HIGHWAY WORK PROPOSAL

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

Proposal Number: 025

COUNTY	STATE PROJECT	FEDERAL	PROJECT DESCRIPTION	HIGHWAY
Door	4430-19-71	N/A	Sth 42, City Of Sturgeon Bay; S Junction Sth 57-Bayview Bridge	STH 042

ADDENDUM REQUIRED

ATTACHED AT BACK

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: $100,000.00 Payable to: Wisconsin Department of Transportation	Attach Proposal Guaranty on back of this PAGE.
Bid Submittal Date: February 8, 2022 Time (Local Time): 11:00 am	Firm Name, Address, City, State, Zip Code SAMPLE NOT FOR BIDDING PURPOSES
Contract Completion Time September 30, 2022	
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

Grading, Base, Milling, Asphalt Pavement, Concrete Pavement Repair, Diamond Grinding, Storm Sewer, Curb and Gutter, Sidewalk, Guardrail, Signs, Pavement Markings

Notice of Award Dated	Date Guaranty Returned

PLEASE ATTACH
PROPOSAL GUARANTY HERE

Effective with November 2007 Letting

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.

Effective with August 2015 Letting

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 departments 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:

1. Have a properly executed annual bid bond on file with the department.

2. 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.

C 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)

March 2010

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

DECEMBER 2000

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 4430-19-71, STH 42, City of Sturgeon Bay, S. Junction STH 57 – Bayview Bridge, Door 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, 2022 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 (20210708)

2. Scope of Work.

The work under this contract shall consist of asphaltic surface milling, common excavation, base aggregate dense, concrete pavement, diamond grinding concrete pavement, HMA pavement, concrete curb and gutter, guardrail, pavement 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 start date to the engineer in writing within a month after executing the contract but at least 14 calendar days before the preconstruction conference. Upon approval, the engineer will issue the notice to proceed within 10 calendar days before the approved start date.

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

The interim completion date for segment C is based on an expedited work schedule and may require extraordinary forces and equipment.

Anticipate cold weather and early spring construction operations. Excavation of frozen ground, high ground water, dewatering, and mitigation efforts for a high water table shall not be considered adverse weather delays to construction. Plan to heat aggregates and water for concrete mixes. Heating of aggregate and water are incidental to those concrete items.

Project Segments

The project is separated into three segments.

Segment A: Station 100+00'NB' to 220+63'NB'

This segment includes STH 42 and adjoining side roads from the beginning of project to the end of STH 42 NB asphalt section.

Segment B: Station 220+63'NB' to 351+55'NB'

This segment includes STH 42 and adjoining side roads from the end of STH 42 NB asphalt section to S. Columbia Ave.

Segment C: Station 351+55'NB' to 481+89'SB'

This segment includes STH 42 and adjoining side roads, including the Green Bay Road Ramps, from S. Columbia Ave to the south approach of the Bayview Bridge.

Interim Completion and Liquidated Damages – Segment C: June 30, 2022

Segment C

Complete construction operations on Segment C to the stage necessary to reopen it to free flow traffic by June 30, 2022 11:59 PM June 30, 2022. Do not reopen until completing the following work: Complete construction and remove traffic control devices in Segment C.

If the contractor fails to complete the work necessary to reopen to free flow traffic by June 30, 2022, the department will assess the contractor $9,600 in interim liquidated damages for each calendar day the contract work remains incomplete beyond 12:01 AM on July 1, 2022. An entire calendar day will be charged for any period of time within a calendar day that the road remains closed beyond 12:01 AM.

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

Interim Completion and Liquidated Damages – Ashland Avenue: 60 Calendar Days

Complete construction operations on Ashland Avenue to a stage necessary to reopen it to free flow traffic within 60 calendar days of restricting STH 42 southbound right turns to Ashland Avenue. Do not reopen until completing the following work: Complete paving, pavement marking, and have the intersection fully functional.

If the contractor fails to complete the work necessary to reopen to free flow traffic within 60 calendar days of restricting turning movements, the department will assess the contractor $2,400 in interim liquidated damages for each calendar day the contract work remains incomplete beyond 60 calendar days of restricting turning movement. An entire calendar day will be charged for any period of time within a calendar day that turning movements are restricted 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.

Fish Spawning

There shall be no instream disturbance of Unnamed Creek at Station 264+52'NB' as a result of construction activity under or for this contract, from March 1 to May 31 both dates inclusive, in order to avoid adverse impacts upon the spawning fish.

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

4. Lane Rental Fee Assessment.

A General

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

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

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

B Lane Rental Fee Assessment

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

- STH 42 Mainline Travel Lanes: $500 per lane, per direction of travel, per hour broken into 15-minute increments

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

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

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

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

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

stp-108-065 (20161130)

5. Traffic.

General

STH 42 will remain open to traffic at all times.

Construction is to be completed under single mainline lane closures outside of mainline peak hours.

Construction on STH 42 from CTH U to the Bayview Bridge will require flagging operations. Complete flagging operations outside of Mainline and Commuter peak hours.

Auxiliary lanes (slotted left turn lanes and right turn lanes) may be closed outside of Mainline and Commuter peak hours.

Do not close a lane of traffic unless work operations are expected to occur within 7 days or as the engineer allows.

Combine mainline lane closures if the end of one lane closure is within 2 miles of a second lane closure.

Do not exceed mainline lane closures longer than 5 miles.

Minimum mainline travel lane width is 11-feet and shall be implemented for shorter durations when work operations require, or workers are present.

Standard mainline travel lane width shall consist of a 12-foot travel lane and a total paved clear width of 15-feet. These widths shall be implemented when operations allow and workers are not present.

Minimum side road travel lane width is 11-feet or as the engineer allows.

A lane closure must separate traffic lanes from unshielded hazards when existing guardrail is removed for replacement.

A milled surface open to through traffic shall not remain in place for longer than 72 hours.

Provide an even cross-sectional profile of the roadway at the end of each day’s milling operations on roadways open to through traffic. Uneven lanes on roadways open to through traffic will not be allowed except during that day’s milling operations.

For paved surfaces open to through traffic, provide an even cross-sectional profile of the roadway prior to opening to traffic.

At the end of each work day, open trench culvert pipe replacement work adjacent to live traffic must brought back up to the existing surface elevation.

Segment Staging and Restrictions

Segments A and B

- Mainline lane closures are allowed outside of mainline peak hours.
- Side roads will remain open to traffic and will be constructed under flagging operations.

Segment C

- Complete work in Segment C by June 30.
- Mainline lane closures will be allowed outside of mainline peak hours.
- Axillary lanes may be closed outside of mainline and commuter peak hours.
- Do not close multiple auxiliary lanes simultaneously.
- Close STH 42 outside lanes first and construct widenings at Ashland Ave, Neenah Ave, Circle Ridge Rd, and CTH U. Pave asphalt on Ashland Ave and Neenah Ave. Pave lower layer of Asphalt at Circle Ridge Rd and CTH U. Open to traffic.
- Close STH 42 inside lanes second and construct STH 42 median work at CTH U.
- Once inside lane work is complete, begin asphalt overlay of STH 42 mainline making sure to stage construction so that an even cross-section profile of the roadway is present when opening traffic lanes for Memorial Day weekend and mainline peak hours (weekends) in June.

Segment C- Ashland Ave

- Ashland Ave construction to coincide with STH 42 outside lane closure.
- Install curb, gutter, and replace disturbed pavement on west side of roadway prior to shifting traffic.
- Temporarily shift traffic to construct intersection widening.
- Restrict STH 42 southbound right turn to Ashland Ave when intersection widening is being constructed. Restrict the right turn for up to 60 calendar days.
- Complete loop detector installation and mill and overlay to side road limits using a single day side road closure.
- The single day side road closure is allowed to occur for one day between 6:00 AM – 3:00 PM, Monday through Thursday on non-holidays.
- Ashland Ave to remain open to traffic outside of single day side road closure.
- See Traffic Control Details for additional information.

Segment C – Neenah Ave

- Neenah Ave construction to coincide with STH 42 outside lane closure.
- Neenah Ave to remain open to traffic.
- Temporarily shift traffic to construct intersection widening.
- Restrict STH 42 southbound right turn to Neenah Ave when intersection widening is being constructed.
- Do not close Green Bay Road ramps when the STH 42 southbound right turn to Neenah Ave is restricted.
- See Traffic Control Details for additional information.

Segment C – CTH U

- CTH U construction to coincide with STH 42 outside lane closure.
- Close CTH U from Tacoma Beach Road to STH 42 to construct intersection widening.

- Close and detour multiuse path access point that joins to CTH U. Sign and maintain pedestrian access to the path from Tacoma Beach Road.
- Do not close CTH U concurrently with STH 42 median closure at CTH U.
- See Traffic Control Details for additional information.

Segment C – Circle Ridge Road

- Circle Ridge Road construction to coincide with STH 42 outside lane closure.
- Circle Ridge Road to remain open to traffic through construction.
- Temporarily shift traffic to construct Circle Ridge Road intersection widening.
- Restrict STH 42 southbound right turn to Circle Ridge Road when intersection widening is being constructed.
- Do not restrict STH 42 southbound right turns to Circle Ridge Road concurrently with STH 42 median closure at CTH U.
- See Traffic Control Details for additional information.

Segment C – Green Bay Road Ramps

- Green Bay Road Ramp construction to coincide with STH 42 inside lane closures.
- Both ramps shall be closed for a maximum of 30 calendar days combined.
- Ensure there is sufficient left turn lane storage for vehicles making a left turn from STH 42 NB to Lansing Ave.
- Do not close Green Bay Road ramps when STH 42 southbound right turn to Neenah Ave is restricted.
- Maintain pedestrian access on adjacent multiuse path through construction. See Traffic Control Details for additional information.

Segment C – STH 42 Median/Left Turn Lanes to CTH U/Circle Ridge Rd

- STH 42 Median/Left Turn Lanes to CTH U/Circle Ridge Road construction to coincide with STH 42 inside lane closure.
- STH 42 to remain open to traffic under single lane closure.
- See Traffic Control Details for additional information.

Segment C – STH 42 Undivided Roadway– CTH U to Bayview Bridge

- STH 42 Undivided Roadway construction to coincide with STH 42 inside lane closure.
- STH 42 Undivided Roadway to be constructed using flagging operations.
- A portion of the STH 42 median/left turn lanes will need to be paved prior to implementing flagging operations to allow traffic to crossover.
- Flagging operations are allowed outside of mainline and commuter peak hours.
- See Traffic Control Details for additional information.

Peak Hours

Mainline Peak Hours are defined as follows:

- From May 26 through October 31
- Friday at noon to Sunday at 9:00 PM

A lane rental fee will be assessed according to the Lane Rental Fee Assessment article for lane closures that occur within mainline peak hours.

Commuter Peak Hours are defined as follows:

- Monday through Friday
- 6:00 AM – 9:00 AM
- 3:00 PM – 6:00 PM
- Or as the engineer directs

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) three 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 seven days before STH 42 lanes closures on Segment A, Segment B, Segment C, and closure of Green Bay Rd Ramps.

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**
Lane and shoulder closures	3 business days
Ramp closures	3 business days
Modifying all closure types	3 business days

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

Temporary Work Zone Clear Zone Working Restrictions.

Park equipment and store materials, including stockpiles, 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 (20200227)

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 STH 42 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 27, 2022 to 6:00 AM Tuesday, May 31, 2022 for Memorial Day;
- From noon Friday, July 1, 2022 to 6:00 AM Tuesday, July 5, 2022 for Independence Day;
- From noon Friday, September 2, 2022 to 6:00 AM Tuesday, September 6, 2022 for Labor Day;
- From noon Friday, October 14, 2022 to 6:00 AM Monday October 17, 2022 for Sister Bay Fall Fest.

stp-107-005 (20210113)

7. Utilities.

This contract comes under the provision of Administrative Rule Trans 220.

107-065 (20080501)

Additional detailed information regarding the location of utility facilities is available at the region WisDOT office during normal working hours.

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 owner. Follow-up with a confirmation notice to the engineer and the utility owner not less than three working days before the site will be ready for the utility owner to begin its work.

AT&T Wisconsin has underground **communication** facilities throughout the project.

AT&T Wisconsin will be lowering two underground cables that cross S. Ashland Ave. in place from Station 359+80 to 360+25 to a depth of approximately 48 inches; lowering the cables underneath the proposed storm sewer structures. AT&T will give the WisDOT a 5-day notice to have WisDOT stake storm sewer locations in the field prior to relocation of cables.

AT&T Wisconsin work described above will be complete prior to construction.

AT&T Wisconsin has underground (9) 4” conduit pack at Station 414+75 at elevation 614.87. No conflicts anticipated.

AT&T has underground communication facilities crossing STH 42 at Station 462+55. No conflicts anticipated.

The field contact is Shea Gorzelanczyk, (920) 433-4250, or sg2528@att.com.

ATC Management Inc has overhead **electrical transmission** facilities within the project limits.

No conflicts are anticipated.

The field contact is Chris Dailey, (262) 506-6884, or cdailey@atcllc.com.

CenturyLink has **communication** facilities within the project limits.

No conflicts are anticipated.

The field contact is Matt Gunderson, (920) 896-2867, or matt.gunderson@centurylink.com.

Charter Communications has overhead and buried **communication** facilities throughout the project.

Charter Communications has underground fiber optic cable along STH 42, which is 1.9 feet from the existing beam guard at approximately Station 284+50 and conflicts with the proposed beam guard post installation.

Charter Communications will relocate the existing 24CT fiber optic cable to a new 1.25-inch duct, bored further southeast from the existing duct, from approximately Station 284+30 to approximately Station 286+01 at a depth of approximately 42 inches.

Charter Communications work described above will be complete prior to construction.

Charter Communications has overhead communication facilities on power company poles. No conflicts anticipated.

The field contact is Vince Albin, (920) 831-9249, or vince.albin@charter.com.

Net Lec LLC has overhead **communication** facilities near the end of the project limits on Wisconsin Public Service and Sturgeon Bay Utilities poles.

No conflicts anticipated.

The field contact is Rick Vincent, (920) 617-7316, or rick.vincent@nsight.com.

Sturgeon Bay Utilities does not have **communication** facilities within the project limits.

No conflicts anticipated.

The field contact is James Stawicki, (920) 746-2820, or jstawicki@wppienergy.org.

Sturgeon Bay Utilities has overhead **electricity** facilities within the project limits, located on the edge of STH 42 right-of-way.

No conflicts anticipated.

The field contact is Jason Bieri, (920) 493-6491, or jbieri@wppienergy.org.

Sturgeon Bay Utilities has **sanitary sewer** facilities within the project limits.

Sturgeon Bay Utilities sanitary manholes will need to be adjusted to final grade between approximately Station 320+00 and Station 375+00. Provide advance notice after milling existing asphalt but prior to placement of the upper layer of asphalt, and the site will be available to the utility owner. Contact Sturgeon Bay Utilities at (920) 746-2820, giving 30 days' notice prior to coordinate these adjustments during construction. Work will take less than one day.

The field contact is Joe Potier, (920) 333-0574, or joseph.potier@suez.com.

Sturgeon Bay Utilities has **water main** facilities within the project limits.

Sturgeon Bay Utilities water valve boxes will need to be adjusted to final grade between approximately Station 320+00 and Station 375+00 and on the Green Bay Road ramps. Provide advance notice after milling existing asphalt but prior to placement of the upper layer of asphalt, and the site will be available to the utility owner. Contact Sturgeon Bay Utilities at (920) 746-2820, giving 30 days' notice prior to coordinate these adjustments during construction. Work will take less than one day.

The field contact is Joe Potier, (920) 333-0574, or joseph.potier@suez.com.

Wisconsin Public Service Corporation has **electricity** facilities within the project limits.

No conflicts anticipated.

The field contact is Tom Goral, (920) 617-5149, or Thomas.goral@wisconsinpublicservice.com.

Wisconsin Public Service Corporation has underground **gas** facilities within the project limits.

Wisconsin Public Service Corporation will discontinue the existing 2-inch PE gas main crossing South Ashland Avenue from approximately Station 359+25 to Station 360+50.

Wisconsin Public Service Corporation will install a new 2-inch PE main crossing South Ashland Avenue, north of the proposed storm sewer and communication facilities at a depth of approximately 4.5 feet from approximately Station 359+25 to Station 360+50.

Wisconsin Public Service Corporation will discontinue the existing 2-inch PE gas main from approximately Station 375+30 to the east, crossing STH 42 at approximately Station 379+50.

Wisconsin Public Service Corporation will install a new 4-inch PE gas main on the east side of CTH S from approximately Station 43+50 to the northern limits; crossing STH 42 at Station approximately 375+30 at a depth of approximately 3 feet.

Wisconsin Public Service Corporation work described above will be complete prior to construction.

Wisconsin Public Service Corporation will discontinue the existing gas main running along the east side of South Neenah Avenue and crosses STH 42.

