to the department upon completion and approved before paving resumes. The department will notify the contractor within 24 hours from start of test strip regarding approval to proceed with paving unless an alternate time frame is agreed upon in writing with the department. The 24-hour approval time includes only working days as defined in standard spec 101.3.

The department will evaluate material conformance and make pay adjustments based on the PWL value of air voids and density for the test strip. The QC core densities and QC and QV mix results will be used to determine the PWL values as calculated according to Appendix A.

The PWL values for air voids and density shall be calculated after determining core densities. An approved test strip is defined as the individual PWL values for air voids and density both being equal to or greater than 75, mixture volumetric properties conforming to the limits specified in C.2.1, and an acceptable gauge-to-core correlation. Further clarification on PWL test strip approval and appropriate post-test strip actions are shown in the following table:

PWL TEST STRIP APPROVAL AND MATERIAL CONFORMANCE CRITERIA

PWL VALUE FOR AIR VOIDS AND DENSITY	TEST STRIP APPROVAL	MATERIAL CONFORMANCE	POST-TEST STRIP ACTION
Both PWL $\geq$ 75	Approved[1]	Material paid for according to Section E	Proceed with Production
50 $\leq$ Either PWL < 75	Not Approved	Material paid for according to Section E	Consult BTS to determine need for additional test strip
Either PWL < 50	Not Approved	Unacceptable material removed and replaced or paid for at 50% of the contract unit price according to Section E	Construct additional Volumetrics or Density test strip as necessary

[1] In addition to these PWL criteria, mixture volumetric properties must conform to the limits specified in C.2.1, split sample comparison must have a passing result and an acceptable gauge-to-core correlation must be completed.

A maximum of two test strips will be allowed to remain in place per pavement layer per contract. If material is removed, a new test strip shall replace the previous one at no additional cost to the department. If the contractor changes the mix design for a given mix type during a contract, no additional compensation will be paid by the department for the required additional test strip and the department will assess the contractor $2,000 for the additional test strip according to Section E of this special provision. For simultaneously conducted density and volumetric test strip components, the following must be achieved:

i. Passing/Resolution of Split Sample Comparison
ii. Volumetrics/mix PWL value $\geq$ 75
iii. Density PWL value $\geq$ 75
iv. Acceptable correlation

If not conducted simultaneously, the mix portion of a test strip must accomplish (i) & (ii), while density must accomplish (iii) & (iv). If any applicable criteria are not achieved for a given test strip, the engineer, with authorization from the department's Bureau of Technical Services, will direct an additional test strip (or alternate plan approved by the department) be conducted to prove the criteria can be met prior to additional paving of that mix. For a density-only test strip, determination of mix conformance will be according to main production, i.e., HMA Pavement Percent Within Limits (PWL) QMP special provision.

D Measurement

The department will measure HMA Percent Within Limits (PWL) Test Strip as each unit of work, acceptably completed as passing the required air void, VMA, asphalt content, gradation, and density correlation for a Test Strip. Material quantities shall be determined according to standard spec 450.4 and detailed here within.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
460.0105.S	HMA Percent Within Limits (PWL) Test Strip Volumetrics	EACH
460.0110.S	HMA Percent Within Limits (PWL) Test Strip Density	EACH

These items are intended to compensate the contractor for the construction of the test strip for contracts paved under the HMA Pavement Percent Within Limits QMP article.

Payment for HMA Percent Within Limits (PWL) Test Strip Volumetrics is full compensation for volumetric sampling, splitting, and testing, and for the proper labeling, handling, and retention of the split samples.

Payment for HMA Percent Within Limits (PWL) Test Strip Density is full compensation for collecting and measuring of pavement cores, acceptably filling core holes, providing of nuclear gauges and operator(s), and all other work associated with completion of a core-to-gauge correlation, as directed by the engineer.

Acceptable HMA mixture placed on the project as part of a volumetric or density test strip will be compensated by the appropriate HMA Pavement bid item with any applicable pay adjustments. If a test strip is delayed as defined in C.1 of this document, the department will assess the contractor $2,000 for each instance, under the HMA Delayed Test Strip administrative item. If an additional test strip is required because the initial test strip is not approved by the department or the mix design is changed by the

contractor, the department will assess the contractor $2,000 for each additional test strip (i.e., $2,000 for each individual volumetrics or density test strip) under the HMA Additional Test Strip administrative item.

Pay adjustment will be calculated using 65 dollars per ton of HMA pavement. The department will pay for measured quantities of mix based on $65/ton multiplied by the following pay adjustment:

PAY ADJUSTMENT FOR HMA PAVEMENT AIR VOIDS & DENSITY

PERCENT WITHIN LIMITS (PWL)	*PAYMENT FACTOR, PF (percent of $65/ton)*
≥ 90 to 100	PF = ((PWL – 90) * 0.4) + 100
≥ 50 to < 90	(PWL * 0.5) + 55
<50	50%[1]

where, PF is calculated per air voids and density, denoted $PF_{air\ voids}$ & $PF_{density}$

[1] Material resulting in PWL value less than 50 shall be removed and replaced, unless the engineer allows for such material to remain in place. In the event the material remains in place, it will be paid at 50% of the contract unit price of HMA pavement.

For air voids, PWL values will be calculated using lower and upper specification limits of 2.0 and 4.3 percent, respectively. Lower specification limits for density will be according to Table 460-3. Pay adjustment will be determined for an acceptably completed test strip and will be computed as shown in the following equation:

Pay Adjustment = (PF-100)/100 x (WP) x (tonnage) x ($65/ton)*

*Note: If Pay Factor = 50, the contract unit price will be used in lieu of $65/ton and the weighted percentage (WP) will equal 1.0.

The following weighted percentage (WP) values will be used for the corresponding parameter:

Parameter	WP
Air Voids	0.5
Density	0.5

Individual Pay Factors for each air voids ($PF_{air\ voids}$) and density ($PF_{density}$) will be determined. $PF_{air\ voids}$ will be multiplied by the total tonnage produced (i.e., from truck tickets), and $PF_{density}$ will be multiplied by the calculated tonnage used to pave the mainline only (i.e., traffic lane excluding shoulder) as determined according to Appendix A.

The department will pay incentive for air voids under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
460.2005	Incentive Density PWL HMA Pavement	DOL
460.2010	Incentive Air Voids HMA Pavement	DOL

The department will administer disincentives under the Disincentive Density HMA Pavement and the Disincentive Air Voids HMA Pavement administrative items.

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21. HMA Pavement Percent Within Limits (PWL) QMP.

A Description

This special provision describes percent within limits (PWL) pay determination, providing and maintaining a contractor Quality Control (QC) Program, department Quality Verification (QV) Program, required sampling and testing, dispute resolution, corrective action, pavement density, and payment for HMA pavements. Pay is determined by statistical analysis performed on contractor and department test results conducted according to the Quality Management Program (QMP) as specified in standard spec 460, except as modified below.

B Materials

Conform to the requirements of standard spec 450, 455, and 460 except where superseded by this special provision. The department will allow only one mix design for each HMA mixture type per layer required for the contract, unless approved by the engineer. The use of more than one mix design for each HMA pavement layer will require the contractor to construct a new test strip according to HMA Pavement

Percent Within Limits (PWL) QMP Test Strip Volumetrics and HMA Pavement Percent Within Limits (PWL) QMP Test Strip Density articles at no additional cost to the department.

Replace standard spec 460.2.8.2.1.3.1 Contracts with 5000 Tons of Mixture or Greater with the following:

460.2.8.2.1.3.1 Contracts under Percent within Limits

(1) Furnish and maintain a laboratory at the plant site fully equipped for performing contractor QC testing. Have the laboratory on-site and operational before beginning mixture production.

(2) Obtain random samples and perform tests according to this special provision and further defined in Appendix A: *Test Methods & Sampling for HMA PWL QMP Projects*. Obtain HMA mixture samples from trucks at the plant. For the sublot in which a QV sample is collected, discard the QC sample and test a split of the QV sample.

(3) Perform sampling from the truck box according to WTM R97 and four-part splitting of HMA samples according to WTM R47. Sample size must be adequate to run the appropriate required tests in addition to one set of duplicate tests that may be required for dispute resolution (i.e., retained). This requires sample sizes which yield four splits for all random sampling per sublot. All QC samples shall provide the following: QC, QV, Retained, and Extra. Take possession of the QC and Extra split samples intended for QC testing. The department will observe the splitting and take possession of the QV and Retained split samples intended for QV testing. Additional sampling details are found in Appendix A. Label samples according to WTM R97.

(4) Test the QC split sample using the test methods identified below at a frequency greater than or equal to that indicated. The Extra split sample shall be tested only when the Gmm and/or Gmb replicate tolerances are exceeded according to WTM T166 section 13.1.4 and WTM T209 section 14.1.1. When testing the Extra split sample, only the results from the test from which the tolerances were exceeded may replace the results from the QC split sample. The Rule of Retained according to CMM 836.1.2 applies.

- Blended aggregate gradations according to WTM T30.
- Asphalt content (AC) in percent.

  Determine AC using one of the following methods:

  - AC by ignition oven according to WTM T308. If the department is using an ignition oven to determine AC, conform to WTP H-003. If the department is not using an ignition oven to determine AC, IOCFs must still be reverified for any of the reasons listed in WTP H-003 Table 2 and conform to WTP H-003 section 3.
  - AC by chemical extraction according to AASHTO T 164 Method A or B.
  - AC by automated extraction according to WTM D8159.
- Bulk specific gravity (Gmb) of the compacted mixture according to WTM T166.
- Maximum specific gravity (Gmm) according to WTM T209.
- Air voids (V_a) by calculation according to WTM T269.
- Voids in Mineral Aggregate (VMA) by calculation according to WTM R35 section 9.2.

(5) Lot size shall consist of 3,750 tons with sublots of 750 tons. Test each design mixture at a frequency of 1 test per 750 tons of mixture type produced and placed as part of the contract. Add a random sample for any fraction of 750 tons at the end of production for a specific mixture design. Partial lots with less than three sublot tests will be included into the previous lot for data analysis and pay adjustment. Volumetric lots will include all tonnage of mixture type under specified bid item unless otherwise specified in the plan.

(6) Conduct field tensile strength ratio tests according to WTM T283 on each qualifying mixture according to CMM 836.6.14. Test each full 50,000-ton production increment, or fraction of an increment, after the first 5,000 tons of production. Perform required increment testing in the first week of production of that increment. If field tensile strength ratio values are below the spec limit, notify the engineer. The engineer and contractor will jointly determine a corrective action.

Delete standard spec 460.2.8.2.1.5 and 460.2.8.2.1.6.

Replace standard spec 460.2.8.2.1.7 Corrective Action with the following:

460.2.8.2.1.7 Corrective Action

(1) Material must conform to the following action and acceptance limits based on individual QC and QV test results (tolerances relative to the JMF used on the PWL Test Strip):

ITEM	ACTION LIMITS	ACCEPTANCE LIMITS
Percent passing given sieve:		
37.5-mm	+/- 8.0	
25.0-mm	+/- 8.0	
19.0-mm	+/- 7.5	
12.5-mm	+/- 7.5	
9.5-mm	+/- 7.5	
2.36-mm	+/- 7.0	
75-µm	+/- 3.0	
AC in percent	-0.3	-0.5
Va		- 1.5 & +2.0
VMA in percent[1]	- 0.5	-1.0

[1] VMA limits based on minimum requirement for mix design nominal maximum aggregate size in table 460-1.

(2) QV samples will be tested for Gmm, Gmb, and AC. Air voids and VMA will then be calculated using these test results.

(3) Notify the engineer if any individual test result falls outside the action limits, investigate the cause and take corrective action to return to within action limits. If two consecutive test results fall outside the action limits, stop production. Production may not resume until approved by the engineer. Additional QV samples may be collected upon resuming production, at the discretion of the engineer.

(4) For any additional non-random tests outside the random number testing conducted for volumetrics, the data collected will not be entered into PWL calculations. Additional QV tests must meet acceptance limits or be subject to production stop. If the department's non-random test does not conform to the acceptance limits, the retained sample will be tested by the BTS lab. If the BTS results also do not meet the acceptance limits, the material will be considered unacceptable as described in (5) below.

