

# HIGHWAY WORK PROPOSAL

Wisconsin Department of Transportation  
06/2017 s.66.0901(7) Wis. Stats

Proposal Number: **001**

<u>COUNTY</u>	<u>STATE PROJECT</u>	<u>FEDERAL</u>	<u>PROJECT DESCRIPTION</u>	<u>HIGHWAY</u>
Dane	1007-12-79	WISC 2020313	Illinois State Line - Madison; USH 12/18 Intchg/Core SB	IH 039
Dane	1007-12-80	WISC 2020314	Illinois State Line - Madison; USH 12/18 Intchg/Core NB/Final Work	IH 039
Rock	1008-10-70	WISC 2020315	Illinois State Line - Madison; Safety Rest Area 22	IH 039

## 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: \$890,000.00 Payable to: Wisconsin Department of Transportation	Attach Proposal Guaranty on back of this PAGE.
Bid Submittal Date: June 9, 2020 Time (Local Time): 9:00 am	Firm Name, Address, City, State, Zip Code
Contract Completion Time December 15, 2022	<b>SAMPLE NOT FOR BIDDING PURPOSES</b>
Assigned Disadvantaged Business Enterprise Goal 8%	This contract is subject to 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

<b>Type of Work:</b> Grading, base aggregate, HMA pavement, concrete pavement, storm sewer, guardrail, storm sewer, bridge structures, box culverts, retaining walls, sign structures, razing buildings, ITS, erosion control, vegetation management, and pavement marking	<b>For Department Use Only</b>
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](http://www.bidx.com) web site or by contacting:

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

- (5) The department will address equipment and process failures, if the bidder can demonstrate that those failures were beyond their control.
- (6) Contractors are responsible for checking on the issuance of addenda and for obtaining the addenda. Notice of issuance of addenda is posted on the department's web site at:  
<https://wisconsindot.gov/Pages/doing-bus/contractors/hcci/bid-let.aspx>

or by calling the department at (608) 266-1631. Addenda can ONLY be obtained from the department's web site listed above or by picking up the addenda at the Bureau of Highway Construction, 4<sup>th</sup> 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

DT1303 1/2006

Wisconsin Department of Transportation

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)

## 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**

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

\_\_\_\_\_  
(Signature of Attorney-in-Fact)

## 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

DT1305 8/2003

Wisconsin Department of Transportation

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.

[illegible]

**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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## **STSP'S Revised November 21, 2019**

### **SPECIAL PROVISIONS**

#### **1. General.**

Perform the work under this construction contract for Project 1007-12-79, Illinois State Line – Madison, USH 12/18 INTCHG/CORE SB, Dane County; Project 1007-12-80, Illinois State Line – Madison, USH 12/18 INTCHG/CORE NB/Final Work, IH 39 Dane County; and Project 1008-10-70, Illinois State Line – Madison, Safety Rest Area 22, IH 39, Rock 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, 2020 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 (20191121)

#### **2. Scope of Work.**

The work under this contract for Project 1007-12-79 and 1007-12-80 shall consist of grading, embankment construction, base aggregate, select crushed material, HMA and concrete pavement, concrete pavement repairs, concrete barrier, storm sewer, guardrail, culvert pipe, storm sewer, widening bridge structures (B-13-462, 463), bridge deck polymer overlays (B-13-460 through 467), box culvert extensions (C-13-044), retaining wall (R-13-335), sign structures (S-13-506 through 513), razing buildings, intelligent transportation systems (ITS), erosion control, vegetation management, traffic control, and all incidental items necessary to complete the work as shown on the plans and included in the proposal and contract.

The work under this contract for Project 1008-10-70 shall consist of grading, base aggregate, HMA shoulders, concrete pavement, concrete curb and gutter, concrete sidewalk, permanent signing, permanent 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 2 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 contract time for completion is based on an expedited work schedule and may require extraordinary forces and equipment. The contract completion date indicates that work efforts will possibly require multiple or concurrent controlling operations to occur at the same time. This information is included to assist the contractor and its subcontractors and shall not be interpreted as a demonstration of specified means and methods or work periods other than a completion date.

The contractor is advised that there may be multiple mobilizations for such items as erosion control, traffic control, detours, signing items, temporary pavement markings and other incidental items related to the staging. The department will make no additional payment for said mobilizations.

Do not start work until July 6, 2020 or later.

Do not perform any work for Projects 1007-12-79 and 1007-12-80 on the new northbound IH 39 alignment prior to 6:00 AM on June 1, 2021 (see Other Contracts).

IH 39 and USH 12 are oversize-overweight (OSOW) routes. Maintain access along IH 39 and USH 12 (or approved detour routes when in place) for all OSOW movements during all stages of construction.

Conform the schedule of operations to the construction staging as shown in the traffic control plans and as described herein unless modifications to the schedule are approved in writing by the engineer.

When engaged in roadway cleaning operations, use equipment having vacuum or water spray mechanisms to eliminate the dispersion of particulate matter into the atmosphere. If vacuum equipment is employed, it must have suitable self-contained particulate collectors to prevent discharge from the collection bin into the atmosphere.

## **A Sequence of Operations**

Permitted overnight lane closure times are detailed in the "Traffic" article of these special provisions.

Stage the construction operations to ensure that ITS devices are not down for more than two days. Ensure the new fiber optic network north of Femrite Drive is constructed before removing the existing fiber optic cable. Salvage existing communications equipment at the locations indicated in the plans after the fiber optic network is operational.

Complete work as detailed in the staging descriptions below. Modifications pertaining to what work is completed in each stage require prior written approval by the engineer.

### **Stage 1 (1007-12-79)**

Estimated Start: Mid-July 2020. Estimated Completion: Mid-August 2020.

Complete the following work along southbound IH 39 during **Stage 1A** as detailed in the plans:

- Remove and grade the southbound outside shoulder and place temporary HMA pavement.
- Repair or replace existing concrete pavement at spot locations identified by the engineer.
- Begin substructure work on bridge widening for B-13-462 (IH 39 southbound over Femrite Drive).

Complete the following work along southbound IH 39 during **Stage 1B** as detailed in the plans:

- Remove and grade the southbound median shoulder and place temporary HMA pavement.
- Repair or replace existing concrete pavement at spot locations identified by the engineer.

Construction operation requirements and restrictions for **Stage 1A and 1B** are as follows:

- Complete all work under nighttime lane closures as detailed in the plans, including construction traffic entry and exit to the work areas.

### **Stage 2 (1007-12-79)**

Estimated Start: Mid-August 2020. Required Interim Completion: November 15, 2020.

Complete the following work along southbound IH 39 during **Stage 2A** as detailed in the plans:

- Embankment construction, select crushed material, base course, storm sewer, outside sign bridge foundations, concrete bridge approach slabs, beam guard installation, temporary signing, pavement markings, and other associated work from approximately Station 1182+00'XSB' to 1235+00'XSB'.
- Continue to widen the outside bridge deck of existing Structure B-13-462 (IH 39 southbound over Femrite Drive) with a continuous outside shoulder closure until the widening is completed.
- Box culvert extensions at C-13-044 (Pennito Creek).

Construction operation requirements and restrictions for **Stage 2A** are as follows:

- Maintain a minimum 8-foot wide outside shoulder for the duration of Stage 2A.
- Access to the work area along the southbound outside shoulder between Stations 1182+00'XSB' and 1235+00'XSB' shall be from a contractor provided temporary access road from Femrite Drive, or from a nighttime southbound outside lane closure.
- Closure of Femrite Drive is allowed for construction operations associated with widening Structures B-13-462 (IH 39 southbound over Femrite Drive) and B-13-463 (eastbound USH 12 ramp to

northbound IH 39 over Femrite Drive) for up to 6 calendar days (closure days do not need to be consecutive), with additional overnight closures allowed for up to 2 nights for work associated with milling and overlaying the roadway. Utilize the permitted 6 calendar days and 2 overnight closures to complete work for both Project 1007-12-79 and 1007-12-80.

- Access to all structure widening work is from contractor provided access roads off Femrite Drive.

Complete the following work along southbound IH 39 during **Stage 2B** as detailed in the plans:

- Continue roadway and bridge widening work between Stations 1182+00'XSB' and 1235+00'XSB'.
- Move the temporary barrier to provide a 2-foot wide outside shoulder and complete the remaining pavement structure grading and placement of the concrete pavement. As soon as the concrete pavement is cured, reestablish the 8-foot wide outside shoulder as shown in the Stage 2A traffic control plans.
- Complete any remaining southbound outside shoulder and ramp lane work, and concrete bridge approach slab replacements at B-13-462 (IH 39 southbound over Femrite Drive), box culvert extensions at C-13-044 (Pennito Creek), signing, and pavement markings.
- Continue the structure deck widening work on B-13-462 (IH 39 southbound over Femrite Drive) and B-13-463 (eastbound USH 12 ramp to northbound IH 39 over Femrite Drive).
- Restore the pavement markings and shift traffic back into the original configuration for the winter shutdown period.

Construction operation requirements and restrictions for **Stage 2B** are as follows:

- Access to the work area along the southbound outside shoulder between Stations 1182+00'XSB' and 1235+00'XSB' shall be from a contractor provided temporary access road off of Femrite Drive, or from a nighttime southbound IH 39 outside lane closure.
- A 2-foot wide outside shoulder from Station 1182+00'XSB' to 1235+00'XSB' is allowed adjacent to daytime live traffic lanes for a one-time period lasting no longer than 21 consecutive calendar days.
- Access to all structure widening work is from contractor provided access roads off Femrite Drive.

Complete the following work along southbound IH 39 during **Stage 2C** as detailed in the plans:

- In preparation for winter shutdown, place temporary pavement markings to restore southbound IH 39 to the original lane configuration.
- Complete all remaining structure widening work for B-13-462 (IH 39 southbound over Femrite Drive).
- Remove or place traffic control items per the Stage 2C Traffic Control plan sheets.

Construction operation requirements and restrictions for **Stage 2C** are as follows:

- Restore pavement markings and place traffic control devices using a nighttime southbound IH 39 lane closures of any lane.

### **2020 Winter Shutdown**

Winter shutdown will commence with the completion of Stage 2 in the Fall of 2020. Recommencement of work is expected to begin on April 1, 2021. A request to change the restart date must be submitted to and approved by the engineer at least 14 calendar days prior to April 1, 2021, or 14 calendar days prior to the requested restart date, whichever is earlier.

### **Stage 3 (1007-12-79)**

Estimated Start: Mid-May 2021. Estimated Completion: Mid-August 2021.

Prior to the start of Stage 3A (when temperatures permit), utilize overnight lane closures to apply the polymer overlay to the new outside deck widening and the adjacent ramp lanes of B-13-462 (southbound IH 39 over Femrite Drive) where ramp traffic will be driving in Stage 3A. Place temporary raised markers spaced 5 feet apart to delineate the outside edge line and skip dashes across the bridge deck.

Complete the following work along southbound IH 39 during **Stage 3A** as detailed in the plans:

- Reconstruct the southbound median between Station 1176+00'XSB' and 1233+00'XSB' including the existing median lane, new median lane and shoulder area, inside concrete bridge approach slabs of B-13-462 (IH 39 southbound over Femrite Drive), sign bridges, signing, pavement markings and all associated work as detailed in the plans.

- Complete the temporary widening on the outside shoulder from Station 2540+00'TSB' to 2560+00'TSB' as detailed in the plans. Close the southbound IH 39 loop ramp to eastbound USH 12 at night when working in the vicinity of this ramp.

Construction operation requirements and restrictions for **Stage 3A** are as follows:

- Access to the southbound median work area between Stations 1176+00'XSB' and 1233+00'XSB' shall from a contractor provided temporary access road off of Femrite Drive, from a nighttime southbound median lane closure, or from the northbound IH 39 lanes constructed on new alignment under Project 1007-12-78 that are not opened to traffic.
- Access the temporary widening area between Stations 2540+00'TSB' and 2560+00'TSB' from the gore area of the southbound IH 39 loop ramp to eastbound USH 12. Exiting this work area is only allowed from a closed southbound lane at the southern limits of the work area.
- Closure of the southbound IH 39 loop ramp to eastbound USH 12 is allowed for up to 3 nights.

Complete the following work along southbound IH 39 during **Stage 3B** as detailed in the plans:

- Continue to reconstruct the southbound median between Stations 1176+00'XSB' and 1233+00'XSB'.
- Begin reconstruction of the southbound IH 39 loop ramp to eastbound USH 12.
- Begin reconstruction of the westbound USH 12 loop ramp to southbound IH 39.
- Reconstruct the southbound median between Stations 1142+00'XSB' and 1176+00'XSB', including the median lane and shoulder area, sign bridges, signing, pavement markings, and all associated work as detailed in the plans.
- Replace the concrete bridge approach slabs and apply the polymer overlays to the inside portion of B-13-461 (southbound IH 39 over northbound ramp to westbound USH 12), B-13-462 (southbound IH 39 over Femrite Drive), B-13-464 (southbound IH 39 over westbound USH 12), and B-13-466 (southbound IH 39 over eastbound USH 12) within the work area, per the traffic control plans.

Construction operation requirements and restrictions for **Stage 3B** are as follows:

- Access to the median area shall be from a contractor provided access road off of Femrite Drive, from IH 39 southbound nighttime lane closures, existing northbound IH 39 median nighttime median lane closure, or from the IH 39 northbound lanes on new alignment that is not opened to traffic.
- A single closure of the southbound IH 39 loop ramp to eastbound USH 12 is allowed for up to 52 consecutive calendar days.
- A single closure of the westbound USH 12 loop ramp to southbound IH 39 is allowed for up to 100 consecutive calendar days.
- The westbound USH 12 loop ramp to southbound IH 39 and the southbound IH 39 to eastbound USH 12 loop ramp may also be closed for up to 3 additional nights during Stage 3 to construct the shoulder and gore area if the work is completed when the ramp is open to live traffic.
- Complete the Stage 3A and 3B work in the median north of Femrite Drive concurrently with Stage 2C of Project 1007-12-80.
- Do not begin Stage 4A until the new median barrier north of Femrite Drive that is being constructed during Stage 2C of Project 1007-12-80 is completed.

#### **Stage 4 (1007-12-79)**

Estimated Start: Mid-August 2021. Required Interim Completion: November 15, 2021.

Complete the following work along southbound IH 39 during **Stage 4A** as detailed in the plans:

- Grade and pave the outside concrete lanes from Station 2540+00'TSB' to 2561+00'TSB'.
- Grade and pave the southbound IH 39 loop ramp to eastbound USH 12 auxiliary (weaving) lane, and complete the bridge work as shown in the plans.
- Replace the existing center lane of pavement from Station 1185+20'XSB' to 1227+00'XSB' as shown in the plans.
- Grade and pave the outside shoulder and other remaining work between Station 1162+00'XSB' and 1183+00'XSB'.
- Replace the concrete bridge approach slabs and apply the polymer overlays to the remaining portion of B-13-461 (southbound IH 39 over northbound IH 39 ramp to westbound USH 12), B-13-462

(southbound IH 39 over Femrite Drive), B-13-464 (southbound IH 39 over westbound USH 12), and B-13-466 (southbound IH 39 over eastbound USH 12) within the work area, per the traffic control plans.

- Apply permanent pavement markings from Station 1200+00'XSB' to 1228+00'XSB'.
- Upon completion of work, apply all other remaining permanent pavement marking and signing.

Construction operation requirements and restrictions for **Stage 4A** are as follows:

- Entry into the work area is allowed from the closed westbound USH 12 loop ramp to southbound IH 39, or with prior approval during a nighttime southbound IH 39 lane closure.
- Exit the work area from the closed southbound IH 39 loop ramp to eastbound USH 12, or from a closed lane on southbound IH 39 during the night.
- Reopen the southbound IH 39 loop ramp to eastbound USH 12 within the allowed 52 calendar day closure prior to completing all Stage 4A work. Reopen this ramp to the configuration detailed in Stage 4B traffic control details.

Complete the following work along southbound IH 39 during **Stage 4B** as detailed in the plans:

- Continue to grade and pave the outside concrete lanes from Station 2540+00'TSB' to 2561+00'TSB'.
- Replace the remaining portions of the concrete bridge approach slabs and apply the polymer overlays to B-13-461 (southbound IH 39 over northbound IH 39 ramp to westbound USH 12) and B-13-462 (southbound IH 39 over Femrite Drive) as shown in the traffic control details.

Construction operation requirements and restrictions for **Stage 4B** are as follows:

- Entry into the work area is allowed from the gore area of the southbound IH 39 loop ramp to eastbound USH 12, or with prior approval during a nighttime southbound IH 39 lane closure.
- Exit the work area from a closed lane on southbound IH 39 during the night.
- Reopen the westbound USH 12 loop ramp to southbound IH 39 upon completion of the work requiring its closure.

### **2021 Winter Shutdown**

Winter shutdown will commence with the completion of Stage 4 in the Fall of 2020. Recommencement of work is expected to begin on May 1, 2022. A request to change the restart date must be submitted to and approved by the engineer at least 14 calendar days prior to May 1, 2022, or 14 calendar days prior to the requested restart date, whichever is earlier.

### **Stage 5 (1007-12-79)**

Estimated Start: May 2022.

Complete the following work in **Stage 5** as detailed in the plans:

- Native seeding and landscape plantings along northbound IH 39.
- Surveillance and Care Cycles for landscape plantings.

Construction operation requirements and restrictions for **Stage 5** are as follows:

- Access to areas where planting trees will be from daytime shoulder closures or nighttime lane closures as detailed in the "Traffic" article of these special provisions.

### **Stage 1 (1007-12-80)**

Estimated Start: Mid-July 2020. Required Interim Completion: November 15, 2020.

Complete the following work along northbound IH 39 during **Stage 1A** as detailed in the plans:

- Remove and grade the northbound outside shoulder and place temporary HMA pavement at locations designated in the plans.
- Apply the polymer overlay to the inside lane and shoulder of B-13-460 (eastbound USH 12 ramp to northbound IH 39 over westbound USH 12).
- Concrete pavement repairs on northbound IH 39 north of Femrite Drive at spot locations as directed by the engineer.

- Concrete pavement repairs on the eastbound USH 12 ramp to northbound IH 39 at spot locations as directed by the engineer.
- Begin the substructure work for the widening of B-13-463 (northbound IH 39 over Femrite Drive) along Femrite Drive.

Complete the following work along northbound IH 39 during **Stage 1B** as detailed in the plans:

- Remove and grade the northbound median shoulder and place temporary HMA pavement.
- Repair or replace existing concrete pavement at spot locations identified by the engineer.
- Apply the polymer overlay to the outside lane and shoulder of B-13-460 (eastbound USH 12 ramp to northbound IH 39 over westbound USH 12).
- Concrete pavement repairs on the northbound IH 39 ramp to westbound USH 12 at spot locations as directed by the engineer.
- Construct temporary pavement along both shoulders for the northbound IH 39 ramp to westbound USH 12 as detailed in the plans.

Construction operation requirements and restrictions for **Stage 1A and 1B** are as follows:

- For the removal, grading, and placement of temporary HMA pavement at the outside and median shoulders, entry to and exit from the work area is only allowed from a nighttime lane closure.
- For concrete pavement repair or replacement at spot locations, entry to and exit from the work area is only allowed from a nighttime lane closure.
- Close the northbound IH 39 ramp to eastbound USH 12 for up to 2 nights to place temporary pavements near the ramp gore area.
- Close the westbound USH 12 ramp to northbound IH 39 for up to 5 nights to place temporary pavements near the ramp gore area.
- Close a single ramp lane on the eastbound USH 12 ramp to northbound IH 39 to place temporary pavements, repair concrete pavements, and for the application of the polymer overlay to B-13-460 (eastbound USH 12 ramp to northbound IH 39 over westbound USH 12).
- Access to the work area for the widening of B-13-463 (northbound IH 39 over Femrite Drive) is only allowed from a nighttime outside lane closure of the eastbound USH 12 ramp to northbound IH 39.
- Closure of the northbound IH 39 ramp to westbound USH 12 is allowed for up to 6 nights in Stage 1B, up to 13 nights in total (2 additional nights allowed in both Stages 3A and 3B, 3 nights in Stage 4).
- Closure of Femrite Drive is allowed for construction operations associated with widening Structures B-13-462 (southbound IH 39 over Femrite Drive) and B-13-463 (northbound IH 39 over Femrite Drive) for up to 6 calendar days (intermittent full day closures allowed), with additional overnight closures allowed for up to 2 nights in Stage 3C for work associated with milling and overlaying the roadway. Utilize the 6 calendar days and 2 overnight closures to complete work for both Project 1007-12-79 and 1007-12-80.

### **2020 Winter Shutdown**

Winter shutdown will commence with the completion of Stage 1 in the Fall of 2020. Recommencement of work is expected to begin on April 1, 2021. A request to change the restart date must be submitted to and approved by the engineer at least 14 calendar days prior to April 1, 2021, or 14 calendar days prior to the requested restart date, whichever is earlier.

### **Stage 2 (1007-12-80)**

Estimated Start: Early April 2021. Estimated Completion: Mid-August 2021.

Complete the following work along northbound IH 39 during **Stage 2A** and as detailed in the plans:

- Grade and place base course on the southern end of the new northbound IH 39 alignment from approximately Station 2524+00'NB' to 2558+00'NB'.
- Grade, place embankment and base materials, concrete pavement, and all associated work from Station 1571+00'BCN' to 1593+50'BCN' and from Station 1193+00'XNB' to 1233+50'XNB' as detailed in the traffic control plans for Stage 2A.
- Pavement replacement on the westbound USH 12 ramp to northbound IH 39 as detailed in the plans.

- Replace the concrete bridge approach slab and apply the polymer overlay to the outside portion of B-13-463 (northbound IH 39 over Femrite Drive) within the work area, per the traffic control plans.

Construction operation requirements and restrictions for Stage 2A are as follows:

- Access to work areas at the southern project limits is only allowed from the closed northbound median lane and shoulder.
- Close the westbound USH 12 ramp to northbound IH 39 for up to 27 calendar days to replace the ramp pavement and reconstruction work from Station 1571+00'BCN' to 1593+50'BCN' and from Station 1193+00'XNB' to 1233+50'XNB'.
- Access to the grading and paving work area along the northbound outside shoulder and USH 12 ramp to northbound IH 39 is allowed from a contractor provided temporary access road off of Femrite Drive, from a nighttime northbound outside lane closure, or from the closed westbound USH 12 ramp to northbound IH 39.
- Exit all work areas from a closed traffic lane or from the contractor provided access road off the Femrite Drive.

Complete the following work along northbound IH 39 during **Stage 2B** and as detailed in the plans:

- Grade, place base course, and concrete pavement on the new northbound IH 39 alignment from approximately Station 2524+00'NB' to 2582+00'NB'.
- Grade, place base materials, concrete pavement, on the inside lanes from Station 1581+00'BCN' to 1593+50'BCN', Station 2594+00'TNB' to 2602+00'TNB', and from Station 1202+00'XNB' to 1204+00'XNB' as detailed in the traffic control plans for Stage 2B.
- Replace the concrete bridge approach slab and apply the polymer overlay to the center portion of B-13-463 (northbound IH 39 over Femrite Drive) within the work area, per the traffic control plans.

Construction operation requirements and restrictions for **Stage 2B** are as follows:

- Access the grading and paving work area on the new northbound alignment from a contractor provided temporary access road off of Femrite Drive, or from a nighttime northbound median lane closure at the southern project limits.
- Access the work area between Station 1581+00'BCN' and 1593+50'BCN', Station 2594+00'TNB' to 2602+00'TNB', and Station 1202+00'XNB' to 1204+00'XNB' from the temporary widened median shoulder of the eastbound USH 12 ramp to northbound IH 39, or from a nighttime lane closure on northbound IH 39 or the eastbound USH 12 ramp to northbound IH 39.

Complete the following work along northbound IH 39 during **Stage 2C** and as detailed in the plans:

- Continue to grade, place base materials, and concrete pavement on the new northbound IH 39 alignment from approximately Station 2524+00'NB' to 2582+00'NB' as detailed in the plans.
- Grade, place base course, concrete pavement, and other associated work in the median area from Station 2584+00'TNB' to 2602+00'TNB', and from Station 1201+50'XNB' to 1233+50'XNB' as detailed in the plans.

Construction operation requirements and restrictions for **Stage 2C** are as follows:

- Access the grading and paving work area on the new northbound alignment from a contractor provided temporary access road off of Femrite Drive, or from a nighttime northbound median lane closure at the southern project limits.
- Entry in the work area north of Femrite Drive shall be from a contractor provided temporary access road off of Femrite Drive.
- Exit the work area north of Femrite Drive from a contractor provided temporary access road off of Femrite Drive, or from a nighttime northbound lane closure at the northern project limits.
- Complete the Stage 2C work in the median north of Femrite Drive concurrently with Stage 3A and 3B of Project 1007-12-79.

### **Stage 3 (1007-12-80)**

Estimated Start: Mid-August 2021. Required Interim Completion: November 15, 2021.

Complete the following work along northbound IH 39 during **Stage 3A** as detailed in the plans:

- Shift all northbound IH 39 traffic onto the new northbound alignment and keep open to two lanes of traffic.

- Reconstruct the northbound IH 39 ramps to both westbound and eastbound USH 12 as detailed in the plans. Provide temporary access for the northbound to westbound ramp movement.
- Construct retaining wall R-13-335 along the northbound IH 39 ramp to eastbound USH 12 along the outside shoulder of the new off ramp alignment.
- Reconstruct the northbound IH 39 ramp taper along eastbound USH 12 as shown in the plans. This work will require a continuous right lane closure along eastbound USH 12 as detailed in the plans.
- Obliterate the old northbound IH 39 roadway no longer in use from Station 1167+00'XNB' to 1180+00'XNB'.
- Replace concrete bridge approach slabs and apply polymer overlays to B-13-465 (northbound IH 39 over westbound USH 12), B-13-467 (northbound IH 39 over eastbound USH 12), and the inside portion of B-13-463 (northbound IH 39 over Femrite Drive).
- Replace the existing concrete pavement, HMA pavement, and guardrail for the inside left shoulder on the northbound IH 39 ramp to westbound USH 12 as detailed in the plans. At the beginning of Stage 3A, construct a temporary pavement slope wedge on the vacated northbound IH 39 roadway just north of B-13-465 (northbound IH 39 ramp over westbound USH 12) as shown in the construction details.
- Concrete pavement repairs on the northbound IH 39 to eastbound USH 12 ramp at spot locations as directed by the engineer.

Construction operation requirements and restrictions for **Stage 3A** are as follows:

- At the southern project limits, enter the work area from the closed outside lanes on the completed portion of northbound IH 39 south of the project limits.
- Entry and exit into the work area from the eastbound USH 12 right lane closure and the closed northbound IH 39 ramp to eastbound USH 12. Provide a crossing of live northbound to westbound ramp traffic lane near Station 1150+00'XNB' to access the grading area from Station 1153+00'XNB' to 1167+00'XNB'.
- Entry and exit into the work area from Station 1167+00'XNB' to 1184+00'XNB' from a contractor provided access road from Femrite Drive. Entry into this work area is also allowed from the inside lane of the eastbound USH 12 ramp to northbound IH 39.
- Entry and exit into all work areas by using nighttime northbound lane closures.
- A single closure of the northbound IH 39 ramp to eastbound USH 12 is allowed for up to 21 consecutive calendar days for the reconstruction of the new ramp gore area, taper along eastbound USH 12, and ramp concrete pavement repairs.
- Closure of the northbound IH 39 ramp to westbound USH 12 is allowed for up to 2 nights in Stage 3A, up to 13 nights in total (6 additional nights allowed in Stages 1B, 2 nights in Stage 3B and 3 nights at the end of Stage 3C) for the construction the temporary and permanent pavements, traffic control, removals, and signing and marking.