Wisconsin Public Service Corporation will install a new 8-inch PE gas main crossing STH 42 on the west side of South Neenah Avenue at a depth of approximately 4 feet to avoid existing utilities on the west side of South Neenah Avenue. The new 8-inch PE gas main will cross South Neenah Avenue at approximately Station 66+30 and will be installed on the east side of South Neenah Avenue from approximately Station 66+30 to the northern limits.

Wisconsin Public Service Corporation South Neenah Avenue gas main relocation work will be complete prior to construction.

Wisconsin Public Service Corporation has a discontinued 1-1/4-inch steel main facility on the south side of STH 42 from Stagg Road to Grant Road and a discontinued 2-inch steel main facility on the south side of STH 42 from Columbus Avenue to Duluth Avenue/CTH C.

The field contact is Joel Sawicki, (920) 657-1862, or joel.sawicki@wisconsinpublicservice.com.

8. Work by Others.

WisDOT Northeast Region Electrical Unit

The Wisconsin Department of Transportation Northeast Region Electrical Unit will perform the following work at the intersection of STH 42/57 & Ashland and STH 42/57 & Neenah:

- Adjust signals/loop detectors for temporary lane shifts
- Terminate all electrical wire in the signal control cabinet

Contact the NE Region Traffic Unit at (920) 360-3107 or email Randy.Asman@dot.wi.gov at least three days prior to when the above work will need to take place.

Door County Highway Department

Door County Highway Department will perform the following work:

- Install local detour route signing for when STH 42 southbound right turn is restricted to Ashland Ave.
- Install local detour route signing for when CTH U is closed from Tacoma road to STH 42.
- Install local detour route signing for when the STH 42 median is closed at CTH U/Circle Ridge Rd.

Contact the Door County Highway Commissioner at (920) 746-2500 or email tash@co.door.wi.us at least two weeks prior to any of these closures or restrictions.

Light Pole – Ashland Avenue

The city of Sturgeon Bay will remove the light pole on the east side of Ashland Avenue (Station 39+95'A' RT) prior to construction.

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

The department has obtained a U.S. Army Corps of Engineers Section 404 permit. 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 Paul Brauer at (920) 366-1097.

stp-107-054 (20210708)

10. Information to Bidders, WPDES General Construction Storm Water Discharge Permit.

The department has obtained coverage through the Wisconsin Department of Natural Resources to discharge storm water associated with land disturbing construction activities of this contract under the Wisconsin Pollutant Discharge Elimination System General Construction Storm Water Discharge Permit (WPDES Permit No. WI-S066796-1). A certificate of permit coverage is available from the regional office by contacting Paul Brauer at (920) 366-1097. Post the permit in a conspicuous place at the construction site.

stp-107-056 (20180628)

11. 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)

12. 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)

13. Environmental Protection, Phragmites

Phragmites, an invasive species plant, is known to exist within the project limits and in areas that ground disturbance or excavation work is shown in the plans. All soils containing plant or root fragments that will be excavated or salvaged as part of the work within the contract shall be salvaged and used as topsoil within the immediate area of the work or deposited at an engineer approved waste site within the existing STH 42 right-of-way within the project limits. All waste sites are subject to review and approval by the department and shall be suitable for the waste of material containing Phragmites. Waste material shall be placed in upland locations in the general area where the plant currently exists. For all equipment that comes into contact with Phragmites infested areas, use the following guidelines for inspection and cleaning of equipment before leaving the project site.

Known Phragmites locations include:

240+87'NB' RT

Locations to be verified by engineer in the field.

Ensure that all equipment that has been in contact with Phragmites infested areas or potentially infested areas has been decontaminated. Use the following inspection and removal procedures (guidelines from the Wisconsin Department of Natural Resources) for disinfection:

Before leaving the contaminated site, wash machinery and ensure that the machinery is free of all soil and other substances that could possible contain exotic invasive species.

Clean all equipment with hot water of 105°F to 110°F for a period of 30 minutes or hot water of 140°F for a period of five minutes. After cleaning, dry all equipment in a sunny location for at least three days.

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

ner-107-060 (20200129)

14. 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)

15. Notice to Contractor – Notifications Prior to Multiuse Path Work

Notify the following individuals prior to closing the multiuse path connected to CTH U and/or impacting the multiuse path that runs alongside Green Bay Road northbound ramp.

- Matt Schaeve, Wisconsin Department of Natural Resources (WisDNR)
  (920) 366-1544 or matthew.schaeve@wisconsin.gov
- Chad Shefchik, City of Sturgeon Bay
  (920) 746-2913 or cshefchik@sturgeonbaywi.org

16. Archaeological Site.

The following sites are located adjacent to the project:

- Site BDR-0050 - Schumacher-Nasewaupee Town Cemetery (Station 303+50'NB' to Station 310+50'NB' LT)
- Site 47DR417 - Farley (Station 449+00'NB' to Station 453+00'NB RT)
- Site 47DR82 - Lenius (Station 473+00'SB' to Station 484+00'SB' LT & RT)
- Site 47DR364 - Mary L (Station 481+50'SB' 6,500-FT RT)

Notify the Bureau of Technical Services – Environmental Process and Document Section (BTS-EPDS) at (608) 266-0099 at least two weeks before commencement of any ground disturbing activities beyond the existing right-of-way limits. BTS-EPDS will determine if a qualified archaeologist will need to be on site during construction of this area.

Do not use the site for borrow or waste disposal. Do not use the site area not currently capped by asphalt/concrete for the staging of personnel, equipment and/or supplies.

stp-107-220 (20180628)

17. 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 7 days prior to the start of work under this contract. Hold additional monthly meetings thereafter if determined necessary by the engineer. The contractor shall notify all parties in writing a minimum of 10 days before the first meeting being held.

18. Removing Asphaltic Surface Milling, Item 204.0120.

Payment includes the milling of concrete base patches.

19. Removing Apron Endwalls, Item 204.9060.S.

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 individual endwalls, acceptably completed.

E Payment

Add the following to standard spec 204.5:

ITEM NUMBER	DESCRIPTION	UNIT
204.9060.S	Removing Apron Endwalls	EACH

stp-204-025 (20150630)

20. Excavation Rock, Item 205.0200.

Blasting, or the use of explosives, as a means of excavating rock is prohibited. Rather, the contractor shall use ripping or jackhammering methods to excavate the rock to the proper depth.

21. Preparing the Foundation

Add the following to standard spec 211.3.1:

The contractor shall plan construction activities such that the earth subgrade is covered by the roadway base in a timely manner upon completion of preparation of the subgrade or as the engineer directs. The contractor is responsible for the removal of any excess water from the subgrade as a result of rainfall events or natural drainage.

ner-211-005 (20171213)

22. HMA Pavement 3 MT 58-28, Item 460.6223.

Due to small quantity of HMA pavement 3 MT 58-28 S, QC mix and density testing will be waived for the project as specified in standard spec 460.2.8.2.1.3.3 and 460.3.3.3.

23. Survey Monument Coordination

The contractor is to notify the Northeast Regional Survey Coordinator, Cormac McInnis at (920) 492-5638, at least 30 days before the beginning of construction activities. The Regional Survey Coordinator will then make the arrangements to have the Public Land Survey Monument and Landmark Reference Monuments tied out.

After the majority of construction is complete (before restoration) the CONTRACTOR is again to notify the Survey Coordinator that the site is ready for the replacement of the monuments. The Survey Coordinator will then make arrangements to have the Public Land Survey Monument and Landmark Reference Monuments reset.

ner-621-010 (20171213)

24. 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 CMM 8-36. 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 CMM 8-15.7 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 CMM 8-15.8. 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 volumetric test is to be taken in a density-only test strip, a non-random three-part split mix sample will be taken and tested for Gmm by the department representative. The department Gmm test results from this non-random test will be entered in the HMA PWL Test Strip Spreadsheet and must conform to the Acceptance Limits presented in C.2.1.

Exclusions such as shoulders and appurtenances shall be tested and reported according to CMM 8-15. 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 8-15.11.

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 according to AASHTO T 209 as modified in CMM 8-36.6.6. Bulk specific gravities of both gyratory compacted samples and field cores shall be determined according to AASHTO T 166 as modified in CMM 8-36.6.5. 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 according to ASTM D8159 as modified in CMM 8-36.6.3.1.

[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 to the applicable density shown in the following table:

TABLE 460-3 MINIMUM REQUIRED DENSITY[1]

	MIXTURE TYPE	
LAYER	LT and MT	HT
LOWER	93.0[2]	93.0[3]
UPPER	93.0	93.0

[1] If any individual core density test result falls more than 3.0 percent below the minimum required target maximum density, the engineer will investigate the acceptability of that material per CMM 8-15.11.

[2] Minimum reduced by 2.0 percent for a lower layer constructed directly on crushed aggregate or recycled base courses.

[3] Minimum reduced by 1.0 percent for lower layer constructed directly on crushed aggregate or recycled base courses.

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) and (ii), while density must accomplish (iii) and (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, for proper labeling, handling, and retention of 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 as modified herein. 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

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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25. 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 and three-part splitting of HMA samples according to CMM 8-36. 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 three splits for all random sampling per sublot. All QC samples shall provide the following: QC, QV, and Retained. The contractor shall take possession and test the QC portions. The department will observe the splitting and take possession of the samples intended for QV testing (i.e., QV portion from each sample) and the Retained portions. Additional sampling details are found in Appendix A. Label samples according to CMM 8-36. Additional handling instructions for retained samples are found in CMM 8-36.

(4) Use the test methods identified below to perform the following tests at a frequency greater than or equal to that indicated:

- Blended aggregate gradations according to AASHTO T 30
- Asphalt content (AC) in percent determined by ignition oven method according to AASHTO T 308 as modified in CMM 8-36.6.3.6, chemical extraction according to AASHTO T 164 Method A or B, or automated extraction according to ASTM D8159 as modified in CMM 8-36.6.3.1.
- Bulk specific gravity (Gmb) of the compacted mixture according to AASHTO T 166 as modified in CMM 8-36.6.5.
- Maximum specific gravity (Gmm) according to AASHTO T 209 as modified in CMM 8-36.6.6.
- Air voids (V_a) by calculation according to AASHTO T 269.
- Voids in Mineral Aggregate (VMA) by calculation according to AASHTO R35.

(5) Lot size shall consist of 3750 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 AASHTO T283, without freeze-thaw conditioning cycles, on each qualifying mixture according to CMM 8-36.6.14. 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[1]	-0.3	-0.5
Va		- 1.5 & +2.0
VMA in percent[2]	- 0.5	-1.0

[1] The department will not adjust pay based on QC AC in percent test results; however corrective action will be applied to nonconforming material according to 460.2.8.2.1.7(3) as modified herein.
[2] 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 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 and/or remove and replace.

(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. 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 three splits for all random sampling per sublot. All QV samples shall furnish the following: QC, QV, and Retained. The department will observe the splitting and take possession of the samples intended for QV testing (i.e., QV portion from each sample) and the Retained portions. 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 perform all testing conforming to the following standards:

- Bulk specific gravity (Gmb) of the compacted mixture according to AASHTO T 166 as modified in CMM 8-36.6.5.
- Maximum specific gravity (Gmm) according to AASHTO T 209 as modified in CMM 8-36.6.6.
- Air voids (Va) by calculation according to AASHTO T 269.
- Voids in Mineral Aggregate (VMA) by calculation according to AASHTO R 35.
- Asphalt Content (AC) in percent determined by ignition oven method according to AASHTO T 308 as modified in CMM 8-36.6.3.6, chemical extraction according to AASHTO T 164 Method A or B, or automated extraction according to ASTM D8159 as modified in CMM 8-36.6.3.1.

(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 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 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. 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 CMM 8-15. 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 7500 lane feet with sublots of 1500 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. The contractor is required to 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 CMM 8-15. 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. 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 8-15.11.

(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 8-15.11.

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 8-15.11. 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)*
≥ 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] 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.

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. 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

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 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.

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%
More than -0.5%	50%[1]

[1] 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. Such material will be referee tested by the department's AASHTO accredited laboratory and HTCP certified personnel using automated extraction according to automated extraction according to ASTM D8159 as modified in CMM 8-36.6.3.1.

Note: PWL value determination is further detailed in the *Calculations* worksheet of the HMA PWL Production spreadsheet.

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26. 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

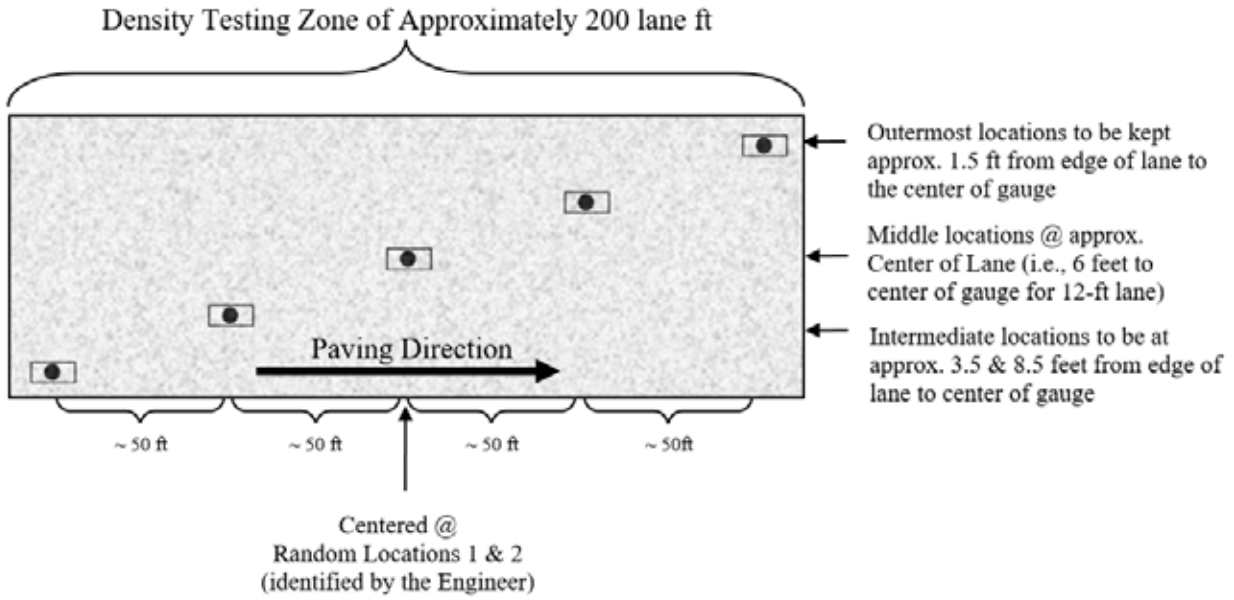

Figure 1: Nuclear/Core Correlation Location Layout

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 should be 1.5-feet from the center of the gauge to the edge of lane. [NOTE: This staggered layout is only applicable to the test strip. All mainline density locations after test strip should have a longitudinal- as well as transverse-random number to determine location as detailed in the *WisDOT Test Method for HMA PWL QMP Density Measurements for Main Production* section of this document.]

Individual locations are represented by the  symbol as seen in Figure 1 above. The symbol is two-part, comprised of the nuclear test locations and the location for coring the pavement, as distinguished here:

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

Photos should be taken of each of the 10 core/gauge locations of the test strip. This should include gauge readings (pcf) and a labelled core within the gauge footprint. If a third reading is needed, all three readings should be recorded and documented. Only raw readings in pcf should 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 pavement

Each core will then be taken from the center of the gauge footprint and will be used to correlate each gauge with 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 should be recorded as damaged and excluded from the correlation. Coring after traffic is on the pavement should be avoided. The contractor is 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. Core density testing will 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 initial testing and is responsible for any verification testing.

Each core 150 mm (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. The contractor is responsible for thoroughly drying cores obtained from the mat according to ASTM D 7227 prior to using specimens for in-place density determination according to AASHTO T 166 as modified by CMM 8-36.6.5.

Cores must be taken before the pavement is open to traffic. 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 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. The core holes shall be dry and coated 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 1/4 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 will be completed at three locations per sublot, with a sublot defined as 1500 lane feet. The three locations will 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 will be used to identify the specific transverse location within each third according to CMM 8-15). Longitudinal locations within each sublot shall be determined with 3 independent random numbers. 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 or disincentive. Each location will be measured 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 will 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 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 sublot density testing layout is depicted in Figure 4, with QC test locations shown as solid lines and QV as dashed.