(5) Remove and replace unacceptable material at no additional expense to the department. Unacceptable material is defined as any individual QC or QV tests results outside the acceptance limits or a PWL value < 50. For AC in percent, unacceptable material is defined as any individual QV test result outside of the acceptance limit. The engineer may allow such material to remain in place with a price reduction. The department will pay for such HMA Pavement allowed to remain in place at 50 percent of the contract unit price.

Replace standard spec 460.2.8.3.1.2 Personnel Requirements with the following:

460.2.8.3.1.2 Personnel Requirements

(1) The department will provide at least one HTCP-certified Transportation Materials Sampling (TMS) Technician, to observe QV sampling of HMA mixtures.

(2) Under departmental observation, a contractor TMS technician shall collect and split samples.

(3) A department HTCP-certified Hot Mix Asphalt, Technician I, Production Tester (HMA-IPT) technician will ensure that all sampling is performed correctly and conduct testing, analyze test results, and report resulting data.

(4) The department will make an organizational chart available to the contractor before mixture production begins. The organizational chart will include names, telephone numbers, and current certifications of all QV testing personnel. The department will update the chart with appropriate changes, as they become effective.

Replace standard spec 460.2.8.3.1.4 Department Verification Testing Requirements with the following:

460.2.8.3.1.4 Department Verification Testing Requirements

(1) HTCP-certified department personnel will obtain QV random samples by directly supervising HTCP-certified contractor personnel sampling from trucks at the plant. Sample size must be adequate to run the appropriate required tests in addition to one set of duplicate tests that may be required for dispute resolution (i.e., retained). This requires sample sizes which yield four splits for all random sampling per sublot. All QV samples shall furnish the following: QC, QV, Retained, and Extra. The department will observe the splitting and take possession of the QV, Retained, and Extra split samples intended for QV testing. The department will take possession of retained samples accumulated to date each day QV samples are collected. The department will retain samples until surpassing the analysis window of up to 5 lots, as defined in standard spec 460.2.8.3.1.7(2) of this special provision. Additional sampling details are found in Appendix A.

(2) The department will verify product quality using the test methods specified here in standard spec 460.2.8.3.1.4(3). The department will identify test methods before construction starts and use only those methods during production of that material unless the engineer and contractor mutually agree otherwise.

(3) The department will test the QV split sample using the test methods identified below at the frequency indicated. The Extra split sample will be tested only when the Gmm and/or Gmb replicate tolerances are exceeded according to WTM T166 section 13.1.4 and WTM T209 section 14.1.1. When testing the Extra split sample, only the results from the test from which the tolerances were exceeded may replace the results from the QV split sample. The Rule of Retained according to CMM 836.1.2 applies. In the event that both the department and contractor's replicate tolerances are exceeded, perform dispute resolution according to 460.2.8.3.1.7(2).

- Bulk specific gravity (Gmb) of the compacted mixture according to WTM T166.
- Maximum specific gravity (Gmm) according to WTM T209.
- Air voids (Va) by calculation according to WTM T269.
- Voids in Mineral Aggregate (VMA) by calculation according to WTM R35 section 9.2.
- Asphalt Content (AC) in percent determined by ignition oven method according to WTM T308 and conforming to WTP H-003, chemical extraction according to AASHTO T 164 Method A or B, or automated extraction according to WTM D8159.

(4) The department will randomly test each design mixture at the minimum frequency of one test for each lot.

Delete standard spec 460.2.8.3.1.6.

Replace standard spec 460.2.8.3.1.7 Dispute Resolution with the following:

460.2.8.3.1.7 Data Analysis for Volumetrics

(1) Analysis of test data for pay determination will be contingent upon QC and QV test results. Statistical analysis will be conducted on Gmm and Gmb test results for calculation of Va. If either Gmm or Gmb analysis results in non-comparable data as described in 460.2.8.3.1.7(2), subsequent testing will be performed for both parameters as detailed in the following paragraph.

(2) The engineer, upon completion of the first 3 lots, will compare the variances (F-test) and the means (t-test) of the QV test results with the QC test results. Additional comparisons incorporating the first 3 lots of data will be performed following completion of the 4^{th} and 5^{th} lots (i.e., lots 1-3, 1-4, and 1-5). A rolling window of 5 lots will be used to conduct F & t comparison for the remainder of the contract (i.e., lots 2-6, then lots 3-7, etc.), reporting comparison results for each individual lot. Analysis will use a set alpha value of 0.025. If the F- and t-tests report comparable data, the QC and QV data sets are determined to be statistically similar and QC data will be used to calculate the Va used in PWL and pay adjustment calculations. If the F- and t-tests result in non-comparable data, proceed to the *dispute resolution* steps found below. Note: if both QC and QV Va PWL result in a pay adjustment of 102% or greater, dispute resolution testing will not be conducted. Dispute resolution via further investigation is as follows:

[1] The Retained portion of the split from the lot in the analysis window with a QV test result furthest from the QV mean (not necessarily the sublot identifying that variances or means do not compare) will be referee tested for Gmm, Gmb, and Asphalt Content by the bureau's AASHTO accredited

laboratory and certified personnel. All previous lots within the analysis window are subject to referee testing and regional lab testing as deemed necessary. Referee test results will replace the QV data of the sublot(s).

[2] Statistical analysis will be conducted with referee test results replacing QV results.

i. If the F- and t-tests indicate variances and means compare, no further testing is required for the lot and QC data will be used for PWL and pay factor/adjustment calculations.

ii. If the F- and t-tests indicate non-comparable variances or means, the Retained portion of the random QC sample will be tested for Gmm, Gmb, and Asphalt Content by the department's regional lab for the remaining 4 sublots of the lot which the F- and t-tests indicate non-comparable datasets. The department's regional lab and the referee test results will be used for PWL and pay factor/adjustment calculations. Upon the second instance of non-comparable variance or means and for every instance thereafter, the department will assess a pay reduction for the additional testing of the remaining 4 sublots at $2,000/lot under the HMA Regional Lab Testing administrative item.

[3] The contractor may choose to dispute the regional test results on a lot basis within 7 days after receiving the results from the region. In this event, the retained portion of each sublot will be referee tested by the department's AASHTO accredited laboratory and certified personnel. The referee Gmm and Gmb test results will supersede the regional lab results for the disputed lot.

i. If referee testing results in an increased calculated pay factor, the department will pay for the cost of the additional referee testing.

ii. If referee testing of a disputed lot results in an equal or lower calculated pay factor, the department will assess a pay reduction for the additional referee testing at $2,000/lot under the Referee Testing administrative item.

(3) The department will notify the contractor of the referee test results within 3 working days after receipt of the samples by the department's AASHTO accredited laboratory. The intent is to provide referee test results within 7 calendar days from completion of the lot.

(4) The department will determine mixture conformance and acceptability by analyzing referee test results, reviewing mixture data, and inspecting the completed pavement according to the standard spec, this special provision, and accompanying Appendix A.

(5) Unacceptable material (i.e., resulting in a PWL value less than 50 or individual QC or QV test results not meeting the Acceptance Requirements of 460.2.8.2.1.7 as modified herein) will be referee tested by the bureau's AASHTO accredited laboratory and certified personnel and those test results used for analysis. Such material may be subject to remove and replace, at the discretion of the engineer. If the engineer allows the material to remain in place, it will be paid at 50% of the HMA Pavement contract unit price. Replacement or pay adjustment will be conducted on a sublot basis. If an entire PWL sublot is removed and replaced, the test results of the newly placed material will replace the original data for the sublot. Any remove and replace shall be performed at no additional cost to the department. Testing of replaced material must include a minimum of one QV result. [Note: If the removed and replaced material does not result in replacement of original QV data, an additional QV test will be conducted and under such circumstances will be entered into the HMA PWL Production spreadsheet for data analysis and pay determination.] The quantity of material paid at 50% the contract unit price will be deducted from PWL pay adjustments, along with accompanying data of this material.

Delete standard spec 460.2.8.3.1.8 Corrective Action.

C Construction

Replace standard spec 460.3.3.2 Pavement Density Determination with the following:

460.3.3.2 Pavement Density Determination

(1) The engineer will determine the target maximum density using department procedures described in WTM T355 and CMM 815. The engineer will determine density as soon as practicable after compaction and before placement of subsequent layers or before opening to traffic.

(2) Do not re-roll compacted mixtures with deficient density test results. Do not operate continuously below the specified minimum density. Stop production, identify the source of the problem, and make corrections to produce work meeting the specification requirements.

(3) A lot is defined as 7,500 lane feet with sublots of 1,500 lane feet (excluding shoulder, even if paved integrally) and placed within a single layer for each location and target maximum density category indicated in table 460-3. Complete three tests randomly per sublot and the department will randomly conduct one QV test per sublot. A partial quantity less than 750 lane feet will be included with the previous sublot. Partial lots with less than three sublots will be included in the previous lot for data analysis/acceptance and pay, by the engineer. If density lots/sublots are determined prior to construction of the test strip, any random locations within the test strip shall be omitted. Exclusions such as shoulders and appurtenances shall be tested and recorded according to WTM T355 and CMM 815. However, all acceptance testing of shoulders and appurtenances will be conducted by the department, and average lot (daily) densities must conform to standard spec Table 460-3 or else be subject to disincentives according to 460.5.2.2(5) herein. No density incentive will be applied to shoulders or appurtenances. Offsets will not be applied to nuclear density gauge readings for shoulders or appurtenances. Unacceptable shoulder material will be handled according to standard spec 460.3.3.1 and CMM 815.11.

(4) The three QC locations per sublot represent the outside, middle, and inside of the paving lane. The QC density testing procedures are detailed in Appendix A.

(5) QV nuclear testing will consist of one randomly selected location per sublot. The QV density testing procedures will be the same as the QC procedure at each testing location and are also detailed in Appendix A.

(6) An HTCP-certified nuclear density technician (NUCDENSITYTEC-I) shall identify random locations and perform the testing for both the contractor and department. The responsible certified technician shall ensure that sample location and testing is performed correctly, analyze test results, and provide density results to the contractor weekly, or at the completion of each lot.

(7) For any additional tests outside the random number testing conducted for density, the data collected will not be entered into PWL calculations. However, additional QV testing must meet the tolerances for material conformance as specified in the standard specification and this special provision. If additional density data identifies unacceptable material, proceed as specified in CMM 815.11.

Replace standard spec 460.3.3.3 Waiving Density Testing with Acceptance of Density Data with the following:

460.3.3.3 Analysis of Density Data

(1) Analysis of test data for pay determination will be contingent upon test results from both the contractor (QC) and the department (QV).

(2) As random density locations are paved, the data will be recorded in the HMA PWL Production Spreadsheet for analysis in chronological order. The engineer, upon completion of the first 3 lots, will compare the variances (F-test) and the means (t-test) of the QV test results with the QC test results. A rolling window of 3 lots will be used to conduct F & t comparison for the remainder of the contract (i.e., lots 2-4, then lots 3-5, etc.), reporting comparison results for each individual lot. Analysis will use a set alpha value of 0.025.

i. If the F- and t-tests indicate variances and means compare, the QC and QV data sets are determined to be statistically similar and QC data will be used for PWL and pay adjustment calculations.

ii. If the F- and t-tests indicate variances or means do not compare, the QV data will be used for subsequent calculations.

(3) The department will determine mixture density conformance and acceptability by analyzing test results, reviewing mixture data, and inspecting the completed pavement according to standard spec, this special provision, and accompanying Appendix A.

(4) Density resulting in a PWL value less than 50 or not meeting the requirements of 460.3.3.1 (any individual density test result falling more than 3.0 percent below the minimum required target maximum density as specified in standard spec Table 460-3) is unacceptable and may be subject to remove and replace at no additional cost to the department, at the discretion of the engineer.

i. Replacement may be conducted on a sublot basis. If an entire PWL sublot is removed and replaced, the test results of the newly placed material will replace the original data for the sublot.

ii. Testing of replaced material must include a minimum of one QV result. [Note: If the removed and replaced material does not result in replacement of original QV data, an additional QV test

must be conducted and under such circumstances will be entered into the data analysis and pay determination.]

iii. If the engineer allows such material to remain in place, it will be paid for at 50% of the HMA Pavement contract unit price. The extent of unacceptable material will be addressed as specified in CMM 815.11. The quantity of material paid at 50% the contract unit price will be deducted from PWL pay adjustments, along with accompanying data of this material.