Complete the following work along northbound IH 39 during **Stage 3B** as detailed in the plans:

- Reconstruct the northbound IH 39 ramp to westbound USH 12 from Station 1135+00'XNB' to 1168+00'XNB'.
- Place permanent pavement markings from Station 1201+00'XNB' to 1233+50'XNB'.
- Continue Stage 3A work for the northbound IH 39 ramp to westbound USH 12 where the pavement is being replaced.

Construction operation requirements and restrictions for **Stage 3B** are as follows:

- Northbound IH 39 nighttime lane closures for both entering and exiting the work area.
- Northbound IH 39 ramp to westbound USH 12 for both entering and exiting the work area.
- Closure of the northbound IH 39 ramp to westbound USH 12 is allowed for up to 2 nights in Stage 3B, up to 13 nights in total (6 additional nights in Stage 1B, 2 additional nights allowed in Stage 3A, and 3 nights at the end of in Stage 3C) for the construction the temporary and permanent pavements, traffic control, and signing and marking.

Complete the following work along northbound IH 39 during **Stage 3C** as detailed in the plans:

- Reconstruct the northbound IH 39 ramp to westbound USH 12 from Station 1150+00'XNB' to 1168+00'XNB' as detailed on the plans.

- Removal of temporary pavements used in staging.
- Placement of permanent pavement markings.
- Remove temporary pavements and temporary widening, construct permanent HMA pavement and guardrail of the northbound IH 39 ramp to westbound USH 12.
- Mill the existing asphaltic pavement surface and resurface Femrite Drive as detailed in the plans.
- Replace the concrete bridge approach slabs and apply the polymer overlays to the outside lanes and shoulder of B-13-465 (northbound IH 39 over westbound USH 12) and B-13-467 (northbound IH 39 over eastbound USH 12).

Construction operation requirements and restrictions for **Stage 3C** are as follows:

- Enter and exit the work area using the northbound IH 39 ramp to westbound USH 12.
- Enter and exit the work area from a contractor provided access road from Femrite Drive.
- Open the northbound IH 39 ramp to westbound USH 12 to traffic using the new pavement, partly shifted onto the inside shoulder. Nighttime closure of this ramp is allowed for 3 nights at the end of Stage 3C.

### **Project 1008-10-70**

Safety Rest Area 22 will be closed at the exit ramp from IH 39 to the rest area. All improvements shall be made under a single stage during the closure.

Do not close traffic lanes, shoulders, or ramps on IH 39 outside the allowed time periods specified in the Traffic article of these special provisions. Assessments per the Lane Rental Fee Assessment article will be charged for lane and ramp closures outside the allowed time periods.

Work within Safety Rest Area 22 shall be performed during the allowed closure period of the rest area. Safety Rest Area 22 will be allowed to be closed to traffic from 6:00 AM on August 3, 2020, until 11:59 PM on October 29, 2020. Local forces and/or Rest Area Management staff may require access to the building or other areas within the project site during the closure and the contractor shall coordinate and maintain access as needed.

All contract work shall be completed prior to reopening the rest area for public use.

### **B Staging**

Complete work as detailed above in section “A Sequence of Operations”. Modifications pertaining to what work is completed in each stage require prior written approval by the engineer.

Do not switch traffic over to the next construction stage unless all signing, pavement marking, reflectors, concrete barrier temporary precast, and traffic control drums for the stage are in place, and conflicting pavement markings and signs are removed as shown in the traffic control plans and as directed by the engineer.

Immediately upon completion of each Stage of construction, complete the following (as applicable to each Stage):

- Remove CBTP along northbound and southbound IH 39, USH 12, Femrite Drive, and ramps.
- Remove temporary pavement markings and place permanent pavement markings.
- Remove traffic control signs and replace and/or uncover permanent signs.
- Reopen ramps to traffic.
- Return traffic to its normal lane configurations.
- Remove and grade any access roads when no longer needed in use.

### **C Work Restrictions**

Do not close traffic lanes on IH 39, eastbound USH 12, interchange ramps or Femrite Drive outside of Permitted Lane Closure Times specified in the “Traffic” article of these special provisions. Assessment per the “Lane Rental Fee Assessment” article will be charged for lane closures outside of the Permitted Lane Closure Times.

Maintain a minimum 4-foot hard surface shoulder width at all times except during a limited time when a 2-foot minimum width is allowed as indicated in Stage 2B of Project 1007-12-79. No aggregate shoulders shall be permitted adjacent to travel lanes at any time. During the nighttime lane closure for shoulder work on IH 39, the existing shoulder pavement within 4 feet of the travel lane shall not be removed unless the shoulder can be paved within the same night.

A vertical shoulder dropoff of up to 2 inches is allowed adjacent to live traffic lanes for a period of no longer than 24 hours.

Construct the temporary access road(s) from Femrite Drive within the right-of-way or temporary easement.

Do not reopen closed ramps until all debris and equipment are removed from the traveled way and its clear zone as defined in the "Traffic" article of these special provisions, and until all signs, barrels, barricades, and traffic control devices required to close the ramp are covered, moved, or removed.

#### **D Contractor Coordination**

The prime contractor shall have a superintendent or designated representative on the job site during all controlling work operations, including periods limited to only subcontractor work operations, to serve as a primary contact person and to coordinate all work operations.

Hold a progress meeting once a week for Projects 1007-12-79, 1007-12-80, and 1008-10-70. These meetings will take place at the engineer's field office. The contractor's superintendent or designated representative and subcontractor's representatives for ongoing subcontract work or subcontractor work expected to begin within the next 2 weeks are to attend and provide a written schedule of the next week's operations. Include begin and end dates of specific prime and subcontractor work operations including lane closures and traffic switches. Invite representatives from the utilities, Town of Blooming Grove, City of Madison, and Dane County Sheriff's Department to attend the progress meetings. Agenda items at the meeting will include review of the contractor's schedule and subcontractors' schedule, utility conflicts and relocation schedule, evaluation of progress and pay items, and making revisions if necessary. Plans and specifications for upcoming work will be reviewed to prevent potential problems or conflicts between contractors.

Modifications to the traffic control plan may be required by the engineer as a result of adjacent work by others.

Based on the progress meeting, if the engineer requests a new revised schedule, submit it within 7 calendar days. Failure to submit a new schedule within 7 days shall result in the engineer holding pay requests until received.

For Projects 1007-12-79 and 1007-12-80, coordinate lane closures with concurrent Projects 1007-12-74, 1007-12-75 and 1007-12-78. Lane closures are not permitted without the approval of the engineer.

For Project 1008-10-70, coordinate with the Safety Rest Area 22 Manager to maintain access for local forces or other staff that may be working on the building facilities and grounds. Coordination with Projects 1003-10-79, 1003-10-80, and 1003-11-71 will be required for traffic control staging.

#### **E Permitted Closures and Interim Completion of Work**

The department will not grant time extensions to the interim completion dates specified above for the following:

1. Labor disputes that are not industry wide.
2. Delays in material deliveries.

#### **Permitted Closures**

##### **Femrite Drive**

Femrite Drive may be closed for up to a total of 6 calendar days (closure days do not need to be consecutive) to complete work associated with widening Structures B-13-462 (southbound IH 39 over Femrite Drive) and B-13-463 (northbound IH 39 over Femrite Drive). If the contractor fails to complete all work necessary that requires the full closure of Femrite Drive within 6 calendar days, the department will assess the contractor \$1,875 in interim liquidated damages for each calendar day that the road is closed after 6 calendar days. An entire calendar day will be charged for any period of time within a calendar day that the road is fully closed beyond 12:01 AM.

In addition to the 6 calendar days, Femrite Drive may be closed for up to a total of 2 nights from 9:00 PM to 5:00 AM to complete work associated with widening Structures B-13-462 and B-13-463. Additional overnight closures require prior approval from the engineer. Early closures (prior to 9:00 PM) or delays in opening the ramp (after 5:00 AM) will be addressed as described in the "Lane Rental Fee Assessment" article of these special provisions.

### **Project 1007-12-79 Ramps and Shoulder**

The southbound IH 39 loop ramp to eastbound USH 12 may be closed for up to a total of 3 nights from 7:00 PM to 5:00 AM, on Monday through Thursday nights for the placement of temporary pavements. Additional overnight closures require prior approval from the engineer. Early closures (prior to 7:00 PM) or delays in opening the ramp (after 5:00 AM) will be addressed as described in the "Lane Rental Fee Assessment" article of these special provisions.

The southbound IH 39 loop ramp to eastbound USH 12 may be closed for up to 52 consecutive calendar days to accommodate a shift in traffic while the southbound median lane is constructed. If the contractor fails to complete all work necessary within the allowed 52 calendar days, the department will assess the contractor \$8,000 in interim liquidated damages for each calendar day that the ramp remains closed after 52 calendar days. An entire calendar day will be charged for any period of time within a calendar day the ramp remains closed beyond 12:01 AM.

The westbound USH 12 loop ramp to southbound IH 39 may be closed for up to 100 consecutive calendar days to accommodate a shift in traffic while the southbound median lane is constructed. If the contractor fails to complete all work necessary within the allowed 100 calendar days, the department will assess the contractor \$8,000 in interim liquidated damages for each calendar day that the ramp remains closed after 100 calendar days. An entire calendar day will be charged for any period of time within a calendar day the ramp remains closed beyond 12:01 AM.

In addition to the 100 consecutive calendar days, the westbound USH 12 loop ramp to southbound IH 39 may be closed for up to 3 additional nights from 7:00 PM to 5:00 AM, on Monday through Thursday nights to construct the shoulder and gore area if the work is completed when the ramp is open to live traffic. Additional overnight closures require prior approval from the engineer. Early closures (prior to 7:00 PM) or delays in opening the ramp (after 5:00 AM) will be addressed as described in the "Lane Rental Fee Assessment" article of these special provisions.

As described above in Section A "Sequence of Operations", shoulders in the same direction of travel may not be closed concurrently, except as allowed for up to 21 consecutive calendar days in **Stage 2B** in order to complete the remaining pavement structure grading and placement of concrete pavement. If the contractor fails to complete all work necessary to provide at least one open shoulder with a minimum width of 8 feet within the allowed 21 calendar days, the department will assess the contractor \$1,875 in interim liquidated damages for each calendar day concurrent shoulder closures remain in effect after 21 calendar days. An entire calendar day will be charged for any period of time within a calendar day that the shoulder remains closed beyond 12:01 AM.

### **Project 1007-12-80 Ramps**

The westbound USH 12 ramp to northbound IH 39 may be closed for up to for up to 27 consecutive calendar days for concrete pavement replacement. If the contractor fails to complete all of the work necessary within the allowed 27 calendar days, the department will assess the contractor \$8,000 in interim liquidated damages for each additional night that the ramp is closed after 27 calendar days. 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.

The northbound IH 39 ramp to westbound USH 12 may be closed for up to a total of 13 nights from 9:00 PM to 5:00 AM, on Monday through Thursday nights to reconfigure the ramp from a left-side exit to a right-side exit and for concrete pavement replacement. Additional overnight closures require prior approval from the engineer. Early closures (prior to 9:00 PM) or delays in opening the ramp (after 5:00 AM) will be addressed as described in the "Lane Rental Fee Assessment" article of these special provisions.

The northbound IH 39 ramp to eastbound USH 12 may be closed for up to 21 consecutive calendar days to reconfigure the ramp from a left-side exit to a right-side exit and. If the contractor fails to complete all work necessary within the allowed 21 calendar days, the department will assess the contractor \$8,000 in interim liquidated damages for each calendar day that the ramp remains closed after 21 calendar days. An entire

calendar day will be charged for any period of time within a calendar day the ramp remains closed beyond 12:01 AM.

### **Interim Completion of Work (by project)**

#### **Project 1007-12-79**

Complete all of the **Stage 1 and 2** work as detailed above in section “A Sequence of Operations” of this article prior to November 16, 2020. If the contractor fails to do so, the department will assess the contractor \$15,000 in interim liquidated damages for each calendar day the work remains incomplete after 12:01 AM on November 16, 2020. An entire calendar day will be charged for any period of time within a calendar day that the work under Stages 1 and 2 remains incomplete beyond 12:01 AM.

Complete all of the **Stage 3 and 4** work as detailed above in section “A Sequence of Operations” of this article prior to November 16, 2021. If the contractor fails to do so, the department will assess the contractor \$15,000 in interim liquidated damages for each calendar day the work remains incomplete after 12:01 AM on November 16, 2021. An entire calendar day will be charged for any period of time within a calendar day that the work under Stages 3 and 4 remains incomplete beyond 12:01 AM.

#### **Project 1007-12-80**

Complete all of the **Stage 1** work as detailed above in section “A Sequence of Operations” of this article prior to November 16, 2020. If the contractor fails to do so, the department will assess the contractor \$15,000 in interim liquidated damages for each calendar day the work remains incomplete after 12:01 AM on November 16, 2020. An entire calendar day will be charged for any period of time within a calendar day that the work under Stage 1 remains incomplete beyond 12:01 AM.

Complete all of the **Stage 2 and 3** work as above detailed in section “A Sequence of Operations” of this article prior to November 16, 2021. If the contractor fails to do so, the department will assess the contractor \$15,000 in interim liquidated damages for each calendar day the work remains incomplete after 12:01 AM on November 16, 2021. 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.

#### **Project 1008-10-70**

Complete all work at **Safety Rest Area 22** prior to October 30, 2020. If the contractor fails to do so, the department will assess the contractor \$15,000 in interim liquidated damages for each calendar day the work remains incomplete after 12:01 AM on October 30, 2020. An entire calendar day will be charged for any period of time within a calendar day that the rest area 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.

### **F Northern Long-eared Bat (*Myotis septentrionalis*)**

Northern Long-eared Bats (NLEB) have the potential to inhabit the project limits because they roost in trees. Roosts may not have been observed on this project, but conditions to support the species exist. The species and all active roosts are protected by the Federal Endangered Species Act. If an individual bat or active roost is encountered during construction operations, stop work and notify the engineer and the WisDOT Regional Environmental Coordinator (REC).

According to the final 4(d) rule issued for the NLEB, the department has determined that the proposed activity may affect, but will not result in prohibited take of the NLEB. The activity involves tree removal but will not occur within 0.25 miles of a known hibernacula, nor will the activity remove a known maternity roost tree or any other tree within 150 feet of a known maternity roost tree.

If additional trees need to be removed, no Clearing shall occur without prior approval from the engineer, following coordination with the WisDOT REC. Additional tree removal beyond the area originally specified will require consultation with the United States Fish and Wildlife Service (USFWS) and may require a bat presence/absence survey. Notify the engineer if additional Clearing cannot be avoided to begin coordination with the WisDOT REC. The WisDOT REC will initiate consultation with the USFWS and determine if a survey is necessary.

Submit a schedule and description of Clearing operations with the Erosion Control Implementation Plan (ECIP) 14 days prior to any Clearing operations. The department will determine, based on schedule and

scope of work, what additional erosion control measures shall be implemented prior to the start of Clearing operations, and list those additional measures in the ECIP.

## **G Migratory Birds**

Swallow and other migratory birds' nests have not been observed on or under the existing bridge, but conditions to support nesting exists. All active nests (when eggs or young are present) of migratory birds are protected under the federal Migratory Bird Treaty Act.

The nesting season for swallows and other birds is usually between May 1 and August 30. Either prevent active nests from becoming established or apply for a depredation permit from the US Fish and Wildlife Service for work that may disturb or destroy active nests. The need for a permit may be avoided by removing the existing bridge structure prior to nest occupation by birds or clearing nests from all structures before the nests become active in early spring. As a last resort, prevent birds from nesting by installing a suitable netting device on the remaining structure prior to nesting activity. Include the cost for preventing nesting in the cost of Removing Old Structure.

## **H Native Prairie Seeding and Tree/Shrub Planting and Care**

This contract contains native prairie seeding and tree/shrub installation within the interchange construction project limits.

The contractor is advised that there may be multiple mobilizations, at multiple sites within the interchange construction limits, for native prairie seeding and tree/shrub installation. The department will make no additional payment for said mobilizations.

Notify the Corridor Vegetation Inspector at least 3 days prior to the planned delivery date of planting stock and replacement planting stock to allow for inspection scheduling.

Native prairie seed and tree/shrub planting work will not be allowed at sites where there is active interchange construction. Verify with the Corridor Vegetation Inspector the availability of planting sites.

Attend a vegetation preconstruction meeting, setup by the department. No later than 30 days after the vegetation preconstruction meeting and prior to planting or seeding, submit one overall schedule that shows the landscape planting activities (including surveillance and care cycles) and the native seed planting activities (including surveillance and care cycles), for approval by the Corridor Vegetation Inspector. Use the department provided template. Update the schedule at least once per month and submit for approval to the Corridor Vegetation Inspector.

At least once per month setup and meet with the Corridor Vegetation Inspector. Provide a meeting summary to the IH 39 Controls Team. More frequent meetings may be necessary during periods of numerous activities.

No later than 30 days after completion of the last surveillance and care period, provide an as-built plan showing the overall layout of all planting beds, shrubs, trees, and native seed areas. Label all plant species and include original planting date or replacement plant date. Label specific areas where growing conditions have required more intense care. Provide description and photos for each area of concern. Use an appropriate scale for the plans.

All department provided vegetation related templates and/or worksheets referenced by name in this contract are located on the department's Highway Construction Contract Information (HCCI) website.

All native seed, trees, and shrubs located on the west side of southbound of IH 39, north of the Femrite Drive crossing, are to be planted in the fall of 2020.

## **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 of these special provisions.

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

Coordinate lane, ramp, and roadway closures with any concurrent operations on adjacent roadways within 3 miles of the project. If other projects are in the vicinity of this project, coordinate lane closures to run concurrent with lane closures on adjacent projects when possible. When lane closures on adjacent projects extend into the limits of this project, Lane Rental Fee Assessments will only occur if the closure facilitates work under this contract.

## **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:

- \$10,000 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.

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## **5. Traffic.**

### **A General**

Accomplish the construction sequence, including the associated traffic control as detailed in the “Traffic Control” section of the plans, and as described in this article.

Do not begin or continue any work that closes traffic lanes outside the permitted lane closure times specified in this article.

Any revisions to traffic control plans shall adhere to the article 'Notice to Contractor – Revisions to Traffic Control Plans' of these special provisions.

The contractor is responsible for coordinating with the following school districts to ensure that bus routes are maintained and accessible throughout construction.

Madison Metropolitan School District

Madison Metro Transit

(608) 266-4904

McFarland School District

Nelson's Bus Service, Inc.

(608) 205-9040

### **B Traffic Operations**

#### **Projects 1007-12-79 and 1007-12-80 (during all stages)**

Maintain 2 lanes of traffic in each direction at all times except during the times specified in the **Lane Closures** section for the following:

- IH 39
- USH 12
- Southbound IH 39 ramp to westbound USH 12
- Eastbound USH 12 ramp to northbound IH 39

Maintain traffic on IH 39, eastbound USH 12, and all interchange ramps on a paved concrete or hot mix asphalt surface at all times.

Maintain a minimum 4-foot hard surface shoulder width at all times except during a limited time when a 2-foot minimum width is allowed as indicated in the "Prosecution and Progress" article of these special provisions.

Coordinate and stage all construction activities within the areas of local traffic routes, as required to maintain a traveled way conforming to all above requirements.

Use drums and barricades to direct traffic in the work zone and to protect and delineate hazards such as open excavations, abrupt drop-offs, and exposed manholes, inlets, etc. The use of such devices shall be incidental to the operation which creates the hazard.

Place roadway signing as detailed on the plans and in conformance to the Manual on Uniform Traffic Control Devices (MUTCD), latest edition. Traffic control shall be completely in place by the end of the working day of a traffic switch.

Do not deliver or store materials and equipment within open travel lanes or ramps during any stage of construction.

Conduct operations in a manner that will cause the least interference to traffic movements.

### **Project 1008-10-70**

Safety Rest Area 22 will be allowed to be closed from 6:00 AM on August 3, 2020 until 11:59 PM on October 29, 2020.

The northbound IH 39 auxiliary lane between the IL 75 entrance ramp and the exit to Safety Rest Area 22 shall be closed prior to the exit for Safety Rest Area 22 during the rest area closure timeframe.

The IL 75 entrance ramp to northbound IH 39 shall be maintained at all times.

Northbound IH 39 immediately south of the IL 75 exit ramp requires a double lane closure and a single lane shift to cover and uncover an existing Rest Area 1¼ Miles sign which is located on a sign bridge at the IL 75 exit ramp. The work shall occur during nighttime operations when lanes closures are allowed on IH 39.

### **C Lane and Shoulder Closures**

Lane and shoulder closures shall be according to the traffic control plans and shall have the approval of the engineer and the Traffic Management Center (414-227-2142).

Single lane closures on IH 39 and eastbound USH 12 are only allowed during the permitted times specified in the following tables and text. During the times when 1 lane is allowed to be closed, maintain a minimum clear width of 16 feet, including the adjacent shoulder, at all times. Times listed include setup and breakdown of equipment and traffic control devices.

Provide arrow boards for use during all single lane closures according to the MUTCD. Arrow boards for single lane closures will be paid for under the item Traffic Control Arrow Boards for each day with a single lane closure where an arrow board is in use.

Lane closures should be continuous when possible. A 2-mile minimum spacing is required where continuous lane closures are not feasible or desirable. Coordinate lane closures with the adjacent Project 1007-12-74/75 immediately to the south (calendar year 2020) and Project 1007-12-78 (calendar year 2020).

All lane closures shall be removed when work is not in progress.

Permitted Single Lane Closure Times – IH 39	
Monday	12:00 AM – 5:00 AM 9:00 PM – 11:59 PM
Tuesday	12:00 AM – 5:00 AM 9:00 PM – 11:59 PM
Wednesday	12:00 AM – 5:00 AM 9:00 PM – 11:59 PM
Thursday	12:00 AM – 5:00 AM 9:00 PM – 11:59 PM
Friday	12:00 AM – 5:00 AM 10:00 PM – 11:59 PM
Saturday	12:00 AM – 7:00 AM 10:00 PM – 11:59 PM
Sunday	12:00 AM – 7:00 AM 10:00 PM – 11:59 PM

Permitted Single Lane Closure Times – Eastbound USH 12	
Monday	12:00 AM – 5:00 AM 9:00 PM – 11:59 PM
Tuesday	12:00 AM – 5:00 AM 9:00 PM – 11:59 PM
Wednesday	12:00 AM – 5:00 AM 9:00 PM – 11:59 PM
Thursday	12:00 AM – 5:00 AM 9:00 PM – 11:59 PM
Friday	12:00 AM – 5:00 AM 10:00 PM – 11:59 PM
Saturday	12:00 AM – 7:00 AM 10:00 PM – 11:59 PM
Sunday	12:00 AM – 7:00 AM 10:00 PM – 11:59 PM

Permitted Dual Lane Closure Times – IH 39	
Monday	12:00 AM – 5:00 AM 9:00 PM – 11:59 PM
Tuesday	12:00 AM – 5:00 AM 9:00 PM – 11:59 PM
Wednesday	12:00 AM – 5:00 AM 9:00 PM – 11:59 PM
Thursday	12:00 AM – 5:00 AM 9:00 PM – 11:59 PM
Friday	12:00 AM – 5:00 AM 10:00 PM – 11:59 PM
Saturday	12:00 AM – 6:00 AM 11:00 PM – 11:59 PM
Sunday	12:00 AM – 6:00 AM 11:00 PM – 11:59 PM

Permitted Single Lane Closure Times – Southbound IH 39 Ramp to Westbound USH 12 & Eastbound USH 12 Ramp to Northbound IH 39	
Monday	12:00 AM – 5:00 AM 8:00 PM – 11:59 PM
Tuesday	12:00 AM – 5:00 AM 8:00 PM – 11:59 PM
Wednesday	12:00 AM – 5:00 AM 8:00 PM – 11:59 PM
Thursday	12:00 AM – 5:00 AM 8:00 PM – 11:59 PM
Friday	12:00 AM – 5:00 AM 10:00 PM – 11:59 PM
Saturday	12:00 AM – 7:00 AM 10:00 PM – 11:59 PM
Sunday	12:00 AM – 7:00 AM 10:00 PM – 11:59 PM

The engineer has the ability to suspend work activities during the periods listed in the event that undesirable traffic congestion develops that has the potential to cause lengthy motorist delay or unsafe working conditions.

Do not simultaneously close a lane or shoulder along the opposing median side during the outside shoulder closure for the bridge widening work completed for B-13-463 in Stage 1 of Project 1007-12-80.

Only one shoulder along IH 39 may be closed in a given direction. The closure of both the IH 39 median shoulder and outside shoulder at the same time in a given direction is prohibited, with the exception of the following proposed shoulder restrictions, as shown in the plans:

#### **SB IH 39 (1007-12-79)**

- **Stage 2B** – from approximately Station 1182+00'XSB' to 1235+00'XSB', leading to and across Structure B-13-462 (2 feet outside to barrier, 2 feet inside to CBTP).
- **Stage 3A** – from approximately Station 1176+50'XSB' to 1183+00'XSB' (4 feet outside with no barrier and permanent 6:1 slope grading, 2 feet inside to CBTP).
- **Stage 3A/B** – from approximately Station 1183+00'XSB' to 1191+00'XSB', leading to and across Structure B-13-462 (2 feet outside to barrier, 4 feet inside to CBTP).
- **Stage 3B** – from approximately Station 2541+00'TSB' to 2559+69'TSB' (4 feet outside with no barrier and permanent 6:1 slope grading, 2 feet inside to CBTP).
- **Stage 3B/4A** – from approximately Station 1159+00'XSB' to 1167+63'XSB', through loop ramp auxiliary lane merging/diverging area (2 feet inside to CBTP, 2 feet outside to existing guardrail).
- **Stage 3B** – from approximately Station 1167+63'XSB' to 1183+00'XSB' (4 feet outside with no barrier and permanent 6:1 slope grading, 2 feet inside to CBTP).
- **Stage 3B** – from approximately Station 1183+00'XSB' to 1191+00'XSB' (4 feet outside with no barrier and permanent 6:1 slope grading, 4 feet inside to CBTP).
- **Stage 4A** – from approximately Station 1161+00'XSB' to 1170+00'XSB' (4 feet outside to permanent concrete barrier, 2 feet inside to CBTP).
- **Stage 4A/B** – from approximately Station 1170+30'XSB' to 1183+00'XSB' (4 feet outside with no barrier and permanent 6:1 slope grading, 2 feet inside to CBTP).
- **Stage 4A/B** – across existing Structure B-13-461 (1 foot outside to existing bridge parapet, 1 foot inside to CBTP).
- **Stage 4A/B** – from approximately Station 1183+00'XSB' to 1232+00'XSB', leading to and across Structure B-13-462 (2 feet outside to barrier, 6 feet inside to CBTP for ramp exiting traffic; 4 feet outside with no barrier and permanent 6:1 slope grading, 2 feet inside to CBTP for southbound IH 39).

- **Stage 4A/B** – from approximately Station 2541+00'TSB' to 2559+69'TSB', south of eastbound USH 12 to south limits (4 feet outside shoulder to CBTP, 2 feet inside shoulder to barrier).