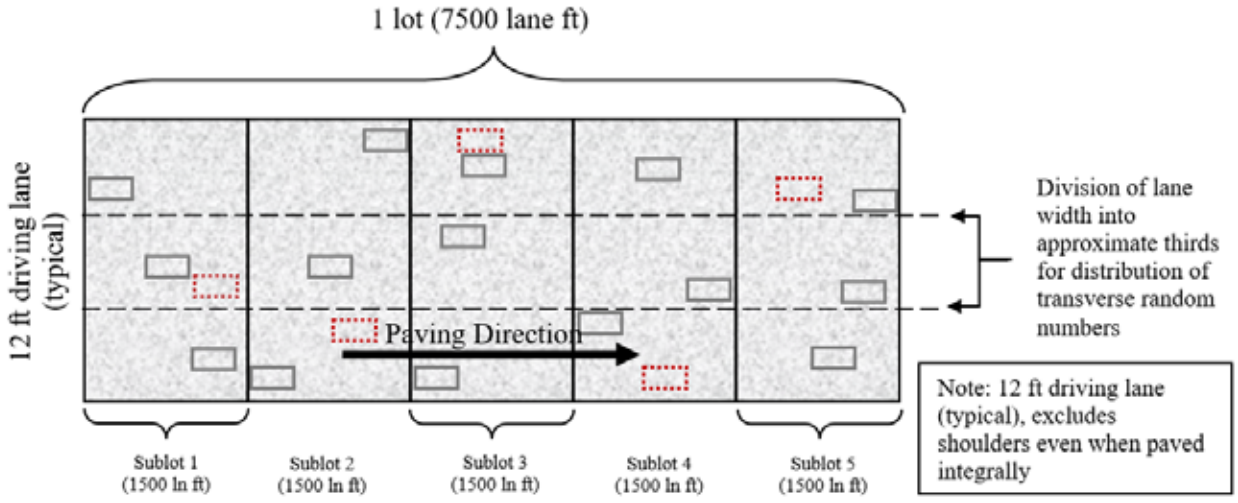

Figure 4: Locations of main lane HMA density testing (QC=solid lines, QV=dashed)

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 SPV. (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 must 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 CMM 8-15 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 2 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%.

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. Cores will be cut by the next working day not to exceed 48 hours after placement of the last QV test of the lot. Prepare cores and determine density according to AASHTO T166 as modified in CMM 8-36.6.5. 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 foot 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 and Retained samples shall conform to CMM 8-36 except as modified here.

Delete CMM 8-36.4 Sampling Hot Mix Asphalt and replace with the following to update sublot tonnages:

Sampling Hot Mix Asphalt

At the beginning of the contract, the contractor determines the anticipated tonnage to be produced. The frequency of sampling is 1 per 750 tons (sublot) for QC and Retained Samples and 1 per 3750 tons (lot or 5 sublots) for QV as defined by the HMA PWL QMP SPV. A test sample is obtained randomly from each sublot. Each random sample shall be collected at the plant according to CMM 8-36.4.1 and 8-36.4.2. The contractor must 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 ASTM Method D-3665 or by using a calculator or computerized spreadsheet that has a random number generator. 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 should 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 should 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 not be 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.

QC, QV, and retained samples shall be collected for all test strip and production mixture testing using a three-part splitting procedure according to CMM 8-36.5.2.

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:

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

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27. 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	90	91.5	91.5
Upper	90	90	91.5	91.5

C Construction

Add the following to standard spec 460.3.3.2:

(5) Establish companion density locations at each applicable joint. Each companion location shares longitudinal stationing with a QC or QV 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 will 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 will 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, will 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. 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. Inlay paving operations will limit payment for additional material to 2 inches wider than the final paving lane width at the centerline.

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	$0.40
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.

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

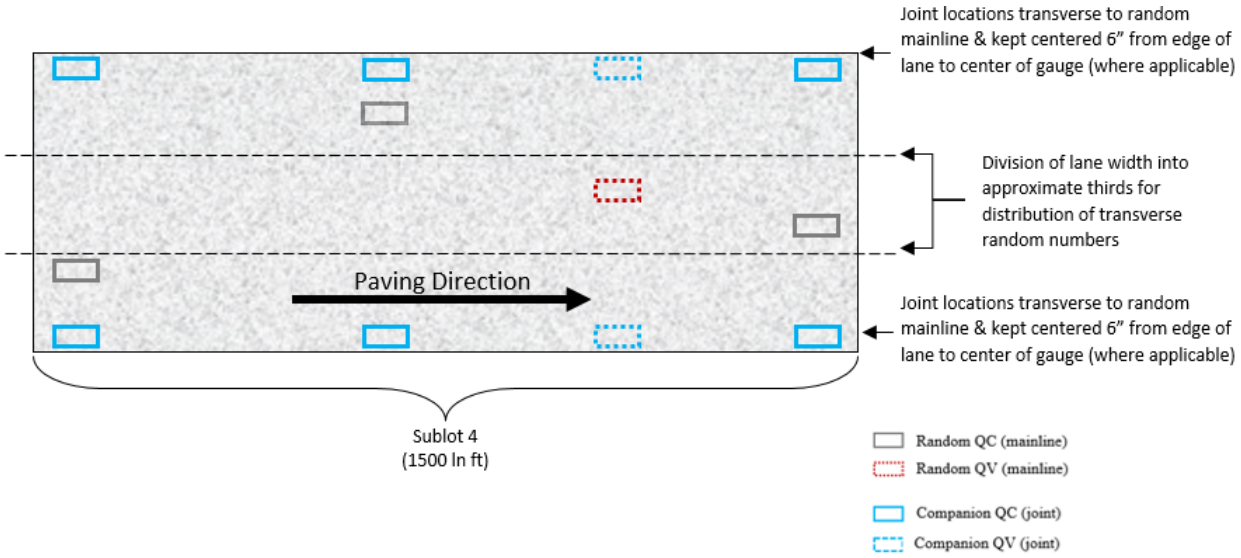
The department will administer disincentives under the Disincentive Density HMA Pavement Longitudinal Joints administrative item.

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 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	$0.40
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	$0.40
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

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28. Storm Sewer Rock Excavation, Item 608.0005.

Blasting, or the use of explosives, as a means of excavating rock for storm sewer is prohibited. Rather, the contractor shall use ripping or jackhammering methods to excavate the rock to the proper depth.

29. 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 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)

30. Inlet Extension Ring, Item SPV.0060.01.

A Description

This special provision describes providing metal Inlet Extension Rings to adjust existing inlet covers as the plans show and as follows.

B Materials

Use materials conforming to standard spec 611.2(4).

Provide the manufacturer's Certification of Compliance, product data sheet, and installation instructions to the engineer at least 14 days before the work.

C Construction

Conform to standard spec 611 and as follows.

Delete standard spec 611.3.7(1) and 611.3.7(2) and replace with the following:

(1) Adjust the lids of covers on resurfacing projects using adjustment castings designated for the purpose. Install per manufacturer's recommendations.

(2) Assemble the inlet cover, extension ring and frame in a manner that prevents rocking or chattering.

D Measurement

The department will measure Inlet Extension Rings as each individual unit, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.01	Inlet Extension Rings	EACH

The department will pay according to standard spec 611.5.5.

ner-611-020 (20190723)

31. Manhole Extension Ring, Item SPV.0060.02

A Description

This special provision describes providing manhole extension rings to adjust existing manhole covers as the plans show and as follows.

B Materials

Use materials conforming to standard spec 611.2(4).

Provide the manufacturer's Certification of Compliance, product data sheet, and installation instructions to the engineer at least 14 days before the work.

C Construction

Conform to standard spec 611 and as follows.

Delete standard spec 611.3.7(1) and 611.3.7(2) and replace with the following:

(3) Adjust the lids of covers on resurfacing projects using adjustment castings designated for the purpose. Install per manufacturer's recommendations.

(4) Assemble the inlet cover, extension ring and frame in a manner that prevents rocking or chattering.

D Measurement

The department will measure Manhole Extension Ring as each individual unit, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.02	Manhole Extension Ring	EACH

The department will pay according to standard spec 611.5.5.

ner-611-040 (20190723)

32. Storm Sewer Plug, Item SPV.0060.03.

A Description

This special provision describes installing storm sewer plugs at locations the plans show.

B Materials

Provide a precast reinforced concrete plug or an engineer approved alternative, conforming to the inside diameter of the corresponding pipe as shown on the plan.

All materials, if concrete, must conform to standard spec 501 and standard spec 611.

C Construction

Place a watertight plug in the end of the storm sewer pipe in a manner that seals the pipe but allows for future removal of plug without damaging the storm sewer pipe.

D Measurement

The department will measure Storm Sewer Plug 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	Storm Sewer Plug	EACH

Payment is full compensation for providing storm sewer plugs and for removing when no longer needed.

ner-608-035 (20190718)

33. Remove Traffic Signal (STH 42/57 & Ashland Ave), Item SPV.0060.04; Remove Traffic Signal (STH 42/57 & Neenah Ave), Item SPV.0060.05.

A Description

This work shall consist of removing the existing traffic signal equipment from the intersection of STH 42/57 & Ashland and STH 42/57 & Neenah according to the requirements of Standard spec 657 and Standard spec 658, standard detail drawings, and as hereinafter provided.

B (Vacant)

C Construction

After coordination with the NE Region Electrical Unit, Randy Asman, (920) 360-3107, the existing traffic signal equipment shall be disconnected from the concrete bases and transported off site to the electrical subcontractor facilities and/or to a recycling/garbage facility.

D Measurement

The department will measure Remove Traffic Signal (location) by each intersection, 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.0060.04	Remove Traffic Signal (STH 42/57 & Ashland Ave)	EACH
SPV.0060.05	Remove Traffic Signal (STH 42/57 & Neenah Ave)	EACH

Payment is full compensation for removal and transporting to the appropriate facility.

34. Concrete Curb & Gutter 18-Inch Type D Special, Item SPV.0090.01; Concrete Curb & Gutter 30-Inch Type D Special, Item SPV.0090.02; Concrete Curb 8.5-Inch & Gutter 30-Inch, Item SPV.0090.03.

A Description

This special provision describes constructing concrete curb and gutter as the plans show, according to standard spec 601, and as hereinafter described.

B Materials

Furnish materials according to standard spec 601.2.

C Construction

Construct concrete curb and gutter as the plans show and according to standard spec 601.3.

D Measurement

Measurement will be according to standard spec 601.4.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.01	Concrete Curb & Gutter 18-Inch Type D Special	LF
SPV.0090.02	Concrete Curb & Gutter 30-Inch Type D Special	LF
SPV.0090.03	Concrete Curb 8.5-Inch & Gutter 30-Inch Type D Special	LF

Payment is according to standard spec 601.5.

35. Sawing Concrete Curb Head, Item SPV.0090.04.

A Description

This special provision describes sawing of existing concrete curb head as the plans show, according to standard spec 690, and as hereinafter described.

B (Vacant)

C Construction

Excavate behind curb as necessary to install tracking for saw blade.

Saw curb head according to standard spec 690. Saw curb head as the plans show or engineer directs. Remove and dispose of curb material according to applicable portions of standard spec 204.

Replace excavated material behind curb as the plans show or engineer directs.

D Measurement

The department will measure Sawing Concrete Curb Head by the linear foot, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.04	Sawing Concrete Curb Head	LF

Payment is full compensation for excavating behind curb to install tracking for saw blade, sawing curb head, sludge removal, removing and disposing of sawed off curb head, replacing excavated material, and salvaged topsoil.

36. Concrete Pipe Patching, Item SPV.0165.01.

A Description

This special provision describes covering or patching existing concrete pipe as the plans show or hereinafter described.

B Materials

Furnish mortar materials as listed in standard spec 611.2.

C Construction

General

(1) Request that engineer determine limits of patching area prior to work beginning.

(2) Remove excess or loose material from culvert pipe with a wire brush or by lightly taping with a metal chisel.

(3) Dampen patching area prior to applying mortar.

(4) Apply mortar to patching area using a trowel and smoothing the edges to match into the existing pipe.

D Measurement

The department will measure Concrete Pipe Patching by the square foot, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0165.01	Concrete Pipe Patching	SF

Payment is full compensation for cleaning patch area and applying mortar.

37. Undoweled Base Patching Concrete, Item SPV.0180.01; Undoweled Base Patching Concrete SHES, Item SPV.0180.02.

A Description

This special provision describes constructing undoweled base patching concrete as the plans show, according to standard spec 390, and as hereinafter described.

B Materials

For Undoweled Base Patching Concrete, furnish grade C concrete as specified standard spec 501.

For Undoweled Base Patching Concrete SHES, furnish concrete as specified for SHES concrete repair and replacement in 416.2.

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

C Construction

Construct as specified in standard spec 390.3 with the following additions:

(1) Dowel bars are not required for items of Undoweled Base Patching Concrete.

(2) Transverse joint patch limits shall consist of sawing or scoring the pavement limits with a 2-inch deep saw cut then removing the remaining concrete by a hydraulic chisel or other approved method to create a rough vertical edge. Using a Vermeer saw is also an acceptable alternative to create a rough vertical edge at the patch limits. Creating a rough vertical edge is critical to producing a mechanical interlock between new and old concrete due the lack of dowel bars.

D Measurement

The department will measure undoweled base patching concrete items by the square yard, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0180.01	Undoweled Base Patching Concrete	SY
SPV.0180.02	Undoweled Base Patching Concrete SHES	SY

Payment for undoweled base patching concrete items will be according to standard spec 390.5.

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.

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

Make the following revisions to the standard specifications:

415.3.16 Tolerance in Pavement Thickness

Replace the entire text with the following effective with the November 2021 letting:

415.3.16.1 General

(1) Construct the plan thickness or thicker. The department will accept pavement thickness based on the results of department-performed acceptance testing conforming to:

Magnetic Pulse Induction	CMM 870: ASTM E3209 WTM
Probing	CMM 870: WTP C-002
Preplacement Measurement	CMM 870: WTP C-003

415.3.16.2 Pavement Units

415.3.16.2.1 Basic Units

(1) Basic unit is defined as a slip formed, single lane, with a minimum lane width of 10 feet, measured, from the pavement edge to the adjacent longitudinal joint; from one longitudinal joint to the next; or between pavement edges if there is no longitudinal joint.

415.3.16.2.2 Special Units

(2) Establish special units for areas of fillets, intersections, gaps, gores, shoulders, ramps, pavement lanes less than 10 feet wide and other areas not included in basic units.

415.3.16.3 Test Plate Locations

(1) Place department-furnished test plates. Within 5 business days after paving, enter the sequential number and associated position data into MRS available at:

http://www.atwoodsystems.com/

(2) Contractor will maintain plate location markings for 10 business days after paving.

415.3.16.4 Acceptance Testing

415.3.16.4.1 Basic Units

415.3.16.4.1.2 Magnetic Pulse Induction

(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) Department will establish a project reference plate at the start of each paving stage. Project reference plate will be measured before each day of testing. Department will notify the contractor of project reference plate locations before 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 falls 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.
- The contractor shall perform coring according to AASHTO T24. The department will evaluate the results according to AASHTO T148
- The contractor shall fill core holes with concrete or mortar.

415.3.16.4.2 Special Units

415.3.16.4.2.1 Magnetic Pulse Induction

(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) Department will establish a project reference plate at the start of each paving stage. Project reference plate will be measured before each day of testing. Department will notify the contractor of project reference plate locations before 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 falls 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 department will measure the second plate in that unit. If both plates are required to be measured, then all six thickness measurements will be averaged for that unit. If the average of the six measurements is more than 1 inch thinner than contract plan thickness, the pavement is unacceptable.

415.3.16.4.2.2 Probing

(1) The department will measure slip form special units during concrete placement. Upon completion of the project thickness testing, the department will provide the test results to the contractor within 5 business days.

(2) Department will probe 2 random locations within the special unit. The average of the two readings will be the reported measurement for the special unit.

415.3.16.4.2.3 Preplacement Measurement

(1) The department will measure non-slip form special units before concrete placement.

(2) Thickness corrections will be made to a conforming thickness by reshaping the base aggregate before the pavement is placed.

415.5.2 Adjusting Pay for Thickness

Replace the entire text with the following effective with the November 2021 letting:

(1) The department will adjust pay for pavement thickness under the Nonconforming Thickness Concrete Pavement administrative item as follows:

FOR PAVEMENT THINNER THAN PLAN THICKNESS BY:	PERCENT OF THE CONTRACT UNIT PRICE
> 1/4 inch but <= 1/2 inch	80
> 1/2 inch but <= 3/4 inch	60
> 3/4 inch but <= 1 inch	50

(2) When pavement of unacceptable final thickness is determined, as specified in 415.3.16.4, the department will direct the contractor to either:

1. Remove and replace unacceptable concrete pavement to the nearest joint with new concrete pavement of conforming thickness. The department will pay once for the area at the full contract price.
2. If the unacceptable pavement is less than 100 LF, the department may allow the concrete to remain in place without payment for the unacceptable area.

460.2.6 Recovered Asphaltic Binders

Replace paragraph two with the following effective with the November 2021 letting:

(2) The contractor may replace virgin binder with recovered binder up to the maximum percentage allowed under 460.2.5 without further testing. When the design percent asphalt binder replaced exceeds the allowable limits in 460.2.5, the contractor must:

- Document adjustments made to the mix design in the mix design submittal.
- Submit test results that indicate the mixture's asphaltic binder meets or exceeds the upper and lower temperature grade requirements the bid item designates.
    - If only one recycled asphaltic material source is used, furnish one of the following:
        - Test results from extracted and recovered binder from the resultant mixture.
        - Blending charts that indicate the resultant mixture's high and low temperature PG as an interpolation of the percent binder replaced between the virgin binder's and the recycled asphaltic material source binder's high and low temperature PG.
    - If two or more recycled asphaltic material sources are used, furnish test results from extracted and

recovered binder from the resultant mixture.