D Measurement

The department will measure the HMA Pavement bid items acceptably completed by the ton, as specified in standard spec 450.4 and as follows in standard spec 460.5, as modified in this special provision.

E Payment

Replace standard spec 460.5.2 HMA Pavement with the following:

460.5.2 HMA Pavement

460.5.2.1 General

(1) Payment for HMA Pavement Type LT, MT, and HT mixes is full compensation for providing HMA mixture designs; for preparing foundation; for furnishing, preparing, hauling, mixing, placing, and compacting mixture; for HMA PWL QMP testing and aggregate source testing; for warm mix asphalt additives or processes; for stabilizer, hydrated lime and liquid antistripping agent, if required; and for all materials including asphaltic materials.

(2) If provided for in the plan quantities, the department will pay for a leveling layer, placed to correct irregularities in an existing paved surface before overlaying, under the pertinent paving bid item. Absent a plan quantity, the department will pay for a leveling layer as extra work.

460.5.2.2 Calculation of Pay Adjustment for HMA Pavement using PWL

(1) Pay adjustments will be calculated using 65 dollars per ton of HMA pavement. The HMA PWL Production Spreadsheet, including data, will be made available to the contractor by the department as soon as practicable upon completion of each lot. The department will pay for measured quantities of mix based on this price multiplied by the following pay adjustment calculated according to the HMA PWL Production Spreadsheet:

PAY FACTOR FOR HMA PAVEMENT AIR VOIDS & DENSITY

PERCENT WITHIN LIMITS (PWL)	*PAYMENT FACTOR, PF (percent of $65/ton)*
$\geq$ 90 to 100	PF = ((PWL – 90) * 0.4) + 100
$\geq$ 50 to < 90	(PWL * 0.5) + 55
<50	50%[1]

where PF is calculated per air voids and density, denoted $PF_{air\ voids}$ & $PF_{density}$.

[1] Any material resulting in PWL value less than 50 shall be removed and replaced unless the engineer allows such material to remain in place. In the event the material remains in place, it will be paid at 50% of the contract unit price of HMA pavement.

(2) For air voids, PWL values will be calculated using lower and upper specification limits of 2.0 and 4.3 percent, respectively. Lower specification limits for density shall be according to standard spec Table 460-3.

(3) Pay adjustment will be determined on a lot basis and will be computed as shown in the following equation:

Pay Adjustment = (PF-100)/100 x (WP) x (tonnage) x ($65/ton)*

*Note: If Pay Factor = 50%, the contract unit price will be used in lieu of $65/ton and the weighted percentage (WP) will equal 1.0.

The following weighted percentage (WP) values will be used for the corresponding parameter:

Parameter	WP
Air Voids	0.5
Density	0.5

(4) Individual Pay Factors for each air voids ($PF_{air\ voids}$) and density ($PF_{density}$) will be determined. $PF_{air\ voids}$ will be multiplied by the total tonnage placed (i.e., from truck tickets), and $PF_{density}$ will be multiplied by the calculated tonnage used to pave the mainline only (i.e., travel lane excluding shoulder) as determined according to Appendix A.

(5) Pay adjustment for shoulders and appurtenances accepted by department testing will be determined on a lot basis. If the lot density is less than the specified minimum in table 460-3, the department will reduce pay based on the contract unit price for the HMA pavement bid item for that lot as follows:

DISINCENTIVE PAY REDUCTION FOR HMA PAVEMENT DENSITY

PERCENT LOT DENSITY BELOW SPECIFIED MINIMUM	PAYMENT FACTOR (percent of contract price)
From 0.5 to 1.0 inclusive	98
From 1.1 to 1.5 inclusive	95
From 1.6 to 2.0 inclusive	91
From 2.1 to 2.5 inclusive	85
From 2.6 to 3.0 inclusive	70
More than 3.0[1]	___

[1] Remove and replace the lot with a mixture at the specified density. When acceptably replaced, the department will pay for the replaced work at the contract unit price. Alternatively, the engineer may allow the nonconforming material to remain in place with a 50 percent payment factor.

(6) The department will pay incentive for air voids and density under the following bid items:

ITEM NUMBER	DESCRIPTION	UNIT
460.2005	Incentive Density PWL HMA Pavement	DOL
460.2010	Incentive Air Voids HMA Pavement	DOL

The department will administer disincentives under the Disincentive Density HMA Pavement and the Disincentive Air Voids HMA Pavement administrative items.

The department will administer a disincentive under the Disincentive HMA Binder Content administrative item for each individual QV test result indicating asphalt binder content below the Action Limit in 460.2.8.2.1.7 presented herein. The department will adjust pay per sublot of mix at 65 dollars per ton of HMA pavement multiplied by the following pay adjustment calculated according to the HMA PWL Production Spreadsheet:

AC Binder Relative to JMF	Pay Adjustment / Sublot
-0.4% to -0.5%	75%[1]
More than -0.5%	50%[1] [2]

[1] *A*ny material resulting in an asphalt binder content more than 0.3% below the JMF AC content will be referee tested by the department's AASHTO accredited laboratory and HTCP certified personnel using automated extraction according to automated extraction according to WTM D8159.

[2] Any material resulting in an asphalt binder content more than 0.5% below the JMF AC content shall be removed and replaced unless the engineer allows such material to remain in place. In the event the material remains in place, it will be paid at 50% of the contract unit price of HMA pavement.

Note: PWL value determination is further detailed in the PWL Production Spreadsheet Instructions located in the *Project Info & Instructions* tab of the HMA PWL Production spreadsheet.

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22. Appendix A.

Test Methods & Sampling for HMA PWL QMP Projects

The following procedures are included with the HMA Pavement Percent Within Limits (PWL) Quality Management Program (QMP) special provision:

- WisDOT Procedure for Nuclear Gauge/Core Correlation – Test Strip
- WisDOT Test Method for HMA PWL QMP Density Measurements for Main Production
- Sampling for WisDOT HMA PWL QMP
- Calculation of PWL Mainline Tonnage Example

WisDOT Procedure for Nuclear Gauge/Core Correlation – Test Strip

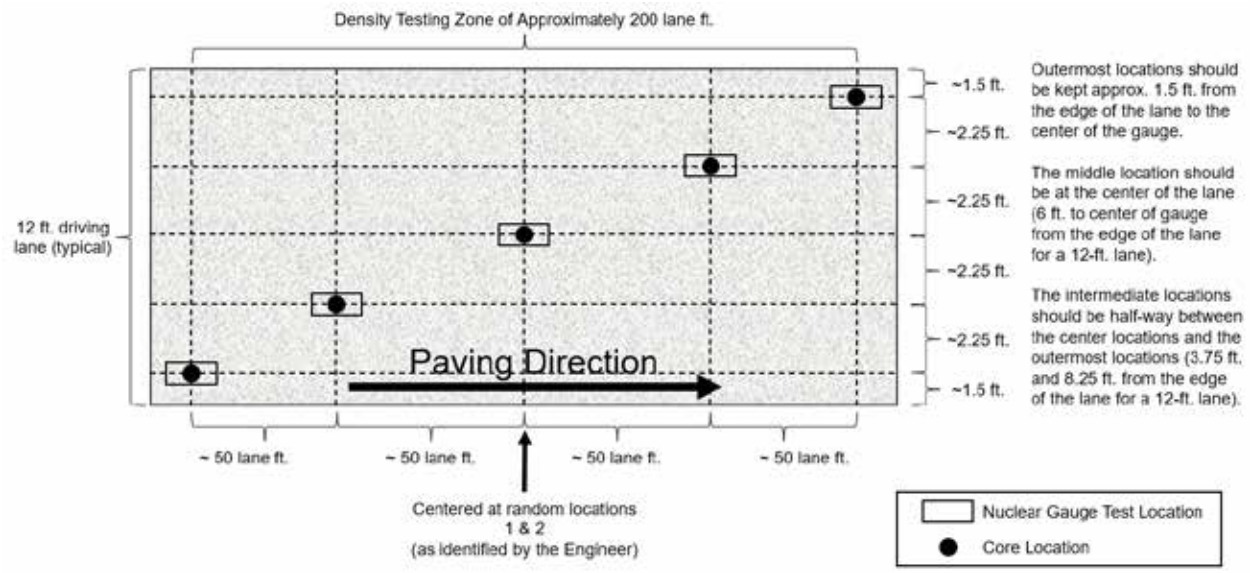


Figure 1: Nuclear/Core Correlation Location Layout

The engineer will identify two zones in which gauge/core correlation is to be performed. These two zones will be randomly selected within each *half* of the test strip length. (Note: Density zones shall not overlap and must have a minimum of 100 feet between the two zones; therefore, random numbers may be shifted (evenly) in order to meet these criteria.) Each zone shall consist of five locations across the mat as identified in Figure 1. The following shall be determined at each of the five locations within both zones:

- two one-minute nuclear density gauge readings for QC team*
- two one-minute nuclear density gauge readings for QV team*
- pavement core sample

*If the two readings exceed 1.0 pcf of one another, a third reading is conducted in the same orientation as the first reading. In this event, all three readings are averaged, the individual test reading of the three which falls farthest from the average value is discarded, and the average of the remaining two values is used to represent the location for the gauge.

The zones are supposed to be undisclosed to the contractor/roller operators. The engineer will not lay out density/core test sites until rolling is completed and the cold/finish roller is beyond the entirety of the zone. Sites are staggered across the 12-foot travel lane, and do not include shoulders. The outermost locations shall be 1.5-feet from the center of the gauge to the edge of the lane. [NOTE: This staggered layout is only applicable to the test strip. All mainline density locations after test strip shall have a longitudinal and transverse random number to determine the location as detailed in the *WisDOT Test Method for HMA PWL QMP Density Measurements for Main Production* section of this document.]

The nuclear site is the same for QC and QV readings for the test strip, i.e., the QC and QV teams are to take nuclear density gauge readings in the same footprint. Each of the QC and QV teams are to take a minimum of two one-minute readings per nuclear site, with the gauge rotated 180 degrees between readings, as seen here:

(a) (b)

Figure 2: Nuclear Gauge Orientation for (a) 1st One-Minute Reading and (b) 2nd One-Minute Reading

Take photos of each of the 10 core/gauge locations of the test strip. Include gauge readings (pcf) and a labelled core within the gauge footprint. If a third reading is needed, record and document all three readings. Only raw readings in pcf shall be written on the pavement during the test strip, with a corresponding gauge ID/SN (generalized as QC-1 through QV-2 in the following Figure) in the following format:

Figure 3: Layout of Raw Gauge Readings as Recorded on the Pavement

Take each core from the center of the gauge footprint and correlate each gauge with the laboratory-measured bulk specific gravities of the pavement cores. One core in good condition must be obtained from each of the 10 locations. If a core is damaged at the time of extracting from the pavement, a replacement core should be taken immediately adjacent to the damaged core, i.e., from the same footprint. If a core is damaged during transport, it shall be recorded as damaged and excluded from the correlation. Coring after traffic is on the pavement shall be avoided. The contractor shall be responsible for coring of the pavement. Coring and filling of core holes must be approved by the engineer. The QV team is responsible for the labeling and safe transport of the cores from the field to the QC laboratory. Conduct core density testing with a witness by department personnel. Dry the cores following testing. The department will take possession of cores following initial testing and is responsible for any verification testing.

Each core 100 or 150 mm (4 or 6 inches) in diameter will be taken at locations as identified in Figure 1. Each random core will be full thickness of the layer being placed. Thoroughly dry cores obtained from the mat according to WTM R79 prior to using specimens for in-place density determination according to WTM T166.