#### **NB IH 39 (1007-12-80)**

- **Stage 2A** – from approximately Station 1126+00'XNB' to 1138+00'XNB' (4 feet outside with no barrier and permanent 6:1 slope grading, 2 feet inside to CBTP).
- **Stage 2A** – from approximately Station 1167+00'XNB' to 1181+00'XNB' (2 feet outside to CBTP, 4 feet inside to traffic control drum).
- **Stage 2A** – from approximately Station 1181+00'XNB' to 1234+00'XNB', USH 12 to northbound IH 39 merge gore to north project limits (4 feet outside to CBTP, 2 feet inside to CBTP/barrier).
- **Stage 2B** – from approximately Station 1126+00'XNB' to 1216+00'XNB' (4 feet outside shoulder with no barrier and permanent 6:1 slope grading, 2 feet inside to CBTP for on ramp traffic; 2 feet outside to CBTP, 2 feet inside to CBTP for northbound IH 39 traffic).
- **Stage 2B** – from approximately Station 1578+00'BCN' to 1580+00'BCN' on the eastbound USH 12 ramp to northbound IH 39 (4 feet outside to beam guard, 2 feet inside to CBTP).
- **Stage 2C** – from approximately Station 1126+00'XNB' to 1138+00'XNB' (4 feet outside with no barrier and permanent 6:1 slope grading, 2 feet inside to CBTP).
- **Stage 2C** – from approximately Station 1180+00'XNB' to 1198+00'XNB' on the USH 12 ramp to northbound IH 39 (2 feet inside to CBTP, 2 feet outside with no barrier and permanent 6:1 slope grading).
- **Stage 2C** – from approximately Station 1198+00'XNB' to 1233+60'XNB' (4 feet outside with no barrier and permanent 6:1 slope grading, 2 feet inside to CBTP).
- **Stage 2C** – from approximately Station 1578+00'BCN' to 1580+00'BCN' on the eastbound USH 12 ramp to northbound IH 39 (2 feet inside to CBTP, 4 feet outside to permanent guardrail).
- **Stage 3A** – from approximately Station 1135+00'XNB' to 1153+00'XNB' on northbound IH 39 prior to the exit ramp to USH 12 (2 feet inside to permanent barrier, 2 feet outside with no barrier and permanent 6:1 slope grading).
- **Stages 3A/3B** – the northbound IH 39 ramp to westbound USH 12 (15 feet clear between CBTP on both sides, consisting of a 12-foot marked lane, a 1 foot inside shoulder, and a 2 foot outside shoulder). Width restriction signing will direct wide loads exceeding 14 feet to continue north through the interchange to westbound STH 30, south on USH 51 (Stoughton Road), and then westbound on USH 12.
- **Stage 3A/B** – from approximately Station 1153+00'XNB' to 1164+50'XNB' on northbound IH 39 prior to the exit ramp to USH 12 (a 14-foot lane, 2 feet outside with no barrier and permanent 6:1 slope grading, 2 feet inside to CBTP).
- **Stage 3A/B** – from approximately Station 1164+50'XNB' to 1168+00'XNB' on northbound IH 39 prior to the exit ramp to USH 12 (a 14-foot lane, 2 feet outside to CBTP, 2 feet inside to CBTP).
- **Stage 3B** – from approximately Station 1135+00'XNB' to 1151+00'XNB' on northbound IH 39 prior to the exit ramp to USH 12 (14-foot lane, 2 feet outside with no barrier and permanent 6:1 slope grading, 2 feet inside to CBTP).
- **Stage 3C** – the northbound IH 39 ramp to westbound USH 12 (14-foot lane with 2-foot shoulders on both sides).

See the “Wisconsin Lane Closure System Advanced Notification” section in this article of the special provisions for additional requirements.

#### **D Rolling Stops**

Combine rolling stops with the closure of one lane to remove and erect overhead sign structures and placement of pavement markings. Rolling stops may occur any night of the week between 11:00 PM and 5:00 AM. Provide for advanced signing, traffic control personnel, department personnel, and law enforcement personnel to be on site prior to and during operations that require rolling stops. Schedule operations to avoid requiring law enforcement vehicles to slow down traffic for more than 15 minutes. Allow vehicles delayed by a rolling stop to clear the area before initiating another rolling stop.

Coordinate with the State Patrol through Jeff Gustafson (Southwest Region Traffic) at (608) 516-6400 or [jeffrey.gustafson@dot.wi.gov](mailto:jeffrey.gustafson@dot.wi.gov).

See the “Wisconsin Lane Closure System Advanced Notification” section in this article of the special provisions for additional lane closure requirements.

### **E Full Roadway and Ramp Closures**

Place Portable Changeable Message Signs for all lane closures on IH 39, interchange ramps, USH 12, and Femrite Drive as shown on the plans at least 7 days prior to the lane closures, ramp closures and full roadway closures. All closures are subject to the approval of the Southwest Region traffic engineer.

Overnight ramp closures are only allowed from 11:00 PM to 5:00 AM, on Monday through Thursday nights.

See the “Wisconsin Lane Closure System Advanced Notification” section in this article of the special provisions for additional lane closure requirements.

### **F Detour Routes**

Detour traffic during the closure of the following interchange ramps as follows, and as detailed in the plans:

- Southbound IH 39 loop ramp to eastbound USH 12 – traffic will use the southbound IH 39 ramp to westbound USH 12, and the USH 51 (Stoughton Road) interchange to redirect their travel to eastbound USH 12.
- Northbound IH 39 ramp to eastbound USH 12 – traffic will use the northbound IH 39 ramp to westbound USH 12, and the USH 51 (Stoughton Road) interchange to redirect their travel to eastbound USH 12.
- Northbound IH 39 ramp to westbound USH 12 – traffic will use the northbound IH 39 ramp to eastbound USH 12, and the CTH N interchange to redirect their travel to westbound USH 12.
- Westbound USH 12 loop ramp to southbound IH 39 – traffic will continue on westbound USH 12 through the interchange, use the USH 51 (Stoughton Road) interchange to redirect their travel to eastbound USH 12, and the eastbound USH 12 ramp to southbound IH 39.
- Westbound USH 12 ramp to northbound IH 39 – traffic will continue on westbound USH 12 through the interchange, use the USH 51 (Stoughton Road) interchange to redirect their travel to eastbound USH 12, and the eastbound USH 12 ramp to northbound IH 39.

A detour will not be posted during the Femrite Drive closures.

### **G Advance Notification**

Notify Dane and Rock County officials (including public safety communications and sheriff departments), the City of Madison, and the Town of Blooming Grove 48 hours in advance of the start of work; closure of USH 12, Femrite Drive, and interchange ramps; and prior to significant changes in traffic control. Notifications must be given by 4:00 PM on Thursday for any such work to be done on the following Monday.

Notify the City of Madison and Village of McFarland School Districts 2 weeks prior to the start of construction and 1 week prior to the daytime full closures of Femrite Drive.

Advance notification as described above is considered incidental to the Traffic Control bid item.

### **H Clear Zone Working Restrictions**

Do not leave any slopes steeper than 3:1 within the clear zone or any drop offs at the edge of the traveled way greater than 2 inches which are not protected by temporary precast barrier. The temporary clear zone for IH 39 is 30 feet.

Do not perform heavy equipment work in the IH 39 median or adjacent to the shoulder at any time unless protected by concrete barrier in both directions except during night work with permitted lane closures.

Store materials or park equipment a minimum of 30 feet from the edge of the IH 39 and USH 12 traveled ways. Equipment may be parked in the median if it is protected by concrete barrier. Do not store materials or equipment on Femrite Drive.

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.

### **I Portable Changeable Message Signs – Message Prior Approval**

After coordinating with department construction field staff, notify Jeff Gustafson (Southwest Region Traffic) at (608) 516-6400 or [jeffrey.gustafson@dot.wi.gov](mailto:jeffrey.gustafson@dot.wi.gov), 3 weeks prior to deploying or changing a message on a PCMS to obtain approval of the proposed message. The department will review the proposed message and either approve the message or make necessary changes.

## **J Wisconsin Lane Closure System Advance Notification**

Request approval from the engineer for all lane and shoulder closures according to this section of the special provisions. Include justification for the lane and shoulder closure and the anticipated duration in the request. A request does not constitute approval. Terminate single lane and shoulder closures at the end of the Permitted Lane Closure Times and Permitted Shoulder Closure Times. Failure to obtain approval or reopen closed lanes or shoulders prior to the required time shall be subject to assessments specified under the article "Lane Rental Fee Assessment".

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**

<b>Closure type with height, weight, or width restrictions (available width, all lanes in one direction less than 16 feet)</b>	<b>MINIMUM NOTIFICATION</b>
Lane and shoulder closures	7 calendar days
Full roadway closures	7 calendar days
Ramp closures	7 calendar days
Detours	7 calendar days
<b>Closure type without height, weight, or width restrictions (available width, all lanes in one direction 16 feet or greater)</b>	<b>MINIMUM NOTIFICATION</b>
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.

## **K Temporary Regulatory Speed Limit Reduction**

During engineer-approved regulatory speed limit reductions, install temporary speed limit signs on the inside and outside shoulders of divided roadways to enhance visibility. On 2-lane 2-way roadways, install temporary speed limit signs on shoulders. When construction activities impede the location of a post-mounted regulatory speed limit sign, relocate the sign for maximum visibility to motorists. If work last less than 7 days, mount the regulatory speed limit sign on a portable sign support.

Post temporary regulatory speed limit signs in work zone only during continuous worker activity. During periods of no work activity or when the traffic controls are removed from the roadway, cover or remove the temporary speed limit signs.

Coordinate with Regional Traffic Section to identify the construction stages that have approved temporary regulatory speed zones documented in a Temporary Speed Zone Declaration. Primary contact phone number: Josh Koebernick, (608) 516-6542; secondary contact number: Rich Cannon (608) 516-4331.

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

Notify the engineer and WisDOT Traffic Management Center at (414) 227-2142 if there are any changes in the schedule, early completions, or cancellations of scheduled work.

The department has the authority to disallow any requested closures or width restrictions.

## **L Protection of Bridge Pier Columns**

Bridge pier columns are to remain protected at all times throughout construction with concrete barrier temporary precast or guardrail.

## **M Construction Access**

Restrict work on IH 39 within closed shoulders as allowed by the plans or engineer. All construction access is prohibited from live IH 39 lanes unless a single lane closure is in place and is subject to approval of the engineer.

Construction traffic cannot travel counter-directional adjacent to IH 39 traffic except behind temporary concrete barrier.

The contractor is responsible for temporary culvert pipes, potential temporary shoring, and the construction of access roads into Work Areas throughout the project. The cost of temporary access is borne by the contractor and should be considered incidental to the bid item Traffic Control.

Construction traffic may cross exit and entrance ramps to get to work zones during daytime hours only. The contractor shall use a flagger to direct construction vehicles across a ramp when a gap in ramp traffic is available. Ramp traffic shall not be flagged or stopped. The location of all crossings shall be in a visible location to ramp traffic and is subject to approval of the engineer.

## **N General Access**

U-Turns at existing or temporary maintenance crossovers will only be allowed when lane closures are in place for the adjacent inside passing lane in each direction.

Construction operations affecting the traveling public's safety will not be allowed during snow and ice conditions, or any other adverse weather conditions, unless approved by the engineer.

Delivery of equipment requiring the use of a semi-tractor and trailer shall only occur during those hours identified as Permitted Lane Closure Times.

Delivery and removal of materials and equipment shall only take place during nighttime traffic control operations when a lane closure is in place.

Except during full roadway and/or ramp closures, maintain access for emergency vehicles to pass through the construction site.

## **O Access to sites for Native Prairie Seeding and Tree/Shrub Planting and Care**

Obtain prior approval from the engineer for access location(s) to each planting site for native prairie seeding, tree/shrub installation, and surveillance and care. Contractor access to the interchange site must be pre-approved by the engineer. Access from IH 39, USH 12, and the interchange ramps will be limited. Conduct operations in a manner that will cause the least interference to traffic.

Workers, material, and equipment should plan to access sites by traveling off-road within the highway right-of-way to the extent that the routes are navigable by vehicles.

Temporary lane closures and/or halting of traffic on live roadways is restricted to side roads only and shall be no longer than 2 hours per day for delivery of material and/or equipment. A flagging operation is required for any temporary lane closure on a side road. Temporary lane closures shall be according to SDD "Traffic Control For Lane Closure With Flagging Operation". Flagging operations shall not delay either direction of traffic more than 15 minutes and the contractor shall allow all vehicles in the queue to clear prior to subsequent flagging operations.

Ramps shall remain open to traffic at all times. Ramp shoulder closures are not allowed within 1,000 feet of a ramp gore. Ramp shoulder closures are limited to 2 hours per day for material and/or equipment delivery.

Access to a planting site directly from IH 39 will only be allowed from a closed shoulder that has a minimum width of 10 feet. The location of IH 39 shoulder closures, if necessary, for material and/or equipment delivery, must be requested and pre-approved by the department. Include written justification for the shoulder closure and the anticipated duration in the request. The shoulder closure must occur on the same side of the road as the planting work. Workers, equipment, and materials are prohibited from crossing IH 39. A request for IH 39 shoulder closure does not constitute approval. IH 39 shoulder closures must be entered in the Wisconsin Lane Closure System (LCS) as specified in this article. IH 39 shoulder closures are prohibited when traffic is in a counter-directional configuration on one side of the roadway.

Close shoulders according to the requirements of standard detail drawings 'Traffic Control, Shoulder Closure on Divided Roadway, Speeds Greater than 40 MPH' and 'Traffic Control, Work on Shoulder or Parking Lane, Undivided Roadway'.

All materials and equipment may be stored at the planting sites if located outside the planting boundary and inside the highway right-of-way as shown in the plans. Do not store materials or equipment within 36 feet of the edge of any traveled way.

The use of temporary construction access point(s) to IH 39 from private property is prohibited without the prior written approval from FHWA and the department. Follow the requirements specified in article "Notice to contractor - New or Revised Temporary Construction Access to IH 39" to request this type of access point. Cutting of access control fence must be repaired by the contractor at their expense.

Construction traffic cannot travel counter-directional adjacent to IH 39 traffic except behind concrete barrier or guardrail.

U-Turns at existing maintenance crossovers or temporary crossovers between the northbound and southbound lanes of IH 39 will not be allowed.

Planting operations affecting the traveling public's safety on IH 39 will not be allowed during snow and ice conditions, or any other adverse weather conditions, unless approved by the engineer.

If the contractor is unsure whether an individual work operation will meet the traffic safety requirements of the department, review the proposed work operation with the engineer before proceeding with the work.

## **6. Holiday and Special Work Restrictions.**

Do not perform work on, nor haul materials of any kind along or across any portion of the highway or ramps carrying IH 39 or USH 12 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 periods:

### **2020 Construction Season (July 6 through November 15, 2020)**

- From noon Friday, September 4, 2020 to 6:00 AM Tuesday, September 8, 2020 for Labor Day;
- From 12:00 AM to 11:59 PM Monday, October 12, 2020 for Columbus Day.

Do not haul materials of any kind along or across any portion of the highway or ramps carrying IH 39 or USH 12 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 periods:

- From 6:00 AM to 9:00 AM and from 3:00 PM to 7:00 PM on each day from Monday, August 24, 2020 through Thursday, August 27, 2020 for the Epic Users Group Meeting.

### **2021 Construction Season (Spring through November 15, 2021)**

- From noon Friday, April 2, 2021 to 6:00 AM Monday, April 5, 2021 for Good Friday and Easter;
- From noon Friday, May 28, 2021 to 6:00 AM Tuesday, June 1, 2021 for Memorial Day;
- From noon Friday, July 2, 2021 to 6:00 AM Tuesday, July 6, 2021 for Independence Day;
- From noon Friday, September 3, 2021 to 6:00 AM Tuesday, September 7, 2021 for Labor Day;
- From 12:00 AM to 11:59 PM Monday, October 11, 2021 for Columbus Day.

Do not haul materials of any kind along or across any portion of the highway or ramps carrying IH 39 or USH 12 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 periods:

- From 3:00 PM to 7:00 PM on Thursday, April 15, 2021, and from 6:00 AM to 9:00 AM and from 3:00 PM to 7:00 PM on Friday, April 16, 2021 for the Midwest Horse Fair.
- From 6:00 AM to 9:00 AM and from 3:00 PM to 7:00 PM on each day from Monday, August 23, 2021 through Thursday, August 26, 2021 for the Epic Users Group Meeting.

It is the contractor's responsibility to confirm the dates of the Epic Users Group Meeting in 2021.

### **2022 Vegetation Management Effort**

- From noon Friday, April 15, 2022 to 6:00 AM Monday, April 18, 2022 for Good Friday and Easter;

- 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, 2021 for Independence Day;
- From noon Friday, September 2, 2022 to 6:00 AM Tuesday, September 6, 2022 for Labor Day;
- From 12:00 AM to 11:59 PM Monday, October 10, 2022 for Columbus Day;
- From noon Friday, November 18, 2020 to 6:00 AM Monday, November 21, 2020 for opening weekend of gun deer season.

107-005 (20181119)

## 7. Utilities.

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

107-065 (20080501)

There are underground and overhead utility facilities located within the project limits. The contractor shall coordinate their construction activities with a call to Diggers Hotline or a direct call to the utilities that have facilities in the area as required per statutes. The contractor shall use caution to ensure the integrity of the underground facilities and shall maintain code clearances from overhead facilities at all times. Field contact information for utilities is included on the General Notes page of the project plan.

Additional detailed information regarding the location of vacated, relocated, and/or removed utility facilities is available in the work plan provided by each utility company or on the permits issued to them. View these documents at the region WisDOT office during normal working hours.

### **Project 1007-12-79 and 1007-12-80**

#### **General Information**

Project 1007-12-80 is tied to and is being tracked under Project 1007-12-79.

#### **No Conflicts Anticipated**

The following utility owners have facilities within the project area; however, no conflicts are anticipated: **ATC Management, AT&T Wisconsin, Charter Communications, City of Madison – Communication Line, City of Madison - Sewer, Flint Hills Resource (formerly Koch Pipeline), Madison Gas & Electric – Electric, Madison Metropolitan Sewerage District (MMSD), Madison Water Utility, MCI Metro (coordination through Bear Communications), Metropolitan Unified Fiber Network (MUFN, maintained by City of Madison Engineering), and Sprint Communication Co LP.**

#### **Coordination Required**

The following utility owner has facilities within the project area; no adjustments are anticipated, however, coordination is required during construction:

**Madison Metropolitan Sewerage District (MMSD)** coordination during construction is required. Contact Ray Schneider, 1610 Moorland Road, Madison, WI 53713; office (608) 222-1201 Ext 259, mobile (608) 347-3628; [rays@madsewer.org](mailto:rays@madsewer.org) at least 3 working days prior to construction near MMSD facilities.

MMSD has a manhole located at Station 2527+85'NB' RT; no relocation is needed.

MMSD has an 18-inch pipe that crosses perpendicular under IH 39 perpendicular at approximately Station 2527+85'NB'. The 18-inch pipe is reinforced concrete pipe (RCP) inside a 36-inch steel casing pipe. The top of the 18-inch pipe is at or near elevation 851, which is approximately 17 feet below the existing pavement. The MMSD pipe and casing appear to be well below any proposed work for project including the updated storm sewer plans.

MMSD has a 42-inch RCP inside a 66-inch steel casing pipe at approximately Station 1212+17'XNB'. The top of the 42-inch pipe is at or near elevation 853.6 and the top of the steel casing pipe is at or near elevation 854.1. The bottom of the special ditch along the west side of IH 39 where it crosses the MMSD pipe is at approximate elevation 857.1.

## **Adjustments Required**

The following utility owners have facilities within the project area; adjustments are anticipated:

**Madison Gas and Electric (MG&E, gas)** has a 4-inch high pressure gas line and 4-inch distribution line along Femrite Drive which will be relocated prior to the start of construction. The 4-inch distribution line will be relocated on the east and west ends of Femrite Drive and IH 39 at approximately Station 49+00'XFD', and between Stations 53+50'XFD' and 55+50'XFD'. The high pressure line will be relocated in its entirety between approximately Stations 49+00'XFD' and 55+00'XFD'.

**Wisconsin Department of Administration (DOA) Division of Enterprise Technology (communication line)** has an existing underground facility along the west side of southbound IH 39 near the right-of-way and along the southbound IH 39 ramp to westbound USH 12 from Station 1180+00'XSB' to 1185+00'XSB'. There is no conflict anticipated with this line.

DOA proposes to place a new hand hole and duct approximately 3 feet to the west of proposed right-of-way on DOA property between Stations 1187+00'XSB' and 1198+00'XSB'. A new duct will also be placed approximately 3 feet to the east of the proposed right-of-way along with two new access hand holes approximately 1 foot east of the proposed right-of-way between Station 1198+00'XSB' and 1233+30'XSB' with the new access hand holes located at Stations 1209+00'XSB' and 1233+30'XSB'. It is anticipated that this work will be completed prior to the start of construction.

There is a discontinued fiber optic line from Station 1182+50'XSB' to 1194+00'XSB', and from Station 1202+50'XSB' to 1213+50'XSB'.

**Wisconsin Department of Transportation** has existing communication facilities within the project area. The relocation of facilities in conflict with the proposed roadway or structure work are included in the Project 1007-12-79 plans.

## **Native Prairie Seeding and Tree/Shrub Planting sites**

There are underground and overhead utility facilities located within the native prairie seeding and tree/shrub planting sites limits. No utility relocations are necessary for this work. Coordinate planting activities with a call to Diggers Hotline or a direct call to the utilities that have facilities in the area as required per statutes. Use caution to insure the integrity of underground facilities and maintain code clearance from overhead facilities at all times. Adjustments to the locations of the trees/shrubs may be necessary to avoid utilities, as directed by the Corridor Vegetation Inspector, if it becomes evident that there is a utility conflict or one that could occur in the future.

## **Project 1008-10-70**

### **No Conflicts Anticipated**

The following utility owners have underground facilities within the project area; however, no conflicts are anticipated: AT&T Wisconsin (telephone), Alliant Energy (electric), and Alliant Energy (gas).

## **Other Projects**

### **General Information**

The following utility owners have facilities within the project area that required adjustments as a result of Project 1007-12-78.

**AT&T Wisconsin, Charter Communications, and Madison Gas and Electric (MG&E, electric)** have underground facilities along Femrite Drive within the project area. The utilities relocated their facilities in a shared trench within the roadway in 2019.

**Metropolitan Unified Fiber Network (MUFN)** has underground facilities along Femrite Drive within the project area. The City of Madison maintains this facility.

The utility proposes to relocate their existing facility south approximately 3 feet during construction for Project 1007-12-78. It is estimated that it will take 2 days to complete this effort.

**Wisconsin Department of Transportation** has an existing underground communication facility crossing IH 39 at Station 2533+98; however, no conflicts are anticipated.

There is an existing underground facility along the southbound IH 39 loop ramp to eastbound USH 12, as well as along the south side of USH 12.

## **8. Other Contracts.**

Modifications to the traffic control plan may be required by the engineer as a result of adjacent work by others.

The following contracts are anticipated to be under construction within the time period of the contract, unless otherwise indicated:

### **Project 1007-12-74/75:**

This project will begin in the fall of 2019 and continue through the fall of 2020 and is located between CTH AB (south of USH 12) and the southern limits of Project 1007-12-78 in Dane County. The project will reconstruct both the northbound and southbound roadways of IH 39, as well as the northbound bridge over Siggelkow Road (B-13-728). In spring of 2020, all IH 39 traffic will be placed on the existing northbound roadway in a counter-directional pattern while the southbound roadway is reconstructed (anticipated duration March – June). In summer 2020, all IH 39 traffic will be moved to the new southbound lanes in a counter-directional pattern while the northbound roadway and bridge are reconstructed (anticipated duration July – November). A crossover will be constructed immediately south of Project 1007-12-78. Coordination will be required for placement of advance warning signs, traffic control, anticipated lane closures, and placement of storm sewer, median barrier wall, retaining walls, and temporary traffic lanes located within this overlap of these projects. The contract completion date for this project is December 15, 2021.

### **Project 1007-12-78:**

This project will begin in the spring of 2020 and continue through the spring of 2021 and has similar project limits as Projects 1007-12-79 and 1007-12-80. The project will construct the embankment and structures for the new northbound roadway through the core of the IH 39 interchange at USH 12. Coordination will be required for placement of advance warning signs, traffic control, lane closures, and work all along IH 39, USH 12, and Femrite Drive. The contract completion date for this project is May 28, 2021. Do not perform any work for Projects 1007-12-79 and 1007-12-80 on the new northbound IH 39 alignment prior to 6:00 AM on June 1, 2021.

### **Project 1206-06-79:**

This project will begin in the spring of 2021 and consists of pavement rehabilitation, a 2-inch asphalt overlay, median concrete barrier wall replacement, drainage upgrades, and implementation of dynamic part-time shoulder use (DPTSU) between Whitney Way and IH 39. The pavement rehabilitation, asphalt overlay, concrete barrier wall, and drainage upgrades will be limited to the approximately 8-mile stretch between Seminole Highway and IH 39.

DPTSU will consist of re-striping the existing roadway to allow for three 11-foot lanes, a 13-foot median shoulder, and a 10-foot outside shoulder. The system will require new ITS infrastructure, dynamic and static lane control signing over the median shoulder, and other various components including cameras, and the installation of crash investigation sites to run and maintain the DPTSU system. Most Type 1 signs will be replaced along with some of the sign structures.

This project will be closing on and off ramps for two to three consecutive interchanges at a time, depending on spacing. Coordination is needed between projects for the use of USH 51 (Stoughton Road) as a detour route.

## **9. Railroad Insurance and Coordination - Wisconsin and Southern Railroad Company.**

### **A Description**

Comply with standard spec 107.17 for all work affecting Wisconsin and Southern Railroad Company property and any existing tracks.

## **A.1 Railroad Insurance Requirements**

In addition to standard spec 107.26, provide railroad protective liability insurance coverage as specified in standard spec 107.17.3. Insurance is filed in the name of Wisconsin and Southern Railroad Company.

Notify evidence of the required coverage, and duration to Amanda Haggerty, Office Administrator; 1890 E Johnson Street, Madison, WI 53704; Telephone (608) 620-2048; E-mail: [ahaggerty@watcocompanies.com](mailto:ahaggerty@watcocompanies.com).

Also send a copy to the following: Teri Beckman, SW Madison Region Railroad Coordinator; 2101 Wright Street, Madison, WI 53704; Telephone (608) 733-1923; E-mail: [teri.beckman@dot.wi.gov](mailto:teri.beckman@dot.wi.gov).

Include the following information on the insurance document:

- Projects: 1007-12-79 and 1007-12-80
- Project Location: Madison, Wisconsin
- Route Name: IH 90, Dane County
- Crossing ID: 177337U
- Railroad Subdivision: Cottage Grove
- Railroad Milepost: 75.89
- Work Performed: Reconstruct of IH 90

## **A.2 Train Operation**

Approximately two through freight trains operate daily at up to 5 mph to 10 mph. There are approximately five switching movements a day.

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

### **Construction Contact**

Roger Schaalma, Superintendent of Maintenance of Way, Wisconsin and Southern Railroad Co.; 1890 East Johnson Street, Madison, WI 53704; (608) 620-2044; [rschaalma@watcocompanies.com](mailto:rschaalma@watcocompanies.com) for consultation on railroad requirements during construction.

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

### **Flagging Contact**

See Construction Contact. Reference the Crossing ID, Wisconsin Milepost and Subdivision found in A.1.