501.2.6 Water

Retitle with the following effective with the November 2021 letting:

501.2.6 Mixing Water

501.2.6.2 Requirements

Replace paragraph two with the following effective with the November 2021 letting:

(2) Water from other sources must comply with the following:

Acidity, maximum of 0.1N NaOH to neutralize 200 mL of water; CMM 870: WTP C-001	2 mL
Alkalinity, maximum of 0.1N HCL to neutralize 200 mL of water; CMM 870: WTP C-001	15 mL
Maximum sulphate ($S0_4$); CMM 870: WTP C-001	0.05 percent
Maximum chloride; CMM 870: WTP C-001	0.10 percent
Maximum total solids; CMM 870: WTP C-001	
Organic	0.04 percent
Inorganic	0.15 percent

501.3.2.4.2 Air Entrainment

Replace paragraph two with the following effective with the November 2021 letting:

(2) Test fresh concrete air content according to AASHTO T152 or AASHTO TP118 at the contract-required frequency and as the engineer directs. Test concrete placed by pumping or belting at the point of discharge from the pump line or belt.

501.3.7.1 Slump

Replace paragraph one with the following effective with the November 2021 letting:

(1) Use a 1-inch to 4-inch slump for concrete used in structures or placed in forms, except as follows:

- Do not exceed a slump of 2 inches for grade E concrete.
- Increase slump as specified in 502.3.5.3 for concrete placed underwater.
- If BTS approves a concrete mixture using a superplasticizer, the contractor may increase slump for that mixture to a maximum of 9 inches without exceeding the maximum mix water allowed for that grade.

531.5 Payment

Replace paragraph two with the following effective with the November 2021 letting:

(2) Payment for Concrete Masonry Ancillary Structures Type NS is full compensation for providing concrete for non-standard sign structure foundations; and for anchor rod assemblies. The department will pay separately for excavating and backfilling drilled shafts under the Drilling Shafts bid items.

Replace paragraph five with the following effective with the November 2021 letting:

(5) Payment for the Foundation bid items is full compensation for providing concrete foundations; for anchor rod assemblies; for reinforcing steel; and for embedded conduit and electrical components. The department will pay separately for excavating and backfilling drilled shafts under the Drilling Shafts bid items.

642.2.2.1 General

Replace paragraph one with the following effective with the November 2021 letting:

(1) Provide each field office with two rooms, separated by an interior door with a padlock. Ensure that each room has a separate exterior door and its own air conditioner. Locate the office where a quality internet connection can be achieved. Ensure quality cell phone reception is achievable inside the field office.

701.3.1 General

Replace table 701-1 with the following effective with the November 2021 letting:

TABLE 701-1 TESTING AND CERTIFICATION STANDARDS

TEST	TEST STANDARD	MINIMUM REQUIRED CERTIFICATION (any one of the certifications listed for each test)
Random Sampling	CMM 830.9.2	Transportation Materials Sampling Technician (TMS) TMS Assistant Certified Technician (ACT-TMS) Aggregate Technician I (AGGTEC-I) AGGTEC-I Assistant Certified Technician (ACT-AGG) PCC Technician I (PCCTEC-I) PCCTEC-I Assistant Certified Technician (ACT-PCC) Grading Technician I (GRADINGTEC-I) Grading Assistant Certified Technician (ACT-GRADING)
Sampling Aggregates	AASHTO T2[1] [4]	TMS, ACT-TMS, AGGTECT-1, ACT-AGG
Percent passing the No. 200 sieve	AASHTO T11[1]	AGGTEC-I, ACT-AGG
Fine & coarse aggregate gradation	AASHTO T27[1]	
Aggregate moisture content	AASHTO T255[1]	
Fractured faces	ASTM D5821[1]	
Liquid limit	AASHTO T89	Aggregate Testing for Transportation Systems (ATTS) GRADINGTEC-I, or ACT-GRADING
Plasticity index	AASHTO T90[3]	
Sampling freshly mixed concrete	AASHTO R60	PCCTEC-1 ACT-PCC
Air content of fresh concrete	AASHTO T152[2] AASHTO TP118[5]	
Air void system of fresh concrete	AASHTO TP118[5]	
Concrete slump	AASHTO T119[2]	
Concrete temperature	ASTM C1064	
Making and curing concrete specimens	AASHTO T23	
Moist curing for concrete specimens	AASHTO M201	
Concrete compressive strength	AASHTO T22	Concrete Strength Tester (CST) CST Assistant Certified Technician (ACT-CST)
Concrete flexural strength	AASHTO T97	
Concrete surface resistivity[2]	AASHTO T358	
Voids in aggregate	AASHTO T19	PCCTEC-II
Profiling	__	PROFILER

[1] As modified in CMM 860.

[2] As modified in CMM 870.

[3] A plasticity check, if required under individual QMP specifications, may be performed by an AGGTEC-I in addition to the certifications listed for liquid limit and plasticity index tests.

[4] Plant personnel may operate equipment to obtain samples under the direct observation of a TMS or higher.

[5] Consolidate by rodding.

710.2 Small Quantities

Replace the entire text with the following effective with the November 2021 letting:

(1) The department defines small quantities as follows:

- As specified in 715.1.1.2 for class I concrete.
- Less than 50 cubic yards of class II ancillary concrete placed under a single bid item.

(2) For contracts with only small quantities of material subject to testing, modify the requirements of 710 as follows:

1. The contractor may submit an abbreviated quality control plan as allowed in 701.1.2.3.
2. Provide one of the following for aggregate process control:
   - Documented previous testing dated within 120 calendar days. Provide gradation test results to the engineer before placing material.
   - Non-random start-up gradation testing.

710.4 Concrete Mixes

Replace paragraph two with the following effective with the November 2021 letting:

(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, SSD bulk specific gravity, wear, soundness, freeze thaw test results if required, and air correction factor. Also include aggregate production records dated within 2 years if using those results in the design. 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 according to AASHTO TP137 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.

Replace paragraph four with the following effective with the November 2021 letting:

(4) Prepare and submit modifications to a concrete mix to the engineer for approval 3 business days before using that modified mix. Modifications requiring the engineer's approval include changes in:

1. Source of any material. For paving and barrier mixes, a source change for fly ash of the same class does not constitute a mix design change.
2. Quantities of cementitious materials.
3. Addition or deletion of admixtures. Minor admixture dosage adjustments required to maintain air content or slump do not require engineer review or approval.

710.5.5 Strength

Replace paragraph one with the following effective with the November 2021 letting:

(1) Cast all 6" x 12" cylinders or all 6" x 6" x 21" beams in a set from the same sample. Do not cast more than one set of specimens from a single truckload of concrete. Mark each specimen to identify the lot and sublot or location on the project it represents.

710.5.6 Aggregate Testing

Retitle and replace the entire text with the following effective with the November 2021 letting:

710.5.6 Aggregate Testing During Concrete Production

710.5.6.1 General

(1) The department will accept gradation based on the results of department-performed acceptance testing.

(2) The department and contractor will obtain samples using the same method. When belt sampling, contractor personnel shall obtain samples for the department under the direct observation of the department personnel. Contractor will define sampling method in the QMP or abbreviated QMP.

710.5.6.2 Contractor Control Charts

710.5.6.2.1 General

(1) Test aggregate gradations during concrete production except as allowed for small quantities under 710.2. Required contractor testing will be performed using non-random samples.

(2) Sample aggregates from either the conveyor belt or from the working face of the stockpiles.

(3) Sample aggregates within 2 business days before placement for each mix design. 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 shown based on the anticipated daily cumulative plant production for each mix design. The contractor's concrete production tests can be used for the same mix design on multiple contracts.

TABLE 710-1 CONTRACTOR GRADATION TESTING FREQUENCY - CLASS I

DAILY PLANT PRODUCTION RATE FOR WisDOT WORK	MINIMUM FREQUENCY
Gradation Report Before Placement	
1000 cubic yards or less	one test per day
more than 1000 cubic yards	two tests per day

TABLE 710-2 CONTRACTOR GRADATION TESTING FREQUENCY - CLASS II

MINIMUM FREQUENCY
Gradation Report Before Placement
One test per calendar week of production

710.5.6.2.2 Optimized Aggregate Gradation Control Charts

(1) Determine the complete gradation using a washed analysis for both fine and coarse aggregates. Report results for the following:

- 1 1/2", 1", 3/4", 1/2", 3/8", #4, #8, #16, #30, #50, #100, and #200 sieves.
- Sum of volumetric percentages retained on No. 8, No. 16, and No. 30 sieves.
- Sum of volumetric percentages retained on No. 30, No. 50, No. 100, and No. 200 sieves.

(2) Calculate blended aggregate gradations using the mix design batch percentages for the component aggregates. Ensure the blended aggregate gradation conforms to the volumetric percent retained of the optimized aggregate gradation limits specified in table 501-4.

(3) Throughout the contract, construct a 4-point running average of the volumetric percent retained for each sieve to determine if the blended aggregate gradation is within the tarantula curve limits specified in table 501-4.

710.5.6.2.3 Combined Aggregate Gradation Control Charts

(1) Determine the complete gradation using a washed analysis for both fine and coarse aggregates. Report results for the 1 1/2", 1", 3/4", 1/2", 3/8", #4, #8, #16, #30, #50, #100, and #200 sieves.

(2) Calculate blended aggregate gradations using the mix design batch percentages for the component aggregates. Ensure the blended aggregate gradation conforms to the percent passing by weight requirements of the combined aggregate gradation limits specified in table 501-4.

(3) Throughout the contract, construct a 4-point running average of the percent passing by weight for each sieve to determine if the blended aggregate gradation is within the combined aggregate gradation limits specified in table 501-4.

710.5.6.3 Department Acceptance Testing

(1) Department testing frequency is based on the quantity of each mix design placed under each individual WisDOT contract.

(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 regional testing lab in the same day. Department will report gradation test results to the contractor within 1 business day of being delivered to the lab. Department and contractor can agree to an alternative test result reporting timeframe; alternative timeframe is required to be documented in the QMP.

(4) Additional samples may be taken at the engineer's discretion due to change in condition.

TABLE 710-3 DEPARTMENT GRADATION TESTING FREQUENCY

CONCRETE CLASSIFICATION	MINIMUM DEPARTMENT FREQUENCY
Class I: Pavement	1 test per placement day for first 5 days of placement. If all samples are passing, reduced frequency is applied.
	Reduced frequency: 1 test per calendar week of placement
Class I: Structures	1 test per 250 CY placed - Minimum of 1 test per substructure - Minimum of 1 test per superstructure

Class I: Cast-in-Place Barrier	1 test per 500 CY placed
Class II	No minimum testing

710.5.7 Corrective Action

Replace the entire text with the following effective with the November 2021 letting:

710.5.7.1 Optimized Aggregate Gradations

(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, 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. Department will conduct two tests within the next business day after corrective action is complete.
5. If blended aggregate gradations are within the tarantula curve limits by the second department test:
    - Continue with concrete production.
    - Contractor will include a break in the 4-point running average.
    - For Class I: Pavements, 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 tarantula curve limits by the second department test:
    - Provide a new mix design with an increased cementitious content.
    - If the mix design already has a cementitious content of 565 or more pounds per cubic yard, provide a new mix design.
    - If the contract requires optimized aggregate gradations under 501.2.7.4.2.1(2), stop concrete production and submit a 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 new mix design.

(3) Department and contractor will sample and test aggregate of the new mix design at the frequency defined in 710.5.6.1.

710.5.7.2 Combined Aggregate Gradations

(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. 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.
    - Contractor will include a break in the 4-point running average.
    - For Class I: Pavements, 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 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 new mix design.

(3) Department and contractor will sample and test aggregate of the new mix design at the frequency defined in 710.5.6.1.

715.3.1.1 General

Replace paragraphs three and four with the following effective with the November 2021 letting:

(3) Cast a set of 3 additional 6"x12" cylinders and test the concrete surface resistivity according to AASHTO T358. Perform this testing at least once per lot if total contract quantities are greater than or equal to the following:

- 20,000 square yards for pavements.
- 5,000 linear feet for barriers.
- 500 cubic yards for structure concrete.

Submit the resistivity to the nearest tenth into MRS for information only. Resistivity testing is not required for the following:

- Lot with less than 3 sublots.
- Concrete items classified as ancillary.
- Concrete placed under the following bid items:
  - Concrete Pavement Approach Slab
  - Concrete Masonry Culverts
  - Concrete Masonry Retaining Walls

(4) Test the air void system at least once per lot and enter the SAM number in MRS for information only. SAM testing is not required for the following:

- For lots with less than 3 sublots.
- High early strength (HES) concrete.
- Special high early strength (SHES) concrete.
- Concrete placed under the following bid items:
  - Concrete Pavement Approach Slab
  - Concrete Masonry Culverts
  - Concrete Masonry Retaining Walls
  - Steel Grid Floor Concrete Filled
  - Crash Cushions Permanent
  - Crash Cushions Permanent Low Maintenance
  - Crash Cushions Temporary

715.3.1.2.3 Lots by Cubic Yard

Replace the entire text with the following effective with the November 2021 letting:

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

TABLE 715-1 CLASS I - LOT AND SUBLOT SIZES

CONCRETE CLASSIFICATION	LOT SIZE	SUBLOT SIZE	NUMBER OF SUBLOTS PER LOT
Class I: Pavement	1250 cubic yards	250 cubic yards	5
Class I: Structures	250 cubic yards	50 cubic yards	5
Class I: Cast-in-Place Barrier	500 cubic yards	100 cubic yards	5

(2) The contractor may include sublots less than or equal to 25 percent of the standard volume in the previous sublot. For partial sublots exceeding 25 percent of the standard volume, notify the engineer who will direct additional testing to represent that partial sublot.

(3) An undersized lot is eligible for incentive payment under 715.5 if the lot has 3 or more sublots for that lot.

715.3.2 Strength Evaluation

Replace the entire text with the following effective with the November 2021 letting:

715.3.2.1 General

(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) Randomly select 2 QC specimens to test at 28 days for percent within limits (PWL). Compare the strengths of the 2 randomly selected QC specimens and determine the 28-day sublot average strength as follows:

- If the lower strength divided by the higher strength is 0.9 or more, average the 2 QC specimens.
- If the lower strength divided by the higher strength is less than 0.9, break one additional specimen and average the 2 higher strength specimens.

715.3.2.2 Removal and Replacement

715.3.2.2.1 Pavement

(1) If a sublot strength is less than 2500 psi in compressive strength or 500 psi in flexural strength, the department may direct the contractor to core that sublot to determine its structural adequacy and whether to direct removal.

(2) If the engineer directs coring, obtain three cores from the sublot in question. Have an HTCP-certified PCC technician I perform or observe core sampling according to AASHTO T24.

(3) Have an independent consultant test cores according to AASHTO T24.

(4) The department will assess concrete for removal and replacement based on a sublot-by-sublot analysis of core strength. Perform coring and testing, fill core holes with an engineer-approved non-shrink grout or concrete, and provide traffic control during coring.

(5) The sublot pavement is conforming if the compressive strengths of all cores from the sublot are 2500 psi or greater.

(6) The sublot pavement is nonconforming if the compressive strengths of any core from the sublot is less than 2500 psi. The department may direct removal and replacement or otherwise determine the final disposition of nonconforming material as specified in 106.5.

715.3.2.2.2 Structures and Cast-in-Place Barrier

(1) The department will evaluate the sublot for possible removal and replacement if the 28-day sublot average compressive strength is lower than f'c minus 500 psi. The value of f'c is the design stress the plans show. The department may assess further strength price reductions or require removal and replacement only after coring the sublot.

(2) The engineer may initially evaluate the sublot strength using a non-destructive method. Based on the results of non-destructive testing, the department may accept the sublot at the previously determined pay for the lot, or direct the contractor to core the sublot.

(3) If the engineer directs coring, obtain three cores from the sublot in question. Have an HTCP-certified PCC technician I perform or observe core sampling according to AASHTO T24. Determine core locations, subject to the engineer's approval, that do not interfere with structural steel.

(4) Have an independent consultant test cores according to AASHTO T24.

(5) The department will assess concrete for removal and replacement based on a sublot-by-sublot analysis of core strength. Perform coring and testing, fill core holes with an engineer-approved non-shrink grout or concrete, and provide traffic control during coring.

(6) If the 3-core average is greater than or equal to 85 percent of f'c, and no individual core is less than 75 percent of f'c, the engineer will accept the sublot at the previously determined pay for the lot. If the 3-core average is less than 85 percent of f'c, or an individual core is less than 75 percent of f'c, the engineer may require the contractor to remove and replace the sublot. The department may direct removal and replacement or otherwise determine the final disposition of nonconforming material as specified in 106.5.