Cut cores by the next day after completion of the test strip, except if the next day is not a working day, then cut within 48 hours of placement. Cores are cut under department/project staff observation. Relabel each core immediately after extruding or ensure that labels applied to pavement prior to cutting remain legible. The layer interface should also be marked immediately following extrusion. Cores should be cut at this interface, using a wet saw, to allow for density measurement of only the most recently placed layer. Cores should be protected from excessive temperatures such as direct sunlight. Also, there should be department custody (both in transport and storage) for the cores until they are tested whether that be immediately after the test strip or the subsequent day if agreed upon between department and contractor. Use of concrete cylinder molds works well to transport cores. Cores should be placed upside down (flat surface to bottom of cylinder mold) in the molds, one core per mold, cylinder molds stored upright, and ideally transported in a cooler. Avoid any stacking of pavement cores.

Fill all core holes with non-shrink rapid-hardening grout, mortar, or concrete, or with HMA. When using grout, mortar, or concrete, remove all water from the core holes prior to filling. Mix the mortar or concrete in a separate container prior to placement in the hole. If HMA is used, fill all core holes with hot-mix matching the same day's production mix type at same day compaction temperature +/- 20 F. Dry the core holes and coat with tack before filling, filled with a top layer no thicker than 2.25 inches, lower layers

not to exceed 4 inches, and compacted with a Marshall hammer or similar tamping device using approximately 50 blows per layer. The finished surface shall be flush with the pavement surface. Any deviation in the surface of the filled core holes greater than ¼ inch at the time of final inspection will require removal of the fill material to the depth of the layer thickness and replacement.

WisDOT Test Method for HMA PWL QMP Density Measurements for Main Production

For nuclear density testing of the pavement beyond the test strip, QC tests shall be completed at three locations per sublot, with a sublot defined as 1,500 lane feet. The three locations shall represent the outside, middle, and inside of the paving lane (i.e., the lane width will be divided into thirds as shown by the dashed longitudinal lines in Figure 3 and random numbers shall be used to identify the specific transverse location within each third determined by WTM D3665). Longitudinal locations within each sublot shall be determined with 3 independent random numbers determined by WTM D3665. The PWL Density measurements do not include the shoulder and other appurtenances. Such areas are tested by the department and are not eligible for density incentive but are subject to disincentive according to 460.5.2.2(5) of the HMA PWL QMP article. Measure each location with two one-minute gauge readings oriented 180 degrees from one another, in the same footprint as detailed in Figure 2 above. Each location requires a minimum of two readings per gauge. The density gauge orientation for the first test shall be with the source rod towards the direction of paving. QV nuclear testing will consist of one randomly selected location per sublot. The QV is also comprised of two one-minute readings oriented 180 degrees from one another. For both QC and QV test locations, if the two readings exceed 1.0 pcf of one another, a third reading shall be conducted in the same orientation as the first reading. In this event, all three readings are averaged, the individual test reading of the three which falls farthest from the average value is discarded, and the average of the remaining two values is used to represent the location for the gauge. The sublot density testing layout is depicted in Figure 4, with QC test locations shown as solid black boxes and QV test locations shown as dashed red boxes.

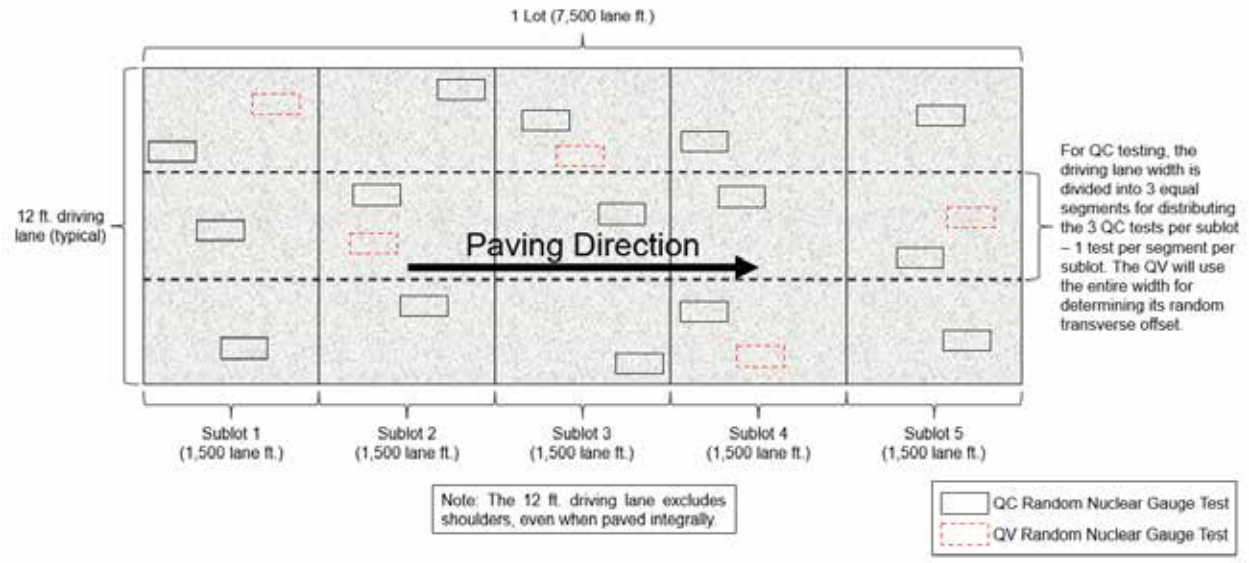


Figure 4: Example Layout of Mainline HMA Nuclear Density Tests

Raw nuclear density data must be shared by both parties at the end of each shift. Paving may be delayed if the raw data is not shared in a timely manner. QC and QV nuclear density gauge readings will be statistically analyzed according to Section 460.3.3.3 of the HMA PWL QMP article. (Note: For density data, if F- and t-tests compare, QC data will be used for the subsequent calculations of PWL value and pay determination. However, if an F- or t-test does not compare, the QV data will be used in subsequent calculations.)

Investigative cores will be allowed on the approaching side of traffic outside of the footprint locations. Results shall be shared with the department.

The QV density technician is expected to be onsite within 1 hour of the start of paving operations and should remain on-site until all paving is completed. Perform footprint testing as soon as both the QC and QV nuclear density technician are onsite and a minimum of once per day to ensure the gauges are not drifting apart during a project. Footprint testing compares the density readings of two gauges at the same testing location and can be done at any randomly selected location on the project. Both teams are encouraged to conduct footprint testing as often as they feel necessary. Footprint testing does not need to be performed at the same time. At project start-up, the QV should footprint the first 10 QC locations.

Individual density tests less than 0.5% above the lower limit should be communicated to the other party and be footprint tested. Each gauge conducts 2 to 3 1-minute tests according to WTM T355 and the final results from each gauge are compared for the location. If the difference between the QC and QV gauges exceeds 1.0 pcf (0.7 percent) for an average of 10 locations, investigate the cause, check gauge moisture and density standards and perform additional footprint testing. If the cause of the difference between gauge readings cannot be identified, the regional HMA Coordinator will consult the RSO, the regional PWL representative and the BTS HMA unit to determine necessary actions. If it is agreed that there is a gauge comparison issue, perform one of the following two options:

New Gauge Combination

- All 4 gauges used on the test strip must footprint 10 locations on the pavement. Pavement placed on a previous day may be used.
- The results of the footprint testing will be analyzed to see if a better combination of acceptable gauges is available.
- If a better combination is found, those gauges should be used moving forward.
- If a better combination cannot be found, a new gauge correlation must be performed. (see below)

Re-correlation of Gauges

- Follow all test strip procedures regarding correlating gauges except the following:
- The 10 locations can be QC or QV random locations.
- The locations used may have been paved on a previous day.
- Retesting with gauges must be done immediately prior to coring.
- New gauge offsets will be used for that day's paving and subsequent paving days. New gauge offsets will not be used to recalculate density results from prior days.

Density Dispute Resolution Procedure

Density results may be disputed by the contractor on a lot-by-lot basis if one of the following criteria is met:

- The lot average for either QC or QV is below the lower specification limit.
- The lot average for QC is different from the lot average for QV by more than 0.5%.
- The lot is in disincentive.

In lieu of using density gauges for acceptance of the lot, the lot will be cored in the QV locations. The results of the cores from the entire lot will be entered in the spreadsheet and used for payment. If the pay factor increases, the contractor will only receive the additional difference in payment for the disputed lot. If the pay factor does not increase, the department will assess the contractor $2,000 for the costs of additional testing.

Notify the engineer in writing before dispute resolution coring. Immediately prior to coring, QC and QV will test the locations with nuclear density gauges.

Under the direct observation of the engineer, cut 100 or 150 mm (4 or 6 inch) diameter cores. Cut cores by the next day after completion of the lot, except if the next day is not a working day, then cut within 48 hours of placement. Prepare cores and determine density according to WTM T166. Dry cores after testing. Fill core holes according to Appendix A and obtain engineer approval before opening to traffic. The department will maintain custody of cores throughout the entire sampling and testing process. The department will label cores, transport cores to testing facilities, witness testing, store dried cores, and provide subsequent verification testing. If a core is damaged at the time of coring, immediately take a replacement core 1 ft ahead of the existing testing location in the direction of traffic at the same offset as the damaged core. If a core is damaged during transport, record it as damaged and notify the engineer immediately.

Sampling for WisDOT HMA PWL QMP Production

Sampling of HMA mix for QC, QV, Retained, and Extra split samples shall conform to WTM R97 and WTM R47.

Sampling Hot Mix Asphalt

At the beginning of the contract, determine the anticipated tonnage to be produced. The frequency of sampling is 1 per 750 tons (sublot) for QC and Retained Samples and 1 per 3,750 tons (lot or 5 sublots) for QV as defined by the HMA PWL QMP article. A test sample is obtained randomly from each sublot. Each random sample shall be collected at the plant according to WTM R97. Submit the random numbers for all mix sampling to the department before production begins.

Example 1

Expected production for a contract is 12,400 tons. The number of required samples is determined based on this expected production (per HMA PWL QMP SPV) and is determined by the random sample calculation.

Sample 1 – from 50 to 750 tons
Sample 2 – from 751 to 1500 tons
Sample 3 – from 1501 to 2250 tons
Sample 4 – from 2251 to 3000 tons
Sample X – ……
Sample 16 – from 11,251 to 12,000 tons
Sample 17 – from 12,001 to 12,400 tons

The approximate location of each sample within the prescribed sublots is determined by selecting random numbers using WTM D3665. The random numbers selected are used in determining when a sample is to be taken and will be multiplied by the sublot tonnage. This number will then be added to the final tonnage of the previous sublot to yield the approximate cumulative tonnage of when each sample is to be taken.

To allow for plant start-up variability, the procedure calls for the first random sample to be taken at 50 tons or greater per production day (not intended to be taken in the first two truckloads). Random samples calculated for 0-50 ton shall be taken in the next truck (51-75 ton).

This procedure is to be used for any number of samples per contract.

If the production is less than the final randomly generated sample tonnage, then the random sample is to be collected from the remaining portion of that sublot of production. If the randomly generated sample is calculated to be within the first 0-50 tons of the subsequent day of production, it shall be taken in the next truck. Add a random sample for any fraction of 750 tons at the end of the contract. Lot size will consist of 3750 tons with sublots of 750 tons. Partial lots with less than three sublot tests will be included into the previous lot, by the engineer.

It is intended that the plant operator is not advised ahead of time when samples are to be taken.

If belt samples are used during troubleshooting, the blended aggregate will be obtained when the mixture production tonnage reaches approximately the sample tonnage. For plants with storage silos, this could be up to 60 minutes in advance of the mixture sample that's taken when the required tonnage is shipped from the plant.

Collect QC, QV, Retained, and Extra split samples for all test strip and production mixture testing using a four-part splitting procedure according to WTM R47.

Calculation of PWL Mainline Tonnage Example

A mill and overlay project in being constructed with a 12-foot travel lane and an integrally paved 3-foot shoulder. The layer thickness is 2 inches for the full width of paving. Calculate the tonnage in each sublot eligible for density incentive or disincentive.