### **Cable Locate Contact**

In addition to contacting Diggers Hotline, contact Amanda Haggerty, Office Administrator; (608) 620-2048; [ahaggerty@watcocompanies.com](mailto:ahaggerty@watcocompanies.com) at least five working days before the locate is needed. Reference the Crossing ID, Wisconsin Milepost and Subdivision found in A.1.

WSOR will only locate railroad owned facilities located in the railroad right-of-way. The railroad does not locate any other utilities.

## **A.4 Work by Railroad**

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

## **A.5 Temporary Grade Crossing**

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

## **A.6 Rail Security Awareness and Contractor Orientation**

Prior to entry on railroad right-of-way, the contractor shall arrange for on-line security awareness and contractor orientation training and testing and be registered through "e-RAILSAFE" for all contractor and subcontractor employees working on railroad right-of-way. See [e-railsafe.com](http://e-railsafe.com) "Information". The security awareness and contractor orientation training is shown under the railroad's name.

The department has secured right of entry to railroad property; neither the contractor nor subcontractors or their employees will be required to sign a right of entry form.

The security awareness and contractor orientation certification is valid for 2 year(s) and must be renewed for projects that will carry over beyond the 2 year period. Contractor and subcontractor employees shall wear the identification badge issued by e-RAILSAFE when on railroad right-of-way. Costs associated with training and registration are incidental to other items in the contract.

stp-107-026 (20190717)

## 10. Contract Award and Execution.

*Supplement standard spec 103 as follows:*

### 103.9 Mobilization Workshops

#### 103.9.1 Workshop Schedule

After contract award, attend the following workshops. Each workshop is described below and will include but not be limited to the topics outlined below.

Workshop	Timeframe
Initial Work Plan (IWP)	Prior to Notice to Proceed (NTP)
Cost Reduction Incentive & Submittals	Prior to preconstruction meeting
Utility Coordination	Prior to preconstruction meeting
Baseline CPM Progress Schedule	After NTP & submittal of Baseline CPM Progress Schedule
Work Force Opportunities	Day of preconstruction meeting

The workshop dates will be scheduled by the engineer after contract award. The engineer may modify the original workshop schedule to ensure attendance by the necessary department and contractor personnel. Workshops may be scheduled earlier than specified if agreed to by all parties. Workshops may be deleted and/or combined depending on the complexity and requirements of the project.

#### 103.9.2 Workshops

##### 103.9.2.1 Initial Work Plan

###### 103.9.2.1.1 General

The Initial Work Plan workshop will provide a forum to discuss and answer questions relative to the proposal, bid schedule, and other questions in the Project Questionnaire described in standard spec 103.9.2.1.2. The Initial Work Plan Workshop will include:

- Contractor responses to the attached Project Questionnaire.
- Department presentation of the use of CPM scheduling on the project.
- Contractor presentation of the conceptual work plan for the project.
- Department and contractor discussion of the level of detail and features in the Initial Work Plan Schedule and the Baseline CPM Progress Schedule.

###### 103.9.2.1.2 Project Questionnaire

Provide the following information in the order shown below. This information will constitute the "Project Questionnaire."

#### General Information

**If a Joint Venture, provide information for each member of the Joint Venture.**

Provide the following information about the company:

- Firm Name
- Address
- Telephone and facsimile numbers; e-mail address

- Contracting Specialties
- Years performing work in contracting specialties
- Geographic areas served
- Total Management Employees and years of service
- Project Managers
- General Superintendents
- Craft Superintendents
- Engineers
- Estimators
- CPM Schedulers

### **Construction Engineering**

- Provide/attach a copy of your Construction Project Manager's resume indicating the manager's experience in similar major construction projects. The resume shall include similar projects with references. (Note: references are only for verification of work scope performed).
- Provide (if applicable) your third-party construction engineering firms.
- Provide plan for Construction surveying.

### **Subcontractors**

- Attach the list of all subcontractors that are intended for this project and the items of work they shall perform.

### **Permanent Material Suppliers**

- Attach the list of all permanent material suppliers that are intended for the project.

### **Quality Control (where applicable)**

- Provide the name of your Construction Quality Control firm and qualifications indicating the firms' experience in similar major construction projects. The resume shall include similar projects with references. (Note: references are only for verification of work scope performed).
- Provide/attach a copy of your Construction Quality Control Manager's resume indicating the manager's experience in similar major construction projects. The resume shall include similar projects with references. (Note: references are only for verification of work scope performed).
- List the major elements and/or Table of Contents of your Construction Quality Management Program.
- Provide the name of your Independent Quality Control Testing firm (Construction Quality Control Lab) and qualifications indicating the firm's experience in similar major construction projects. The resume shall include similar projects with references. (Note: references are only for verification of work scope performed).

### **Organization Chart**

- Provide a functional and personnel Organization Chart showing the authority and responsibilities of each individual identified.

### **Work Rules**

- Provide the plan for hours per day, days per week, and number of shifts for key elements of work; i.e. sewer tunnels, retaining wall construction, roadway excavation, bridge structures, and roadway structural section activities.

### **Maintenance of Traffic**

- Provide the name of your Traffic Control Manager and qualifications indicating the firm's experience in similar major construction projects. The resume shall include similar projects with references. (Note: references are only for verification of work scope performed).
- Attach a copy of your Preliminary Schedule indicating your approach to achieving the substantial completion schedule.

- Include an outline of your approach to the maintenance of traffic and how you shall stage the construction to meet the substantial completion schedule including planned locations for local street and freeway access into and out of the work zones for each stage of construction.

## **Construction**

- Provide the approach (resources, equipment, suppliers, number of crews, and where required ground support systems) for the following activities:
- Retaining wall construction by type of work
- Bridge demolition
- Roadway structural section
- Roadway excavation
- Underground construction
- Office and yard facilities

### **103.9.2.2 Cost Reduction Incentives and Submittals**

The Cost Reduction Incentive (CRI) & Submittals workshop will have 2 primary topics outlined below:

#### Cost Reduction Incentives

Identify value enhancing opportunities and consider modifications to the plans and specifications that will reduce either the total cost, time of construction or traffic congestion, without impairing, in any manner, the essential functions or characteristics of the project, including, but not limited to, service life, economy of operation, ease of maintenance, benefits to the traveling public, desired appearance, or design and safety standards.

Submit recommendations resulting from the workshop for approval by the engineer as cost reduction incentive proposals in conformance with the provisions in standard spec 104.10 "Cost Reduction Incentive."

The department and the contractor may be able to complete the CRI Concept process, as specified in standard spec 104.10.2, during the CRI workshop.

Submit CRIs after the CRI workshops that were not introduced at the CRI workshop.

#### Submittals

The Submittals Workshop will identify the key required submittals for the project, categorize submittals into functional areas, and develop a schedule for submittals, submittal reviews, and material fabrications and deliveries. The workshop participants will at a minimum:

1. Review the project special provisions.
2. Categorize submittals into functional areas including but not limited to:
  - MSE Retaining Walls
  - Temporary Shoring
  - Falsework and Formwork
  - Girder Shop Drawings, Fabrication, and Delivery Dates
  - Steel Transportation, Delivery, and Erection
  - Structure Demolition Plans
  - Pile Hammers and High Capacity Piling
  - Concrete/Asphalt
  - Materials
  - ITS/Lighting
  - Traffic Signals
  - Sanitary Sewer and Water
  - Permits

3. Develop a schedule for submittals. Submittal schedule data shall be incorporated into CPM progress schedule to reflect submittal preparation durations and dates, submittal approval durations and dates, and material fabrication periods with forecasted delivery dates. Reference Baseline CPM Progress Schedule in these special provisions.

#### **103.9.2.3 Utility Coordination**

The Utility Coordination Workshop will define the scope and schedule of utility relocation work and the respective roles and responsibilities of the project team.

1. At a minimum, the following key personnel will attend the Utility Coordination Meeting.
  - Department's Utility Coordinator
  - Contractor's Project Manager, Foreman, Supervisor
  - Designer Team's Utility Coordinator
  - Key Utility Company Representative(s)
2. At a minimum, the Utility Coordination Meeting will include a review of the following:
  - Summary of all required utility relocations on the project
  - Special provisions addressing utility work
  - Sharing of contact information
  - Scheduling of work for utility relocation(s) including critical milestones and staging for the work
  - Contractor's work schedule and anticipated conflicts with the utility's construction schedule.

#### **103.9.2.4 Baseline CPM Scheduling**

At the Baseline CPM Scheduling workshop, provide a presentation of the Baseline CPM Schedule. In the presentation, include a discussion of the anticipated fabrication and delivery durations for long lead material procurements, construction staging and sequencing of the work, understanding of traffic phasing, and application of labor and equipment resources to the work. Address comments raised in the engineer's review.

#### **103.9.2.5 Work Force Opportunities**

The Work Force Opportunities workshop will provide a venue for contractors to have meaningful dialogue with TrANS providers regarding the hiring of TrANS graduates. For the prime contractor and the subcontractors, provide staff with hiring authority to participate in a job-matching session during this workshop. The workshop will take place on the same day and in the same location as the pre-construction meeting. The workshop participants will at a minimum:

1. Review contractor hiring processes for general labor positions.
2. Review and listen to presentation provided by TrANS providers regarding the training program including details regarding how contractors can hire TrANS graduates.
3. Review TrANS graduate availability for working on project.
4. Meet one-on-one for at least 2 minutes with each TrANS graduate in attendance at the meeting.

(1/5/2017)

## **11. Timely Decision Making Manual.**

Use the Timely Decision Making Manual (TDM) on this contract. Coordinate with the department to modify the various published tools as necessary to meet the particular project needs and determine how to implement those tools under the contract. Ensure the full participation of the contractor and its principal subcontractors throughout the term of the contract.

Forms and associated guidance are published in the TDM available at the department's Highway Construction Contract Information (HCCI) web site at:

<https://wisconsindot.gov/rdwy/admin/tdm.doc>

105-005 (20151210)

## 12. Intelligent Transportation Systems (ITS) – Control of Materials.

### Standard spec 106.2 – Supply Source and Quality

*Add the following to standard spec 106.2:*

The department will furnish a portion of equipment to be installed by the contractor. This department-furnished equipment includes the following:

Department-Furnished Items
(1) Camera Pole, 50-foot
(1) Camera Assembly
(9) Microwave Detector
(9) Ethernet Switch
(9) SFP 10 KM
(4) Pole-Mounted Cabinet
(5) Fiber Optic Splice Enclosure
(7) Termination Panel - 12 Count ST
(3,684 LF) Fiber Optic Cable – 12 Count
(6,253LF) Fiber Optic Cable – 72 Count

Contact Dean Beekman, Traffic Manager Center (TMC), at (414) 227-2154 to obtain a copy of the manufacturer list and contact names for department-furnished equipment.

Pick-up small department-furnished equipment from the department's Statewide Traffic Manager Center (TMC), 433 W. St. Paul Ave., Milwaukee, WI 53203 at a mutually agreed upon time during normal state office hours. Contact the department's TMC at (414) 227-2166 to coordinate pick-up of equipment.

Large department-furnished equipment will be delivered by the supplier to a contractor-controlled site within Dane County. Delivery will not necessarily be in a "just in time" manner. Store the equipment until field installation. Provide location details and a contact for delivery coordination upon receiving the contract's Notice to Proceed.

Transportation of the equipment between the electric shop and the field or interim locations are the responsibility of the contractor.

### Standard spec 106.3 – Approval of Materials

*Add the following to standard spec 106.3:*

#### Design/Shop Drawings

Before the purchase and/or fabrication of any of the components listed herein, and for any non-catalog item shown on the Material and Equipment List specified above, and no more than 30 days after notice to proceed, submit five copies of design drawings and shop drawings, as required, to the department for review. The items and the drawings that represent them shall meet the requirements of the standard specifications.

Design drawing submissions shall consist of signed and certified designs, design drawings, calculations, and material specifications for required items.

Shop drawings will be required for, but not limited to the following:

1. Mounting assemblies for the vehicle speed and classification sensors, including their attachment to the structure.
2. Any contractor-designed structure or foundation.

The department will complete its review of the material within 30 days from the date of receipt of the submission, unless otherwise specified. The department will advise the contractor, in writing, as to the acceptability of the material submitted. The department may determine that if no exceptions were taken for the item, it is approved, and no further action is required by the contractor; or the item may be partially or totally rejected, in which case modify and/or amend the submittal as required by the department and

resubmit the item within 14 days. At this time, the review and approval cycle described above will begin again.

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

**Project 1007-12-79 and 1007-12-80**

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-S066796-01). A certificate of permit coverage is available from the regional office by contacting Mark Sponem at (608) 516-1792. Post the permit in a conspicuous place at the construction site.

**Project 1008-10-70**

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-S066796-01). A certificate of permit coverage is available from the regional office by contacting Mark Sponem at (608) 516-1792. Post the permit in a conspicuous place at the construction site.

107-056 (20180628)

**14. 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 WisDOT SW Region Madison Environmental Coordinator Jennifer Grimes at (608) 516-9760.

107-054 (20080901)

**15. Environmental Protection.**

**A 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 5 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 (>104° F) application.

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

107-055 (20130615)

## **B Protection of Work Area**

Broom or brush any mud, dirt, or debris deposited on any roads, as a result of construction activity at the end of the day and as directed by the engineer.

*Supplement standard spec 107.18 as follows:*

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

1. Prior to 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. 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 5 minutes. After cleaning, dry all equipment in a sunny location for at least 3 days.

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

Make equipment available for inspection by the Corridor Vegetation Inspector prior to operating within the planting site limits.

## **C Monitoring Wells and Tribal Trust Land**

Prior to the start of construction, place Safety Fence around each monitoring well located along the east side of IH 39 north of Femrite Drive, and along the Ho-Chunk Nation tribal trust land as detailed in the plans. It will be the contractor's responsibility to repair and/or replace any monitoring wells damaged by construction operations, as directed by the engineer.

## **D Rusty Patched Bumble Bee**

According to the United States Fish & Wildlife Service (USFWS) this project may affect, but is not likely to adversely affect, the Rusty Patched Bumble Bee. The area is unlikely to have high value floral resources and nesting and overwintering is extremely unlikely. Conservation measures to revegetate disturbed natural areas with shrubs/trees and a pollinator friendly seed mix that would benefit the species are detailed in the plans. If revisions are needed to the proposed measures listed above, contact WisDOT SW Region Madison Environmental Coordinator Jennifer Grimes at (608) 516-9760, or via email at [Jennifer.Grimes@dot.wi.gov](mailto:Jennifer.Grimes@dot.wi.gov) prior to making any changes.

## **E Treatment of Water Adjacent to Wetlands or Waterways**

Spoil material should be stockpiled on uplands an adequate distance from a stream, wetland, and/or any open water created by excavation. Filter fabric silt fence shall be installed between spoil material and the stream or wetland, and between the entire disturbed area and the waterway.

If dewatering is required for any reason, the water must be pumped into a properly sized and constructed settling basin before the clean/filtered water is allowed to enter any waterway or wetland. The "clean/filtered" water must be free of suspended solids and contaminants. A properly designed and constructed settling basin will take into consideration the amount of space for construction, desired

pumping speed, number/size of pumps likely to be used, and the sedimentation rate of soils to be encountered. See Wisconsin Department of Natural Resources Technical Standard 1061 for method selection by soil type. The final dewatering plan must be submitted and approved in the Erosion Control Implementation Plan (ECIP).

The cost of dewatering is considered incidental to construction.

#### **F Contaminated Soil and/or Groundwater**

There is no documented contamination within the right-of-way of the IH 39 project limits; however, there is known contamination adjacent to IH 39 at Parcel 4. The April 2019 data for the water table monitoring wells located between Station 2598+00'TNB' and 1205+00'XNB' shows the depth to groundwater was greater than 10 feet below ground surface. The project requires minimal excavation in this area (less than 2 feet); as such, contaminated soil and/or groundwater is not expected to be encountered. If contamination is encountered, contact WisDOT SW Region Madison Environmental Coordinator Jennifer Grimes at (608) 516-9760.

### **16. Erosion Control.**

*Supplement standard spec 107.20 with the following:*

Unless otherwise directed by the engineer at the end of each day, drive a tracked vehicle up and down all untracked or newly graded slopes to reduce the erosive potential of the slopes. The tracks shall be roughly perpendicular to the direction of stormwater runoff flow down the slopes. Upslope tracking is incidental to the cost of grading.

*Delete the last sentence of standard spec 107.20(7) and replace it with the following:*

Provide the permanent erosion control measures immediately after performing grading operations, unless temporary erosion control measures are specified or authorized by the engineer.

(5/14/2013)

### **17. Native American Hiring.**

#### **Pre-Bid**

Before bid submittal, contact the Ho-Chunk Nation Department of Labor to provide information on hiring procedures and future employment opportunities, and gather information on the tribal work force.

Ho-Chunk Nation Department of Labor contact information:

Angela K Ward, Executive Director of Labor  
PO Box 667; Black River Falls, WI 54615  
(715) 284-9343 Ext. 1139  
[Angela.Ward@Ho-Chunk.com](mailto:Angela.Ward@Ho-Chunk.com)

Maintain documentation of all efforts made to communicate with the Ho-Chunk Nation. Pre-bid, submit documentation in conjunction with the Proposal Request Form to the Bureau of Project Development at:

[DOTDTSDDHighwayConstructionContractors@dot.wi.gov](mailto:DOTDTSDDHighwayConstructionContractors@dot.wi.gov)

The Eligible Bidders list will not be updated until this documentation is received. Include the following information in documentation:

- Proposal number/route number/termini/county
- Persons contacted
- Method of communication (phone, email, written, in person)
- Information exchanged (hiring procedures, available positions, referrals received, employee performance, etc.)

## After Execution

At a minimum of three days before the tribal coordination meeting, contact the Ho-Chunk Nation to provide the following information regarding available employment opportunities for prime and subcontractors:

- Job classification/trade
- Job qualifications and required skills
- Employment period
- Wage
- Copy of job application

After receiving employment opportunities, the Ho-Chunk Nation will within two business days provide employment referrals or provide other recruitment sources to obtain qualified referrals.

Document all efforts made to communicate job opportunities and the results of hiring activities throughout the life of the contract. At any time during the life of the contract, provide the Ho-Chunk Nation communication documentation within five business days of request by the department.

## Tribal Coordination Meeting

Between execution of contract and the project preconstruction conference, setup and coordinate a meeting with the Tribal officials and leaders at the Ho-Chunk Nation and notify and invite the WisDOT SW Region Tribal Liaison, Amy Coughlin, 2101 Wright Street, Madison, WI 53704, [amy.coughlin@dot.wi.gov](mailto:amy.coughlin@dot.wi.gov), (608) 245-5358. The prime contractor and all subcontractors shall attend this meeting. Discuss available employment opportunities and other tribal areas of interest such as scope of work, Tribal regulations, borrow sites, waste sites, and available aggregate.

## Project Completion

As a part of the document submittals required under standard spec 109.7, submit documentation summarizing communications regarding job opportunities throughout the life of the contract. Provide final report to the tribe and Statewide Tribal Affairs compiling the results of hiring activities for the prime contractor as well as for subcontractors at all tiers.

stp-107-200 (20191121)

## 18. Erosion Control Structures.

Within three calendar days after completing the excavation for a substructure unit, place riprap or other permanent erosion control items required by the contract or deemed necessary by the engineer around the unit at a minimum to a height equivalent to the calculated water elevation resulting from a storm that occurs on the average of once every two years (Q2) as shown on the plan, or as the engineer directs.

In the event that construction activity does not disturb the existing ground below the Q2 elevation, the above timing requirements for permanent erosion control shall be waived.

stp-107-070 (20191121)

## 19. Notice to Contractor - Construction Safety.

*Supplement standard spec 107 as follows:*

### Description

This specification describes minimum occupational safety and health requirements for the prime contractor and their subcontractors performing work on this project. The fundamental objective of these requirements is to eliminate construction related injuries and incidents so that their associated impacts to workers and the public, budgets and schedules are avoided or minimized.

### Definitions

**Certified Crane Operator.** To be certified a crane operator one must pass both written and practical tests offered by a nationally accredited testing organization, such as the National Commission for the Certification of Crane Operators (NCCCO) or the Operating Engineers Certification Program (OECF).

**Competent Person.** One who is capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them.

**Critical Lift.** A critical lift applies to, but is not limited to the following: any crane lift or hoisting operation that exceeds 75 percent of the rated capacity of the crane, requires the use of more than one crane or hoisting device, involves barge-mounted cranes, where the center of gravity could change, lifts where existing outriggers cannot be fully extended due to site constraints, lifts involving multiple lift rigging assemblies or other non-routine/difficult rigging arrangements.

**Project Safety Officer (PSO).** The person or persons designated by the department to coordinate implementation of a construction safety management system, including risk assessment, training, evaluating effectiveness, corrective/preventive action, and management review.

**Qualified Person.** One who, by possession of a recognized degree, certificate, or professional standing, or who by extensive knowledge, training and experience, has successfully demonstrated his/her ability to solve or resolve problems relating to the subject matter, the work, or the project.

**Safety Representative (SR).** A person designated by the contractor to develop and implement the company's health and safety plan, assess job hazards, and identify and carry out corrective and preventive actions.

## **General Requirements**

Notify the department immediately of any agency compliance inspections, including but not limited to the Occupational Safety and Health Administration (OSHA).

Report all project-related fatalities and OSHA-recordable injuries and illnesses that result in inpatient hospitalizations within 8 hours to the Project Safety Officer (PSO). Report all other project-related OSHA-recordable injuries and illnesses monthly to the PSO.

## **Safety Representative Requirements**

Provide at least one Safety Representative (SR). Each SR shall perform inspections, safety observations and other safety-related duties on-site on a weekly basis, at a minimum. Provide an alternate SR in the event of illness or other unforeseen circumstances.

Each SR and alternate SR shall have training, knowledge and experience in construction safety and health, including but not limited to a current OSHA 10-hour Occupational Safety and Health Training Course in Construction Safety and Health. Provide evidence of SR certifications, qualifications and training to the PSO.

Each SR and alternate SR shall attend a 2-hour Construction Safety Awareness Training provided by the department at the beginning of the project and at least once every 2 years. The SR shall communicate and distribute materials provided in the 2-hour Construction Safety Awareness Training to their site workers prior to starting site construction activities.

## **Requirements for Construction Health and Safety Programs**

In addition to implementing programs to meet the requirements of OSHA Construction Safety and Health standards, develop a written safety plan for the work to be performed. Note: General guidance is provided in Section 1-35.1.2 of the Construction and Materials Manual.

## **Traffic Control and Vehicle Collision Prevention/Risk Reduction**

All vehicles and mobile equipment shall use high-intensity rotating, flashing, oscillating, or strobe lights according to Section 6G.02 of the Manual of Uniform Traffic Control Devices (FHWA, 2009).

Provide crash cushions or truck (or trailer)-mounted attenuators (TMAs) on shadow vehicles to protect workers, vehicles, and mobile equipment from vehicle collisions according to the Manual of Uniform

Traffic Control Devices (FHWA, 2009, Section 6F.86). Coordinate with the engineer at least 72 hours before placing a TMA in service.

### **Personal Protective Equipment (PPE)**

Minimum Requirement Personal Protective Equipment (PPE) to be worn in Construction Work Areas:

ASTM F2413-11 safety-toed boots rated for impact and puncture resistance (PR) shall be worn.

ANSI Z-87+ impact-resistant safety glasses with sideshields shall be worn. Requirements for faceshields, goggles, welding shades, etc. shall be determined by the SR.

ANSI Z-89.1 Class G or E hard hats where there is potential for impact or injury to the head.

Daytime Work: ANSI/ISEA 107-2004 Class 2 or 3 high visibility vests at all times and Type E pants for flaggers and other personnel working on the traffic side of concrete barriers (yellow/lime).

Nighttime Work: ANSI/ISEA 107-2004 Class 2 or 3 retro-reflective safety vests (yellow/lime) and Type E pants (Type 3 ensemble) and a hard-hat-mounted LED light ("miner's lamp").

Hearing protection shall be used, if the work site noise exceeds 90 decibels (dBA), as 8-hour average exposure measurements. [29 CFR 1926.52 and .101]

### **Walking and Working Surfaces**

Keep all accessible work areas and passageways free from debris, obstructions and other slip, trip and fall hazards.

### **Excessive Driving Hours/Extended Work Shifts**

Distribute a one-page handout to each truck driver accessing the work zone to increase their awareness of hazards related to extended work shifts. The department will make the handout available electronically.

### **Cranes and Hoists.**

Ensure that all crane operators have been certified by the National Commission for the Certification of Crane Operators (NCCCO) or by the Operating Engineer Certification Program (OECF) if they will be operating a 10-Ton or greater capacity crane or if they are involved in critical lifts.

Provide critical lift plans to the department at least 72 hours prior to a critical lift. The contractor is responsible for all submittals, assumptions, calculations, and conclusions. Have a professional engineer, registered in the state of Wisconsin and knowledgeable of the specific site conditions and requirements, verify the adequacy of the design. Submit one copy of each design, signed and sealed by the same professional engineer verifying the design, to the engineer.

Crane operators shall safely terminate hoisting operations in the event of wind conditions that exceed the original equipment manufacturer's specifications for safe operation.

### **Work near American Transmission Company (ATC) 69 kV, 138 kV, and 345 kV Overhead Electric Lines**

WisDOT is aware of possible induced voltage on metal objects from overhead 69 kV, 138 kV, and 345 kV electric lines. WisDOT staff are utilizing personal protective equipment (PPE) in the form of insulated gloves when inspecting or working on metal objects in the vicinity of these lines. Please use PPE according to your company policies and OSHA requirements. Consult the current version of the ATC guidance document "Induced Voltage and Nuisance Shocks" (ATC, 2013) for best practices to prevent nuisance shocks when working around these overhead lines.

### **Documentation and Records**

Maintain documents and records and ensure that they are readily available upon request. At a minimum this includes:

- a. Written Safety Plan for Work Activities to be Performed
- b. Names of Safety Representatives and copies of their OSHA 10-Hour Occupational Safety and Health Training Course in Construction Safety and Health training cards.
- c. Names of Competent Persons and Qualified Persons (if required by OSHA for the work performed).
- d. Reports of inspections of the job sites, materials, and equipment [29 CFR 1926.20(b)(2)].
- e. Documentation that the SR has communicated and distributed materials from the Construction Safety Awareness Training to their site workers. At a minimum this will include a dated sign-in sheet with the names and signatures of the workers trained. The department will provide a sign-in sheet template electronically.
- f. Project site OSHA 300 Log (no worker names) [29 CFR 1904.29]
- g. Project site OSHA 301 Incident Report (no worker names) [29 CFR 1904.29]
- h. Hazard Communication Program [29 CFR 1926.59]
  - i. Hazardous Chemical Inventory,
  - ii. Location of Safety Data Sheets (SDSs)
  - iii. Hazard Warning Symbols
  - iv. Information and training requirements.
- i. Exposure Monitoring results (if monitoring is required under a specific OSHA standard-no worker names)
- j. Crane operator certifications (if applicable)
- k. Fall Protection Plan (if applicable) [29 CFR 1926.500-.503 and 1926.104]
- l. Confined Space Entry Procedures (if applicable). [29 CFR 1926.1200-.1213]
- m. Lockout/Tagout Procedures (if applicable). [29 CFR 1926.417 and .702]
- n. Respiratory Protection Program (if applicable) [29 CFR 1926.103 and 1910.134(c)]
- o. Emergency Action Plan [29 CFR 1926.35]
  - i. Emergency escape procedures and emergency escape route assignments.
  - ii. Procedures to be followed by employees who remain to operate critical equipment before they evacuate.
  - iii. Procedures to account for all employees after emergency evacuation has been completed.
  - iv. Rescue and medical duties for those employees who are to perform them;
    - First Aid and Medical Treatment Procedures [29 CFR 1926.50].
    - Equipment and Supplies.
    - Names of persons certified in first aid.
    - Location of the nearest medical facility.
  - v. The preferred means of reporting fires and other emergencies.
  - vi. Prime contractor's alarm system.
  - vii. Names or regular job titles of persons who can be contacted for further information or explanation of duties under the plan.
- p. Fire Protection Program (if applicable) [29 CFR 1926.150].
- q. Fire Prevention Plan and Hot Work Permit procedures (if applicable) [29CFR 1926.352].