715.3.3 Aggregate

Replace the entire text with the following effective with the November 2021 letting:

715.3.3.1 General

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

715.3.3.2 Structures

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

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

715.5 Payment

Replace the entire text with the following effective with the November 2021 letting:

715.5.1 General

(1) The department will pay incentive for compressive strength under the following bid items:

ITEM NUMBER	DESCRIPTION	UNIT
715.0502	Incentive Strength Concrete Structures	DOL
715.0603	Incentive Strength Concrete Barrier	DOL
715.0715	Incentive Flexural Strength Concrete Pavement	DOL
715.0720	Incentive Compressive Strength Concrete Pavement	DOL

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

(3) The department will administer disincentives for strength under the Disincentive Strength Concrete Structures, Disincentive Strength Concrete Barrier, Disincentive Flexural Strength Concrete Pavement, and Disincentive Compressive Strength Concrete Pavement, administrative items.

(4) The pay factor that is calculated from the equations in 715.5.2(2) and 715.5.3(2) will be applied to the unit costs listed below:

- Pavement: $45 per SY.
- Structure: $635 per CY.
- Cast-in-place barrier: $75 per LF.

(5) 28-day strength average for a lot is the average of the individual sublot strengths within the given lot.

(6) 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.

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

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

715.5.2 Compressive Strength

(1) The department will measure PWL relative to strength lower specification limits as follows:

- Compressive strength of 3700 psi for pavements.
- Compressive strength of 4000 psi for structures and cast-in-place barrier.

(2) The department will adjust pay for each lot using equation "Comp2022" as follows:

Percent within Limits (PWL)	Pay Factor (%)
>= 90 to 100	(1/5 x PWL) + 82
>= 85 to < 90	100
>= 50 to < 85	(5/7 x PWL) + (275/7)
< 50	50[1]

[1] Any material resulting in a lot PWL value less than 50 will be evaluated according to 715.3.2. In the event the material remains in place, it will be paid at 50 percent of the contract unit price of the concrete bid item.

(3) The department will not pay incentive if the lot standard deviation is greater than the following:

- 400 psi for pavement.
- 350 psi for structure and cast-in-place barrier

(4) For lots with less than 3 sublots, there is no incentive but the department will reduce pay by 50 percent of the contract unit price for sublots with an average compressive strength below the following:

- 3700 psi for pavements.
- 4000 psi for structures and cast-in-place barrier.

715.5.3 Flexural Strength

(1) The department will measure PWL relative to strength lower specification limits as follows:

- Flexural strength of 650 psi for pavements.

(2) The department will adjust pay for each lot using equation "Flex2022" as follows:

Percent within Limits (PWL)	Pay Factor (%)
>= 90 to 100	(2/5 x PWL) + 64
>= 85 to < 90	100

>= 50 to < 85	(5/7 x PWL) + (275/7)
< 50	50[1]

[1] Material resulting in a lot PWL value less than 50 will be evaluated according to 715.3.2. In the event the material remains in place, it will be paid at 50 percent of the contract unit price of the concrete bid item.

(3) The department will not pay incentive if the lot standard deviation is greater than 60 psi.

(4) For lots with less than 3 sublots, there is no incentive but the department will reduce pay by 50 percent of the contract unit price for sublots with an average flexural strength below 650 psi.

460.2.2.3 Aggregate Gradation Master Range

Correct errata by adding US Standard equivalent sieve sizes.

(1) Ensure that the aggregate blend, including recycled material and mineral filler, conforms to the gradation requirements in table 460-1. The values listed are design limits; production values may exceed those limits.

TABLE 460-1 AGGREGATE GRADATION MASTER RANGE AND VMA REQUIREMENTS

SIEVE	PERCENT PASSING DESIGNATED SIEVES							
	NOMINAL SIZE							
	No. 1 (37.5 mm) (1 1/2 inch)	No. 2 (25.0 mm) (1 inch)	No.3 (19.0 mm) (3/4 inch)	No. 4 (12.5 mm) (1/2 inch)	No. 5 (9.5 mm) (3/8 inch)	No. 6 (4.75 mm) (3/16 inch)	SMA No. 4 (12.5 mm) (1/2 inch)	SMA No. 5 (9.5 mm) (3/8 inch)
50.0-mm (2-inch)	100							
37.5-mm (1 1/2-inch)	90 - 100	100						
25.0-mm (1-inch)	90 max	90 - 100	100					
19.0-mm (3/4-inch)	___	90 max	90 - 100	100			100	
12.5-mm (1/2-inch)	___	___	90 max	90 - 100	100		90 - 97	100
9.5-mm (3/8-inch)	___	___	___	90 max	90 - 100	100	58 - 80	90 - 100
4.75-mm (No. 4)	___	___	___	___	90 max	90 - 100	25 - 35	35 - 45
2.36-mm (No. 8)	15 - 41	19 - 45	23 - 49	28 - 58	32 - 67	90 max	15 - 25	18 - 28
1.18-mm (No. 16)	___	___	___	___	___	30 - 55	___	___
0.60-mm (No. 30)	___	___	___	___	___	___	18 max	18 max
0.075-mm (No. 200)	0 - 6.0	1.0 - 7.0	2.0 - 8.0	2.0 - 10.0	2.0 - 10.0	6.0 - 13.0	8.0 - 11.0	8.0 - 12.0
% VMA	11.0 min	12.0 min	13.0 min	14.0 min[1]	15.0 min[2]	16.0 - 17.5	16.0 min	17.0 min

[1] 14.5 for LT and MT mixes.

[2] 15.5 for LT and MT mixes.

715.5.1 General

Correct the bid item number for Incentive Compressive Strength Concrete Pavement.

(1) The department will pay incentive for compressive strength under the following bid items:

ITEM NUMBER	DESCRIPTION	UNIT
715.0502	Incentive Strength Concrete Structures	DOL
715.0603	Incentive Strength Concrete Barrier	DOL
715.0715	Incentive Flexural Strength Concrete Pavement	DOL
715.0720	Incentive Compressive Strength Concrete Pavement	DOL

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. 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).
6. All agreements made by a contractor shall include the provisions in A(1), (2), (3), (4) and (5), and shall be binding on all first tier subcontractor relationships and all contractors and subcontractors utilizing DBE firms on the project.

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

Effective January 2019 Letting ASP 9

ADDITIONAL SPECIAL PROVISION 9

Electronic Certified Payroll or Labor Data Submittal

(1) Use the department's Civil Rights Compliance System (CRCS) 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. 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 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 or by telephone. Contact Paul Ndon at (414) 438-4584 to schedule the training.

(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) Firms wishing to export payroll/labor data from their computer system into CRCS should have their payroll coordinator contact Paul Ndon at paul.ndon@dot.wi.gov. Not every contractor's payroll system is capable of producing 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

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).

Effective November 2020 letting

BUY AMERICA PROVISION

All steel and iron materials permanently incorporated in this project shall be domestic products and all manufacturing and coating processes for these materials from smelting forward in the manufacturing process must have occurred within the United States. Coating includes epoxy coating, galvanizing, painting and any other coating that protects or enhances the value of a material subject to the requirements of Buy America. The exemption of this requirement is the minimal use of foreign materials if the total cost of such material permanently incorporated in the product does not exceed one-tenth of one percent (1/10 of 1%) of the total contract cost or $2,500.00, whichever is greater. For purposes of this paragraph, the cost is that shown to be the value of the subject products as they are delivered to the project. The contractor shall take actions and provide documentation conforming to CMM 2-28.5 to ensure compliance with this “Buy America” 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 steel, iron, and coating processes for steel or iron incorporated into the contract work conform to these "Buy America" provisions. Attach a list of exemptions and their associated costs to the certification form. Department form DT4567 is available at:

https://wisconsindot.gov/Documents/formdocs/dt4567.docx

Proposal ID: 20220208025 **Project(s):** 4430-19-71

Federal ID(s): N/A

SECTION: 0001 Contract Items

Alt Set ID: **Alt Mbr ID:**

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0002	201.0120 Clearing	18.000 ID	_____.____	_____.____
0004	201.0220 Grubbing	18.000 ID	_____.____	_____.____
0006	204.0100 Removing Concrete Pavement	2,362.000 SY	_____.____	_____.____
0008	204.0105 Removing Pavement Butt Joints	1,620.000 SY	_____.____	_____.____
0010	204.0110 Removing Asphaltic Surface	30.000 SY	_____.____	_____.____
0012	204.0115 Removing Asphaltic Surface Butt Joints	1,433.000 SY	_____.____	_____.____
0014	204.0120 Removing Asphaltic Surface Milling	111,930.000 SY	_____.____	_____.____
0016	204.0130 Removing Curb	10.000 LF	_____.____	_____.____
0018	204.0150 Removing Curb & Gutter	1,659.000 LF	_____.____	_____.____
0020	204.0155 Removing Concrete Sidewalk	261.000 SY	_____.____	_____.____
0022	204.0157 Removing Concrete Barrier	186.000 LF	_____.____	_____.____
0024	204.0165 Removing Guardrail	2,158.000 LF	_____.____	_____.____
0026	204.0195 Removing Concrete Bases	3.000 EACH	_____.____	_____.____
0028	204.0220 Removing Inlets	7.000 EACH	_____.____	_____.____
0030	204.0245 Removing Storm Sewer (size) 01. 12-Inch	95.000 LF	_____.____	_____.____
0032	204.0246 Removing Ancillary Structure (structure) 01. S-151	1.000 EACH	_____.____	_____.____

Proposal ID: 20220208025 **Project(s):** 4430-19-71

Federal ID(s): N/A

SECTION: 0001 Contract Items

Alt Set ID: **Alt Mbr ID:**

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0034	204.9060.S Removing (item description) 01. Apron Endwall	17.000 EACH	_____.____	_____.____
0036	205.0100 Excavation Common	2,536.000 CY	_____.____	_____.____
0038	205.0200 Excavation Rock	85.000 CY	_____.____	_____.____
0040	211.0100 Prepare Foundation for Asphaltic Paving (project) 01. 4430-19-71	LS	LUMP SUM	_____.____
0042	211.0300 Prepare Foundation for Concrete Base (project) 01. 4430-19-71	LS	LUMP SUM	_____.____
0044	211.0400 Prepare Foundation for Asphaltic Shoulders	202.000 STA	_____.____	_____.____
0046	213.0100 Finishing Roadway (project) 01. 4430-19-71	1.000 EACH	_____.____	_____.____
0048	305.0110 Base Aggregate Dense 3/4-Inch	4,636.000 TON	_____.____	_____.____
0050	305.0120 Base Aggregate Dense 1 1/4-Inch	2,954.000 TON	_____.____	_____.____
0052	320.0145 Concrete Base 8-Inch	517.000 SY	_____.____	_____.____
0054	390.0303 Base Patching Concrete	311.000 SY	_____.____	_____.____
0056	416.0610 Drilled Tie Bars	5,299.000 EACH	_____.____	_____.____
0058	416.0620 Drilled Dowel Bars	7,261.000 EACH	_____.____	_____.____
0060	416.1710 Concrete Pavement Repair	2,593.000 SY	_____.____	_____.____
0062	416.1715 Concrete Pavement Repair SHES	412.000 SY	_____.____	_____.____

Proposal ID: 20220208025 **Project(s):** 4430-19-71

Federal ID(s): N/A

SECTION: 0001 Contract Items

Alt Set ID: **Alt Mbr ID:**

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0064	416.1720 Concrete Pavement Replacement	4,042.000 SY	_____.____	_____.____
0066	416.1725 Concrete Pavement Replacement SHES	438.000 SY	_____.____	_____.____
0068	420.1000 Continuous Diamond Grinding Concrete Pavement	117,800.000 SY	_____.____	_____.____
0070	455.0605 Tack Coat	16,560.000 GAL	_____.____	_____.____
0072	460.0105.S HMA Percent Within Limits (PWL) Test Strip Volumetrics	1.000 EACH	_____.____	_____.____
0074	460.0110.S HMA Percent Within Limits (PWL) Test Strip Density	1.000 EACH	_____.____	_____.____
0076	460.2000 Incentive Density HMA Pavement	9,670.000 DOL	1.00000	9,670.00
0078	460.2005 Incentive Density PWL HMA Pavement	5,560.000 DOL	1.00000	5,560.00
0080	460.2007 Incentive Density HMA Pavement Longitudinal Joints	15,880.000 DOL	1.00000	15,880.00
0082	460.2010 Incentive Air Voids HMA Pavement	15,150.000 DOL	1.00000	15,150.00
0084	460.6223 HMA Pavement 3 MT 58-28 S	260.000 TON	_____.____	_____.____
0086	460.6224 HMA Pavement 4 MT 58-28 S	30,250.000 TON	_____.____	_____.____
0088	465.0120 Asphaltic Surface Driveways and Field Entrances	31.000 TON	_____.____	_____.____
0090	465.0125 Asphaltic Surface Temporary	35.000 TON	_____.____	_____.____
0092	465.0305 Asphaltic Surface Safety Islands	105.000 TON	_____.____	_____.____

Proposal ID: 20220208025 **Project(s):** 4430-19-71

Federal ID(s): N/A

SECTION: 0001 Contract Items

Alt Set ID: **Alt Mbr ID:**

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0094	465.0315 Asphaltic Flumes	31.000 SY	_____.____	_____.____
0096	465.0400 Asphaltic Shoulder Rumble Strips	64,414.000 LF	_____.____	_____.____
0098	520.1012 Apron Endwalls for Culvert Pipe 12-Inch	1.000 EACH	_____.____	_____.____
0100	520.1018 Apron Endwalls for Culvert Pipe 18-Inch	2.000 EACH	_____.____	_____.____
0102	520.8000 Concrete Collars for Pipe	14.000 EACH	_____.____	_____.____
0104	520.8700 Cleaning Culvert Pipes	17.000 EACH	_____.____	_____.____
0106	522.1018 Apron Endwalls for Culvert Pipe Reinforced Concrete 18-Inch	10.000 EACH	_____.____	_____.____
0108	522.1024 Apron Endwalls for Culvert Pipe Reinforced Concrete 24-Inch	2.000 EACH	_____.____	_____.____
0110	522.1030 Apron Endwalls for Culvert Pipe Reinforced Concrete 30-Inch	4.000 EACH	_____.____	_____.____
0112	522.1048 Apron Endwalls for Culvert Pipe Reinforced Concrete 48-Inch	1.000 EACH	_____.____	_____.____
0114	524.0172 Culvert Pipe Salvaged 72-Inch	16.000 LF	_____.____	_____.____
0116	524.0672 Apron Endwalls for Culvert Pipe Salvaged 72-Inch	1.000 EACH	_____.____	_____.____
0118	601.0110 Concrete Curb Type D	10.000 LF	_____.____	_____.____
0120	601.0120 Concrete Curb Type J	103.000 LF	_____.____	_____.____
0122	601.0409 Concrete Curb & Gutter 30-Inch Type A	938.000 LF	_____.____	_____.____

Proposal ID: 20220208025 **Project(s):** 4430-19-71

Federal ID(s): N/A

SECTION: 0001 Contract Items

Alt Set ID: **Alt Mbr ID:**

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0124	601.0411 Concrete Curb & Gutter 30-Inch Type D	2,084.000 LF	_____.____	_____.____
0126	601.0413 Concrete Curb & Gutter 6-Inch Sloped 30-Inch Type G	29.000 LF	_____.____	_____.____
0128	601.0415 Concrete Curb & Gutter 6-Inch Sloped 30-Inch Type J	25.000 LF	_____.____	_____.____
0130	601.0555 Concrete Curb & Gutter 6-Inch Sloped 36-Inch Type A	166.000 LF	_____.____	_____.____
0132	601.0557 Concrete Curb & Gutter 6-Inch Sloped 36-Inch Type D	264.000 LF	_____.____	_____.____
0134	602.0405 Concrete Sidewalk 4-Inch	2,464.000 SF	_____.____	_____.____
0136	606.0300 Riprap Heavy	26.000 CY	_____.____	_____.____
0138	608.0005 Storm Sewer Rock Excavation	20.000 CY	_____.____	_____.____
0140	608.0112 Relaid Storm Sewer 12-Inch	28.000 LF	_____.____	_____.____
0142	608.0412 Storm Sewer Pipe Reinforced Concrete Class IV 12-Inch	170.000 LF	_____.____	_____.____
0144	608.3012 Storm Sewer Pipe Class III-A 12-Inch	35.000 LF	_____.____	_____.____
0146	608.3018 Storm Sewer Pipe Class III-A 18-Inch	142.000 LF	_____.____	_____.____
0148	611.0530 Manhole Covers Type J	2.000 EACH	_____.____	_____.____
0150	611.0600 Inlet Covers Type A	9.000 EACH	_____.____	_____.____
0152	611.0603 Inlet Covers Type A-S	1.000 EACH	_____.____	_____.____