Solution:

$$\frac{1500\ ft\ \times\ 12\ ft}{9\ sf/sy}\ \times\ \frac{2\ in\ \times 112\ lb/sy/in}{2000\ lb/ton}\ =\ 224\ tons$$

23. HMA Pavement Longitudinal Joint Density.

A Description

This special provision incorporates longitudinal joint density requirements into the contract and describes the data collection, acceptance, and procedure used for determination of pay adjustments for HMA pavement longitudinal joint density. Pay adjustments will be made on a linear foot basis, as applicable per pavement layer and paving lane. Applicable longitudinal joints are defined as those between any two or more traffic lanes including full-width passing lanes, turn lanes, or auxiliary lanes more than 1,500 lane feet, and those lanes must also include the 460.2005 Incentive Density PWL HMA Pavement bid item. This excludes any joint with one side defined as a shoulder and ramp lanes of any length. If echelon paving is required in the contract, the longitudinal joint density specification shall not apply for those joints. Longitudinal joints placed during a test strip will be tested for information only to help ensure the roller pattern will provide adequate longitudinal joint density during production. Longitudinal joint density test results collected during a test strip are not eligible for pay adjustment.

Pay is determined according to standard spec 460, HMA Pavement Percent Within Limits QMP special provisions, and as modified within.

B Materials

Compact all applicable HMA longitudinal joints to the appropriate density based on the layer, confinement, and mixture type shown in Table B-1.

TABLE B-1 MINIMUM REQUIRED LONGITUDINAL JOINT DENSITY

Layer	Percent of Target Maximum Density			
	Unconfined		Confined	
	LT and MT	HT	LT and MT	HT
Lower (on crushed/recycled base)	88	89	89.5	90.5
Lower (on Concrete/HMA)	90[1]	90[1]	91.5[1]	91.5[1]
Upper	90	90	91.5	91.5

[1] Minimum reduced by 1.0 percent for a 1.25-inch-thick No. 5 mix lower layer constructed on a paved or milled surface.

C Construction

Add the following to standard spec 460.3.3.2:

(5) Establish companion QC and QV density locations for each applicable joint. Each companion location shares longitudinal stationing with the respective QC or QV mainline density location within each sublot and is located transversely with the center of the gauge 6-inches from the final joint edge of the paving area. Sublot and lot numbering remains the same as mainline densities, however, in addition to conventional naming, joint identification must clearly indicate “M” for inside/median side of lane or “O” for outside shoulder side of lane, as well as “U” for an unconfined joint or “C” for a confined joint (e.g., XXXXX-MC or XXXXX-OU).

(6) Each joint shall be measured, reported, and accepted under methods, testing times, and procedures consistent with the program employed for mainline density, i.e., PWL.

(7) For single nuclear density test results greater than 3.0% below specified minimums per Table B-1 herein, perform the following:

a) Testing at 50-foot increments both ahead and behind the unacceptable site.

b) Continued 50-foot incremental testing until test values indicate higher than or equal to -3.0 percent from target joint density.

c) Materials within the incremental testing indicating lower than -3.0 percent from target joint density are defined as unacceptable and will be handled with remedial action as defined in the payment section of this document.

d) The remaining sublot average (exclusive of unacceptable material) will be determined by the first forward and backward 50-foot incremental tests that reach the criteria of higher than or equal to -3.0 percent from target joint density.

Note: If the 50-foot testing extends into a previously accepted sublot, remedial action is required up to and inclusive of such material; however, the results of remedial action must not be used to recalculate the previously accepted sublot density. When this occurs, the lane feet of any unacceptable material will be deducted from the sublot in which it is located, and the previously accepted sublot density will be used to calculate pay for the remainder of the sublot.

(8) Joint density measurements shall be kept separate from all other density measurements and entered as an individual data set into Atwood Systems.

(9) Placement and removal of excess material outside of the final joint edge, to increase joint density at the longitudinal joint nuclear testing location, shall be done at the contractor's discretion and cost. This excess material and related labor will be considered waste and will not be paid for by the department. Joints with excess material placed outside of the final joint edge to increase joint density or where a notched wedge is used will be considered unconfined joints.

(10) When not required by the contract, echelon paving may be performed at the contractor's discretion to increase longitudinal joint density and still remain eligible to earn incentive. The additional costs incurred related to echelon paving will not be paid for by the department. If lanes are paved in echelon, the contractor may choose to use a longitudinal vertical joint or notched wedge longitudinal joint as described in SDD 13c19 HMA Longitudinal Joints. Lanes paved in echelon shall be considered confined on both sides of the joint regardless of the selected joint design. The joint between echelon paved lanes shall be placed at the centerline or along lane lines.

(11) When performing inlay paving below the elevation of the adjacent lane, the longitudinal joint along the adjacent lane to be paved shall be considered unconfined.

D Measurement

(1) The department will measure each side of applicable longitudinal joints, as defined in Section A of this special provision, by the linear foot of pavement, acceptably placed. Measurement will be conducted independently for the inside or median side and for the outside or shoulder side of paving lanes with two applicable longitudinal joints. Each paving layer will be measured independently at the time the mat is placed.

E Payment

Add the following as 460.5.2.4 Pay Adjustment for HMA Pavement Longitudinal Joint Density:

(1) The department will administer longitudinal joint density adjustments under the Incentive Density HMA Pavement Longitudinal Joints and Disincentive Density HMA Pavement Longitudinal Joints items. The department will adjust pay based on density relative to the specified targets in Section B of this special provision, and linear foot of the HMA Pavement bid item for that sublot as follows:

PAY ADJUSTMENT FOR HMA PAVEMENT LONGITUDINAL JOINT DENSITY

PERCENT SUBLOT DENSITY ABOVE/BELOW SPECIFIED MINIMUM	PAY ADJUSTMENT PER LINEAR FOOT
Equal to or greater than +1.0 confined, +2.0 unconfined	$0.20
From 0.0 to +0.9 confined, 0.0 to +1.9 unconfined	$0
From -0.1 to -1.0	$(0.20)
From -1.1 to -2.0	$(0.40)
From -2.1 to -3.0	$(0.80)
More than -3.0	*REMEDIAL ACTION* [1]

[1] Remedial action must be approved by the engineer and agreed upon at the time of the pre-pave meeting and may include partial sublots as determined and defined in 460.3.3.2(7) of this document. If unacceptable material is removed and replaced per guidance by the engineer, the removal and replacement will be for the full lane width of the side of which the joint was constructed with unacceptable material.

(2) The department will not assess joint density disincentives for pavement placed in cold weather because of a department-caused delay as specified in standard spec 450.5.2(3).

(3) The department will not pay incentive on the longitudinal joint density if the traffic lane is in disincentive A disincentive may be applied for each mainline lane and all joint densities if both qualify for a pay reduction.

(4) Inlay paving operations will limit payment for additional material to 2 inches wider than the final paving lane width at the centerline.

The department will pay incentive for longitudinal joint density under the following bid items:

ITEM NUMBER	DESCRIPTION	UNIT
460.2007	Incentive Density HMA Pavement Longitudinal Joints	DOL

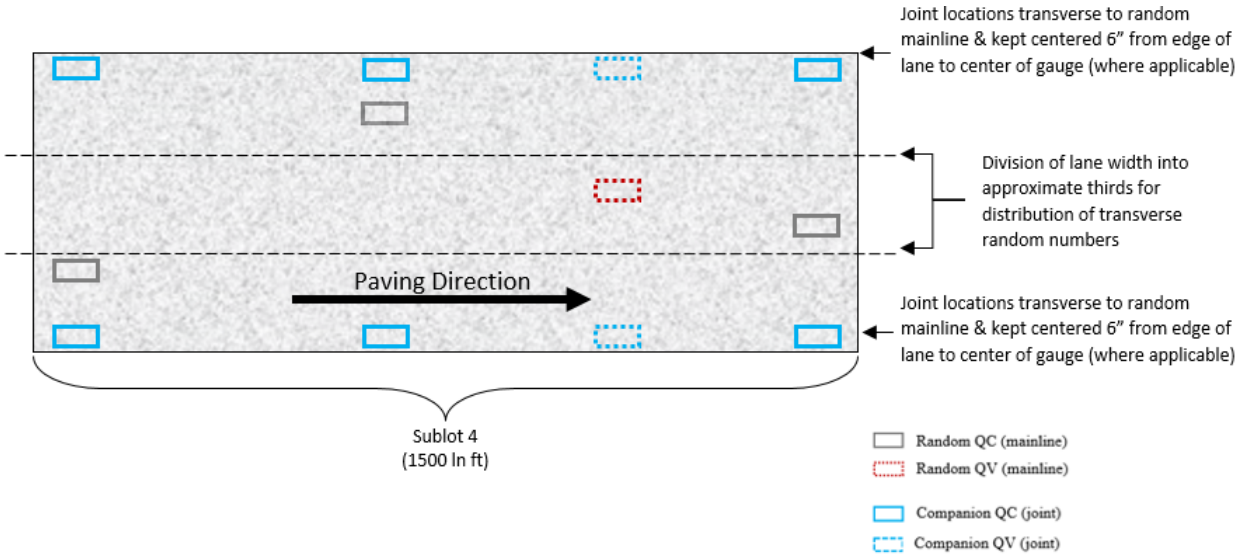
The department will administer disincentives under the Disincentive Density HMA Pavement Longitudinal Joints administrative item.

Appendix

WisDOT Longitudinal Joint – Nuclear Gauge Density Layout

Each QC and QV density location must have a companion density location at any applicable joint. This companion location must share longitudinal stationing with each QC or QV density location and be located transversely with the center of the gauge 6-inches from the final joint edge of the paving area.

For HMA Pavement Percent Within Limits QMP projects, this appears as follows:



Further Explanation of *PAY ADJUSTMENT FOR HMA PAVEMENT LONGITUDINAL JOINT DENSITY* Table

	Confined				
	Lower Layer (On Base)		Upper Layer		
	LT/MT	HT	LT/MT	HT	Pay Adjust
Mainline Target (SS 460-3)	91.0	92.0	93.0	93.0	-
Confined Target (mainline - 1.5)	89.5	90.5	91.5	91.5	-
Equal to or greater than +1.0	≥ 90.5	≥ 91.5	≥ 92.5	≥ 92.5	$0.20
From 0.0 to +0.9	90.4 - 89.5	91.4 - 90.5	92.4 - 91.5	92.4 - 91.5	$0
From -0.1 to -1.0	89.4 - 88.5	90.4 - 89.5	91.4 - 90.5	91.4 - 90.5	($0.20)
From -1.1 to -2.0	88.4 - 87.5	89.4 - 88.5	90.4 - 89.5	90.4 - 89.5	($0.40)
From -2.1 to -3.0	87.4 - 86.5	88.4 - 87.5	89.4 - 88.5	89.4 - 88.5	($0.80)
More than -3.0	< 86.5	< 87.5	< 88.5	< 88.5	REMEDIAL ACTION

	Unconfined				
	Lower Layer (On Base)		Upper Layer		
	LT/MT	HT	LT/MT	HT	Pay Adjust
Mainline Target (SS 460-3)	91.0	92.0	93.0	93.0	-
Unconfined Target (Mainline -3.0)	88.0	89.0	90.0	90.0	-
Equal to or greater than +2.0	≥ 90.0	≥ 91.0	≥ 92.0	≥ 92.0	$0.20
From 0.0 to +1.9	89.9 - 88.0	90.9 - 89.0	91.9 - 90.0	91.9 - 90.0	$0
From -0.1 to -1.0	87.9 - 87.0	88.9 - 88.0	89.9 - 89.0	89.9 - 89.0	($0.20)
From -1.1 to -2.0	86.9 - 86.0	87.9 - 87.0	88.9 - 88.0	88.9 - 88.0	($0.40)
From -2.1 to -3.0	85.9 - 85.0	86.9 - 86.0	87.9 - 87.0	87.9 - 87.0	($0.80)
More than -3.0	< 85.0	< 86.0	< 87.0	< 87.0	REMEDIAL ACTION

stp-460-075 (20240105)

24. Manhole, Inlet, and Catch Basin Adjusting Rings.

Add to standard specification 611.3:

When using concrete adjustment rings:

The height of the grade ring shall equal (to within an inch and not to exceed) the height of the adjustment to minimize the number of joints in the chimney section. Multiple grade rings will not be allowed where one will suffice. Concrete grade rings less than 2-inches in thickness are not allowed. Concrete rings shall be of a size that closely matches the inside and outside dimensions of the structures.