(2/21/2017)

## 20. Notice to Contractor – New or Revised Temporary Construction Access to IH 39.

Traffic control and staging plans/details contained within the project plans shall be followed by the contractor. The contractor's use of any construction access point(s) to IH 39 which is/are not shown in the plans is prohibited without the prior written approval from FHWA and the department. To obtain written approval for temporary access to IH 39 during construction, the contractor shall provide the following:

Details on existing or new project plan sheets that show:

- The location, dimensions, grades, and slopes for any new/revised temporary construction access point(s) to IH 39.
- Traffic control measures that are required to manage this access change.
- Traffic control measures that are required to secure/close any new/revised construction access points when not in use.
- Erosion control measures required to manage this change, including the location(s) of any tracking pad(s).

Written summary of proposed temporary construction access change including:

- Timeframe to construct, duration in place, and time to remove.
- Cost of proposed temporary access including grading, traffic control, erosion control, and all other items and incidentals to implement and remove the access.
- Benefits in implementing the change (i.e., cost or time savings, ease of construction, increased safety to workers, and the motoring public).
- Signed Construction Permit if temporary access traverses private property.

The above information shall be provided to the engineer a minimum of 14 calendar days prior to the contractor's anticipated implementation of the new/revised temporary construction access to IH 39. The request will be reviewed, and if warranted, concurred with designated IH 39 Corridor Management Team (CMT) Traffic and Project staff, the engineer, and WisDOT Central Office Field Construction Coordinator (if warranted). If these parties concur with the request, it will be forwarded to FHWA for review and processing a minimum of 7 calendar days in advance of the contractor's anticipated implementation.

The engineer shall correspond with the following FHWA and department staff for concurrence:

- Dave Platz, FHWA, [Dave.Platz@dot.gov](mailto:Dave.Platz@dot.gov)
- Rich Cannon, IH 39 CMT Traffic, [Richard.Cannon@dot.wi.gov](mailto:Richard.Cannon@dot.wi.gov)
- Jeff Gustafson, IH 39 CMT Traffic, [Jeffrey.Gustafson@dot.wi.gov](mailto:Jeffrey.Gustafson@dot.wi.gov)

In the event of an emergency situation the above review process, including the extent of information required to be submitted and approval timeframes, can be modified if agreed upon by all parties.

(10/3/2016)

## **21. Notice to Contractor – Revisions to Traffic Control Plans.**

The traffic control and staging plans/details contained within the project plans have been developed from an FHWA approved Transportation Management Plan (TMP). According to TMP requirements, the department shall revise the TMP during construction if conditions warrant. This specification shall be followed to obtain concurrence for implementation of any proposed changes to construction phasing/staging that will affect the traffic patterns depicted in the plans.

Submit traffic control revision(s) to the engineer a minimum of 21 calendar days prior to the anticipated implementation of the proposed change(s). Include the following:

Detail on existing or new project plan sheets that show:

- The revised traffic pattern, widths, grades, temporary pavement, signs, traffic control devices, pavement marking, flaggers, time of day, width restrictions, and any other details required to convey a new or revised traffic control design.
- Erosion control measures required, including the location(s) of any tracking pad(s).

Written summary of proposed traffic control change including:

- Benefits to implementing the change (i.e., cost or time savings, ease of construction, increased safety to workers, and the motoring public).
- Timeframe to construct, duration in place, and time to remove.

The request will be reviewed, and if warranted, concurred with designated IH 39 Corridor Management Team (CMT) staff, the engineer, and WisDOT Central Office Field Construction Coordinator (if

warranted). If the request is approved, it will be forwarded to FHWA for review and processing a minimum of 7 calendar days in advance of the contractor's anticipated implementation.

The engineer shall correspond with the following FHWA and department staff to obtain concurrence:

Dave Platz, FHWA, [Dave.Platz@dot.gov](mailto:Dave.Platz@dot.gov)

Rich Cannon, IH 39 CMT Traffic, [Richard.Cannon@dot.wi.gov](mailto:Richard.Cannon@dot.wi.gov)

Jeff Gustafson, IH 39 CMT Traffic, [Jeffrey.Gustafson@dot.wi.gov](mailto:Jeffrey.Gustafson@dot.wi.gov)

Josh Koebernick, IH 39 CMT Traffic, [Joshua.Koebernick@dot.wi.gov](mailto:Joshua.Koebernick@dot.wi.gov)

(10/3/2016)

## 22. Notice to Contractor – Airport Operating Restrictions.

### General Restrictions

A temporary permit is not required from the Federal Aviation Administration (FAA) for the permanent or temporary installations that are included in the plans, and NOT LISTED BELOW under 'Site Specific Restrictions', as long as the contractor uses equipment that will not exceed 200 feet above ground level. The contractor shall submit FAA Form 7460-1, Notice of Proposed Construction or Alteration, to the FAA a minimum of 45 days before beginning construction operations that propose to use equipment that will exceed 200 feet above ground level.

If required, the FAA will return FAA Form 7460-2, Notice of Actual Construction or Alteration, with a determination. The contractor shall complete and send FAA Form 7460-2, Part 1 to the FAA at least 48 hours prior to starting the actual construction or alteration of a structure. Additionally, the contractor shall submit Part 2 no later than 5 days after the structure has reached its greatest height.

Contact Justin Hetland, Airspace Safety Program Manager, Bureau of Aeronautics at (608) 267-5018 ([Justin.Hetland@dot.wi.gov](mailto:Justin.Hetland@dot.wi.gov)) with any questions. Refer to the following FAA website for instructions to complete the form and the required information.

<http://oeaaa.faa.gov/oeaaa/externail/portal.jsp>.

### Site Specific Restrictions

The Federal Aviation Administration (FAA) has height restrictions surrounding select airports. The department has obtained Temporary Determinations of No Hazard to Air Navigation for all temporary structure (i.e. crane) erections associated with bridge and retaining wall construction at the following locations. A copy of the determinations can be obtained through the engineer.

As a condition of the Determinations, the structures are to be marked/lighted according to FAA Advisory circular 70/7460-1 L Change 2, Obstruction Marking and Lighting, flags/red lights – Chapters 3 (Marked), 4, 5 (Red), and 12.

Structure	Location	Latitude	Longitude	Heights	Issue Date	Expiration Date	Aeronautical Study No.
Temporary Installation							
Crane Temporary for B-13-462	SB IH 39 over Femrite Drive	43-03-05.97 N NAD 83	89-16-40.25 W	177 feet AGL 882.015 feet AMSL	12/9/2019	6/9/2021	2019-AGL- 19702-OE
Crane Temporary for B-13-463	USH 12 to NB ramp over Femrite Drive	43-03-06.04 N NAD 83	89-16-36.26 W	177 feet AGL 892.929 feet AMSL	12/9/2019	6/9/2021	2019-AGL- 19714-OE
Crane Temporary for C-13-044	Approximately 3,050' north of SB IH 39 over Femrite Drive	43-03-37.24 N NAD 83	89-16-38.81 W	177 feet AGL 857.613 feet AMSL	12/9/2019	6/9/2021	2019-AGL- 19701-OE
Crane Temporary for R-13-335	Approximately 850' north of Ag Ditch #4 along NB to USH 12 ramp	43-02-20.85 N NAD 83	89-16-21.81 W	177 feet AGL 863.458 feet AMSL	12/9/2019	6/9/2021	2019-AGL- 19707-OE

Structure	Location	Latitude	Longitude	Heights	Issue Date	Expiration Date	Aeronautical Study No.
Crane Temporary for S-13-0136	Approximately 130' south of SB IH 39 over EB USH 12	43-02-42.40 N NAD 83	89-16-41.12 W	177 feet AGL 886.79 feet AMSL	12/9/2019	6/9/2021	2019-AGL-19668-OE
Crane Temporary for S-13-506	Approximately 1,000' south of NB IH 39 over EB USH 12	43-02-34.37 N NAD 83	89-16-38.16 W	177 feet AGL 867 (existing) feet AMSL	12/9/2019	6/9/2021	2019-AGL-19703-OE
Crane Temporary for S-13-507	Approximately 20' south of SB IH 39 over WB USH 12	43-02-48.39 N NAD 83	89-16-40.92 W	177 feet AGL 887.152 feet AMSL	12/9/2019	6/9/2021	2019-AGL-19691-OE
Crane Temporary for S-13-508	Approximately 250' north of SB IH 39 over Femrite Drive	43-03-09.75 N NAD 83	89-16-39.97 W	177 feet AGL 883.389 feet AMSL	12/9/2019	6/9/2021	2019-AGL-19695-OE
Crane Temporary for S-13-509	Approximately 1,300' south of SB IH 39 over WI & Southern Railroad	43-03-44.62N NAD 83	89-16-38.45 W	177 feet AGL 877.026 feet AMSL	12/9/2019	6/9/2021	2019-AGL-19697-OE
Crane Temporary for S-13-510	Approximately 350' south of SB IH 39 over WI & Southern Railroad	43-03-53.75 N NAD 83	89-16-40.04 W	177 feet AGL 895.043 feet AMSL	12/9/2019	6/9/2021	2019-AGL-19699-OE
Crane Temporary for S-13-511	Approximately 1,050' north of Ag Ditch #4 along NB to USH 12 ramp	43-02-21.93 N NAD 83	89-16-24.14 W	177 feet AGL 868.656 feet AMSL	12/9/2019	6/9/2021	2019-AGL-19708-OE
Crane Temporary for S-13-512	Approximately 1,100' south of NB to WB ramp over WB USH 12	43-02-32.91 N NAD 83	89-16-32.47 W	177 feet AGL 872.412 feet AMSL	12/9/2019	6/9/2021	2019-AGL-19710-OE
Crane Temporary for S-13-513	Approximately 480' south of NB IH 39 over EB USH 12	43-02-38.81 N NAD 83	89-16-39.36 W	177 feet AGL 869.88 (existing) feet AMSL	12/9/2019	6/9/2021	2019-AGL-19719-OE
Permanent Installation							
S-13-136 Permanent Sign Structure	Approximately 130' south of SB IH 39 over EB USH 12	43-02-42.40 N NAD 83	89-16-41.12 W	31 feet AGL 886.79 feet AMSL	12/9/2019	6/9/2021	2019-AGL-19690-OE
S-13-506 Permanent Sign Structure	Approximately 1,000' south of NB IH 39 over EB USH 12	43-02-34.37 N NAD 83	89-16-38.16 W	21 feet AGL 867 (existing) feet AMSL	1/3/2020	7/3/2021	2019-AGL-20265-OE
S-13-507 Permanent Sign Structure	Approximately 20' south of SB IH 39 over WB USH 12	43-02-48.39 N NAD 83	89-16-40.92 W	31 feet AGL 887.152 feet AMSL	12/9/2019	6/9/2021	2019-AGL-19694-OE
S-13-508 Permanent Sign Structure	Approximately 250' north of SB IH 39 over Femrite Drive	43-03-09.75 N NAD 83	89-16-39.97 W	35 feet AGL 883.389 feet AMSL	12/9/2019	6/9/2021	2019-AGL-19696-OE

Structure	Location	Latitude	Longitude	Heights	Issue Date	Expiration Date	Aeronautical Study No.
S-13-509 Permanent Sign Structure	Approximately 1,300' south of SB IH 39 over WI & Southern Railroad	43-03-44.62N NAD 83	89-16-38.45 W	21 feet AGL 877.026 feet AMSL	12/9/2019	6/9/2021	2019-AGL- 19698-OE
S-13-510 Permanent Sign Structure	Approximately 350' south of SB IH 39 over WI & Southern Railroad	43-03-53.75 N NAD 83	89-16-40.04 W	21 feet AGL 895.043 feet AMSL	12/9/2019	6/9/2021	2019-AGL- 19700-OE
S-13-511 Permanent Sign Structure	Approximately 1,050' north of Ag Ditch #4 along NB to USH 12 ramp	43-02-21.93 N NAD 83	89-16-24.14 W	21 feet AGL 868.656 feet AMSL	12/9/2019	6/9/2021	2019-AGL- 19709-OE
S-13-512 Permanent Sign Structure	Approximately 1,100' south of NB to WB ramp over WB USH 12	43-02-32.91 N NAD 83	89-16-32.47 W	34 feet AGL 872.412 feet AMSL	12/9/2019	6/9/2021	2019-AGL- 19713-OE
S-13-513 Permanent Sign Structure	Approximately 480' south of NB IH 39 over EB USH 12	43-02-38.81 N NAD 83	89-16-39.36 W	21 feet AGL 869.88 (existing) feet AMSL	1/3/2020	7/3/2021	2019-AGL- 20264-OE
B-13-462 Permanent Bridge Structure	SB IH 39 over Femrite Drive	43-03-05.97 N NAD 83	89-16-40.25 W	5 feet AGL 882.015 feet AMSL	12/9/2019	6/9/2021	2019-AGL- 19721-OE
B-13-463 Permanent Bridge Structure	USH 12 to NB ramp over Femrite Drive	43-03-06.04 N NAD 83	89-16-36.26 W	5 feet AGL 892.929 feet AMSL	12/9/2019	6/9/2021	2019-AGL- 19720-OE
C-13-044 Permanent Box Culvert	Approximately 3,050' north of SB IH 39 over Femrite Drive	43-03-37.24 N NAD 83	89-16-38.81 W	15 feet AGL 857.613 feet AMSL	12/9/2019	6/9/2021	2019-AGL- 19722-OE
R-13-335 Permanent Retaining Wall	Approximately 850' north of Ag Ditch #4 along NB to USH 12 ramp	43-02-20.85 N NAD 83	89-16-21.81 W	7 feet AGL 863.458 feet AMSL	12/9/2019	6/9/2021	2019-AGL- 19706-OE

For all other locations not listed under the lighting requirements above, marking/lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, the contractor is encouraged to install and maintain it according to FAA Advisory Circular 70/7460-1 K Change 2.

Lower any temporary structure (i.e. crane) to the ground when not in use and also during the hours between sunset and sunrise.

Notify the manager of Dane County Regional Airport at (608) 246-3380 and the manager of Blackhawk Airfield at (608) 334-4932 at least 3 business days prior to any temporary structure being erected and again when the temporary structure is removed from the site.

Any failure or malfunction that lasts more than 30 minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867, so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

Any height of a temporary structure exceeding above ground level (AGL) or above mean sea level (AMSL), as listed in the temporary determination, will result in a substantial adverse effect and will warrant a Determination of Hazard to Air Navigation.

The determination expires unless extended, revised or terminated by the issuing FAA office. If an extension is needed, the contractor must request an extension of the effective period of the determination. The request must be e-filed at least 15 days prior to the expiration date.

For questions on extensions to the effective period of the determinations, contact the FAA office at (202) 267-4525, or [david.maddox@faa.gov](mailto:david.maddox@faa.gov) and reference the Aeronautical Study Number.

Any changes in coordinates and/or heights will void the determination. Any future construction or alteration, including increase to height, requires a separate notice to the FAA.

Determinations include temporary construction equipment such as cranes, derricks, and other equipment, which may be used during actual construction. Equipment shall not exceed the overall heights as indicated in the determination. The contractor must request separate notice to the FAA if equipment has a height greater than the determination.

The contractor must copy the engineer on any correspondence with the FAA.

A determination concerns the effect of temporary structures on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

### **23. Notice to Contractor - Verification of Asbestos Inspection.**

James Gondek, License Number All-108099, inspected Structures B-13-460 through 467 for asbestos on December 7, 2005. There was no regulated Asbestos Containing Material (RACM) found on the structures.

Bob Stigsell, License Number All-03628, inspected the commercial property at 2863 County Road N in Pleasant Springs for asbestos on November 21, 2019. Exterior caulk found on the metal part of the window frames was found to contain asbestos described as Category II non-friable. The caulk will be removed by the inspection company prior to the start of construction.

A copy of the inspection reports are available by contacting WisDOT SW Region Madison Environmental Coordinator Jennifer Grimes at (608) 516-9760, or via email at [Jennifer.Grimes@dot.wi.gov](mailto:Jennifer.Grimes@dot.wi.gov).

### **24. Notice to Contractor, Subcontractor Pre-Certification.**

Pre-certification is required for native prairie seeding (with follow-up surveillance and care), and tree/shrub installation (with follow-up surveillance and care).

Subcontractors from each of the pre-certified lists titled "Native Seed Installation and Restoration Management" and "Woody Vegetation Installation and Restoration Management" shall perform the work associated with the pertinent items listed further in this article. The same subcontractor is allowed if that subcontractor is on both lists.

The pre-certified lists are located on the departments Highway Construction Contract Information (HCCI) website.

Subcontractors or entities not on the department list are not permitted to perform any aspect of the work.

Native Seed Installation and Restoration Management pre-certification is required for the following pay items:

- SPV.0005.501 Pre-Planting Vegetation Treatment
- SPV.0005.502 Seed Bed Preparation
- SPV.0060.501 Native Seed Surveillance and Care Cycles
- SPV.0085.501 Seeding Native Mix N2
- SPV.0085.502 Seeding Native Mix N3

Woody Vegetation Installation and Restoration Management pre-certification is required for the following pay items:

- 632.0101 Trees
- 632.0201 Shrubs
- 632.9101 Landscape Planting Surveillance and Care Cycles
- SPV.0035.501 Topsoil Special
- SPV.0180.501 Compost

At the preconstruction meeting, or 14 days prior to the start of construction, whichever date is earlier, submit the names, positions, experience, and qualifications of any personnel to be used on this project that were not listed in the Request for Qualifications. Any new personnel must be approved by the department before vegetation management work begins. Provide current licenses and certifications related to executing the work.

## **25. Notice to Contractor – Common Excavation Disposal Site.**

At the contractor's option, an area is available along the entrance ramp from Safety Rest Area 22 to northbound IH 39 within the limits shown on the plans for disposal of suitable excavated materials from Project 1008-10-70. Payment for erosion control, salvaging topsoil, hauling materials, compaction, restoration, and all other work associated with using the site shall be considered incidental to other contract items. Coordinate with the engineer for utilization of this site.

## **26. Public Convenience and Safety.**

*Revise standard spec 107.8(6) as follows:*

Check for and comply with local ordinances governing the hours of operation of construction equipment. Construction operations will be allowed at night with the exception of the following operations:

Do not perform pile driving between 10:00 PM and 6:00 AM.

## **27. Contractor Data Packet.**

The department will provide electronic design data for Projects 1007-12-79, 1007-12-80, and 1008-10-70. The data provided is for the bidder's general knowledge only and is not a part of the contract. The department assumes no responsibility for discrepancies between the data provided and the contract documents.

The department will provide the project contractor data packet before the project let date within 5 business days of a contractor request submitted by email to Mark Vesperman at [Mark.Vesperman@dot.wi.gov](mailto:Mark.Vesperman@dot.wi.gov).

The contractor data packet contains the following:

1. Field control data, LandXML v1.2 file
2. Existing topographic data, 2D AutoCAD DWG files
  - a. Mapping
  - b. Utilities
3. Reference line alignments and proposed profiles, LandXML v1.2 file(s)
4. Superelevation transition information, comma separated value (csv) text file(s)
5. Proposed roadway features, 2D AutoCAD DWG file
6. Proposed structure horizontal features, 2D in AutoCAD DWG file

7. Surface models, LandXML v1.2 files and AutoCAD DWG files containing 3D face objects representing surface TIN triangles of surface models as follows:
  - a. Existing ground surface
  - b. Proposed top surface
    - i. Top of topsoil outside the roadway subgrade shoulder points extended to the slope intercepts
    - ii. Top of shoulder and top of pavement within the roadway subgrade
  - c. Proposed datum surface
    - i. Top of topsoil outside the roadway subgrade shoulder points extended to the slope intercepts
    - ii. Subgrade surface within the roadway subgrade shoulder points
8. Proposed surface model longitudinal breaklines, 3D AutoCAD DWG files
9. Surface model outer boundaries, 3D AutoCAD DWG file
10. Slope stake report, comma separated value (csv) text file
11. Earthwork data, Excel spreadsheet xlsx file(s)
12. right-of-way and easement data, LandXML v1.2 file and 2D AutoCAD DWG file
13. Metadata information

(10/31/2017)

**28. Removing Old Structure Station 1212+84'XSB', Item 203.0500.S.800;  
Removing Old Structure Station 1213+00'XNB', Item 203.0500.S.801.**

Conform to standard spec 203 as modified in this special provision.

*Add the following to standard spec 203:*

**203.3.6 Removals Over Waterways and Wetlands**

**203.3.6.1 Removing Old Structure Over Waterway**

- (1) Remove portions of existing Structures at 1212+84'XSB' and the entire structure at 1213+00'XNB' at Pennito Creek as shown in the plan conforming to the contractor's approved structure removal and clean-up plan. Remove all reinforcing steel, all concrete, and all other debris that falls into the waterway or wetland. Remove large pieces of the structure within 36 hours. The contractor may leave limited amounts of small concrete pieces scattered over the waterway floor or wetland only if the engineer allows.
- (2) Submit a structure removal and clean-up plan as part of the erosion control implementation plan required under standard spec 107.20. Do not start work under the structure removal and clean-up plan without the department's written approval of the plan. Include the following information in the structure removal and clean-up plan:
  1. Methods and schedule to remove the structure.
  2. Methods to control potentially harmful environmental impacts.
  3. Methods for removing piers and abutments. If blasting in water, include restrictions that regulatory agencies and the contract require.
  4. Methods for cleaning the waterway or wetlands.
- (3) If stockpiling spoil material, place it on an upland site an adequate distance from the waterway, wetland, or any open water created by excavation. Install silt fence between the spoil pile and the waterway, wetland, or excavation site.

*Add the following Removing Old Structure bid item to standard spec 203.5.1:*

ITEM NUMBER	DESCRIPTION	UNIT
203.0500.S.800	Removing Old Structure Station 1212+84'XSB'	LS
203.0500.S.801	Removing Old Structure Station 1213+00'XNB'	LS

**29. Removing Building STA 110+50'NN', Item 204.0230.001;  
Removing Building STA 110+61'NN', Item 204.0230.002.**

Conform to the requirements of standard spec 204 and as hereinafter specified.

Furnish all labor, equipment, tools, transportation, and incidentals necessary to perform the work necessary to remove the buildings located at 2863 County Road N in the Town of Pleasant Springs at Station 110+50'NN' (concrete block exterior, approximately 2,251 SF) and Station 110+61'NN' (metal exterior, approximately 3,739 SF) as noted in the plans.

Break and remove entirely from the site all walls, floors, and footings. Concrete may be used to fill any holes or depressions left when removing the building as long as it is broken into sizes smaller than 5 inches. Remove all unused material from concrete steps, concrete sidewalks, and concrete slabs from the premises. Do not remove the driveway or parking lot pavement.

Coordinate with the utility companies to disconnect services to the buildings. Provide a two-week notice prior to removing the buildings. Do not remove the buildings prior to April 1, 2021.

In compliance with the ordinances and permit requirements of the municipality in which the buildings are situated, and in the presence of the local governing unit, a certified/licensed well driller, pump installer or water system operator shall seal or abandon all sewer and water lines and/or wells pursuant to Wisconsin Statute §280.30 and the Natural Resources portion of the Wisconsin Administrative Code covered under NR 811 and 812.

Until standing walls have been razed, the walls shall be reasonably and safely braced at all times to ensure complete safety during the wrecking operations.

Dispose of all non-hazardous demolition waste in a landfill licensed or approved in writing by the Wisconsin Department of Natural Resources (DNR) and according to NRSOO, Wisconsin Administrative Code. Failure to properly dispose of solid waste is a violation of State Solid Waste Statutes and Administrative code and is subject to issuance of a citation under Wisconsin Statute §287.81(2)(a).

Remove all hazardous materials from the site, only after proper notification and compliance with the department requirements of the DNR and local government regulations.

Remove all material from the premises in a safe manner and in compliance with all applicable laws and ordinances. Do not disturb adjacent property.

The department has investigated the building to be removed for the presence of asbestos. Any friable asbestos found will be removed by others prior to the start of construction. If any additional friable asbestos is found by the contractor during building removal, cease building removal and contact the engineer to arrange for friable asbestos removal by others.

Contact WisDOT SW Region Madison Environmental Coordinator Jennifer Grimes at (608) 516-9760 or [jennifer.grimes@dot.wi.gov](mailto:jennifer.grimes@dot.wi.gov) to obtain a copy of the pre-demolition asbestos inspection report.

**30. Removing Apron Endwall, Item 204.9060.S.01.**

**A Description**

This special provision describes removing apron endwall conforming to standard spec 204.

**B (Vacant)**

**C (Vacant)**

**D Measurement**

The department will measure Removing Apron Endwall by each, acceptably completed.

**E Payment**

*Add the following to standard spec 204.5:*

ITEM NUMBER	DESCRIPTION	UNIT
204.9060.S.01	Removing Apron Endwall	EACH
204-025 (20150630)		

**31. Removing Business Sign, Item 204.9060.S.02.**

**A Description**

This special provision describes removing business sign conforming to standard spec 204.

Under the Removing Business Sign item, remove the existing sign from the support, remove the sign support, concrete footing, and the electrical supply. These materials become the contractor's property, unless otherwise specified. Dispose of these materials off the right-of-way.

**B (Vacant)**

**C (Vacant)**

**D Measurement**

The department will measure Removing Business Sign as each individual sign location acceptably completed.

**E Payment**

*Add the following to standard spec 204.5:*

ITEM NUMBER	DESCRIPTION	UNIT
204.9060.S.02	Removing Business Sign	EACH
stp-204-025 (20150630)		

**32. Removing Type I Sign Covers, Item 204.9060.S.03.**

**A Description**

This special provision describes removing left-in-place temporary covers on permanent large green type I signs mounted on overhead sign structures.

**B (Vacant)**

**C Construction**

Remove the cover from the sign, including temporary appurtenances that affix the cover in place.

Dispose of removed materials off the right-of-way.

**D Measurement**

The department will measure Removing Type I Sign Covers, acceptably completed, as a single complete unit of work for each removal. The cover will be paid for as one unit for each sign location, which includes not only the main sign, but also supplementary plaques that physically abut, or are attached to, the main sign.

**E Payment**

*Add the following to standard spec 204.5:*

ITEM NUMBER	DESCRIPTION	UNIT
204.9060.S.03	Removing Type I Sign Covers	EACH

Payment is full compensation for removing and disposing of the cover, and the appurtenances affixing it in place.

stp-204-025 (20150630)

**33. Removing Temporary Sign Support, Item 204.9060.S.04.**

**A Description**

This special provision describes removing left-in-place temporary supports for large temporary signs.

**B (Vacant)**

## C Construction

Remove the temporary sign support, including appurtenances that affix the temporary sign to the support.

Dispose of removed materials off the right-of-way.