Proposal ID: 20220208025 **Project(s):** 4430-19-71

Federal ID(s): N/A

SECTION: 0001 Contract Items

Alt Set ID: **Alt Mbr ID:**

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0154	611.0624 Inlet Covers Type H	5.000 EACH	_____.____	_____.____
0156	611.0636 Inlet Covers Type HM-S	1.000 EACH	_____.____	_____.____
0158	611.0639 Inlet Covers Type H-S	2.000 EACH	_____.____	_____.____
0160	611.0642 Inlet Covers Type MS	1.000 EACH	_____.____	_____.____
0162	611.2033 Manholes 3x3-FT	2.000 EACH	_____.____	_____.____
0164	611.3004 Inlets 4-FT Diameter	3.000 EACH	_____.____	_____.____
0166	611.3220 Inlets 2x2-FT	2.000 EACH	_____.____	_____.____
0168	611.3230 Inlets 2x3-FT	5.000 EACH	_____.____	_____.____
0170	611.3901 Inlets Median 1 Grate	1.000 EACH	_____.____	_____.____
0172	611.8115 Adjusting Inlet Covers	4.000 EACH	_____.____	_____.____
0174	611.9710 Salvaged Inlet Covers	21.000 EACH	_____.____	_____.____
0176	614.0220 Steel Thrie Beam Bullnose Terminal	2.000 EACH	_____.____	_____.____
0178	614.0230 Steel Thrie Beam	102.000 LF	_____.____	_____.____
0180	614.2300 MGS Guardrail 3	1,116.000 LF	_____.____	_____.____
0182	614.2330 MGS Guardrail 3 K	63.000 LF	_____.____	_____.____
0184	614.2500 MGS Thrie Beam Transition	169.000 LF	_____.____	_____.____
0186	614.2610 MGS Guardrail Terminal EAT	4.000 EACH	_____.____	_____.____

Proposal ID: 20220208025 **Project(s):** 4430-19-71

Federal ID(s): N/A

SECTION: 0001 Contract Items

Alt Set ID: **Alt Mbr ID:**

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0188	614.2620 MGS Guardrail Terminal Type 2	4.000 EACH	_____.____	_____.____
0190	618.0100 Maintenance And Repair of Haul Roads (project) 01. 4430-19-71	1.000 EACH	_____.____	_____.____
0192	619.1000 Mobilization	1.000 EACH	_____.____	_____.____
0194	620.0100 Concrete Corrugated Median	344.000 SF	_____.____	_____.____
0196	620.0300 Concrete Median Sloped Nose	229.000 SF	_____.____	_____.____
0198	624.0100 Water	72.000 MGAL	_____.____	_____.____
0200	625.0100 Topsoil	662.000 SY	_____.____	_____.____
0202	625.0500 Salvaged Topsoil	3,923.000 SY	_____.____	_____.____
0204	628.1504 Silt Fence	5,259.000 LF	_____.____	_____.____
0206	628.1520 Silt Fence Maintenance	5,259.000 LF	_____.____	_____.____
0208	628.1905 Mobilizations Erosion Control	14.000 EACH	_____.____	_____.____
0210	628.1910 Mobilizations Emergency Erosion Control	7.000 EACH	_____.____	_____.____
0212	628.2006 Erosion Mat Urban Class I Type A	4,312.000 SY	_____.____	_____.____
0214	628.7010 Inlet Protection Type B	19.000 EACH	_____.____	_____.____
0216	628.7015 Inlet Protection Type C	104.000 EACH	_____.____	_____.____
0218	628.7504 Temporary Ditch Checks	290.000 LF	_____.____	_____.____

Proposal ID: 20220208025 **Project(s):** 4430-19-71

Federal ID(s): N/A

SECTION: 0001 Contract Items

Alt Set ID: **Alt Mbr ID:**

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0220	628.7555 Culvert Pipe Checks	26.000 EACH	_____.____	_____.____
0222	628.7570 Rock Bags	38.000 EACH	_____.____	_____.____
0224	629.0210 Fertilizer Type B	3.000 CWT	_____.____	_____.____
0226	630.0130 Seeding Mixture No. 30	107.000 LB	_____.____	_____.____
0228	630.0140 Seeding Mixture No. 40	23.000 LB	_____.____	_____.____
0230	630.0500 Seed Water	97.000 MGAL	_____.____	_____.____
0232	633.5200 Markers Culvert End	37.000 EACH	_____.____	_____.____
0234	634.0614 Posts Wood 4x6-Inch X 14-FT	13.000 EACH	_____.____	_____.____
0236	634.0616 Posts Wood 4x6-Inch X 16-FT	6.000 EACH	_____.____	_____.____
0238	637.2210 Signs Type II Reflective H	39.690 SF	_____.____	_____.____
0240	637.2230 Signs Type II Reflective F	8.000 SF	_____.____	_____.____
0242	638.2102 Moving Signs Type II	20.000 EACH	_____.____	_____.____
0244	638.2601 Removing Signs Type I	1.000 EACH	_____.____	_____.____
0246	638.2602 Removing Signs Type II	1.000 EACH	_____.____	_____.____
0248	638.3000 Removing Small Sign Supports	10.000 EACH	_____.____	_____.____
0250	642.5001 Field Office Type B	1.000 EACH	_____.____	_____.____
0252	643.0300 Traffic Control Drums	169,990.000 DAY	_____.____	_____.____

Proposal ID: 20220208025 **Project(s):** 4430-19-71

Federal ID(s): N/A

SECTION: 0001 Contract Items

Alt Set ID: **Alt Mbr ID:**

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0254	643.0410 Traffic Control Barricades Type II	60.000 DAY	_____.____	_____.____
0256	643.0420 Traffic Control Barricades Type III	10,994.000 DAY	_____.____	_____.____
0258	643.0500 Traffic Control Flexible Tubular Marker Posts	30.000 EACH	_____.____	_____.____
0260	643.0600 Traffic Control Flexible Tubular Marker Bases	30.000 EACH	_____.____	_____.____
0262	643.0705 Traffic Control Warning Lights Type A	14,357.000 DAY	_____.____	_____.____
0264	643.0715 Traffic Control Warning Lights Type C	6,450.000 DAY	_____.____	_____.____
0266	643.0800 Traffic Control Arrow Boards	498.000 DAY	_____.____	_____.____
0268	643.0900 Traffic Control Signs	28,214.000 DAY	_____.____	_____.____
0270	643.0910 Traffic Control Covering Signs Type I	3.000 EACH	_____.____	_____.____
0272	643.0920 Traffic Control Covering Signs Type II	13.000 EACH	_____.____	_____.____
0274	643.1050 Traffic Control Signs PCMS	91.000 DAY	_____.____	_____.____
0276	643.5000 Traffic Control	1.000 EACH	_____.____	_____.____
0278	644.1410 Temporary Pedestrian Surface Asphalt	300.000 SF	_____.____	_____.____
0280	644.1601 Temporary Pedestrian Curb Ramp	30.000 DAY	_____.____	_____.____
0282	644.1810 Temporary Pedestrian Barricade	700.000 LF	_____.____	_____.____
0284	645.0120 Geotextile Type HR	66.000 SY	_____.____	_____.____

Proposal ID: 20220208025 **Project(s):** 4430-19-71

Federal ID(s): N/A

SECTION: 0001 Contract Items

Alt Set ID: **Alt Mbr ID:**

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0286	646.1020 Marking Line Epoxy 4-Inch	67,309.000 LF	_____.____	_____.____
0288	646.1040 Marking Line Grooved Wet Ref Epoxy 4-Inch	78,247.000 LF	_____.____	_____.____
0290	646.1545 Marking Line Grooved Wet Ref Contrast Epoxy 4-Inch	8,109.000 LF	_____.____	_____.____
0292	646.1555 Marking Line Grooved Contrast Permanent Tape 4-Inch	10,292.000 LF	_____.____	_____.____
0294	646.3020 Marking Line Epoxy 8-Inch	294.000 LF	_____.____	_____.____
0296	646.3545 Marking Line Grooved Wet Ref Contrast Epoxy 8-Inch	6,590.000 LF	_____.____	_____.____
0298	646.3555 Marking Line Grooved Contrast Permanent Tape 8-Inch	3,431.000 LF	_____.____	_____.____
0300	646.4520 Marking Line Same Day Epoxy 4-Inch	8,060.000 LF	_____.____	_____.____
0302	646.5020 Marking Arrow Epoxy	64.000 EACH	_____.____	_____.____
0304	646.5120 Marking Word Epoxy	9.000 EACH	_____.____	_____.____
0306	646.7120 Marking Diagonal Epoxy 12-Inch	170.000 LF	_____.____	_____.____
0308	646.8020 Marking Corrugated Median Epoxy	116.000 SF	_____.____	_____.____
0310	646.8120 Marking Curb Epoxy	189.000 LF	_____.____	_____.____
0312	646.8220 Marking Island Nose Epoxy	10.000 EACH	_____.____	_____.____
0314	646.9000 Marking Removal Line 4-Inch	3,350.000 LF	_____.____	_____.____

Proposal ID: 20220208025 **Project(s):** 4430-19-71

Federal ID(s): N/A

SECTION: 0001 Contract Items

Alt Set ID: **Alt Mbr ID:**

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0316	646.9200 Marking Removal Line Wide	249.000 LF	_____.____	_____.____
0318	646.9300 Marking Removal Special Marking	6.000 EACH	_____.____	_____.____
0320	649.0105 Temporary Marking Line Paint 4-Inch	13,278.000 LF	_____.____	_____.____
0322	649.0150 Temporary Marking Line Removable Tape 4-Inch	26,987.000 LF	_____.____	_____.____
0324	649.0205 Temporary Marking Line Paint 8-Inch	142.000 LF	_____.____	_____.____
0326	649.0250 Temporary Marking Line Removable Tape 8-Inch	700.000 LF	_____.____	_____.____
0328	650.4000 Construction Staking Storm Sewer	16.000 EACH	_____.____	_____.____
0330	650.4500 Construction Staking Subgrade	1,446.000 LF	_____.____	_____.____
0332	650.5000 Construction Staking Base	1,446.000 LF	_____.____	_____.____
0334	650.5500 Construction Staking Curb Gutter and Curb & Gutter	3,794.000 LF	_____.____	_____.____
0336	650.7000 Construction Staking Concrete Pavement	268.000 LF	_____.____	_____.____
0338	650.8000 Construction Staking Resurfacing Reference	78,925.000 LF	_____.____	_____.____
0340	650.9910 Construction Staking Supplemental Control (project) 01. 4430-19-71	LS	LUMP SUM	_____.____
0342	650.9920 Construction Staking Slope Stakes	1,446.000 LF	_____.____	_____.____
0344	652.0210 Conduit Rigid Nonmetallic Schedule 40 1-Inch	17.000 LF	_____.____	_____.____

Proposal ID: 20220208025 **Project(s):** 4430-19-71

Federal ID(s): N/A

SECTION: 0001 Contract Items

Alt Set ID: **Alt Mbr ID:**

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0346	652.0225 Conduit Rigid Nonmetallic Schedule 40 2-Inch	35.000 LF	_____.____	_____.____
0348	652.0235 Conduit Rigid Nonmetallic Schedule 40 3-Inch	65.000 LF	_____.____	_____.____
0350	652.0615 Conduit Special 3-Inch	598.000 LF	_____.____	_____.____
0352	652.0800 Conduit Loop Detector	68.000 LF	_____.____	_____.____
0354	653.0164 Pull Boxes Non-Conductive 24x42-Inch	3.000 EACH	_____.____	_____.____
0356	654.0101 Concrete Bases Type 1	2.000 EACH	_____.____	_____.____
0358	654.0102 Concrete Bases Type 2	1.000 EACH	_____.____	_____.____
0360	655.0230 Cable Traffic Signal 5-14 AWG	243.000 LF	_____.____	_____.____
0362	655.0240 Cable Traffic Signal 7-14 AWG	46.000 LF	_____.____	_____.____
0364	655.0260 Cable Traffic Signal 12-14 AWG	1,134.000 LF	_____.____	_____.____
0366	655.0305 Cable Type UF 2-12 AWG Grounded	422.000 LF	_____.____	_____.____
0368	655.0610 Electrical Wire Lighting 12 AWG	150.000 LF	_____.____	_____.____
0370	655.0700 Loop Detector Lead In Cable	2,792.000 LF	_____.____	_____.____
0372	655.0800 Loop Detector Wire	204.000 LF	_____.____	_____.____
0374	657.0100 Pedestal Bases	2.000 EACH	_____.____	_____.____
0376	657.0255 Transformer Bases Breakaway 11 1/2-Inch Bolt Circle	1.000 EACH	_____.____	_____.____

Proposal ID: 20220208025 **Project(s):** 4430-19-71

Federal ID(s): N/A

SECTION: 0001 Contract Items

Alt Set ID: **Alt Mbr ID:**

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0378	657.0310 Poles Type 3	1.000 EACH	_____._____	_____._____
0380	657.0425 Traffic Signal Standards Aluminum 15-FT	2.000 EACH	_____._____	_____._____
0382	657.0595 Trombone Arms 25-FT	1.000 EACH	_____._____	_____._____
0384	657.0709 Luminaire Arms Truss Type 4-Inch Clamp 12-FT	1.000 EACH	_____._____	_____._____
0386	658.0173 Traffic Signal Face 3S 12-Inch	3.000 EACH	_____._____	_____._____
0388	658.0174 Traffic Signal Face 4S 12-Inch	2.000 EACH	_____._____	_____._____
0390	658.5069 Signal Mounting Hardware (location) 01. 42&57 & Neenah Ave	LS	LUMP SUM	_____._____
0392	658.5069 Signal Mounting Hardware (location) 02. 42&57 & Ashland Ave	LS	LUMP SUM	_____._____
0394	690.0150 Sawing Asphalt	5,701.000 LF	_____._____	_____._____
0396	690.0250 Sawing Concrete	36,094.000 LF	_____._____	_____._____
0398	740.0440 Incentive IRI Ride	118,580.000 DOL	1.00000	118,580.00
0400	SPV.0060 Special 01. Inlet Extension Rings	51.000 EACH	_____._____	_____._____
0402	SPV.0060 Special 02. Manhole Extension Rings	2.000 EACH	_____._____	_____._____
0404	SPV.0060 Special 03. Storm Sewer Plug	2.000 EACH	_____._____	_____._____
0406	SPV.0060 Special 04. Remove Traffic Signal (STH 42/57 & Ashland Ave)	1.000 EACH	_____._____	_____._____

Proposal ID: 20220208025 **Project(s):** 4430-19-71

Federal ID(s): N/A

SECTION: 0001 Contract Items

Alt Set ID: **Alt Mbr ID:**

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0408	SPV.0060 Special 05. Remove Traffic Signal (STH 42/57 & Neenah Ave)	1.000 EACH	_____._____	_____._____
0410	SPV.0090 Special 01. Concrete Curb and Gutter 18-Inch Type D Special	18.000 LF	_____._____	_____._____
0412	SPV.0090 Special 02. Concrete Curb and Gutter 30-Inch Type D Special	357.000 LF	_____._____	_____._____
0414	SPV.0090 Special 03. Concrete Curb 8.5-Inch & Gutter 30-Inch Type D	64.000 LF	_____._____	_____._____
0416	SPV.0090 Special 04. Sawing Concrete Curb Head	550.000 LF	_____._____	_____._____
0418	SPV.0165 Special 01. Concrete Pipe Patching	25.000 SF	_____._____	_____._____
0420	SPV.0180 Special 01. Undoweled Base Patching Concrete	3,443.000 SY	_____._____	_____._____
0422	SPV.0180 Special 02. Undoweled Base Patching Concrete SHES	817.000 SY	_____._____	_____._____

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

Total Bid: _____._____

PLEASE ATTACH ADDENDA HERE

Wisconsin Department of Transportation

Division of Transportation Systems Development
Bureau of Project Development
4822 Madison Yards Way, 4th Floor South
Madison, WI 53705

Telephone: (608) 266-1631
Facsimile (FAX): (608) 266-8459

January 27, 2022

NOTICE TO ALL CONTRACTORS:

Proposal #25: 4430-19-71
STH 42, City of Sturgeon Bay
S Junction STH 57–Bayview Bridge
STH 42
Door County

Letting of February 8, 2022

This is Addendum No. 01, which provides for the following:

Special Provisions:

Revised Special Provisions	
Article No.	Description
5	Traffic
7	Utilities

Plan Sheets:

Revised Plan Sheets	
Plan Sheet	Plan Sheet Title (brief description of changes to sheet)
14	Finished Typical Sections – Replotted to show the correct text.
65	Traffic Control – Modified notes to match the new language in the traffic article of the special provisions.

The responsibility for notifying potential subcontractors and suppliers of these changes remains with the prime contractor.