When using rubber adjustment rings:

Rubber grade rings shall be in a flat and/or tapered configuration of a size to closely match the inside and outside dimensions of circular or rectangular structures, installed individually or in combination not to exceed 3-inches in height. If more than 3-inches of adjustment is necessary, use one concrete ring 3-inches or more in height with rubber rings on top of the concrete ring. If multiple rubber adjustment rings are necessary, a maximum of two adjustment rings can be used. Rubber grade rings shall be tapered to match the cross slope and profile of the roadway.

ner-611-050 (20190722)

25. Traffic Control.

Perform this work conforming to standard spec 643, and as the plans show, or as the engineer approves, except as follows.

Submit to engineer for approval a detailed traffic control plan for any changes to the proposed traffic control detail as the plans show. Submit this plan ten (10) days before the preconstruction conference.

The turning of traffic control devices when not in use to obscure the message will not be allowed under this contract.

Obtain prior approval from the engineer for the location of egress and ingress for construction vehicles to prosecute the work.

Conduct operations in such a manner that causes the least interference and inconvenience to the free flow of vehicles on the roadways. This includes the following:

Do not park or store any vehicle, piece of equipment, or construction materials on the right of way, unless otherwise specified in the traffic control article or without approval of the engineer.

All construction vehicles and equipment entering or leaving live traffic lanes shall yield to through traffic.

Equip all vehicles and equipment entering or leaving the live traffic lanes with a hazard identification beam (flashing yellow signal) capable of being visible on a sunny day when viewed without the sun

directly on or behind the device from a distance of 1000 feet. Activate the beam when merging into or exiting a live traffic lane.

Do not disturb, remove or obliterate any traffic control signs, advisory signs, shoulder delineators or beam guard in place along the traveled roadways without the approval of the engineer. Immediately repair or replace any damage done to the above during the construction operations at contractor expense.

The traffic requirements are subject to change at the direction of the engineer in the event of an emergency.

ner-643-065 (20190410)

26. Temporary Audible Message Devices, Item 644.1900.S.

A Description

This special provision describes providing, maintaining, and removing temporary audible message devices. These devices are used on temporary pedestrian facilities to guide individuals with sight disabilities.

B Materials

Furnish temporary audible message devices from the approved products lists.

C Construction

Provide and maintain temporary audible message device. Maintain and repair devices within two hours of being notified by the project engineer of an issue.

Contractors record messages as approved by the engineer.

Mount temporary audible message devices on drums, temporary sign supports, or other locations approved by the engineer. Locate motion detection areas that will be effective in activating the device to operate properly. Avoid locating motion detection areas that will cause activation by trees, traffic, or other known regular activity.

Move and adjust devices after disruptions by the work or the public.

Maintain devices in a working condition and replace batteries as needed. Replace any devices that are not working properly within 2 hours of being notified of an issue.

Use tamper-proof hardware for mounting.

D Measurement

The department will measure temporary audible message devices by the day, 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
644.1900.S	Temporary Audible Message Devices	DAY

Payment is full compensation for providing, maintaining, and removing temporary audible message device.

The department will not pay for devices that are inoperable.

stp-644-190 (20250108)

27. Removing Raised Pavement Markers without Overlay, Item SPV.0060.01.

A Description

This special provision describes removing existing castings and filling original saw cut areas as the plans show or engineer directs.

B Materials

B.1 Concrete Patch Material

Use concrete patch material tested as Rapid Set Concrete Patching Materials that conforms to ASTM C928 with the following deletion or addition: Delete sections 1.1.1, 1.1.2, and 1.3. Only use material that: (1) provides an opening to traffic compressive strength of 3000 psi in three hours per ASTM C39; (2) exhibits expansion of less than 0.10 percent per ASTM C531; Section 1.3 of the ASTM C531 should be modified to say this test method is limited to materials with aggregate size of 3/8 inch or less; and (3) has a calculated durability factor of 90.0 percent minimum at the end of 300 freeze-thaw cycles per ASTM C666, procedure A (water shall contain 5% sodium chloride by mass). Before use, provide a certification of compliance with the above requirements as prescribed by standard spec 106.3.3. Patching material shall be extended with a clean natural aggregate. Aggregate extender shall conform to the requirements prescribed in standard spec 501.2.5.4 except that the size requirements are as follows:

Minimum of 95% passing the 3/8 (9.5 mm) sieve

Maximum of 25% passing the No. 4 (4.75 mm) sieve

B.2 Curing Agent

Provide a concrete curing agent that is a resin of 100 percent poly-alpha-methylstyrene type curing compound meeting ASTM C309, Type 2, Class B specifications and conforming to all requirements listed in the following table:

Properties	Minimum	Maximum
Total Solids, % by weight of compound	42	
Reflectance in 72 hours (ASTM E1347)	65	
Loss of Water, kg/m^2 in 24 hours (ASTM C156)		0.15
Loss of Water, kg/m^2 in 72 hours (ASTM C156)		0.40
Settling Test, ml/100 ml in 72 hours[1]		2
V.O.C. Content, g/L		350
Infrared Spectrum, Vehicle[2]	100% alpha-methylstryrene	

Shelf life of the product shall be 6 months from date of manufacture. The product may be re-tested by the department's Materials Testing Lab and re-approved, if the physical and chemical properties have not changed, for an additional six months. However, the maximum shelf life shall not exceed one year from manufacture date.

C Construction

C.1 Removing Raised Pavement Marker

Sand blast or use other approved method to completely remove the raised pavement marker, epoxy and other construction material from the existing slot.

Remove pavement marker and any epoxy or other construction material from the existing saw cut area.

C.2 Placing Patch Mix

Immediately before placing the patch mix, moisten existing concrete surfaces in the slot or prepare the existing concrete surfaces as recommended by the manufacturer, or both. Before patching material is placed, remove all excess water in the slot.

With a portable or mobile mixer, mix patching material according to the manufacturer's recommendations.

Place the patching material into the slot and vibrate the patching material. The diameter of the vibrator head shall not exceed 1 1/4-inches.

When the ambient temperature is below 50 degrees Fahrenheit (10 degrees Celsius), placement of patching material will require prior approval by the engineer.

If the pavement is not going to be diamond ground, strike-off the surface of the filled area flush with the adjacent concrete. If the pavement is to be diamond ground after completion of the dowel bar retrofit operation, it is acceptable to leave the slot slightly overfilled.

Before placing any vehicle load on the patched area, cure patching material by the impervious coating method for a minimum of three hours. The coverage rate for the curing agent will be at a rate of 100

square feet per gallon. During this three-hour initial curing period, covering may be needed to prevent excess thermal stress in the patch material.

When the ambient temperature is below 50 degrees Fahrenheit (10 degrees C), the engineer may postpone opening to vehicular loads or require covering during the initial curing period, or both.

Remove existing pavement marker casting. Clean, dry and epoxy existing saw cut area.

D Measurement

The department will measure Removing Raised Pavement Markers without Overlay by the individual casting acceptably removed and filled with concrete patch material.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.01	Removing Raised Pavement Markers without Overlay	EACH

Payment for Removing Raised Pavement Markers is full compensation for removing, hauling, and disposing of materials; cleaning existing saw cut areas; and for furnishing and placing concrete patch material.

ner-646-035 (20171213)

28. Removing Raised Pavement Markers with Overlay, Item SPV.0060.02.

A Description

This special provision describes removing existing castings and filling original saw cut areas as the plans show or the engineer directs.

B (Vacant)

C Construction

Remove existing pavement marker casting. Clean, dry and fill existing saw cut area with either HMA Pavement 4 MT 58-28 S or epoxy, which is to be 2-part conforming to AASHTO M237, type IV. Use epoxy formulated to hard cure in 30-45 minutes at the field temperature. Mix the epoxy with an automatic mixer, to a uniform color before dispensing. Do not place epoxy when the pavement surface temperature or the ambient air temperature is less the 40 degrees Fahrenheit. Place a traffic cone over each area until the epoxy is cured.

D Measurement

The department will measure Removing Raised Pavement Markers by the individual casting acceptably removed and filled with HMA pavement or epoxy.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.02	Removing Raised Pavement Markers with Overlay	EACH

Payment for Removing Raised Pavement Markers is full compensation for removing, hauling, disposing of materials, and backfilling; cleaning and drying existing saw cut areas; and for furnishing and placing asphalt pavement or epoxy material.

ner-646-030 (20250825)

29. Adjusting Sanitary Manhole Covers, Item SPV.0060.03.

A Description

This special provision describes adjusting sanitary manhole covers.

B Materials

Use materials conforming to standard spec 611.2.

C Construction

Use construction methods conforming to standard spec 611.3 and as follows:

Remove and reinstall existing chimney seals, as necessary to adjust manhole cover. If existing chimney seal is damaged, coordinate with Harrison Utilities and contact Tom Van Zeeland at 920-850-6864 to obtain a new chimney seal.

D Measurement

The department will measure Adjusting Sanitary Manhole Covers as each individual unit acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.03	Adjusting Sanitary Manhole Covers	EACH

Payment is full compensation for providing all required materials, exclusive of frames, grates, or lids; and for removing, reinstalling and adjusting the covers, including removing and reinstalling the existing chimney seal.

~~ner-900-005 (20190718)~~

30. Salvage and Reinstall Apron Endwall for Pipe Underdrain, Item SPV.0060.04.

A Description

This special provision describes removing the underdrain outfall endwall, storing the endwall, temporarily capping the outfall pipe, extending the outfall pipe, and re-installing the endwall to match finished grade.

B Materials

Reinstall existing underdrain endwall. Furnish and use unperforated pipe underdrain and fittings conforming to standard spec 612.

C Construction

Salvage the existing underdrain endwall, extend the unperforated pipe underdrain, and re-install the endwall according to standard spec 612.

D Measurement

The department will measure Salvage and Reinstall Apron Endwall for Pipe Underdrain at each endwall location, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.05	Salvage and Reinstall Apron Endwall for Pipe Underdrain	EACH

Payment is full compensation for removing existing underdrain endwall; for storing and protecting the salvaged endwall; for temporarily capping the existing outfall pipe; for providing the unperforated pipe underdrain and fittings; for re-installing the salvaged endwall; for excavating and backfilling; and for disposing of all surplus materials.

31. Remove Traffic Signals (USH 10/STH 114/Oneida Street), Item SPV.0060.05; Remove Traffic Signal (USH 10/STH 114/CTH LP), Item SPV.0060.06.

A Description

This work shall consist of removing the existing traffic signal equipment from the intersection of USH 10/STH 114/Oneida Street and USH 10/STH 114/County LP in accordance with the requirements of standard specs 657 and 658, standard detail drawings, and as hereinafter provided.

B (Vacant)

C (Vacant)

D Measurement

The department will measure Remove Traffic Signal bid items by intersection location acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.06	Remove Traffic Signal (USH 10/STH 114/Oneida Street)	EACH
SPV.0060.07	Remove Traffic Signal (USH 10/STH 114/CTH LP)	EACH

Payment is full compensation for removal and disposal of the signals.

32. Concrete Joint and Crack Cleaning and Repair, Item SPV.0090.01.

A Description

This special provision describes removing loose or spalled concrete and asphalt patching, cleaning joints and cracks, and filling with asphaltic surface, prior to installing an asphaltic overlay.

B Materials

Furnish asphaltic mixture as specified for asphaltic surface under standard spec 465.2.

Furnish tack coat as specified for tack coat under standard spec 455.2.5.