## D Measurement

The department will measure Removing Temporary Sign Support, acceptably completed, as a single complete unit of work for each removal. The support will be paid for as one unit for each sign location, including all vertical and horizontal members.

## E Payment

*Add the following to standard spec 204.5:*

ITEM NUMBER	DESCRIPTION	UNIT
204.9060.S.04	Removing Temporary Sign Support	EACH

Payment is full compensation for removing and disposing of the support, and the appurtenances affixing the temporary sign to the support. Removal of the temporary sign mounted to the support will be measured and paid for separately.

stp-204-025 (20150630)

## 34. Embankment Construction.

*Replace standard spec 205.3.2(4) with the following:*

If placing embankment on side slopes 10 feet high or higher and steeper than 1 vertical to 3 horizontal, cut a minimum 2-foot horizontal bench into the existing embankment every 2 feet of vertical fill height.

## 35. Roadway Excavation.

*Supplement standard spec 205.5.2(1) to include the following:*

Provide the department with an earth flow diagram within 30 calendar days of receiving the contract Notice to Proceed.

Identify on the earth flow diagram, all excavation material within the project; material shrinkage and swell factors; acceptable on-site material available for use as embankment within the project; anticipated off-site material that will be required for use as embankment within the project (if applicable); and anticipated material to be disposed of off-site (if applicable). It is the sole responsibility of the contractor to prepare their individual investigation and testing program to establish material shrinkage and swell factors.

(6/29/2015)

## 36. Borrow.

*Replace standard spec 208.1(1) with the following:*

This section describes constructing embankments and other portions of the work consistent with the earthwork summary and defines the contract requirements for embankment material if required by the plans or if the contractor elects to utilize off-site material to complete the roadway embankments.

*Delete standard spec 208.2.2(2).*

*Supplement standard spec 208.3 to include the following:*

The contractor shall be responsible for complying with all permit requirements in obtaining embankment materials.

*Supplement standard spec 208.4 with the following:*

The department will not measure embankment material from its source.

*Supplement standard spec 208.5 with the following:*

The department will not pay directly for work specified under this section pertaining to Borrow. This work is included in the Roadway Embankment bid item.

(5/31/2016)

### **37. Select Borrow, Item 208.1100.**

Conform to the requirements of standard spec 208 and as hereinafter provided.

#### **Materials**

Furnish and use material that consists of granular material meeting the following requirements: Maximum particle size of 12 inches when measured from any face. The material passing the No. 4 sieve shall have a maximum of 15% by weight passing the No. 200 sieve.

As a contractor's option, the department will allow the use of select crushed material for select borrow. The material shall conform to the requirements of standard spec 312 and will be measured and paid for as Select Borrow.

#### **Measurement**

*Replace standard spec 208.4 with the following:*

The department will measure select borrow by the cubic yard acceptably completed in its final location using the method of average end areas, with no correction for curvature or settlement, except as follows:

1. The engineer and contractor mutually agree to an alternative volume calculation method;
2. The method of average end areas is not feasible.

If it is not possible to compute volumes of select borrow by the method of average end areas due to erratic location of isolated deposits, the department may compute the volumes by alternative methods involving 3-dimensional measurements.

The department will not measure select borrow material beyond the limits of the required slopes as shown on the plans.

(11/29/2016)

### **38. Base Aggregate Dense 3/4-Inch, Item 305.0110.**

*Add the following to standard spec 301.2.4.3:*

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

swr-305-001 (20170711)

### **39. Base Aggregate Dense 1 1/4-Inch, Item 305.0120.**

The contractor for Project 1007-12-78 may have used reclaimed asphalt as base aggregate material. In areas where reclaimed asphalt was used by the previous contractor, place additional reclaimed asphalt instead of base aggregate to establish final grade prior to paving.

Revise standard spec 305.2.2.1 when base is  $\geq 50\%$  crushed gravel as follows:

Use 1 1/4-inch base aggregate that conforms to the following gradation requirements.

SIEVE	PERCENT PASSING BY WEIGHT
1 1/4-inch	95 - 100
1 inch	--
3/4-inch	70 - 90
3/8-inch	45 - 75
No. 4	30 - 60
No. 10	20 - 40
No. 40	7 - 25
No. 200	3 - 10 <sup>[1]</sup>

<sup>[1]</sup> Limited to a maximum of 8.0 percent for base placed between old and new pavement.

swr-305-002 (20170711)

#### 40. High Performance Dowel Bars for Concrete Pavement.

Replace standard spec 415.2.2 with the following:

- (1) Furnish steel reinforcement conforming to standard spec 505. Furnish tie bars as the plans show and conforming to standard spec 505.2.6.
- (2) Furnish dowel bars of the dimensions the plans show and conforming to standard spec 505.2.6 except for transverse joints in concrete pavement, furnish non-corrosive, high performance dowel bars from the department's APL. Use only one type of high performance bar for work under the contract.

416-020 (20191121)

#### 41. Special High Early Strength Concrete Pavement Repair and Replacement.

Replace standard spec 416.2.3.2, paragraph (3), sentence 1 with the following:

- (3) Achieve a minimum compressive yield strength of 3,000 psi for special high early strength concrete prior to opening to traffic by the times described in the "Traffic" article of these special provisions under Permitted Lane Closure Times.

Replace standard spec 416.3.8.2, paragraph (1), sentence 1 with the following:

- (1) Place, cure and open special high early strength concrete to traffic by the times described in the "Traffic" article of these special provisions under Permitted Lane Closure Times.

Replace standard spec 416.3.8.3, paragraph (1), sentence 1 with the following:

- (1) Place, cure and open special high early strength concrete to traffic by the times described in the "Traffic" article of these special provisions under Permitted Lane Closure Times.

#### 42. Concrete Protective Surface Treatment.

Add the following to standard spec 415.3.6:

##### 415.3.6.4 Concrete Protective Surface Treatment

1. This specification applies to all sawed concrete joints on the IH 39 and USH 12 mainline and ramps, also including sawed joints on concrete shoulders, and to all concrete placement methods. Treat sawed surfaces of transverse and longitudinal joints with a silane joint sealant

found on the department approved products list for Concrete Protective Surface Treatments. Prepare surface by pressure washing all saw slurry from sawed joints and allow to dry thoroughly prior to application of silane sealer. Apply the product directly to the interior of the sawed joint. Do not use the broadcast spray method of application.

(1/5/2017)

#### **43. Rout and Seal, Item 415.6000.S.**

##### **A Description**

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

##### **B Materials**

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

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

##### **C Construction**

###### **C.1 Equipment**

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

Make rout cuts in a single pass. Two-pass cutting will not be allowed. Use a self-propelled mechanical router capable of routing the bituminous pavement to provide a 1:1 depth to width ratio of all routed cracks. The router blade or blades shall be of such size and configuration to cut the desired joint reservoir in one pass. No spacers between blades shall be allowed unless the contractor can demonstrate to the engineer that the desired reservoir and rout cut can be obtained with them. Either wet or dry routing will be permitted provided the above conditions are met. Use a pressure distributor for applying sealing material through a hand-operated wand or nozzle according to sealant manufacturer's instructions.

###### **C.2 Methods**

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

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

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

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

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

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

#### **D Measurement**

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

#### **E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
415.6000.S	Rout and Seal	LF

Payment is full compensation for rout cutting; cleaning the joint; and rerouting as required under C.2.  
stp-415-100 (20140630)

### **44. HMA Pavement Modification.**

#### **A Description**

This special provision describes specialized material requirements for HMA Pavements. Conform to standard spec 460 as modified in this special provision.

*Replace the noted HMA mixture values in Table 460-2 under 460.2.7 with the following:*

1. LA Wear (AASHTO T96) – LT, MT, HT, and SMA mixtures:
  - 100 revolutions – 13% loss maximum
  - 500 revolutions – 40% loss maximum
2. Soundness (AASHTO T104) (sodium sulfate) – LT, MT, HT, and SMA mixtures:
  - 9.0% loss maximum
3. Freeze/Thaw (AASHTO T103) (specified counties) – LT, MT, HT, and SMA mixtures:
  - 12% loss maximum

*Replace Note 3 at the end of Table 460-2 under standard spec 460.2.7 with the following:*

<sup>[3]</sup> For No. 5 (9.5 mm) and No. 4 (12.5 mm) nominal maximum size mixtures, the specified VFB range is 73 – 76%.

(07/13/2016)

### **45. QMP HMA Pavement Nuclear Density.**

#### **A Description**

*Replace standard spec 460.3.3.2 (1) and standard spec 460.3.3.2 (4) with the following:*

- (1) This special provision describes density testing of in-place HMA pavement with the use of nuclear density gauges. Conform to standard spec 460 except as modified in this special provision.

- (2) Provide and maintain a quality control program defined as all activities and documentation of the following:
  1. Selection of test sites.
  2. Testing.
  3. Necessary adjustments in the process.
  4. Process control inspection.
- (3) Chapter 8 of the department's construction and materials manual (CMM) provides additional detailed guidance for QMP work and describes required procedures.

<https://wisconsindot.gov/rdwy/cmm/cm-08-00toc.pdf>

- (4) The department's Materials Reporting System (MRS) software allows contractors to submit data to the department electronically, estimate pay adjustments, and print selected reports. Qualified personnel may obtain MRS software from the department's web site at:

<http://www.atwoodsystems.com/>

## **B Materials**

### **B.1 Personnel**

- (1) Nuclear gauge owners and personnel using nuclear gauges shall comply with WisDOT requirements according to 460.3.3 and CMM 8-15.

### **B.2 Testing**

- (1) Conform to ASTM D2950 and CMM 8.15 for density testing and gauge monitoring methods. Conform to CMM 8-15.10.4 for test duration and gauge placement.

### **B.3 Equipment**

#### **B.3.1 General**

- (1) Furnish nuclear gauges according to CMM 8-15.2.
- (2) Furnish nuclear gauges from the department's approved product list at:

<https://wisconsindot.gov/Pages/doing-bus/eng-consultants/cnslt-rsrcs/tools/appr-prod/default.aspx>

#### **B.3.2 Comparison of Nuclear Gauges**

##### **B.3.2.1 Comparison of QC and QV Nuclear Gauges**

- (1) Compare QC and QV nuclear gauges according to CMM 8-15.7.

##### **B.3.2.2 Comparison Monitoring**

- (1) Conduct reference site monitoring for both QC and QV gauges according to CMM 8-15.

### **B.4 Quality Control Testing and Documentation**

#### **B.4.1 Lot and Sublot Requirements**

##### **B.4.1.1 Mainline Traffic Lanes, Shoulders, and Appurtenances**

- (1) Divide the pavement into lots and sublots for nuclear density testing according to CMM 8-15.10.2.
- (2) Determine required number of tests according to CMM 8-15.10.2.1.
- (3) Determine random testing locations according to CMM 8-15.10.3.

##### **B.4.1.2 Side Roads, Crossovers, Turn Lanes, Ramps, and Roundabouts**

- (1) Divide the pavement into lots and sublots for nuclear density testing according to CMM 8-15.10.2.
- (2) Determine required number of tests according to CMM 8-15.10.2.2.
- (3) Determine random testing locations according to CMM 8-15.10.3.

#### **B.4.2 Pavement Density Determination**

##### **B.4.2.1 Mainline Traffic Lanes and Appurtenances**

- (1) Calculate the average sublot densities using the individual test results in each sublot.

- (2) If all subplot averages are no more than one percent below the target density, calculate the daily lot density by averaging the results of each random QC test taken on that day's material.
- (3) If any subplot average is more than one percent below the target density, do not include the individual test results from that subplot when computing the lot average density and remove that subplot's tonnage from the daily quantity for incentive. The tonnage from any such subplot is subject to disincentive pay as specified in standard spec 460.5.2.2.

#### **B.4.2.2 Mainline Shoulders**

##### **B.4.2.2.1 Width Greater Than 5 Feet**

- (1) Determine the pavement density as specified in B.4.2.1.

##### **B.4.2.2.2 Width of 5 Feet or Less**

- (1) If all subplot test results are no more than 3.0 percent below the minimum target density, calculate the daily lot density by averaging all individual test results for the day.
- (2) If a subplot test result is more than 3.0 percent below the target density, the engineer may require the unacceptable material to be removed and replaced with acceptable material or allow the nonconforming material to remain in place with a 50 percent pay reduction. Determine the limits of the unacceptable material according to B.4.3.

#### **B.4.2.3 Side Roads, Crossovers, Turn Lanes, Ramps, and Roundabouts**

- (1) Determine the pavement density as specified in B.4.2.1.

#### **B.4.2.4 Documentation**

- (1) Document QC density test data as specified in CMM 8.15. Provide the engineer with the data for each lot within 24 hours of completing the QC testing for the lot.

#### **B.4.3 Corrective Action**

- (1) Notify the engineer immediately when an individual test is more than 3.0 percent below the specified minimum in standard spec 460.3.3.1. Investigate and determine the cause of the unacceptable test result.
- (2) The engineer may require unacceptable material specified in B.4.3(1) to be removed and replaced with acceptable material or allow the nonconforming material to remain in place with a 50 percent pay reduction. Determine limits of the unacceptable area by measuring density of the layer at 50-foot increments both ahead and behind the point of unacceptable density and at the same offset as the original test site. Continue testing at 50-foot increments until a point of acceptable density is found as specified in standard spec 460.5.2.2(1). Removal and replacement of material may be required if extended testing is in a previously accepted subplot. Testing in a previously accepted subplot will not be used to recalculate a new lot density.
- (3) Compute unacceptable pavement area using the product of the longitudinal limits of the unacceptable density and the full subplot width within the traffic lanes or shoulders.
- (4) Retesting and acceptance of replaced pavement will be as specified in standard spec 105.3.
- (5) Tests indicating density more than 3.0 percent below the specified minimum, and further tests taken to determine the limits of unacceptable area, are excluded from the computations of the subplot and lot densities.
- (6) If 2 consecutive subplot averages within the same paving pass and same target density are more than one percent below the specified target density, notify the engineer and take necessary corrective action. Document the locations of such sublots and the corrective action that was taken.

#### **B.5 Department Testing**

##### **B.5.1 Verification Testing**

- (1) The department will have a HTCP certified technician, or ACT working under a certified technician, perform verification testing. The department will test randomly at locations independent of the contractor's QC work. The department will perform verification testing at a minimum frequency of 10 percent of the sublots and a minimum of one subplot per mix design. The sublots selected will be within the active work zone. The contractor will supply the necessary traffic control for the department's testing activities.

- (2) The QV tester will test each selected subplot using the same testing requirements and frequencies as the QC tester.
- (3) If the verification subplot average is not more than one percent below the specified minimum target density, use the QC tests for acceptance.
- (4) If the verification subplot average is more than one percent below the specified target density, compare the QC and QV subplot averages. If the QV subplot average is within 1.0 lb/ft<sup>3</sup> of the QC subplot average, use the QC tests for acceptance.
- (5) If the first QV/QC subplot average comparison shows a difference of more than 1.0 lb/ft<sup>3</sup> each tester will perform an additional set of tests within that subplot. Combine the additional tests with the original set of tests to compute a new subplot average for each tester. If the new QV and QC subplot averages compare to within 1.0 lb/ft<sup>3</sup>, use the original QC tests for acceptance.
- (6) If the QV and QC subplot averages differ by more than 1.0 lb/ft<sup>3</sup> after a second set of tests, resolve the difference with dispute resolution specified in B.6. The engineer will notify the contractor immediately when density deficiencies or testing precision exceeding the allowable differences are observed.

### **B.5.2 Independent Assurance Testing**

- (1) Independent assurance is unbiased testing the department performs to evaluate the department's verification and the contractor's QC sampling and testing including personnel qualifications, procedures, and equipment. The department will perform the independent assurance review according to the department's independent assurance program.

### **B.6 Dispute Resolution**

- (1) The testers may perform investigation in the work zone by analyzing the testing, calculation, and documentation procedures. The testers may perform gauge comparison according to B.3.2.1.
- (2) The testers may use comparison monitoring according to B.3.2.2 to determine if one of the gauges is out of tolerance. If a gauge is found to be out of tolerance with its reference value, remove the gauge from the project and use the other gauge's test results for acceptance.
- (3) If the testing discrepancy cannot be identified, the contractor may elect to accept the QV subplot density test results or retesting of the subplot in dispute within 48 hours of paving. Traffic control costs will be split between the department and the contractor.
- (4) If investigation finds that both gauges are in error, the contractor and engineer will reach a decision on resolution through mutual agreement.

### **B.7 Acceptance**

- (1) The department will not accept QMP HMA Pavement Nuclear Density if a non-compared gauge is used for contractor QC tests.

### **C (Vacant)**

### **D (Vacant)**

### **E Payment**

#### **E.1 QMP Testing**

- (1) Costs for all sampling, testing, and documentation required under this special provision are incidental to the work. If the contractor fails to perform the work required under this special provision, the department may reduce the contractor's pay. The department will administer pay reduction under the Non-performance of QMP administrative item.

#### **E.2 Disincentive for HMA Pavement Density**

- (1) The department will administer density disincentives as specified in standard spec 460.5.2.2.

#### **E.3 Incentive for HMA Pavement Density**

- (1) The department will administer density incentives as specified in standard spec 460.5.2.3.

460-020 (20181119)

46. **Aggregates for Concrete Pavements.**

This special provision describes specialized material requirements for aggregates used in Concrete Pavements. Conform to standard spec 415 and 501, as modified in this special provision. Conform to standard spec 715 for QMP Concrete Pavement and Structures.

*Replace standard spec 501.2.5.4.1 with the following:*

**501.2.5.4.1 General**

- (1) The department will sample and test aggregates as follows:
- |  |              |
|--|--------------|
| LA Wear (100 and 500 revolutions) .....        | AASHTO T 96  |
| Sodium Sulfate Soundness (R-4, 5 cycles) ..... | AASHTO T 104 |
| Freeze-Thaw Soundness .....                    | AASHTO T 103 |
| Lightweight Pieces <sup>[1]</sup> .....        | AASHTO T 113 |
- <sup>[1]</sup> Material having a bulk specific gravity (saturated surface-dry basis) of less than 2.45. Determine the percentage of lightweight pieces by dividing the weight of lightweight pieces in the sample retained on the 3/8-inch sieve by the weight of the total sample.
- (2) Contact the engineer a minimum of 4 weeks prior to paving to collect a sample of the aggregates proposed for the project. The engineer will obtain the sample, or observe the contractor obtaining the sample. The sampler must be HTCP certified to sample aggregates.
- (3) The department will randomly sample coarse aggregate for lightweight pieces testing at least once per 10,000 cubic yards during placement of concrete pavement.
- (4) Use clean, hard, durable crushed gravel or crushed limestone free of an excess of thin or elongated pieces, frozen lumps, vegetation, deleterious substances, or adherent coatings considered injurious.
- (5) Use virgin aggregates only.

*Replace the first paragraph of standard spec 501.2.5.4.2 with the following:*

- (1) The amount of deleterious substances must not exceed the following percentages:
- |   |                   |
|---|-------------------|
| DELETERIOUS SUBSTANCE.....                          | PERCENT BY WEIGHT |
| Shale .....   | 1.0               |
| Coal .....  | 1.0               |
| Clay lumps .....                                    | 0.3               |
| Soft fragments .....                                | 5.0               |
| Any combination of above .....                      | 5.0               |
| Thin or elongated pieces based on a 3:1 ratio ..... | 15.0              |
| Materials passing the No. 200 sieve .....           | 1.5               |
| Lightweight Pieces .....                            | 5.0               |

*Replace the first paragraph of standard spec 501.2.5.4.3 with the following:*

- (1) The percent wear shall not exceed 40, the weighted soundness loss shall not exceed 9 percent, and the weighted freeze-thaw average loss shall not exceed 12 percent.
- (10/26/2016)

47. **Ice Hot Weather Concreting, Item 501.1000.S.**

Conform to standard spec 501.3.8.2 except the department will pay for ice at the contract unit price under the Ice Hot Weather Concreting bid item. This special provision only applies to work done under the following contract bid items:

Concrete Masonry Bridges  
Concrete Masonry Bridges HES  
Concrete Masonry Culverts  
Concrete Masonry Culverts HES  
High Performance Concrete (HPC) Masonry Structures

Concrete Masonry Retaining Walls  
Concrete Masonry Retaining Walls HES  
Concrete Masonry Endwalls  
Concrete Masonry Overlay Decks

*Replace standard spec 501.4 and 501.5 with the following:*

#### **501.4 Measurement**

The department will measure Ice Hot Weather Concreting by the pound, acceptably completed, measured only if the conditions prescribed in standard spec 501.3.8.2 are met.

#### **501.5 Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
501.1000.S	Ice Hot Weather Concreting	LB

Payment for Ice Hot Weather Concreting is full compensation for ice used to cool concrete placed in hot weather as specified in standard spec 501.3.8.2.

The department will not pay directly for the concrete specified under this section. Concrete is incidental to the various bid items using it. Payment under those bid items includes providing all materials, including aggregates and associated aggregate source testing, cement, fly ash, slag, and admixtures; for preparing, transporting, storing, protecting and curing concrete; and for contractor requirements related to testing specified in standard spec 501.3.10.

If required to remove and replace any concrete damaged by lack of proper protection. Perform this work at no expense to the department.

501-010 (20151210)

### **48. Sawing Pavement Deck Preparation Areas, Item 509.0310.S.**

#### **A Description**

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

#### **B (Vacant)**

#### **C Construction**

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

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

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

#### **D Measurement**

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

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

## **E Payment**

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

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

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

stp-509-070 (20180628)

## **49. Concrete Masonry Deck Repair, Item 509.2100.S.**

### **A Description**

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

### **B Materials**

#### **B.1 Neat Cement**

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

#### **B.2 Concrete**

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

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

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

### **C Construction**

#### **C.1 Neat Cement**

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

#### **C.2 Placing Concrete**

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

#### **C.3 Curing Concrete**

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

### **D Measurement**

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

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

The department will not measure wasted concrete.

## E Payment

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

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

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

stp-509-060 (20191121)

## 50. Polymer Overlay, Item 509.5100.S.

### A Description

This special provision describes providing 2 layers of a 2-component polymer overlay system to the bridge decks the plans show.

### B Materials

#### B.1 General

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

#### B.2 Polymer Resin

Furnish a polymer resin base and hardener composed of 2-component, 100 percent solids, 100 percent reactive, thermosetting compound with the following properties:

Property	Requirements	Test Method
Gel Time <sup>[1]</sup>	15 - 45 minutes @ 73° to 75° F	ASTM C881
Viscosity <sup>[1]</sup>	7 - 70 poises	ASTM D2393, Brookfield RVT, Spindle No. 3, 20 rpm
Shore D Hardness <sup>[2]</sup>	60-75	ASTM D2240
Absorption <sup>[2]</sup>	1% maximum at 24 hr	ASTM D570
Tensile Elongation <sup>[2]</sup>	30% - 70% @ 7 days	ASTM D638
Tensile Strength <sup>[2]</sup>	2000 to 5000 psi @ 7 days	ASTM D638
Chloride Permeability <sup>[2]</sup>	< 00 coulombs @ 28 days	AASHTO T277

<sup>[1]</sup> Uncured, mixed polymer binder

<sup>[2]</sup> Cured, mixed polymer binder

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

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

<sup>[1]</sup> Based on samples cured or aged and tested at 75°F

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

### B.3 Aggregates

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

**Aggregate Properties**

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

<sup>[1]</sup> Sampled and tested by the department before placement.

**Gradation**

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

### B.4 Approval of Bridge Deck Polymer Overlay System

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

#### B.4.1 Product Data Sheets and Specifications

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

#### B.4.2 Certified Report of Test or Analysis

Conform to the following:

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

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

## C Construction

### C.1 General

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

Conform to the following:

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

Pre-Installation Meeting: Conduct a pre-installation meeting with the manufacturer's representative and the engineer before construction. Discuss the field review findings, verification testing of the surface preparation and establish procedures for maintaining optimum working conditions and

coordination of work. Furnish the engineer a copy of the recommended procedures and apply the overlay system according to the manufacturer's instructions. Supply for the engineer's use for the duration of the project, a Concrete Surface Profile (CSP) chip set of 10 from the International Concrete Repair Institute (ICRI).

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

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

## **C.2 Deck Preparation**

### **C.2.1 Deck Repair**

Remove all asphaltic patches and unsound or disintegrated areas of the concrete decks as the plans show, or as the engineer directs. Work performed to repair the concrete deck will be paid for under other items. Ensure that products used for deck patching are compatible with the polymer overlay system.

NOTE: Some polymer systems require concrete patch material to be in place a minimum of 28 days before overlaying - contact polymer manufacturer before completing deck patching/repair.

### **C.2.2 Surface Preparation**

Determine an acceptable shotblasting machine operation (size of shot, flow of shot, forward speed, and/or number of passes) that provides a surface profile meeting CSP 5 (medium-heavy shotblast) according to the ICRI Technical Guideline No. 310.2. If the engineer requires additional verification of the surface preparation, test the tensile bond strength according to ASTM C1593. The surface preparation will be considered acceptable if the tensile bond strength is greater than or equal to 250 psi or the failure area at a depth of 1/4 inches or more is greater than 50 percent of the test area. Continue adjustment of the shotblasting machine and necessary testing until the surface is acceptable to the engineer or a passing test result is obtained.

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

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

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

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

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

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

### **C.2.3 Transitional Area**

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

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

### C.3 Overlay Application

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

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

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

The polymer overlay shall consist of a 2-course application of polymer and aggregate. Each of the 2 courses shall consist of a layer of polymer covered with a layer of aggregate in sufficient quantity to completely cover the polymer. Apply the polymer and aggregate according to the manufacturer's requirements. Apply the overlay using equipment designed for this purpose. The application machine shall feature positive displacement volumetric metering and be capable of storing and mixing the polymer resins at the proper mix ratio. Disperse the aggregate using a method that provides a uniform, consistent coverage of aggregate and minimizes aggregate rolling or bouncing into final position. First course applications that do not receive enough aggregate before the polymer gels shall be removed and replaced. A second course applied with insufficient aggregate may be left in place but will require additional applications before opening to traffic.

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

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

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

### C.4 Application Rates

Apply the polymer overlay in 2 separate courses according to the manufacturer's instructions, but not less than the following rate of application.

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

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

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

## C.5 Minimum Curing Periods

As a minimum, cure the coating as follows:

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

If faster cure times are desired and achievable, submit to the engineer a certified test report from an independent laboratory showing the material is able to reach a compressive strength of 1,000 psi as tested per ASTM C 579 Method B within the temperature ranges and cure times for which the product is proposed to be placed. Establish ambient air, material, and substrate temperatures from the manufacturer for field applications. Field applications will not be allowed below the documented temperatures.

## C.6 Repair of Polymer Overlay

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

## D Measurement

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

## E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
509.5100.S	Polymer Overlay	SY

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

The department will pay separately for Concrete Deck Repair.

509-030 (20170615)

## 51. Cleaning Parapets, Item 509.9050.S.

### A Description

This special provision describes cleaning the inside faces and top surface of the concrete parapet as the plans show and as the engineer directs.

### B (Vacant)

### C Construction

#### C.1 Blast Cleaning Operation

Blast clean the inside face and top surface of the concrete parapet according to SSPC SP-13 and ASTM D4259 for an abrasive blast cleaning to a surface roughness and finish as the engineer directs. Before abrasive blast cleaning operations are to begin for the entire bridge parapet, prepare a representative trial area on the parapet concrete surface, and have the method of blast cleaning approved by the engineer.