Sincerely,

Mike Coleman

Proposal Development Specialist
Proposal Management Section

ADDENDUM NO. 01

4430-19-71

January 27, 2022

Special Provisions

5. Traffic.

Replace entire language with the following:

General

STH 42 traffic shall remain open to a minimum of one travel lane in each direction at all times. Travel lanes may be reduced to a minimum of 11 feet when necessary for work operations. Travel lanes shall be a minimum of 12 feet at all other times as work operations allow. See Segment Staging & Restrictions below for additional requirements for maintaining clear paved width.

STH 42 through lanes shall not be closed during Mainline peak hours.

Flagging operations on STH 42 shall not occur during Mainline or Commuter peak hours.

Auxiliary lanes (slotted left turn lanes and right turn lanes) that are being milled and/or resurfaced shall not be closed during Mainline and Commuter peak hours.

Do not close a lane of traffic unless work operations are expected to occur within 7 days or as the engineer allows.

Combine mainline lane closures if the ends of the closures are within 2 miles of one another.

Do not exceed mainline lane closures longer than 5 miles.

Maintain side road traffic on a minimum of one 11-FT travel lane in each direction at all times, except during necessary single lane closures under flagging operations and except for the closures allowed for Ashland Avenue, Green Bay Road Ramps, and CTH U as described below.

A lane closure must separate STH 42 traffic from unshielded hazards when existing guardrail is removed for replacement.

Do not allow the milled surface to remain exposed to traffic for a period greater than 72 hours unless adverse weather prevents placement of the asphaltic pavement. In the event of adverse weather, resume placement of the asphaltic pavement as soon as conditions permit.

Provide an even cross-sectional profile on adjacent milled lanes and shoulders prior to opening to traffic.

Provide an even cross-sectional profile on adjacent paved lanes and shoulders prior to opening to traffic.

At the end of each work day, open trench and excavation work adjacent to live traffic must be brought back up to the existing surface elevation.

Segment Staging & Restrictions

<u>Segments A & B</u>

- During outside lane closures on STH 42, maintain a minimum clear paved width of 14 feet for traffic on the inside lane and shoulder. The minimum clear paved width may temporarily be reduced to 12 feet in the immediate vicinity of active concrete, milling, and paving work operations.
- During inside lane closures on STH 42, maintain a minimum clear paved width of 16 feet for traffic on the outside lane and shoulder.
- Side roads shall be constructed under flagging operations.

<u>Segment C</u>

- Complete work in Segment C prior to July.

- Do not close auxiliary lanes of adjacent/consecutive intersections in the same direction of travel simultaneously.
- During inside lane closures on STH 42, maintain a minimum clear paved width of 14 feet for traffic on the outside lane and shoulder. The minimum clear paved width may temporarily be reduced to a minimum of 12 feet in the immediate vicinity of active concrete, milling, and paving work operations.
- Close STH 42 outside lanes first to construct widenings at Ashland Ave, Neenah Ave, Circle Ridge Rd, and CTH U. After required construction of these intersections is complete, open to traffic.
- Close STH 42 inside lanes second and construct STH 42 median work at CTH U.

Segment C- Ashland Ave

- Ashland Ave construction shall coincide with STH 42 outside lane closure.
- Install curb, gutter, and replace disturbed pavement on west side of roadway prior to shifting traffic.
- Temporarily shift traffic to construct intersection widening.
- Restrict STH 42 southbound right turn to Ashland Ave when intersection widening is being constructed. Restrict the right turn for up to 60 calendar days.
- Complete loop detector installation and mill and overlay to side road limits using a single day side road closure.
- The single day side road closure is allowed to occur for one day between 6AM-3PM, Monday through Thursday on non-holidays.
- Ashland Ave shall remain open to traffic except for the single day side road closure.
- See Traffic Control Details for additional information.

Segment C – Neenah Ave

- Neenah Ave construction shall coincide with STH 42 outside lane closure.
- Temporarily shift traffic to construct intersection widening.
- Restrict STH 42 southbound right turn to Neenah Ave when intersection widening is being constructed.
- Do not close Green Bay Road ramps when the STH 42 southbound right turn to Neenah Ave is restricted.
- See Traffic Control Details for additional information.

Segment C – CTH U

- CTH U construction shall coincide with STH 42 outside lane closure.
- Close CTH U from Tacoma Beach Road to STH 42 to construct intersection widening.
- Close and detour multiuse path access point that joins to CTH U. Sign and maintain pedestrian access to the path from Tacoma Beach Road.
- Do not close CTH U concurrently with STH 42 median closure at CTH U.
- See Traffic Control Details for additional information.

Segment C – Circle Ridge Road

- Circle Ridge Road construction shall coincide with STH 42 outside lane closure.
- Temporarily shift traffic to construct Circle Ridge Road intersection widening.
- Restrict STH 42 southbound right turn to Circle Ridge Road when intersection widening is being constructed.
- Do not restrict STH 42 southbound right turns to Circle Ridge Road concurrently with STH 42 median closure at CTH U.
- See Traffic Control Details for additional information.

Segment C – Green Bay Road Ramps

- Green Bay Road Ramp construction shall coincide with STH 42 inside lane closures.
- Both ramps shall be closed for a maximum of 30 calendar days combined.
- STH 42 NB slotted left turn lane at Lansing Avenue shall remain open to traffic during the NB Green Bay Road ramp closure.
- Do not close Green Bay Road ramps when STH 42 southbound right turn to Neenah Ave is restricted.

- Maintain pedestrian access on adjacent multiuse path through construction. See Traffic Control Details for additional information.
- The ramp closure shall occur from Duluth Avenue to Hudson Avenue unless directed otherwise by the engineer.

Segment C – STH 42 Median/Left Turn Lanes to CTH U/Circle Ridge Rd

- STH 42 Median/Left Turn Lanes to CTH U/Circle Ridge Road construction shall coincide with STH 42 inside lane closure.
- See Traffic Control Details for additional information.

Segment C – STH 42 Undivided Roadway– CTH U to Bayview Bridge

- STH 42 Undivided Roadway construction shall coincide with STH 42 inside lane closure.
- STH 42 Undivided Roadway shall be constructed using flagging operations.
- A portion of the STH 42 median/left turn lanes will need to be paved prior to implementing flagging operations to allow traffic to crossover.
- See Traffic Control Details for additional information.

Peak Hours

Mainline Peak Hours are defined as follows:

- From May 26 through October 31
- Friday at noon to Sunday at 9:00 PM

A lane rental fee will be assessed according to the Lane Rental Fee Assessment article for lane closures that occur within mainline peak hours.

Commuter Peak Hours apply to Segment C and are defined as follows:

- Monday through Friday
- 6:00 AM – 9:00 AM
- 3:00 PM – 6:00 PM
- Or as the engineer directs

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 STH 42 lanes closures on Segment A, Segment B, Segment C, and closure of Green Bay Rd Ramps.

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
Lane and shoulder closures	3 business days
Ramp closures	3 business days
Modifying all closure types	3 business days

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

Temporary Work Zone Clear Zone Working Restrictions.

Park equipment and store materials, including stockpiles, 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 (20200227)

7. Utilities.

Replace section titled **Sturgeon Bay Utilities has sanitary sewer** *with the following:*

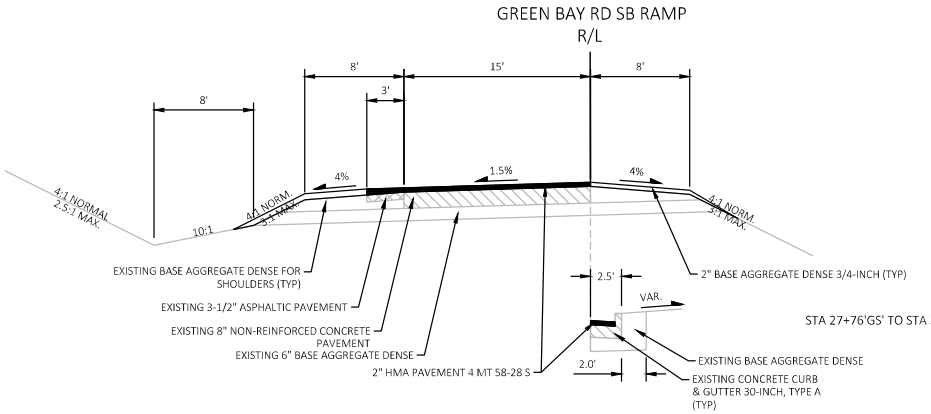
Sturgeon Bay Utilities sanitary manholes will need to be adjusted to final grade between approximately Station 320+00 and Station 375+00. Provide advance notice after milling existing asphalt but prior to placement of the upper layer of asphalt, and the site will be available to the utility owner. Contact Sturgeon Bay Utilities at (920) 746-2820, giving 30 days' notice prior to project commencement. Work will take less than one day.

Replace section titled **Sturgeon Bay Utilities has water main** *with the following:*

Sturgeon Bay Utilities water valve boxes will need to be adjusted to final grade between approximately Station 320+00 and Station 375+00 and on the Green Bay Road ramps. Provide advance notice after milling existing asphalt but prior to placement of the upper layer of asphalt, and the site will be available to the utility owner. Contact Sturgeon Bay Utilities at (920) 746-2820, giving 30 days' notice prior to project commencement. Work will take less than one day.

Plan Sheets
The following 8½ x 11-inch sheets are attached and made part of the plans for this proposal:
Revised: 14 and 65

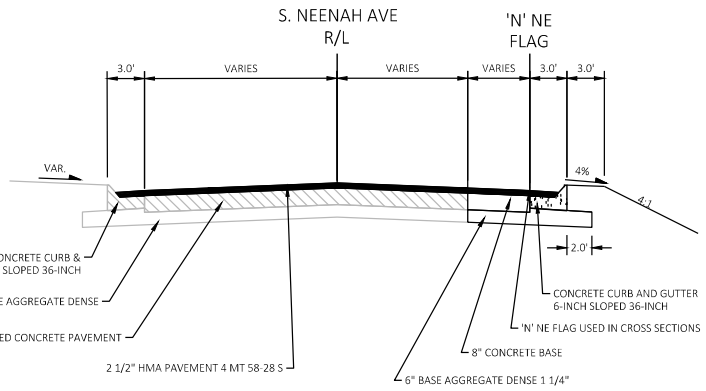
END OF ADDENDUM



FINISHED TYPICAL SECTION GREEN BAY RD SB RAMP

STA 20+00'GS' TO STA 31+47'GS'

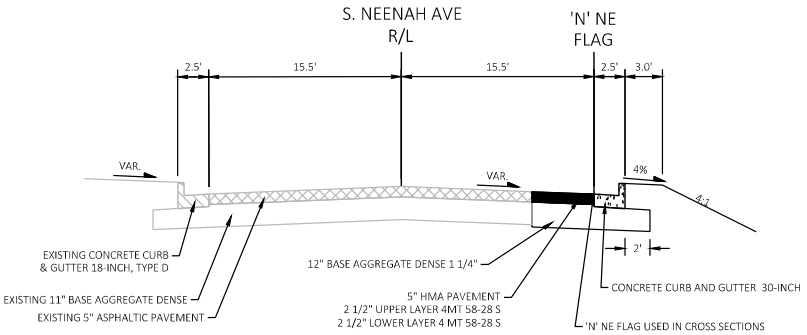
STA 27+76'GS' TO STA 31+47'GS'



FINISHED TYPICAL SECTION S. NEENAH AVE

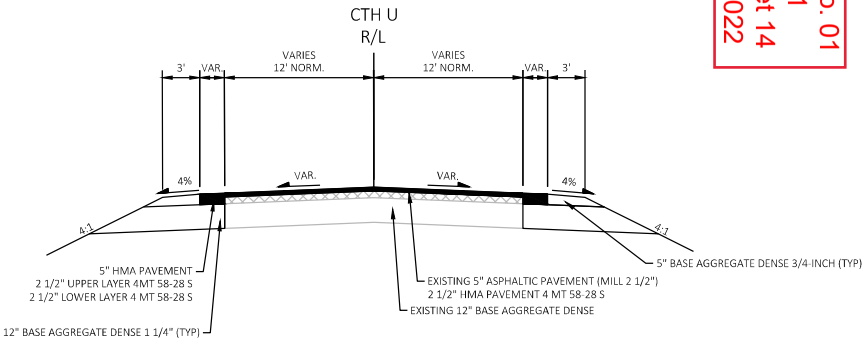
STA 65+52'N' TO 66+24'N'

Addendum No. 01
ID 4430-19-71
Revised Sheet 14
January 27, 2022



FINISHED TYPICAL SECTION S. NEENAH AVE

STA 66+24'N' TO STA 67+16'N'



FINISHED TYPICAL SECTION CTH U

STA 78+07'U' TO 78+99'U'

PROJECT NO: 4430-19-71	HWY: STH 42	COUNTY: DOOR	FINISHED TYPICAL SECTIONS	SHEET 14	E

FILE NAME : N:\PDS\C3D\44301900\SHEETSPLAN\020301-TS.DWG
LAYOUT NAME - 020311-ts
PLOT DATE : 1/24/2022 11:58 AM
PLOT BY : SCHROEDER, DEREK W
PLOT NAME :
PLOT SCALE : 1IN:10 FT
WISDOT/CADDS SHEET 42

2

TRAFFIC CONTROL - PROJECT OVERVIEW

NOTES: REFER TO SPECIAL PROVISIONS FOR DETAILED INFORMATION.
IN GENERAL:

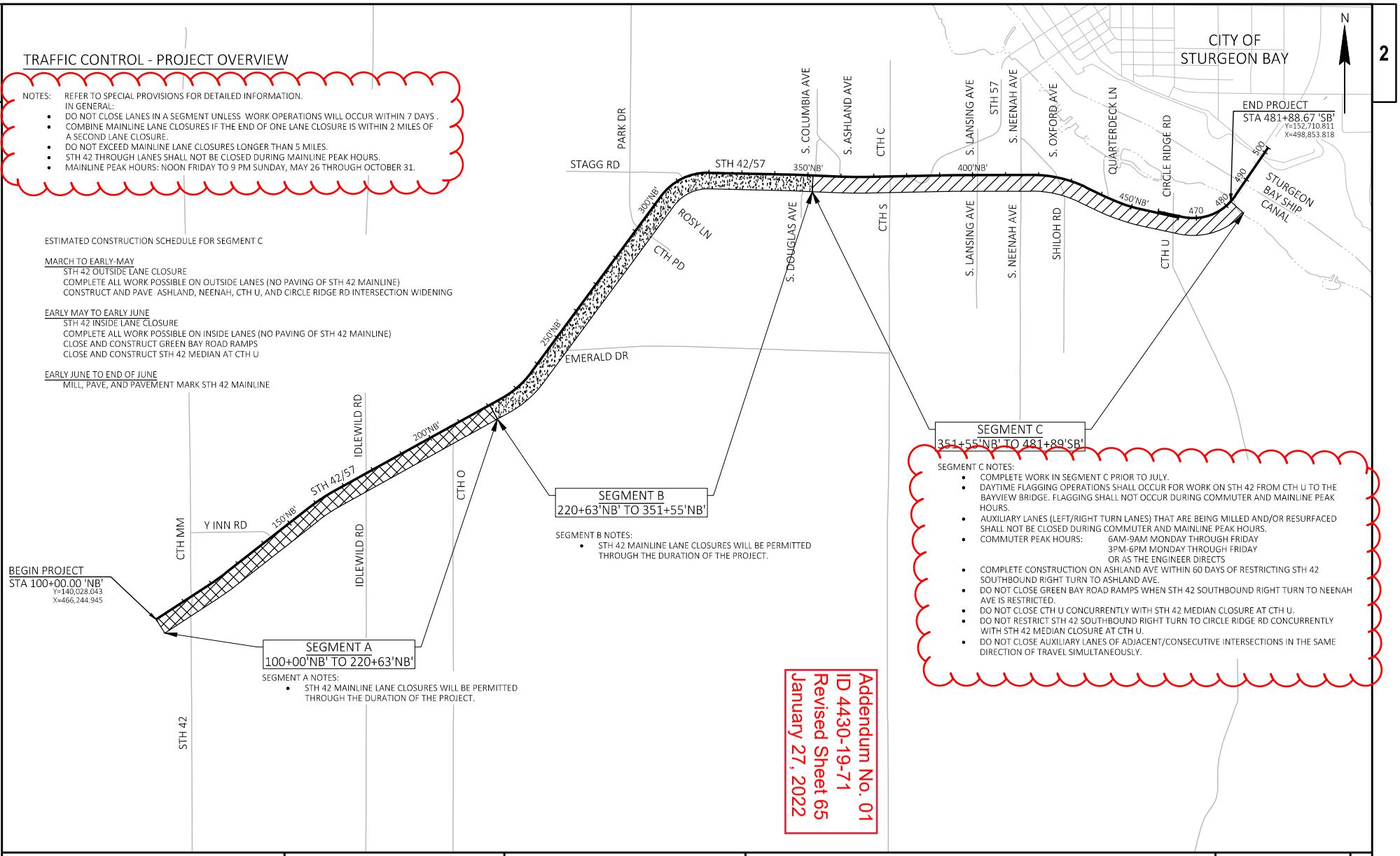
- DO NOT CLOSE LANES IN A SEGMENT UNLESS WORK OPERATIONS WILL OCCUR WITHIN 7 DAYS .
- COMBINE MAINLINE LANE CLOSURES IF THE END OF ONE LANE CLOSURE IS WITHIN 2 MILES OF A SECOND LANE CLOSURE.
- DO NOT EXCEED MAINLINE LANE CLOSURES LONGER THAN 5 MILES.
- STH 42 THROUGH LANES SHALL NOT BE CLOSED DURING MAINLINE PEAK HOURS.
- MAINLINE PEAK HOURS: NOON FRIDAY TO 9 PM SUNDAY, MAY 26 THROUGH OCTOBER 31.