C Construction

Prepare the existing concrete per standard spec 211.3.5.4 and as indicated in the plans. Blow out repair areas with 80 psi minimum compressed air immediately prior to applying tack coat. Compact the asphalt mixture per standard spec 450.3.2.6.1

D Measurement

The department will measure Concrete Joint and Crack Cleaning and Repair by the linear foot, per lane, acceptably completed. Lane includes adjacent gutters and concrete shoulders less than or equal to 5-foot in width.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.01	Concrete Joint and Crack Cleaning and Repair	LF

Payment is full compensation for removing and disposing of all loose or spalled concrete and asphalt patching; for cleaning joints and cracks; for furnishing asphaltic materials for filling joints and cracks including asphaltic surface; and tack coat.

ner-415-030 (20220923)

33. Ditch Cleaning, Item SPV.0090.02.

A Description

This special provision describes minor grading and cleaning of existing ditch flow lines to restore the ditch cross section and allow conveyance of storm water along the right of way. Conform to section 205 of the standard specifications and as hereinafter provided.

B Materials

Furnish new topsoil per standard spec 625.2 along the cleaned and restored ditch.

C Construction

Grade and shape the ditch flow line as necessary to restore and allow unimpeded flow at the location shown in the plan details. Do not excavate deeper than one foot nor disturb an overall lateral width

greater than 15 feet. Grade and trim the lateral areas of disturbance to produce uniform side slope surfaces. Dispose of surplus material in accordance with standard spec 205.3.12.

D Measurement

The department will measure Ditch Cleaning, completed in accordance with the contract, by the Linear Foot of ditch flow line 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.0090.02	Ditch Cleaning	LF

Payment is full compensation for grading, shaping, trimming, and fully cleaning and restoring the ditch flow line; for disposing of excess material.

The department will pay separately for finishing and erosion control items.

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

Table of Contents

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

104.6.1.2.3 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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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

(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.

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 Bureau of Structures (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 BOS 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.

621 Landmark Reference Monuments

Remove Standard Specification 621 (Landmark Reference Monuments) effective with the November 2025 letting. Refer to updated information in 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 Bureau of Traffic Operations (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, replace paragraph (3) and add paragraph (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.

(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.

646.3.1.6.2 Retroreflectivity

Replace paragraph (1) with the following effective with the November 2025 letting.

(1) For grooved-in 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

646.3.2.4 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.

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.

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

MODIFICATION TYPE		LEVEL I	LEVEL II	NEW MIX DESIGN DURING PROJECT
Change in:	Water source	X		
	Cement source, type, or brand			X
	Total cementitious [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	
	Chemical admixture manufacturer or product name [2]			X
Removal of:	SCM			X
	Type B or Type D chemical admixture	X [3]	X [4]	
Addition of:	Non-fading, color pigment	X		
	Type B or Type D chemical admixture	X [3]	X [4]	
	New SCM			X

[1] If not HES/SHES concrete.

[2] Not including Type B or Type D chemical admixture.

[3] Furnished from the APL.

[4] Not furnished from the APL.

TABLE 710-3 MIX DESIGN MODIFICATION DOCUMENTATION

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 [1]	X		
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	X
New maturity curve	X [2]	X	X
New lot/sublot layout [3]		X [4]	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.

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

CONCRETE CLASSIFICATION	PRE-PLACEMENT TESTING	PLACEMENT TESTING	
Class I: Pavement	One pre-placement test per aggregate source	Hand Placement: ≤ 250 CY > 250 CY Slip Formed Placement [1] ≤ 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		≤ 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

LIMITS (F) [1]	PERCENT PRICE REDUCTION OF THE CONTRACT UNIT PRICE
<= 5	10
> 5	25

[1] Applies only for Concrete Structures and Cast-in-Place Barrier.

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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

600 Bid Items

Add the following bid items 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 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: 20260210024 **Project(s):** 1500-49-60, 1500-49-61

Federal ID(s): N/A, 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	203.0100 Removing Small Pipe Culverts	1.000 EACH	_____.____	_____.____
0004	204.0100 Removing Concrete Pavement	1,025.000 SY	_____.____	_____.____
0006	204.0105 Removing Concrete Pavement Butt Joints	520.000 SY	_____.____	_____.____
0008	204.0110 Removing Asphaltic Surface	3,667.000 SY	_____.____	_____.____
0010	204.0115 Removing Asphaltic Surface Butt Joints	445.000 SY	_____.____	_____.____
0012	204.0120 Removing Asphaltic Surface Milling	30,635.000 SY	_____.____	_____.____
0014	204.0150 Removing Curb & Gutter	1,595.000 LF	_____.____	_____.____
0016	204.0155 Removing Concrete Sidewalk	90.000 SY	_____.____	_____.____
0018	204.0165 Removing Guardrail	1,405.000 LF	_____.____	_____.____
0020	204.0180 Removing Delineators and Markers	3.000 EACH	_____.____	_____.____
0022	204.9060.S Removing (item description) 01. Apron Endwalls	3.000 EACH	_____.____	_____.____
0024	211.0101 Prepare Foundation for Asphaltic Paving (project) 01. 1500-49-60	1.000 EACH	_____.____	_____.____
0026	211.0101 Prepare Foundation for Asphaltic Paving (project) 02. 1500-49-61	1.000 EACH	_____.____	_____.____
0028	211.0400 Prepare Foundation for Asphaltic Shoulders	5.000 STA	_____.____	_____.____

Proposal ID: 20260210024 **Project(s):** 1500-49-60, 1500-49-61

Federal ID(s): N/A, 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
0030	213.0100 Finishing Roadway (project) 01. 1500-49-60	1.000 EACH	_____.____	_____.____
0032	213.0100 Finishing Roadway (project) 02. 1500-49-61	1.000 EACH	_____.____	_____.____
0034	305.0110 Base Aggregate Dense 3/4-Inch	3,210.000 TON	_____.____	_____.____
0036	305.0120 Base Aggregate Dense 1 1/4-Inch	1,339.000 TON	_____.____	_____.____
0038	390.0100 Removing Pavement for Base Patching	670.000 CY	_____.____	_____.____
0040	390.0305 Base Patching Concrete HES	595.000 CY	_____.____	_____.____
0042	390.0405 Base Patching Concrete SHES	75.000 CY	_____.____	_____.____
0044	405.0100 Coloring Concrete WisDOT Red	6.000 CY	_____.____	_____.____
0046	415.0090 Concrete Pavement 9-Inch	300.000 SY	_____.____	_____.____
0048	415.0120 Concrete Pavement 12-Inch	18.000 SY	_____.____	_____.____
0050	416.0610 Drilled Tie Bars	1,690.000 EACH	_____.____	_____.____
0052	416.0620 Drilled Dowel Bars	5,095.000 EACH	_____.____	_____.____
0054	416.1710 Concrete Pavement Repair	585.000 SY	_____.____	_____.____
0056	416.1720 Concrete Pavement Replacement	2,050.000 SY	_____.____	_____.____
0058	420.1000 Continuous Diamond Grinding Concrete Pavement	58,780.000 SY	_____.____	_____.____

Proposal ID: 20260210024 **Project(s):** 1500-49-60, 1500-49-61

Federal ID(s): N/A, 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
0060	450.4000 HMA Cold Weather Paving	1,555.000 TON	_____.____	_____.____
0062	455.0605 Tack Coat	9,085.000 GAL	_____.____	_____.____
0064	460.0105.S HMA Percent Within Limits (PWL) Test Strip Volumetrics	1.000 EACH	_____.____	_____.____
0066	460.0110.S HMA Percent Within Limits (PWL) Test Strip Density	1.000 EACH	_____.____	_____.____
0068	460.2005 Incentive Density PWL HMA Pavement	6,548.000 DOL	1.00000	6,548.00
0070	460.2007 Incentive Density HMA Pavement Longitudinal Joints	4,710.000 DOL	1.00000	4,710.00
0072	460.2010 Incentive Air Voids HMA Pavement	15,005.000 DOL	1.00000	15,005.00
0074	460.6224 HMA Pavement 4 MT 58-28 S	15,005.000 TON	_____.____	_____.____
0076	465.0110 Asphaltic Surface Patching	503.000 TON	_____.____	_____.____
0078	465.0315 Asphaltic Flumes	15.000 SY	_____.____	_____.____
0080	465.0510 Asphaltic Rumble Strips, Shoulder Divided Roadway	43,645.000 LF	_____.____	_____.____
0082	465.0520 Asphaltic Rumble Strips, Shoulder	1,825.000 LF	_____.____	_____.____
0084	465.0560 Asphaltic Rumble Strips, Centerline	600.000 LF	_____.____	_____.____
0086	520.8700 Cleaning Culvert Pipes	35.000 EACH	_____.____	_____.____
0088	521.1618 Apron Endwalls for Culvert Pipe Sloped Side Drains Steel 18-Inch 10 to 1	2.000 EACH	_____.____	_____.____

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Federal ID(s): N/A, 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
0090	522.0418 Culvert Pipe Reinforced Concrete Class IV 18-Inch	70.000 LF	_____.____	_____.____
0092	522.1018 Apron Endwalls for Culvert Pipe Reinforced Concrete 18-Inch	2.000 EACH	_____.____	_____.____
0094	522.2619 Apron Endwalls for Culvert Pipe Reinforced Concrete Horizontal Elliptical 19x30-Inch	1.000 EACH	_____.____	_____.____
0096	601.0409 Concrete Curb & Gutter 30-Inch Type A	755.000 LF	_____.____	_____.____
0098	601.0555 Concrete Curb & Gutter 6-Inch Sloped 36-Inch Type A	670.000 LF	_____.____	_____.____
0100	601.0557 Concrete Curb & Gutter 6-Inch Sloped 36-Inch Type D	270.000 LF	_____.____	_____.____
0102	601.0581 Concrete Curb & Gutter 4-Inch Sloped 30-Inch Type R	32.000 LF	_____.____	_____.____
0104	601.0600 Concrete Curb Pedestrian	30.000 LF	_____.____	_____.____
0106	602.0410 Concrete Sidewalk 5-Inch	2,615.000 SF	_____.____	_____.____
0108	602.0415 Concrete Sidewalk 6-Inch	760.000 SF	_____.____	_____.____
0110	602.0515 Curb Ramp Detectable Warning Field Natural Patina	60.000 SF	_____.____	_____.____
0112	602.0615 Curb Ramp Detectable Warning Field Radial Natural Patina	50.000 SF	_____.____	_____.____
0114	602.3210 Concrete Rumble Strips, Shoulder Divided Roadway	10,320.000 LF	_____.____	_____.____

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Federal ID(s): N/A, 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
0116	606.0200 Riprap Medium	60.000 CY	_____.____	_____.____
0118	611.8110 Adjusting Manhole Covers	1.000 EACH	_____.____	_____.____
0120	611.8115 Adjusting Inlet Covers	8.000 EACH	_____.____	_____.____
0122	612.0106 Pipe Underdrain 6-Inch	12.000 LF	_____.____	_____.____
0124	614.0010 Barrier System Grading Shaping Finishing	6.000 EACH	_____.____	_____.____
0126	614.0220 Steel Thrie Beam Bullnose Terminal	2.000 EACH	_____.____	_____.____
0128	614.0230 Steel Thrie Beam	150.000 LF	_____.____	_____.____
0130	614.0397 Guardrail Mow Strip Emulsified Asphalt	50.000 SY	_____.____	_____.____
0132	614.2300 MGS Guardrail 3	803.100 LF	_____.____	_____.____
0134	614.2330 MGS Guardrail 3 K	62.500 LF	_____.____	_____.____
0136	614.2340 MGS Guardrail 3 L	562.500 LF	_____.____	_____.____
0138	614.2350 MGS Guardrail Short Radius	50.000 LF	_____.____	_____.____
0140	614.2610 MGS Guardrail Terminal EAT	6.000 EACH	_____.____	_____.____
0142	614.2620 MGS Guardrail Terminal Type 2	3.000 EACH	_____.____	_____.____
0144	614.2630 MGS Guardrail Short Radius Terminal	1.000 EACH	_____.____	_____.____
0146	614.8010 Anchor Post Assembly Top Mount	3.000 EACH	_____.____	_____.____