After abrasive blast cleaning operations are completed, clean the prepared parapet surface with water according to ASTM D4258. Remove with this water cleaning all dust and loose material from the parapet inside face and top that is to be coated with pigmented surface sealer. Provide an adequate drying time of the parapet inside face and top surface of at least 24 hours before coating with the pigmented surface sealer. Remove all loose concrete, dirt, dust, or blast material that remains on the bridge deck, as the engineer directs.

## **C Construction**

### **C.1 General**

Furnish, prepare, apply, cure, and store all materials according to the product manufacturer's specifications for the type and condition of application required.

Match or exceed the stain manufacturer's minimum recommended curing time of the concrete or 28 days, whichever is greater, before staining.

### **C.2 Preparation of Concrete Surfaces**

Provide a sack rubbed finish as specified in standard spec 502.3.7.5, using mortar as indicated above on concrete surfaces with open voids or honeycombing.

Following the sack rubbing, clean all concrete surfaces that are to be coated to ensure that the surface is free of all laitance, dirt, dust, grease, efflorescence, and any foreign material and that the surface will accept the coating material according to product requirements. As a minimum, clean the surface using a 3,000 psi water blast. Hold the nozzle of the water blaster approximately 6 inches from the concrete surface and move it continuously in a sweeping motion. Give special attention to smooth concrete surfaces to produce an acceptable surface texture. Correct any surface problems resulting from the surface preparation methods. Grit blasting of the concrete surface is not allowed.

### **C.3 Staining Concrete Surfaces**

Apply the concrete stain according to the manufacturer's recommendations.

Apply the concrete stain when the temperature of the concrete surface is 45° F or higher, or as given by the manufacturer.

The color of the stain shall be as given on the plan. Tint the base coat to match the finish coat; the two coats shall be compatible with each other.

Do not begin staining the structure until earthwork operations are completed to a point where this work can begin without receiving damage. Where this work is adjacent to exposed soil or pavement areas, provide temporary covering protection from overspray or splatter.

### **C.4 Test Areas**

Before applying stain to the structure, apply the stain to sample panels measuring a minimum of 48 inches by 48 inches and constructed to demonstrate workmanship in the use of the form liner specified on the structure if applicable. Match or exceed the stain manufacturer's minimum recommended curing time of the concrete or 28 days, whichever is greater, before staining. Prepare the concrete surfaces of the sample panels and apply stain using the same materials and in the same manner as proposed for the structure, including staining of the joints between the stones produced by the form liner if applicable. Do not apply stain to the structure until the department approves the test panels.

### **C.5 Surfaces to be Coated.**

Apply concrete stain to the surfaces according to the plan.

## **D Measurement**

The department will measure Concrete Staining (Structure) in area by the square foot of surface, acceptably prepared and stained.

## **E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
517.1010.S.700	Concrete Staining B-13-462	SF
517.1010.S.701	Concrete Staining B-13-463	SF
517.1010.S.702	Concrete Staining S-13-509	SF
517.1010.S.703	Concrete Staining S-13-510	SF

Payment is full compensation for furnishing and applying the two coat system; for preparing the concrete surface; and for preparing the sample panels.

517-110 (20140630)

### 53. Apron Endwalls for Culvert Pipe Reinforced Concrete 18-Inch

*Supplement standard spec 520.3.5 with the following:*

- (4) The installation of the 18-inch reinforced concrete apron endwall at Station 1529+97.40'BBW', 10.82 feet RT (02.02.04T) during Stage 1A of Project 1007-12-80 is a temporary condition. The final installation of the apron endwall is at Station 1527+90.00'BBW', 37.50 feet RT (02.02.04) during Stage 3A. The temporary installation of the apron endwall during Stage 1A and its removal in Stage 3A is incidental to the installation of the apron endwall at its final location.

### 54. Reseal Crushed Aggregate Slope Paving, Item 604.9015.S.

#### A Description

This special provision describes sealing existing crushed aggregate slope paving as the engineer directs and conforming to standard spec 604as modified in this special provision.

#### B Materials

Furnish materials conforming to standard spec 604.2.

#### C Construction

Clean all debris from the surface of the slope paving before applying asphalt. Apply sufficient asphalt so that it penetrates to seal the top 2 inches of aggregate; where existing asphalt is closer to the surface of the aggregate, apply less asphalt.

#### D Measurement

The department will measure Reseal Crushed Aggregate Slope Paving in area by the square yard of slope paving, acceptably resealed.

#### E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
604.9015.S	Reseal Crushed Aggregate Slope Paving	SY

Payment is full compensation for cleaning the surface; furnishing and applying the asphalt.

stp-604-015 (20100709)

### 55. Fence Safety, Item 616.0700.S.

#### A Description

This special provision describes providing plastic fence at locations the plans show.

#### B Materials

Furnish notched conventional metal "T" or "U" shaped fence posts.

Furnish fence fabric meeting the following requirements:

<b>Color:</b>	International orange (UV stabilized)
<b>Roll Height:</b>	4 feet
<b>Mesh Opening:</b>	1 inch min to 3-inch max
<b>Resin/Construction:</b>	High density polyethylene mesh
<b>Tensile Yield:</b>	Avg. 2,000 lb per 4-foot width (ASTM D638)
<b>Ultimate Tensile Strength:</b>	Avg. 3,000 lb per 4-foot width (ASTM D638)
<b>Elongation at Break (%):</b>	Greater than 100% (ASTM D638)
<b>Chemical Resistance:</b>	Inert to most chemicals and acids

## C Construction

Drive posts into the ground 12 to 18 inches. Space posts at 7 feet.

Use a minimum of 3 wire ties to secure the fence at each post. Weave tension wire through the top row of strands to provide a top stringer that prevents sagging.

Overlap 2 rolls at a post and secure with wire ties.

## D Measurement

The department will measure Fence Safety by the linear foot along the base of the fence, center-to-center of posts, 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
616.0700.S	Fence Safety	LF

Payment is full compensation for furnishing and installing fence and posts; maintaining the fence and posts in satisfactory condition; and for removing and disposing of fence and posts at project completion.

616-030 (20160607)

## 56. Maintenance and Repair of Haul Roads.

*Revise standard spec 618.3.1 as follows:*

The contractor shall provide the engineer a detailed map of all proposed haul roads including the type of trucking operation and expected durations at least 10 days prior to the commencement hauling operations. The contractor will update hauling information mapping as needed. The engineer will contact the local maintaining authority to discuss the condition of the road and will video tape the haul road condition prior to hauling. Digital copies of this video will be made available to the maintaining authorities. Contractor will video tape the haul road after hauling operations conclude, and digital copies of this video will be made available to the maintaining authorities, to assess the condition of the roadway.

## 57. Furnishing and Planting Plant Materials.

The work covered by this special provision is according to standard spec 632 except as hereinafter specified.

*Supplement standard spec 632.2.2.1 with the following:*

All plant material must conform to American Standard for Nursery Stock, ANSI Z60.1-2014 for type, shape, and height.

Provide plants grown within the states of Wisconsin, Minnesota, Michigan, or parts of northern Illinois, Indiana or Ohio located within Zone 5 of the "Plant Hardiness Zone Map" produced by the United States Department of Agriculture, Miscellaneous Publication No. 1475, issued January 1990, updated January 24, 2012.

*Modify paragraph (1) of standard spec 632.2.2.2 as follows:*

Collected grown stock is not allowed.

*Supplement standard spec 632.2.2.4 as follows:*

Requests for substitution(s) of root category (i.e. bare root vs. balled and burlapped) must be documented in writing to the Corridor Vegetation Inspector. Approval of a root category substitution is required, and the department may execute a contract change order to adjust contract unit prices for the substituted materials.

Requests for substitution(s) of plant species must include written documentation from at least three nurseries stating that the plant species is unavailable in some or all the quantities as specified. Include the nursery's contact information with the documentation. The engineer may authorize specific substitute plants or may extend the contract time to ensure availability of the plants shown on the plans. Provide substitutions of equal quality to the initially specified materials.

*Supplement standard spec 632.2.2.8 with the following:*

Plants with undersized, insufficient, unbalanced, damaged, or improperly stored, transported or handled root systems will be rejected.

To prevent stem-girdling roots over time, plants with encircling roots that cannot be properly repositioned during installation will be rejected.

*Supplement standard spec 632.2.2.9.1 with the following:*

Plants must be protected from excessive vibrations. Plants shall not be thrown or bounced off a truck or loader to the ground. Plants shall not be dragged, lifted, or pulled by the trunk or foliage parts in a manner that will loosen the roots in the ball.

Ensure there is adequate drainage in the planting holes and bed areas. For suspected drainage problems, perform a percolation test by filling a 16-inch-deep planting hole with water and measure the time it takes for the water to drain from the hole. Adequate drainage will be equal to or greater than ½-inch per hour. If drainage does not meet these requirements, request approval from the Corridor Vegetation Inspector to either relocate or remove the planting location(s).

*Supplement standard spec 632.2.2.9.3 with the following:*

Roots cannot extend more than 4 inches beyond the burlap.

Numerous larger diameter root stubs must not be present.

Roots must fill the soil ball.

Plant must be no more than 10% off center in the soil ball, unless the ball is oversized allowing a centered plant within the minimum radius spread for the root type as specified in the plans.

*Replace standard spec 632.2.3.1 with the following:*

Compost shall conform to the bid item Compost.

*Remove standard spec 632.2.3.2, and 632.2.3.4.*

*Remove standard spec 632.2.3.3 (1) and replace standard spec 632.2.3.3 (2) with the following:*

Soil from the plant hole excavation may be used for backfill provided it conforms to the requirements below:

1. Not altered, compacted to root limiting density, or contaminated before or during the construction process.
2. Considered acceptable for planting and long-term health of the plant
3. Free of gravel, roots, rocks larger than 1 inch, subsoil, debris, large weeds and foreign matter.
4. Friable loam.
5. Acidity range (pH) of 6.1 to 7.5.

*Remove standard spec 632.2.4.1.*

*Supplement standard spec 632.2.6 with the following:*

Mulch shall be hardwood chip mulch. Provide fibrous wood mulch not containing manufactured boards or chemically treated wood, including but not limited to wafer board, particle board, and chromated copper arsenate (CCA) or penta-treated wood. Ensure that the material does not contain bark of black walnut trees.

*Replace standard spec 632.2.9(1) with the following:*

Rodent protection consists of wire mesh material embedded and staked into the ground as shown in the construction detail in the plans.

*Delete standard spec 632.2.14.*

*Add new standard spec 632.2.16:*

Topsoil Special shall conform to the bid item Topsoil Special.

*Supplement standard spec 632.3.1 with the following:*

Prior to proceeding with plant installation work and to the satisfaction of the Corridor Vegetation Inspector, schedule and perform a "Competency Test" demonstrating acceptable plant installation methods for each root category applicable to this project. The test will include handling plants, digging holes and beds, installing plants, initial watering, installing applicable protection materials, and mulching.

If the planting is not completed within the specified calendar windows the department will assess daily damages in the amount of \$1,000 per day. The department will assess these damages for each day the planting remains incomplete outside the specified calendar windows except when the department extends the required time period.

*Supplement standard spec 632.3.2 with the following:*

Store any trees or shrubs delivered before use in a way that protects them from damage by heat, moisture, rodents, or other causes. The storage locations and requirements are described elsewhere in these special provisions. Discard and replace, at no cost to the department, any previously accepted plant material that becomes damaged. Plant material should not be stored on site more than seven days.

*Replace standard spec 632.3.3 with the following:*

Notify the Corridor Vegetation Inspector at least 1 month prior to scheduled planting activity, and after utility locates, to initiate layout and staking. The department will stake out select locations of tree pits, plant holes and plant beds as indicated by coordinate points on the plans. At least 10 days prior to proposed planting, using the department provided stakes, stake the remaining locations of proposed trees and the edges of proposed shrub masses. Mark tree locations with flags or wood stakes that are labeled with each tree species abbreviation, per the planting plan.

At least 7 days prior to scheduled planting activity and after locating is complete, setup a field meeting with the Corridor Vegetation Inspector to review the marked locations.

The Corridor Vegetation Inspector will review the tree, shrub, and bed layout(s) and direct adjustments as required.

All tree, shrub, and bed locations must be reviewed by the Corridor Vegetation Inspector before planting begins.

Changes to tree, plant and bed locations to account for unforeseen localized and seasonal conditions that may hinder plant establishment must be brought to the attention of the Corridor Vegetation Inspector for concurrence.

*Replace paragraph (2) of standard spec 632.3.4 with the following:*

Unless otherwise instructed, remove all existing plant material, root thatch, and non-soil debris from the surface of the planting holes using equipment that does not increase compaction of soil to root limiting levels.

Excavate planting holes as shown in the plan details, and to minimum widths shown in the plant data charts. The planting hole diameter for trees shall be at least three times the diameter of the root ball or 8-ft minimum. The soil shall be loosened beyond the edge of the planting hole. Excavation may be done by shovel, backhoe, or stump grinder, but a soil auger may not be used.

Protect the excavated soil from compaction, contamination, and degradation during the planting process.

For balled and burlapped (B&B) plants, determine the depth of plant hole by measuring the distance from the point at which the trunk flare begins to the bottom of the ball and subtracting 2 inches.

Excavated planting holes that will be left open when work is not in progress or pose an immediate and considerable hazard to pedestrians or vehicles shall be adequately barricaded with appropriate warning devices.

*Remove standard spec 632.3.4 (4).*

*Replace paragraph (2) of standard spec 632.3.7 with the following:*

Place the plant in the plant hole with its most desirable face towards the most prominent view and hold it in a vertical position. Place B&B plants while in their wrapped ball. Move and handle only by the ball. Set the plant so that, after settling, the plant root collar is at or 2 inches above the surrounding ground level, as specified in 632.3.4. For B&B plants, loosen the burlap to the top of the ball and locate the plant root collar. Remove excess soil without damaging the plant if the plant root collar is buried less than 4 inches into the root ball soil. If root collar is buried in the root ball soil more than 4-inches, it will be rejected. Keep the root ball intact until it is secure in the hole.

Test the soil ball by pulling on the stem or crown of the ball. If the stem or crown moves and the ball does not, the ball is broken and will be rejected.

The soil pad on which the B&B soil ball or root ball will be placed shall be of undisturbed soil or on a layer of hand-compacted soil measuring at least 300 psi with a soil penetrometer in moist soil. The plant shall be set plumb and in proper alignment. Carefully set the plant in the hole so that the trunk flare is 2 inches above the finished grade. Remove burlap, twine, and pins from top half of rootball only, retain on bottom. Cut and remove top half of wire basket. Do not remove the wire basket by pulling on the root ball. Cut the burlap and wire away; do not fold onto the soil and do not leave any protruding points of wire which could cause injury. Remove plastic wrap around ball. Remove wire and other non-degradable materials.

Vertically slice through any remaining burlap at 6-inch intervals around the ball in a manner that does not damage the roots.

Prior to planting balled and potted (B&P) or container grown (CG) plants, remove the plastic, metal, or biodegradable container. If roots are crowded or coiled on the bottom, sides, or surface of the root ball, gently separate from the edges or surface.

*Replace paragraph (3) of standard spec 632.3.7 with the following:*

Backfill the plant hole with material from the hole excavation if it conforms to the requirements specified elsewhere in this article

If directed by the Corridor Vegetation Inspector, add 4-inches of Compost to the cultivated planting holes and planting beds. Use a spading machine to incorporate compost to a depth of at least 12 inches, as measured from the finished grade elevation of the soil.

Use backfill material Topsoil Special for all planting bed locations and other locations shown in the plans. Request approval from the Corridor Vegetation Inspector to use Topsoil Special in tree pits containing unsatisfactory in-situ material.

When plant is set, backfill the space around the root ball. Place backfill in 6-inch lifts around base and sides of ball and work each layer to settle backfill and eliminate voids and air pockets, lightly compacted to 150 - 200 psi as measured with a soil penetrometer in moist soil. Tamp each soil layer in a way that avoids injuring the roots or ball or disturbing the plant position. When excavation is approximately three quarters full, fill excavation with water and let drain before placing remainder of backfill to final grade. Thoroughly water the soil and root ball immediately after planting. After settling, provide additional backfill to bring back to final grade.

Once the tree or shrub is set and backfilled, remove any corrugated cardboard, rope, string, or twine from around the trunk.

To complete backfilling, smooth the surface soil with a rake and check to ensure that the trunk flare is completely exposed and that the top of the rootball is not covered with soil. Build a soil "saucer" at the root ball periphery to retain water and allow it to soak down to the roots.

Any remaining burlap must be completely covered with soil. If exposed to the air, it will dry out, potentially wicking moisture from the ball and making it difficult to re-wet. If the root collar is deep in the ball and the ball planted high as a result, soil will have to be mounded above grade to assure the burlap is covered.

*Supplement paragraph (5) of standard spec 632.3.7 with the following:*

After planting, water the planting area deeply. Newly planted trees and shrubs must receive adequate water during the establishment period.

*Supplement standard spec 632.3.9 as follows:*

Shovel cut an edge around the perimeter of planting beds at the locations shown on the plans. Manually, or machine cut, edge to a minimum width and depth as shown in the plan detail. Fill shovel cut edge with the appropriate mulch and finish approximately 2 inches below adjacent lawn grades. Tamp mulch lightly and add additional mulch, as necessary, so that the final level of the mulch, after compacting, is level with adjacent lawn grades.

Place the hardwood chip mulch immediately after planting.

*Replace standard spec 632.3.13(1) with the following:*

Place rodent protection around deciduous, pine, and Baldcypress trees according to the detail shown in the plans.

*Supplement standard spec 632.3.14 with the following:*

Brace trees as shown in the plans.

*Delete standard spec 632.3.15.*

*Delete standard spec 632.3.17.*

*Delete the 2<sup>nd</sup> to last sentence of standard spec 632.5.1 (2).*

*Supplement standard spec 632.5.1 (2) with the following:*

Payment for Topsoil Special will be paid for separately.

Payment for Compost will be paid for separately.

*Delete standard spec 632.5.3.*

## **58. Plant Delivery and Temporary Storage.**

*Supplement standard spec 632.3.2 with the following:*

Determine location(s) for delivery of the trees, shrubs, and seeds, and submit the location(s) to the Corridor Vegetation Inspector for approval. The delivery location(s) may be on the public right-of-way or private property. The delivery location(s) must not directly access to/from IH 39. The location(s) shall be secure, shaded, have water available for tree and shrub irrigation, and provide easy access for the department. The plant material must be planted within seven days of when the material is delivered to the plant material delivery location(s).

Each delivery location(s) must be approved by the Corridor Vegetation Inspector through the Erosion Control Implementation Plan (ECIP) or an ECIP amendment.

## **59. Landscape Planting Surveillance and Care Cycles.**

The work covered by this special provision is according to standard spec 632 except as hereinafter specified.

*Replace paragraph (1) of standard spec 632.3.18.1.1 with the following:*

A plant establishment period of one year shall follow the completion of planting.

*Delete standard spec 632.3.18.1.2.*

*Replace the 1<sup>st</sup> sentence of standard spec 632.3.18.1.3 with the following:*

The plant establishment period for material planted in the spring shall extend until June 15 of the succeeding year

*Supplement standard spec 632.3.19.1 with the following:*

Properly care for trees and shrubs from the time of planting and during the plant establishment period.

Leaning trees and shrubs shall be reset to proper grades and upright position.

Edges between mulch and lawn areas shall be maintained in smooth neat lines as originally shown on the drawings.

Prune to ANSI A300 standard practices for tree care operations – tree, shrub and other woody plant maintenance.

Prevent or repair ruts and other damage due to installation that may lead to soil erosion and weed infestation.

Top dress all mulched areas with 1"-2" of specified mulch material immediately prior to the end of the surveillance and care period.

Mow a 5-foot band of turf around the shrub bed limits. Mow to a 4-inch height when the turf height exceeds 9-inches. This requirement applies to standard turf grass only. Native prairie mowing specifications are described elsewhere. Contractor shall not as part of mowing operations, throw grass/vegetation clippings into mulched bed areas.

Perform a complete and thorough spring clean-out of all planting beds that contain trees, shrubs, perennials, ornamental grasses and/or bulbs. Perform spring clean-out during the first care cycle or as soon as weather and growing season conditions permit. Do not perform spring clean-out until the ground is no longer saturated from the spring thaw; walking on saturated soil will result in compaction. Ensure that Spring clean-out includes removal of past-season herbaceous material that was left standing over winter, cutting back ornamental grasses to within 3-inches of the mulched surface, removing any material damaged over the winter by pruning according to the language outlined in standard spec 632, removal of trash or other debris that has accumulated in planting beds, removal of leaves or other plant debris that has accumulated on the top of the mulched surface, weeding, and any and all other obsolete temporary

erosion control devices, rocks and clean-out and maintenance operations as directed by the Corridor Vegetation Inspector.

Perform a complete and thorough fall clean-out of all planting beds that contain trees, shrubs, perennials, ornamental grasses and/or bulbs. Perform fall clean-out during the last care cycle. Do not perform fall clean-out if the soil is saturated from rain event; wait until the soil moisture levels have gone down before performing the final bed clean-out. Ensure that fall clean-out includes coordination with the Corridor Vegetation Inspector to determine which herbaceous perennial and ornamental grass material to leave standing through the winter and which to cut back to the ground. Weed planting beds as necessary. Remove any material damaged during the growing season by pruning according to the language outlined in standard spec 632. Remove trash, leaves, plant debris and other debris that has accumulated on the top of the mulched surface.

*Delete the 2<sup>nd</sup> sentence of paragraph (8) of standard spec 632.3.19.1.*

*Add to the end of paragraph (9) of standard spec 632.3.19.1:*

Unless directed otherwise by the Corridor Vegetation Inspector.

*Replace item 3. of paragraph (10) of standard spec 632.3.19.1 with the following:*

Following the completion of each care cycle, fill out the department provided worksheet "Tree and Shrub Scouting Report". Complete one worksheet per site, sign the worksheet, and submit to the Corridor Vegetation Inspector.

At end of establishment period, include required attachments, a written summary of management efforts for the year, a written summary of management recommendations for the following years, locations and description of areas of concern. Submit to the Corridor Vegetation Inspector for review and approval.

*Supplement standard spec 632.3.19.2 with the following:*

The department will assess daily damages in the amount of \$1,000.

*Replace paragraph (1) of standard spec 632.3.20 with the following:*

The Corridor Vegetation Inspection will inspect trees and shrubs according to the following minimum requirements and the inspection schedule below.

- Plant sizes and standards shall adhere to the American Standards for Nursery Stock.
- All plants are the species and quantity specified unless the Corridor Vegetation Inspector approves changes. Conform to 632.3.19 and this article for proper care of plants.
- Deciduous trees shall exceed the minimum size of the specified size range and shall have fully matured, average-sized, healthy leaves distributed throughout the branch system as is typical of the species.
- Deciduous shrubs shall exceed the requirements of the specified size range and have mature, average-sized leaves typically distributed throughout the branch system.
- Evergreens shall exceed the minimum size of the specified size range and all coniferous types shall have fully developed, mature needles, and average-sized buds on current season's growth.
- Trees and shrubs found to be dead, in unhealthy condition, or not conforming to minimum form and size standards shall be replaced. Any tree with a dead main leader or a crown that is 25% or more dead, shall be replaced.

Tree & Shrub Inspection Schedule		
Activity	Spring	Fall
Planting (per 632.3.1)	Up to June 1	Sept. 1 to freeze
Interim Inspection	September 15	May 15
Plant Replacement	October 1	June 1
Final Inspection	May 15	September 15
Final Replacement	June 1	October 1

Schedule inspections with the Corridor Vegetation Inspector at least two weeks prior to the inspection.

*Replace paragraph (2) of standard spec 632.3.20 with the following:*

Remove and replace plants as ordered by the Corridor Vegetation Inspector during the interim and final inspections that are not conforming to the above requirements. Use the same materials and methods for replacement plantings as specified for the original plantings or as approved by Corridor Vegetation Inspector

Removal and replacement of living snow fence plantings is not required.

*Replace paragraph (2) of standard spec 632.4 with the following:*

The department will measure Landscape Planting Surveillance and Care Cycles as each individual care cycle acceptably completed. Each tree and shrub, as shown in the plans, shall receive the specified number of care cycles listed in the plan quantities.

## 60. Signs Type I and II.

Furnish and install aluminum vertical support beams for type II signs on overhead sign supports incidental to sign. For type II signs on sign bridges use aluminum vertical support beams incidental to sign.

*Modify standard spec 637.2.4 with the following:*

Use stainless steel bolts, washers and nuts for type I and type II signs mounted on sign bridges or type I signs mounted on overhead sign supports. Use clips on every joint for Sign Plate A 4-6 when mounted on a sign bridge or overhead sign support. Inspect installation of clips and assure bolts and nuts are tightened to manufacturers recommended torque values.

*Replace standard spec 637.2.4.1(2)2 with the following:*

Clips may be either stainless steel or ASTM B 108, aluminum alloy, 356.0-T6.

## 61. Blue Specific Service Signs.

*Add the following to standard spec 638.3.4:*

Do not remove or move blue specific service signs or their associated posts. Specific service signs are signs with logos that identify commercial entities providing gas, food, lodging, camping, or attractions. A separate contractor, Interstate Logos - Wisconsin, is responsible for these signs. Contact Interstate Logos - Wisconsin at (844) 496-9163 a minimum of 14 calendar days in advance to coordinate removing, moving, or re-installation of these signs.

The contractor is responsible for damage done to these signs due to contractor operations.

stp-638-010 (20150630)

## 62. Field Facilities.

Prior to April 1, 2021, for 1007-12-79 and 1007-12-80, utilize the existing field facilities provided by the contractor under 1007-12-78. Provide field facilities for the project starting April 1, 2021 through April 1, 2022.

*Add the following to standard spec 642 with the following:*

For field offices without handwashing facilities, provide and maintain a portable handwashing station at every project field office. The station shall include a hands-free sink with foot pump-operated faucet, soap dispenser, paper towel dispenser, fresh water supply, and collection tank for gray water. Regularly service and maintain the handwashing station and all supplies as needed, and properly dispose of all materials. Costs associated with the handwashing station are incidental to the field office bid item.

*Replace standard spec 642.2.1 (4) with the following:*

Provide and maintain suitable interior sanitary facilities conforming to State and local health requirements, in clean and good working condition, provide a weekly cleaning service, and stock with sanitary supplies for the duration of the contract.

*Supplement standard spec 642.2.2.1 (3) with the following:*

Provide CAT 5 services with a minimum of six CAT 5 receptacles.

*Supplement standard spec 642.2.2.1 (4) with the following:*

Provide and maintain a plain-paper photocopier with scanner that uses toner not ink, has auto-feed capability, and can output a PDF of a copied or scanned document.

*Add standard spec 642.2.2.1 (6) as follows:*

Provide a field office having an adjacent hard surface parking facility with a minimum capacity of 16 passenger vehicles.

*Replace standard spec 642.2.2.4 with the following:*

Under bid item Field Office Type D, furnish a facility with a minimum interior space of 1,500 square feet including a meeting room that is at least 20 feet by 20 feet; furnish indoor sanitary facilities that are housed within, or directly adjacent to, the field office; clean, maintain, and supply the field office and sanitary facilities weekly; and equip with the following:

- Ten suitable office desks with drawers and locks.
- Ten ergonomically correct office chairs in working condition according to standard spec 642.2.2.1 (4).
- Two 4-drawer file cabinets.
- Two 4-shelf bookcases.
- Four 2.5 x 5-foot (minimum) tables.
- Four 4 x 8-foot (minimum) tables for the meeting room.
- Twenty, or more, folding chairs.