ESTIMATED CONSTRUCTION SCHEDULE FOR SEGMENT C

MARCH TO EARLY-MAY
STH 42 OUTSIDE LANE CLOSURE
COMPLETE ALL WORK POSSIBLE ON OUTSIDE LANES (NO PAVING OF STH 42 MAINLINE)
CONSTRUCT AND PAVE ASHLAND, NEENAH, CTH U, AND CIRCLE RIDGE RD INTERSECTION WIDENING

EARLY MAY TO EARLY JUNE
STH 42 INSIDE LANE CLOSURE
COMPLETE ALL WORK POSSIBLE ON INSIDE LANES (NO PAVING OF STH 42 MAINLINE)
CLOSE AND CONSTRUCT GREEN BAY ROAD RAMPS
CLOSE AND CONSTRUCT STH 42 MEDIAN AT CTH U

EARLY JUNE TO END OF JUNE
MILL, PAVE, AND PAVEMENT MARK STH 42 MAINLINE



SEGMENT A NOTES:

- STH 42 MAINLINE LANE CLOSURES WILL BE PERMITTED THROUGH THE DURATION OF THE PROJECT.

SEGMENT B NOTES:

- STH 42 MAINLINE LANE CLOSURES WILL BE PERMITTED THROUGH THE DURATION OF THE PROJECT.

SEGMENT C NOTES:

- COMPLETE WORK IN SEGMENT C PRIOR TO JULY.
- DAYTIME FLAGGING OPERATIONS SHALL OCCUR FOR WORK ON STH 42 FROM CTH U TO THE BAYVIEW BRIDGE. FLAGGING SHALL NOT OCCUR DURING COMMUTER AND MAINLINE PEAK HOURS.
- AUXILIARY LANES (LEFT/RIGHT TURN LANES) THAT ARE BEING MILLED AND/OR RESURFACED SHALL NOT BE CLOSED DURING COMMUTER AND MAINLINE PEAK HOURS.
- COMMUTER PEAK HOURS: 6AM-9AM MONDAY THROUGH FRIDAY
  3PM-6PM MONDAY THROUGH FRIDAY
  OR AS THE ENGINEER DIRECTS
- COMPLETE CONSTRUCTION ON ASHLAND AVE WITHIN 60 DAYS OF RESTRICTING STH 42 SOUTHBOUND RIGHT TURN TO ASHLAND AVE.
- DO NOT CLOSE GREEN BAY ROAD RAMPS WHEN STH 42 SOUTHBOUND RIGHT TURN TO NEENAH AVE IS RESTRICTED.
- DO NOT CLOSE CTH U CONCURRENTLY WITH STH 42 MEDIAN CLOSURE AT CTH U.
- DO NOT RESTRICT STH 42 SOUTHBOUND RIGHT TURN TO CIRCLE RIDGE RD CONCURRENTLY WITH STH 42 MEDIAN CLOSURE AT CTH U.
- DO NOT CLOSE AUXILIARY LANES OF ADJACENT/CONSECUTIVE INTERSECTIONS IN THE SAME DIRECTION OF TRAVEL SIMULTANEOUSLY.

Addendum No. 01
ID 4430-19-71
Revised Sheet 65
January 27, 2022

PROJECT NO: 4430-19-71	HWY: STH 42	COUNTY: DOOR	TRAFFIC CONTROL	SHEET 65	E

FILE NAME : N:\PDS\C3D\44301900\SHEETSPLAN\025001-TC.DWG
LAYOUT NAME - 025001-tc
PLOT DATE : 1/24/2022 11:46 AM
PLOT BY : SCHROEDER, DEREK W
PLOT NAME :
PLOT SCALE : 1 IN:0.5 MI
WISDOT/CADDS SHEET 42

Wisconsin Department of Transportation

Division of Transportation Systems Development
Bureau of Project Development
4822 Madison Yards Way, 4th Floor South
Madison, WI 53705

Telephone: (608) 266-1631
Facsimile (FAX): (608) 266-8459

February 2, 2022

NOTICE TO ALL CONTRACTORS:

Proposal #25: 4430-19-71
STH 42, City of Sturgeon Bay
S Junction STH 57 - Bayview Bridge
STH 42
Door County

Letting of February 8, 2022

This is Addendum No. 02, which provides for the following:

Special Provisions:

Revised Special Provisions	
Article No.	Description
5	Traffic

The responsibility for notifying potential subcontractors and suppliers of these changes remains with the prime contractor.

Sincerely,

Mike Coleman

Proposal Development Specialist
Proposal Management Section

ADDENDUM NO. 02

4430-19-71

February 2, 2022

Special Provisions

5. Traffic.

Replace paragraph twelve under section titled **General** *with the following:*

Provide an even cross-sectional profile on adjacent paved lanes and shoulders opened to traffic on all weekends from noon Friday to 9:00 PM Sunday.

END OF ADDENDUM

Wisconsin Department of Transportation

Division of Transportation Systems Development
Bureau of Project Development
4822 Madison Yards Way, 4th Floor South
Madison, WI 53705

Telephone: (608) 266-1631
Facsimile (FAX): (608) 266-8459

February 4, 2022

NOTICE TO ALL CONTRACTORS:

Proposal #25: 4430-19-71
STH 42, City of Sturgeon Bay
S. Junction Sth 57-Bayview Bridge
Sth 42
Door County

Letting of February 8, 2022

This is Addendum No. 03, which provides for the following:

Schedule of Items:

Revised Bid Item Quantities					
Bid Item	Item Description	Unit	Old Quantity	Revised Quantity	Proposal Total
460.2000	Incentive Density HMA Pavement	DOL	9,670	520	10,190
460.2005	Incentive Density PWL HMA Pavement	DOL	5,560	500	6,060
460.2007	Incentive Density HMA Pavement Longitudinal Joints	DOL	15,880	3,970	19,850
460.2010	Incentive Air Voids HMA Pavement	DOL	15,150	-800	14,350

Plan Sheets:

Revised Plan Sheets	
Plan Sheet	Plan Sheet Title (brief description of changes to sheet)
103	Miscellaneous Quantities (Mainline Asphalt Items) – Moved lower layer PWL Air Voids quantities to QMP Incentive Density HMA Pavement for work at intersections

Schedule of Items
Attached, dated February 4, 2022, are the revised Schedule of Items Page 3.

Plan Sheets
The following 8½ x 11-inch sheets are attached and made part of the plans for this proposal:
Revised: 103

The responsibility for notifying potential subcontractors and suppliers of these changes remains with the prime contractor.

Sincerely,

Mike Coleman

Proposal Development Specialist
Proposal Management Section

END OF ADDENDUM

Addendum No. 03
ID 4430-19-71
Revised Sheet 103
February 4, 2022

3

3

MAINLINE ASPHALT ITEMS

									HMA PAVEMENT 4 MT 58-28 S					
							455.0605	460.6223	460.6224					
CATEGORY	ESTIMATED LANE CLOSURE	STATION	TO	STATION	LOCATION	THICKNESS INCHES	TACK COAT GAL	TON	TON	PWL DENSITY INCENTIVE TON*	PWL AIR VOIDS TON**	QMP INCENTIVE DENSITY HMA PAVEMENT TON***	INCENTIVE DENSITY HMA PAVEMENT LONGITUDINAL JOINTS LF	REMARKS
	SEGMENT C													
0010	NB OUTSIDE	369+70'NB'	-	464+66'NB'	12' RT	2.5	2,230	—	2,780	1,370	2,780	—	9,496	TRAVEL LANE & SHOULDER
0010	NB OUTSIDE	374+49'NB'	-	463+20'NB'	VARIES	2.5	260	—	330	—	330	—	—	NB SIDE ROADS
0020	NB OUTSIDE	458+15'NB'	-	463+23'NB'	24' RT	2.5	40	—	130	—	130	—	—	NB STH 42 RIGHT TURN TO CTH U - UPPER LAYER
0010	NB OUTSIDE	458+15'NB'	-	463+23'NB'	24' RT	2.5	40	—	130	—	—	130	—	NB STH 42 RIGHT TURN TO CTH U - MIDDLE LAYER
0010	NB OUTSIDE	458+15'NB'	-	463+04'NB'	24' RT	2.5	—	110	—	—	—	—	—	NB STH 42 RIGHT TURN TO CTH U - LOWER LAYER
0020	NB OUTSIDE	463+47'NB'	-	464+66'NB'	24' RT	2.5	20	—	60	—	60	—	—	CTH U RIGHT TURN TO NB STH 42 - UPPER LAYER
0010	NB OUTSIDE	463+47'NB'	-	464+66'NB'	24' RT	2.5	—	—	60	—	—	60	—	CTH U RIGHT TURN TO NB STH 42 - MIDDLE LAYER
0010	NB OUTSIDE	463+30'NB'	-	464+66'NB'	24' RT	2.5	20	50	—	—	—	—	—	CTH U RIGHT TURN TO NB STH 42 - LOWER LAYER
0010	SB OUTSIDE	369+70'NB'	-	464+66'NB'	-42' LT	2.5	2,290	—	2,860	1,370	2,860	—	9,350	TRAVEL LANE & SHOULDER
0010	SB OUTSIDE	351+55'SB'	-	369+70'SB'	VARIES	2	20	—	40	—	—	40	—	S. ASHLAND AVE/COLUMBIA AVE - SB SIDE ROADS
0010	SB OUTSIDE	369+70'SB'	-	463+52'SB'	VARIES	2.5	400	—	500	—	500	—	—	SB SIDE ROADS
0010	SB OUTSIDE	39+54'A'	-	40+96'A'	13 RT'	2	20	—	40	—	—	40	—	S ASHLAND AVE WIDENING - UPPER LAYER
0020	SB OUTSIDE	39+54'A'	-	40+96'A'	13 RT'	3	—	—	60	—	—	60	—	S. ASHLAND AVE WIDENING - LOWER LAYER
0020	SB OUTSIDE	39+96'A'	-	40+96'A'	0' LT/RT	2	20	—	40	—	—	40	—	S. ASHLAND AVE
0020	SB OUTSIDE	66+03'N'	-	67+16'N'	11' RT	5	10	—	30	—	—	30	—	S. NEENAH AVE WIDENING
0020	SB OUTSIDE	463+01'SB	-	467+65'SB'	-18' LT	2.5	30	—	100	—	100	—	—	SB STH 42 RIGHT TURN TO CIRCLE RIDGE - UPPER LAYER
0010	SB OUTSIDE	463+01'SB	-	467+65'SB'	-18' LT	2.5	30	—	100	—	—	100	—	SB STH 42 RIGHT TURN TO CIRCLE RIDGE - MIDDLE LAYER
0010	SB OUTSIDE	463+01'SB	-	467+65'SB'	-18' LT	2.5	—	100	—	—	—	—	—	SB STH 42 RIGHT TURN TO CIRCLE RIDGE - LOWER LAYER
0010	NB INSIDE	369+70'NB'	-	464+66'NB'	0' RT	2.5	1,740	—	2,170	1,370	2,170	—	9,496	TRAVEL LANE & SHOULDER
0010	SB INSIDE	369+70'NB'	-	463+22'NB'	-28' LT	2.5	1,730	—	2,160	1,350	2,160	—	9,350	TRAVEL LANE & SHOULDER
0010	NB & SB INSIDE	364+73'NB'	-	369+70'NB'	-2.5' LT	2.0	110	—	190	—	—	190	—	PAVED MEDIAN TWLTL
0010	NB & SB INSIDE	369+70'NB'	-	463+23'NB'	0' LT	2.5	680	—	860	—	860	—	—	MEDIAN INTERSECTIONS/CROSSOVERS
0010	NB & SB INSIDE	459+17'NB'	-	462+55'NB'	0' LT	2.5	60	—	80	—	80	—	—	STH 42 NB LT TURN LANE TO CIRCLE RIDGE RD - UPPER LAYER
0010	NB & SB INSIDE	459+18'NB'	-	462+56'NB'	0' LT	2.5	—	—	80	—	—	80	—	STH 42 NB LT TURN LANE TO CIRCLE RIDGE RD - LOWER LAYER
0020	NB & SB INSIDE	463+23'SB'	-	471+59'SB'	0' LT	2.5	60	—	190	—	190	—	—	SB STH 42 LEFT TURN LANE TO CTH U - UPPER LAYER
0010	NB & SB INSIDE	463+23'SB'	-	471+59'SB'	0' LT	2.5	—	—	190	—	—	190	—	SB STH 42 LEFT TURN LANE TO CTH U - LOWER LAYER
0010	RAMP	12+00'GN'	-	30+06'GN'	0' RT	2.0	290	—	510	260	510	—	—	GREEN BAY RD RAMP NB
0020	RAMP	20+11'GN'	-	23+73'GN'	17' RT	3.0	10	—	30	—	—	30	—	GREEN BAY RD RAMP NB - LOWER LAYER
0010	RAMP	20+00'GS'	-	31+47'GS'	0' LT	2.0	210	—	360	—	360	—	—	GREEN BAY RD RAMP SB
0010	RAMP	23+03'GN'	-	27+34'GN	LT	2.0	60	—	100	—	100	—	—	MEDIAN INTERSECTION AND SIDE ROAD
0010	FLAGGING	464+66'SB'	-	471+56'SB'	VARIES	2.5	230	—	290	100	290	—	—	STH 42 NB SINGLE LANE
0010	FLAGGING	464+66'SB'	-	471+56'SB'	0'	2.5	140	—	170	100	170	—	—	STH 42 SB SINGLE LANE
0010	FLAGGING	471+56'SB'	-	481+60'SB'	0'	2.5	560	—	700	140	700	—	2,008	STH 42 UNDIVIDED TO BRIDGE
					SUBTOTAL SEGMENT C		11,310	260	15,340	6,060	14,350	990	39,700	
					CAT 0010 TOTAL		16,370	260	29,610	6,060	13,870	15,740	39,700	
					CAT 0020 TOTAL		190	0	640	0	480	160	0	

* Tonnage is eligible for Incentive Density PWL 460.2005 and Incentive Air Voids 460.2010.
** Tonage is eligible for Incentive Air Voids 460.2010.
*** Tonnage is eligible for QMP Density Incentive 460.2000. Wedging & leveling layers are excluded from density testing and density incentive.
**** LF is eligible for Incentive Density HMA Pavement Longitudinal Joints 460.2007

Proposal ID: 20220208025 Project(s): 4430-19-71

Federal ID(s): N/A

SECTION: 0001 Contract Items

Alt Set ID: Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0064	416.1720 Concrete Pavement Replacement	4,042.000 SY	_____._____	_____._____
0066	416.1725 Concrete Pavement Replacement SHES	438.000 SY	_____._____	_____._____
0068	420.1000 Continuous Diamond Grinding Concrete Pavement	117,800.000 SY	_____._____	_____._____
0070	455.0605 Tack Coat	16,560.000 GAL	_____._____	_____._____
0072	460.0105.S HMA Percent Within Limits (PWL) Test Strip Volumetrics	1.000 EACH	_____._____	_____._____
0074	460.0110.S HMA Percent Within Limits (PWL) Test Strip Density	1.000 EACH	_____._____	_____._____
0076	460.2000 Incentive Density HMA Pavement	10,190.000 DOL	1.00000	10,190.00
0078	460.2005 Incentive Density PWL HMA Pavement	6,060.000 DOL	1.00000	6,060.00
0080	460.2007 Incentive Density HMA Pavement Longitudinal Joints	19,850.000 DOL	1.00000	19,850.00
0082	460.2010 Incentive Air Voids HMA Pavement	14,350.000 DOL	1.00000	14,350.00
0084	460.6223 HMA Pavement 3 MT 58-28 S	260.000 TON	_____._____	_____._____
0086	460.6224 HMA Pavement 4 MT 58-28 S	30,250.000 TON	_____._____	_____._____
0088	465.0120 Asphaltic Surface Driveways and Field Entrances	31.000 TON	_____._____	_____._____
0090	465.0125 Asphaltic Surface Temporary	35.000 TON	_____._____	_____._____
0092	465.0305 Asphaltic Surface Safety Islands	105.000 TON	_____._____	_____._____