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Federal ID(s): N/A, 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
0148	618.0100 Maintenance and Repair of Haul Roads (project) 01. 1500-49-60	1.000 EACH	_____.____	_____.____
0150	618.0100 Maintenance and Repair of Haul Roads (project) 02. 1500-49-61	1.000 EACH	_____.____	_____.____
0152	619.1000 Mobilization	1.000 EACH	_____.____	_____.____
0154	620.0300 Concrete Median Sloped Nose	535.000 SF	_____.____	_____.____
0156	624.0100 Water	15.000 MGAL	_____.____	_____.____
0158	625.0100 Topsoil	730.000 SY	_____.____	_____.____
0160	628.1504 Silt Fence	3,200.000 LF	_____.____	_____.____
0162	628.1520 Silt Fence Maintenance	3,200.000 LF	_____.____	_____.____
0164	628.1905 Mobilizations Erosion Control	5.000 EACH	_____.____	_____.____
0166	628.1910 Mobilizations Emergency Erosion Control	3.000 EACH	_____.____	_____.____
0168	628.2002 Erosion Mat Class I Type A	730.000 SY	_____.____	_____.____
0170	628.7005 Inlet Protection Type A	3.000 EACH	_____.____	_____.____
0172	628.7015 Inlet Protection Type C	11.000 EACH	_____.____	_____.____
0174	628.7504 Temporary Ditch Checks	400.000 LF	_____.____	_____.____
0176	628.7555 Culvert Pipe Checks	12.000 EACH	_____.____	_____.____

Proposal ID: 20260210024 **Project(s):** 1500-49-60, 1500-49-61

Federal ID(s): N/A, 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
0178	628.7570 Rock Bags	300.000 EACH	_____.____	_____.____
0180	629.0210 Fertilizer Type B	1.100 CWT	_____.____	_____.____
0182	630.0130 Seeding Mixture No. 30	10.000 LB	_____.____	_____.____
0184	630.0140 Seeding Mixture No. 40	7.000 LB	_____.____	_____.____
0186	630.0500 Seed Water	22.000 MGAL	_____.____	_____.____
0188	633.5200 Markers Culvert End	13.000 EACH	_____.____	_____.____
0190	638.2102 Moving Signs Type II	6.000 EACH	_____.____	_____.____
0192	642.5001 Field Office Type B	1.000 EACH	_____.____	_____.____
0194	643.0300 Traffic Control Drums	64,120.000 DAY	_____.____	_____.____
0196	643.0420 Traffic Control Barricades Type III	5,675.000 DAY	_____.____	_____.____
0198	643.0500 Traffic Control Flexible Tubular Marker Posts	282.000 EACH	_____.____	_____.____
0200	643.0600 Traffic Control Flexible Tubular Marker Bases	282.000 EACH	_____.____	_____.____
0202	643.0705 Traffic Control Warning Lights Type A	5,678.000 DAY	_____.____	_____.____
0204	643.0715 Traffic Control Warning Lights Type C	6,510.000 DAY	_____.____	_____.____
0206	643.0810 Traffic Control Connected Arrow Boards	309.000 DAY	_____.____	_____.____

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Federal ID(s): N/A, 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
0208	643.0900 Traffic Control Signs	16,852.000 DAY	_____.____	_____.____
0210	643.0910 Traffic Control Covering Signs Type I	3.000 EACH	_____.____	_____.____
0212	643.0920 Traffic Control Covering Signs Type II	11.000 EACH	_____.____	_____.____
0214	643.1000 Traffic Control Signs Fixed Message	49.000 SF	_____.____	_____.____
0216	643.1050 Traffic Control Signs PCMS	306.000 DAY	_____.____	_____.____
0218	643.1070 Traffic Control Cones 42-Inch	65,110.000 DAY	_____.____	_____.____
0220	643.1220 Traffic Control Connected Work Zone Start and End Location Markers	309.000 DAY	_____.____	_____.____
0222	643.3165 Temporary Marking Line Paint 6-Inch	67,770.000 LF	_____.____	_____.____
0224	643.3180 Temporary Marking Line Removable Tape 6-Inch	26,940.000 LF	_____.____	_____.____
0226	643.3280 Temporary Marking Line Removable Tape 10-Inch	975.000 LF	_____.____	_____.____
0228	643.3350 Temporary Marking Crosswalk Removable Tape 6-inch	360.000 LF	_____.____	_____.____
0230	643.3550 Temporary Marking Arrow Removable Tape	3.000 EACH	_____.____	_____.____
0232	643.3850 Temporary Marking Stop Line Removable Tape 18-Inch	52.000 LF	_____.____	_____.____
0234	643.3960 Temporary Marking Removable Mask Out Tape 6-Inch	982.000 LF	_____.____	_____.____

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Federal ID(s): N/A, 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
0236	643.5000 Traffic Control	1.000 EACH	_____.____	_____.____
0238	644.1410 Temporary Pedestrian Surface Asphalt	1,230.000 SF	_____.____	_____.____
0240	644.1440 Temporary Pedestrian Surface Matting	80.000 SF	_____.____	_____.____
0242	644.1601 Temporary Pedestrian Curb Ramp	7.000 DAY	_____.____	_____.____
0244	644.1605 Temporary Pedestrian Detectable Warning Field	248.000 SF	_____.____	_____.____
0246	644.1810 Temporary Pedestrian Barricade	1,035.000 LF	_____.____	_____.____
0248	644.1900.S Temporary Audible Message Devices	21.000 DAY	_____.____	_____.____
0250	645.0120 Geotextile Type HR	185.000 SY	_____.____	_____.____
0252	646.2025 Marking Line Grooved Black Epoxy 6-Inch	9,970.000 LF	_____.____	_____.____
0254	646.2040 Marking Line Grooved Wet Ref Epoxy 6-Inch	83,930.000 LF	_____.____	_____.____
0256	646.2050 Marking Line Grooved Permanent Tape 6-Inch	9,970.000 LF	_____.____	_____.____
0258	646.4040 Marking Line Grooved Wet Ref Epoxy 10-Inch	30.000 LF	_____.____	_____.____
0260	646.4050 Marking Line Grooved Permanent Tape 10-Inch	5,450.000 LF	_____.____	_____.____
0262	646.5020 Marking Arrow Epoxy	29.000 EACH	_____.____	_____.____

Proposal ID: 20260210024 **Project(s):** 1500-49-60, 1500-49-61

Federal ID(s): N/A, 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
0264	646.5120 Marking Word Epoxy	6.000 EACH	_____.____	_____.____
0266	646.5220 Marking Symbol Epoxy	2.000 EACH	_____.____	_____.____
0268	646.5520 Marking Outfall Epoxy	250.000 EACH	_____.____	_____.____
0270	646.6120 Marking Stop Line Epoxy 18-Inch	304.000 LF	_____.____	_____.____
0272	646.6466 Cold Weather Marking Epoxy 6-Inch	10,405.000 LF	_____.____	_____.____
0274	646.6470 Cold Weather Marking Epoxy 10-Inch	550.000 LF	_____.____	_____.____
0276	646.7120 Marking Diagonal Epoxy 12-Inch	750.000 LF	_____.____	_____.____
0278	646.7420 Marking Crosswalk Epoxy Transverse Line 6-Inch	755.000 LF	_____.____	_____.____
0280	646.8120 Marking Curb Epoxy	90.000 LF	_____.____	_____.____
0282	646.8220 Marking Island Nose Epoxy	7.000 EACH	_____.____	_____.____
0284	646.8320 Marking Parking Stall Epoxy	1,060.000 LF	_____.____	_____.____
0286	646.9000 Marking Removal Line 4-Inch	3,097.000 LF	_____.____	_____.____
0288	646.9002 Marking Removal Line 6-Inch	90.000 LF	_____.____	_____.____
0290	646.9200 Marking Removal Line Wide	40.000 LF	_____.____	_____.____
0292	646.9300 Marking Removal Special Marking	7.000 EACH	_____.____	_____.____

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Federal ID(s): N/A, 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
0294	650.5500 Construction Staking Curb Gutter and Curb & Gutter	1,702.000 LF	_____.____	_____.____
0296	650.6000 Construction Staking Pipe Culverts	1.000 EACH	_____.____	_____.____
0298	650.8000 Construction Staking Resurfacing Reference	42,036.000 LF	_____.____	_____.____
0300	650.9000 Construction Staking Curb Ramps	5.000 EACH	_____.____	_____.____
0302	650.9500 Construction Staking Sidewalk (project) 01. 1500-49-60	1.000 EACH	_____.____	_____.____
0304	650.9500 Construction Staking Sidewalk (project) 02. 1500-49-61	1.000 EACH	_____.____	_____.____
0306	650.9911 Construction Staking Supplemental Control (project) 01.1500-49-60	1.000 EACH	_____.____	_____.____
0308	650.9911 Construction Staking Supplemental Control (project) 02. 1500-49-61	1.000 EACH	_____.____	_____.____
0310	652.0210 Conduit Rigid Nonmetallic Schedule 40 1-Inch	5.000 LF	_____.____	_____.____
0312	652.0225 Conduit Rigid Nonmetallic Schedule 40 2-Inch	80.000 LF	_____.____	_____.____
0314	652.0235 Conduit Rigid Nonmetallic Schedule 40 3-Inch	180.000 LF	_____.____	_____.____
0316	652.0800 Conduit Loop Detector	1,386.000 LF	_____.____	_____.____
0318	653.0164 Pull Boxes Non-Conductive 24x42-Inch	14.000 EACH	_____.____	_____.____
0320	653.0905 Removing Pull Boxes	21.000 EACH	_____.____	_____.____

Proposal ID: 20260210024 **Project(s):** 1500-49-60, 1500-49-61

Federal ID(s): N/A, 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
0322	655.0230 Cable Traffic Signal 5-14 AWG	1,979.000 LF	_____.____	_____.____
0324	655.0240 Cable Traffic Signal 7-14 AWG	1,147.000 LF	_____.____	_____.____
0326	655.0260 Cable Traffic Signal 12-14 AWG	1,057.000 LF	_____.____	_____.____
0328	655.0305 Cable Type UF 2-12 AWG Grounded	1,929.000 LF	_____.____	_____.____
0330	655.0515 Electrical Wire Traffic Signals 10 AWG	1,813.000 LF	_____.____	_____.____
0332	655.0700 Loop Detector Lead In Cable	6,679.000 LF	_____.____	_____.____
0334	655.0800 Loop Detector Wire	4,844.000 LF	_____.____	_____.____
0336	690.0150 Sawing Asphalt	4,186.000 LF	_____.____	_____.____
0338	690.0250 Sawing Concrete	12,496.000 LF	_____.____	_____.____
0340	715.0720 Incentive Compressive Strength Concrete Pavement	500.000 DOL	1.00000	500.00
0342	740.0440 Incentive IRI Ride	62,900.000 DOL	1.00000	62,900.00
0344	SPV.0060 Special 01. Removing Raised Pavement Markers Without Overlay	180.000 EACH	_____.____	_____.____
0346	SPV.0060 Special 02. Removing Raised Pavement Markers With Overlay	90.000 EACH	_____.____	_____.____
0348	SPV.0060 Special 03. Adjusting Sanitary Manhole Covers	2.000 EACH	_____.____	_____.____
0350	SPV.0060 Special 04. Salvage and Reinstall Apron Endwall for Underdrain	2.000 EACH	_____.____	_____.____

Proposal ID: 20260210024 **Project(s):** 1500-49-60, 1500-49-61

Federal ID(s): N/A, 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
0352	SPV.0060 Special 05. Remove Traffic Signal (USH10/STH114/Oneida Street)	1.000 EACH	_____.____	_____.____
0354	SPV.0060 Special 06. Remove Traffic Signal (USH 10/STH 114/CTH LP)	1.000 EACH	_____.____	_____.____
0356	SPV.0090 Special 01. Concrete Joint and Crack Cleaning and Repiar	1,083.000 LF	_____.____	_____.____
0358	SPV.0090 Special 02. Ditch Cleaning	255.000 LF	_____.____	_____.____
	Section: 0001		**Total:**	_____.____

Total Bid: _____.____

PLEASE ATTACH ADDENDA HERE