*Add standard spec 642.3 (7) as follows:*

(7) Locate the field office to be within 3 miles of the IH 39 interchange with USH 12.

*Add standard spec 642.5 (4) as follows:*

- (4) Payment of the field office is full compensation for providing a weekly cleaning service for the field office and sanitary facilities, for providing sanitary supplies as necessary, for replenishing paper, toner cartridges, and other supplies before fully expended, for maintaining the photocopier/scanner in working order at all times and for providing and supporting CAT 5 services.

## **63. Traffic Control Signs.**

### **A Description**

This special provision describes mounting height requirements. Conform to standard spec 643, as modified in this special provision.

*Supplement standard spec 643.2.9.1(5) as follows:*

Provide associated advanced signing, including portable traffic control signing, according to the MUTCD. Mount all portable traffic control sign at a minimum height of 5 feet, measured from the bottom of the sign, above the edge of pavement.

(7/6/2014)

## **64. Nighttime Work Lighting-Stationary.**

### **A Description**

This special provision describes furnishing portable lighting as necessary to complete nighttime work. Nighttime operations consist of work specifically scheduled to occur after sunset and before sunrise.

### **B (Vacant)**

### **C Construction**

#### **C.1 General**

This provision shall apply when providing, maintaining, moving, and removing portable light towers and equipment-mounted lighting fixtures for nighttime stationary work operations, for the duration of nighttime work on the contract.

At least 14 days before the nighttime work, furnish a lighting plan to the engineer for review and acceptance. Address the following in the plan:

1. Layout, including location of portable lighting – lateral placement, height, and spacing. Clearly show on the layout the location of all lights necessary for every aspect of work to be done at night.
2. Specifications, brochures, and technical data of all lighting equipment to be used.
3. The details on how the luminaires will be attached.
4. Electrical power source information.
5. Details on the louvers, shields, or methods to be employed to reduce glare.
6. Lighting calculations. Provide illumination with average to minimum uniformity ratio of 5:1 or less throughout the work area.
7. Detail information on any other auxiliary equipment.

#### **C.2 Portable Lighting**

Provide portable lighting that is sturdy and free standing and does not require any guy wires, braces, or any other attachments. Furnish portable lighting capable of being moved as necessary to keep up with the construction project. Position the portable lighting and trailers to minimize the risk of being impacted by traffic on the roadway or by construction traffic or equipment. Provide lightning protection for the portable lighting. Portable lighting shall withstand up to 60 mph wind velocity.

If portable generators are used as a power source, furnish adequate power to operate all required lighting equipment without any interruption during the nighttime work. Provide wiring that is weatherproof and installed according to local, state, federal (NECA and OSHA) requirements. Equip all power sources with a ground-fault circuit interrupter to prevent electrical shock.

### **C.3 Light Level and Uniformity**

Position (spacing and mounting height) the luminaires to provide illumination with an average to minimum uniformity ratio of 5:1 or less throughout the work area.

Illuminate the area as necessary to incorporate construction vehicles, equipment, and personnel activities.

### **C.4 Glare Control**

Design, install, and operate all lighting supplied under these specifications to minimize or avoid glare that interferes with all traffic on the roadway or that causes annoyance or discomfort for properties adjoining the roadway. Locate, aim, and adjust the luminaires to provide the adequate level of illumination and the specified uniformity in the work area without the creation of objectionable glare.

Provide louvers, shields, or visors, as needed, to reduce any objectionable levels of glare. As a minimum, ensure the following requirements are met to avoid objectionable glare on the roadways open to traffic in either direction or for adjoining properties:

1. Aim tower-mounted luminaires, either parallel or perpendicular to the roadway, so as to minimize light aimed toward approaching traffic.
2. Aim all luminaires such that the center of beam axis is no greater than 60 degrees above vertical (straight down).

If lighting does not meet above-mentioned criteria, adjust the lighting within 24 hours.

### **C.5 Continuous Operation**

Provide and have available sufficient fuel, spare lamps, generators, and qualified personnel to ensure that the lights will operate continuously during nighttime operation. In the event of any failure of the lighting system, discontinue the operation until the adequate level of illumination is restored. Move and remove lighting as necessary.

### **D (Vacant)**

### **E Payment**

Costs for furnishing a lighting plan, and for providing, maintaining, moving, and removing portable lighting, tower mounted lighting, and equipment-mounted lighting required under this special provision are incidental to the contract.

643-010 (20100709)

## **65. Truck or Trailer-Mounted Attenuator, Item 643.1055.S.**

### **A Description**

This special provision describes protecting work operations with a truck or trailer-mounted attenuator (TMA).

### **B Materials**

Furnish and maintain a TMA conforming to NCHRP Report 350 test level 3 or to MASH crashworthiness criteria. Submit written certification from the manufacturer that the host vehicle/attenuator configuration provided conforms to crashworthiness criteria. Include the federal-aid reimbursement eligibility letter with that submittal.

Provide a host vehicle and mount the attenuator conforming to the attenuator manufacturer's specifications. Provide the engineer a copy of the manufacturer's specifications and installation instructions.

### **C Construction**

Coordinate with the engineer at least 72 hours before its intended use so the engineer can determine if the work operation requires TMA protection.

Position the attenuator at a manufacturer-recommended location in advance of a stationary work operation. Position and maintain the attenuator consistently at the manufacturer-recommended distance from a mobile work operation. Ensure that an operator stays with the host vehicle while protecting a mobile work operation.

## D Measurement

The department will measure Truck or Truck-Trailer-Mounted Attenuator by the day, acceptably completed, measured to the 1/2-day based on the engineer-determined time the attenuator is required to protect work operations. The department will measure 4 or less hours per calendar day as a half day and over 4 hours as a full day.

## E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
643.1055.S	Truck or Trailer-Mounted Attenuator	DAY

Payment is full compensation for providing the portable attenuator, host vehicle, and operator.

643-015 (20140630)

## 66. Basic Traffic Queue Warning System, Item 643.1205.S.

### A Description

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

### B Materials

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

#### B.1 Portable Traffic Sensors (PTS)

Provide PTS that are nonintrusive and capable of capturing individual vehicle speed (mph) and traffic volume. Integrate each sensor with a modem to communicate with the automated system manager.

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

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

#### B.3 Automated System Manager

Provide an ASM that assesses current traffic data captured by the PTS and activates/deactivates the FBS based on predetermined speed thresholds.

#### B.4 System Communications

Ensure Basic Traffic QWS communications meet the following requirements:

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

#### B.5 System Acceptance

Submit vendor verification to the engineer and Bureau of Traffic Operations ([DOTWorkzone@dot.wi.gov](mailto:DOTWorkzone@dot.wi.gov)) 14 calendar days before the pre-construction meeting that the system will adequately perform the functions specified in this special provision. Adequate verification includes past successful performance of the system, literature and references from successful use of the system by other agencies, and/or demonstration of the system.

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

## **C Construction**

### **C.1 General**

Install and reposition Basic Traffic Queue Warning System per plan with FBS and PTS spaced every mile starting one mile upstream of the taper and one PTS near the lane closure taper or as the engineer directs.

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

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

Promptly correct the system within 24 hours of becoming aware of a deficiency in the operation or individual part of the system. A minimum of three days before deployment, place the Basic Traffic QWS and demonstrate to the department that the Basic Traffic QWS is operational. Maintain the Basic Traffic QWS for the duration of the project. Ensure the system operates continuously (24 hours, 7 days a week) in the automated mode throughout the duration of the project.

Remove the system upon completion.

### **C.2 Reports**

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

### **C.3 Meetings**

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

### **C.4 Programming**

#### **C.4.1 General**

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

1. Provide a password protected login to the ASM, website and all other databases.
2. Provide real-time data from the ASM to a website with a full color mapping feature and refresh every 60 seconds. Make data on website available to the department staff at all times for the duration of the work zone activity. Ensure website includes:
  - Vehicle speeds
  - FBS triggers
  - Device locations
  - Traffic volume
3. Archive all traffic data in a Microsoft Excel format with date and time stamps.
4. Configure the website to quantify system failures which includes communication disruption between any devices in the system configuration, FBS malfunctioning, PTS malfunction, loss of power, low battery, etc.
5. Automatically generate and send an email alert any time a user specified queue is detected by the system.
6. Ensure the system autonomously restarts in case of any power failure.

#### **C.4.2 System Operation Strategy**

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

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

**Free Flow:**

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

**Slow or Stopped Traffic:**

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

**C.5 Calibration and Testing**

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

Send email of successful calibration and testing to the engineer.

**D Measurement**

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

**E Payment**

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

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

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

Failure to correct a deficiency to the FBS, PTS, or ASM within 24 hours after notification from the engineer or the department will result in a one-day deduction of the measured quantity for each day in which the deficiency is not corrected.

Failure to correct the website within 24 hours after notification from the engineer will result in a 10% reduction of the day quantity for each day the website is down.

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

stp-643-046 (20191121)

**67. Electrical Service Meter Breaker Pedestal Rest Area 22, Item 656.0200.01.**

*Replace standard spec 656.2.3, Meter Breaker Pedestal Service, paragraph (1) with the following:*

- (1) Furnish an approved service having a meter breaker pedestal, 22,000-AIC circuit breakers unless the local utility requires otherwise, grounding electrodes and connections, conduit and fittings, and all necessary conductors and equipment required by the WSEC and the utility for a service connection. Furnish a pedestal with a 100 A 2-pole main breaker and a 30 A spare breaker. When the meter breaker pedestal is energized, install an approved meter seal at all access points on the meter trough. Meter shall be time of use type.

**68. Intelligent Transportation Systems - General Requirements.****A Description****A.1 General**

This special provision describes providing elements for an Intelligent Transportation System (ITS) in or along the existing roadway as the plans show.

Unusual aspects of this project include:

1. The project includes working on cables and equipment that are carrying data between roadside equipment and the department's Statewide Traffic Operations Center (STOC). Interruption of this service is not expected to perform this work. If an interruption is determined necessary, it must be done on a weekend, and must be done in a way that minimizes communication outages for the existing equipment. Notify the department's STOC at least 48 hours in advance of the planned interruption.
2. The department will furnish some of the equipment to be installed. Make a reasonable effort to discover defects in that equipment before installing it.

## **A.2 Surge Protection**

Equip every ungrounded conductor wire entering or leaving any equipment cabinet with a surge protector. For purposes of this section, multiple cabinets on a single pole or foundation are considered a single cabinet.

## **B Materials**

### **B.1 General**

Only furnish equipment and component parts for this work that are new and have high quality workmanship. All controls, indicators, and connectors shall be clearly and permanently labeled in a manner approved by the engineer. All equipment of each type shall be identical.

All electrical equipment shall conform to the standards and requirements of the Wisconsin Electrical Code, the National Electrical Manufacturers Association (NEMA), National Electric Safety Council (NESC), Underwriter's Laboratory Inc. (UL) or the Electronic Industries Association (EIA), when applicable. All materials and workmanship shall conform to the requirements of the National Electrical Code (NEC), Rural Electrification Administration (REA), Standards of the American Society for Testing and Materials (ASTM), American Association of State Highway and Transportation Officials (AASHTO), requirements of the plans these special provisions, the standard specifications, and to any other codes, standards, or ordinances that may apply. All system wiring, conduit, grounding hardware and circuit breakers shall be in conformance with the National Electrical Code. Whenever reference is made to any of the standards mentioned, the reference shall be considered to mean the code, ordinance, or standard that is in effect at the time of the bid advertisement.

### **B.2 Outdoor Equipment**

All conductive connectors, pins (except pins connected by soldering), and socket contacts shall be gold plated. Acrylic conformal coating shall protect each circuit board side that has conductive traces. Except for integrated circuits containing custom firmware, all components shall be soldered to the printed circuit board.

To prevent galvanic corrosion, all connections between dissimilar metals shall incorporate a means of keeping moisture out of the connection. Where the connection need not conduct electricity, interpose a non-absorbing, inert material or washer between the dissimilar metals. Use nonconductive liners and washers to insulate fasteners from dissimilar metals. Where the connection must conduct electricity, use a conductive sealant between the dissimilar metals. Alternatively, use an insulating gasket and a bond wire connecting the two metal parts.

### **B.3 Custom Equipment**

Equipment that is not part of the manufacturer's standard product line, or that is made or modified specifically for this project, shall conform to the following requirements:

Where practical, electronics shall be modular plug-in assemblies to facilitate maintenance. Such assemblies shall be keyed to prevent incorrect insertion of modules into sockets.

All components shall be available from multiple manufacturers as part of the manufacturers' standard product lines. All must be clearly labeled with the value, part number, tolerance, or other information sufficient to enable a technician to order an exact replacement part.

Lamps used for indicator purposes shall be light-emitting diodes.

The printed circuit boards shall be composed of "two-ounce" copper on 1/16 inch thick fiberglass epoxy or equivalent type construction. Holes that carry electrical connections from one side of the boards to the other shall be completely plated through. Multilayer printed circuit boards shall not be used. The name or

reference number used for the board in the drawings and maintenance manuals supplied to the department shall be permanently affixed to each board.

All components shall be mounted so that the identifying markings are visible without moving or removing any part, if practical.

#### **B.4 Environmental Conditions**

Equipment shall continue to operate as specified under the following ranges of environmental conditions, except as noted in the specifications for individual pieces of equipment.

1. **Vibration and Shock:** Vehicle speed and classification sensors and any other equipment mounted atop poles or on structures shall not be impaired by the continuous vibration caused by winds (up to 90 mph with a 30 percent gust factor) and traffic.
2. **Duty Cycle:** Continuous
3. **Electromagnetic Radiation:** The equipment shall not be impaired by ambient electrical or magnetic fields, such as those caused by power lines, transformers, and motors. The equipment shall not radiate signals that adversely affect other equipment.
4. **Electrical Power:**
  - 4.1. **Operating power:** The equipment shall operate on 120-volts, 60-Hz, single-phase unless otherwise specified. It shall conform to its specified performance requirements when the input voltage varies from 89 to 135 volts and the frequency varies +3 Hz.
  - 4.2. **High frequency interference:** The equipment operation shall be unaffected by power supply voltage spikes of up to 150 volts in amplitude and 10 microseconds duration.
  - 4.3. **Line voltage transients:** The equipment operation shall be unaffected by voltage transients of plus or minus 20 percent of nominal line voltage for a maximum duration of 50 milliseconds. Equipment in the field shall meet the power service transient requirements of NEMA Standard TS-2 when connected to the surge protectors in the cabinets.
5. **Temperature and Humidity:**
  - 5.1. **Field equipment:** Equipment in the field shall meet the temperature and humidity requirements of NEMA Standard TS-2. Liquid crystal displays shall be undamaged by temperatures as high as 165 degrees F, and shall produce a usable display at temperatures up to 120 degrees F.
  - 5.2. **Equipment in Controlled Environments:** shall operate normally at any combination of temperatures between 50 degrees F and 100 degrees F, and humidity's between 5 percent and 90 percent, non-condensing, and with a temperature gradient of 9 degrees F per hour.

#### **B.5 Patch Cables and Wiring**

All cables and wiring between devices installed in a single cabinet, or in separate cabinets sharing a single concrete base, will be considered incidental to the installation of the devices and no separate payment will be made for them. It is anticipated that this will include fiber optic patch cables between termination panels and Ethernet switches, 10 / 100 MBPS Ethernet cables, RS-232 cables between individual devices and terminal servers, and power cables between individual devices and power sources within the cabinets.

#### **B.6 Surge Protection**

Low-voltage signal pairs, including twisted pair communication cable entering each cabinet shall be protected by two-stage, plug-in surge protectors and shall be installed on both ends of camera control cables. The protectors shall meet or exceed the following minimum requirements:

1. The protectors shall suppress a peak surge current of up to 10k amps.
2. The protectors shall have a response time less than one nanosecond.
3. The protector shall clamp the voltage between the two wires at a voltage that is no more than twice the peak signal voltage and clamp the voltage between each wire and ground at 50 volts.
4. The first stage of protection shall be a three-element gas discharge tube, and the second stage shall consist of silicon clamping devices.
5. The protector shall also contain a resettable fuse (PTC) to protect against excessive current.
6. There shall be no more than two pairs per protector.
7. It shall be possible to replace the protector without using tools.

Cables carrying power to curve signs shall be protected at the cabinet by grounded metal oxide varistors of appropriate voltages. The varistors must be at least 0.8 inch in diameter.

## **C Construction**

### **C.1 Thread Protection**

Provide rust, corrosion, and anti-seize protection at all thread assemblies of metallic parts by coating (non-spray) the mating surfaces with an approved compound. Failure to use an approved compound will result in no payment for the items to which coating was to have been applied.

### **C.2 Cable Installation**

When installing new cables into conduits containing existing cables, remove the existing cables and reinstall the existing cables simultaneously with the new cables. Take every precaution necessary to protect the existing cables. In the event of avoidable damage to the existing cables, replace all damaged cables, in-kind, at no additional expense to the department. When cables are pulled into conduit, use a cable pulling lubricant approved by the cable manufacturer. Submit documentation supporting manufacturer approval of the lubricant to the engineer.

### **C.3 Wiring**

Every conductor, except a conductor contained entirely within a single piece of equipment, must terminate either in a connector or on a terminal block. Provide and install the connectors and terminal blocks where needed, without separate payment. Use approved splice kits instead of connectors and terminal blocks for underground power cable splices.

Permanently label and key connectors to preclude improper connection. Obtain prior engineer approval for labeling methods before use.

Terminal blocks must be affixed to panels that permanently identify the block and what wire connects to each terminal. This may be accomplished by silk screening or by installing a laminated printed card under the terminal block, with the labels on portions of the card that extend beyond the block. Installation of terminal blocks by drilling holes in the exterior wall of the cabinet is not acceptable.

Use barriers to protect personnel from accidental contact with all dangerous voltages.

Do not install conductors carrying AC power in the same wiring harness as conductors carrying control or communication signals.

Arrange wiring, including fiber optic pigtails, so that any removable assembly can be removed without disturbing wiring that is not associated with the assembly being removed.

Communication and control cables may not be spliced underground, except where indicated on the plans.

Cables in the Statewide Traffic Operations Center or in communication hubs, which are not contained within a single cabinet, shall have at least 10 feet of slack.

### **C.4 System Operations**

If the contractor's operations unexpectedly interrupt Intelligent Transportation Systems (ITS) service, notify the engineer immediately and restore service within 24 hours. Repair all damaged facilities to the condition existing before the interruption. If service is not restored within 24 hours, the department may restore service to any operating device and deduct restoration costs from payments due the contractor.

### **C.5 Surge Protection**

Arrange the equipment and cabinet wiring to minimize the distance between each conductor's point of entry and its protector. Locate the protector as far as possible from electronic equipment. Ensure that all wiring between the surge protectors and the point of entry is free from sharp bends.

## **D Measurement**

The department will not measure the work performed under this special provision.

## **E Payment**

The department will pay for the work performed under this special provision under the contract ITS bid items.

stp-670-010 (20100709)

## **69. Intelligent Transportation Systems – Conduit.**

*Add the following to standard spec 671.2:*

### **671.2.4 Locate Wire**

Provide a No. 14 AWG stranded copper wire for future locate purposes through each conduit run. Connect the locate wire by using a wire nut at each pull box, manhole, or other access point. Alternatively, use a single wire through the access points. All material furnished under this item shall meet the requirements of standard spec 655.

stp-671-005 (20150630)

## **70. Install Pole Mounted Cabinet, Item 673.0225.S.**

### **A Description**

This special provision describes installing department furnished aluminum enclosures on poles for intelligent transportation systems equipment.

### **B Materials**

Use stainless steel bolts, nuts, and washers unless otherwise specified.

All conductors, terminals, and parts that could be hazardous to maintenance personnel shall be protected with suitable insulating material.

The cabinet will be equipped with service panels. Two panels shall be provided and mounted on the cabinet sidewalls. The left side panel shall be designated as "Input/Communications," and the right side panel shall be designated as the "Service Panel."

The service panel will be equipped with a four-outlet handi-box. Wire the handi-box to the series portion of the filtering surge protector.

Use metallic conduit, fittings, and adapters required from the underground conduit transition point to the cabinet as part of this item. A typical installation requires on 2-inch conduit. Use metallic conduit conforming to standard spec 652.

### **C Construction**

Fasten the field cabinet securely onto a pole. Provide bolted stainless steel connections with lock washers, locking nuts, or other engineer-approved means to prevent the connection nuts from backing off. Isolate dissimilar materials from one another using stainless steel fittings. Make all power connections to the cabinet as specified in standard spec 656.

Drill and tap the cabinet, as necessary, to mount the terminal blocks and other attachments to the service panel, to provide an entrance on the back of the cabinet for cable from the pole mounted intelligent transportation systems equipment, and to mount the service panel to the cabinet as shown in the details. Remove all sharp edges or burrs, or both, caused by the cutting or drilling process. Seal all openings to prevent water from entering the cabinet. Mount the surge protector to the service panel.

Install metallic conduit on the exterior of the pole (for entrance to the cabinet from the ground) as the plans show, and according to the applicable requirements of standard spec 652.

### **D Measurement**

The department will measure Install Pole Mounted Cabinet as each individual assembly, 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
673.0225.S	Install Pole Mounted Cabinet	EACH

Payment is full compensation for installing the pole mounted cabinet; for making all connections and conduit/wire entrances; and for all testing.

stp-673-010 (20100630)

## 71. Optimized Aggregate Gradation Incentive, Item 715.0710.

### Description

This special provision describes optional contractor optimized aggregate gradation, optional optimized mixture designs, and associated additional requirements for class 1 concrete used in concrete pavements. Conform to standard specification part 7 and as follows:

### Optimized Aggregate Gradation

*Replace standard spec 715.2.2 with the following:*

A Job Mix Formula (JMF) contains all of the following:

- Proportions for each aggregate fraction conforming to table 1.
- Individual gradations for each aggregate fraction.
- Composite gradation of the combined aggregates including working ranges on each sieve according to table 2.

Submit the target JMF and aggregate production gradation test results to the engineer for review 10 business days before initial concrete placement.

**TABLE 1 TARANTULA CURVE GRADATION BAND**

SIEVE SIZES	PERCENT RETAINED
2 in.	0
1 1/2 in.	≤5
1 in.	≤16
3/4 in.	≤20
1/2 in.	4-20
3/8 in.	4-20
No. 4	4-20
No. 8 <sup>[1]</sup>	≤12
No. 16 <sup>[1]</sup>	≤12
No. 30 <sup>[1] [2]</sup>	4-20
No. 50 <sup>[2]</sup>	4-20
No. 100 <sup>[2]</sup>	≤10
No. 200 <sup>[2]</sup>	≤2.3

<sup>[1]</sup> Minimum of 15% retained on the sum of the #8, #16, and #30 sieves.

<sup>[2]</sup> Conform to 24-34% retained of fine sand on the #30-200 sieves.

**TABLE 2 JMF WORKING RANGE**

SIEVE SIZES	WORKING RANGE <sup>[1]</sup> (PERCENT)
2 in.	+/- 5
1 1/2 in.	+/- 5
1 in.	+/- 5
3/4 in.	+/- 5
1/2 in.	+/- 5
3/8 in.	+/- 5
No. 4	+/- 5
No. 8	+/- 4
No. 16	+/- 4
No. 30	+/- 4
No. 50	+/- 3
No. 100	+/- 2
No. 200	≤ 2.3

<sup>[1]</sup> Working range limits of composite gradation based on moving average of 4 tests.

*Replace standard spec 710.5.6 with the following:*

Determine the complete gradation, including P200, using a washed analysis for both fine and coarse aggregates. Test each stockpile for each component aggregate once per 1,500 cubic yards during concrete production.

Take samples by one of the following sampling methods:

1. At the belt leading to the weigh hopper.
2. Working face of the stock piles at the concrete plant if approved by the engineer.

The department will take independent QV samples using the same sampling method the contractor uses for QC sampling. QV samples may be taken by the contractor's QC personnel if witnessed by the department's QV personnel. The department will split each QV sample and retain half for all dispute resolutions. If QV test results conform to the specification, the department will take no further action. If QV test results are nonconforming, add the QV to the QC test results as if it were an additional QC test.

If, during concrete production, the moving average of four for any sieve fall outside the allowable JMF working range do the following:

1. Notify the engineer of the test results within 1 business day from the time of sampling.
2. Make immediate adjustments to the JMF, within the limits specified in Table 3;
3. Review JMF adjustments with the engineer. Both the contractor and engineer will sign the adjusted JMF if the adjustments comply with Table 3.
4. If the moving average of four falls outside the adjusted allowable working range, stop production and provide a new mix design including JMF to the engineer.

**TABLE 3 ALLOWABLE JMF ADJUSTMENTS**

SIEVE SIZES	ALLOWABLE ADJUSTMENT (PERCENT)
≥ No. 4	+/- 5
No. 8 – No. 30	+/- 4
No. 50	+/- 3
No. 100	+/- 2

## Dispute Resolution

The department will resolve disputes as specified in standard spec 106.3.4.3.5 using QV split samples.

## Sublot and Lot Size

A sublot consists of up to 1,500 cubic yards. A lot consists of two sublots.

## Optimized Concrete Mixtures

The contractor may use a reduced cementitious content for concrete pavement placed if the contractor does the following:

1. Use an optimized aggregate gradation as defined in this special provision.
2. Conform to the additional testing requirements for flexural strength as specified in the contract special provisions.
3. Submit aggregate gradation result records no more than 2 years old when developing the mix design.
4. Determine the volume of voids in the optimized aggregates using ASTM C29.
5. Download and follow the instructions tab of the Optimized Gradation and Mix Design Spreadsheet located at:  
<https://wisconsindot.gov/Pages/doing-bus/eng-consultants/cnslt-rsrcs/qmp/default.aspx>
6. Design an appropriate paste content based upon the Performance-based PCC Mix Design Guide located at:  
<https://wisconsindot.gov/Pages/doing-bus/eng-consultants/cnslt-rsrcs/qmp/default.aspx>
7. Provide a minimum  $V_{paste}/V_{voids}$  of 1.25. (Paste/Void ratio equals the volume of paste divided by the volume of voids.).
8. Evaluate workability of trial batches by following section 6.8 of AASHTO Draft Performance Engineered Concrete Pavement Mixtures Specifications located at:  
<https://wisconsindot.gov/Pages/doing-bus/eng-consultants/cnslt-rsrcs/qmp/default.aspx>
9. Submit trial batch workability results when submitting the mix design.
10. Submit the CP Tech center computer spreadsheet concrete mix design to the engineer for review at least 3 business days before producing concrete.
11. Provide a minimum cement content of 520 pounds per cubic yard, except if using type I, IL, or III cement in a mix where the geologic composition of the coarse aggregate is primarily igneous or metamorphic materials, provide a minimum cement content of 660 pounds per cubic yard.
12. The contractor may use class C fly ash or grade 100 or 120 slag as a partial replacement for cement. For binary mixes use up to 30% fly ash or slag. For ternary mixes use up to 30% fly ash plus slag in combination. Replacement values are in percent by weight of the total cementitious material in the mix.
13. See CMM 8-70.2.2.3 for additional guidance.

## Measurement

The department will measure Optimized Aggregate Gradation Incentive by the dollar, for each combined averaged lot of QC test results meeting Table 1.

## Payment

The department will pay incentive of 3 percent of the contract unit price for concrete pavement under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
715.0710	Optimized Aggregate Gradation Incentive	DOL
stp-715-005 (20191121)		

## 72. Concrete Pavement Flexural Strength.

This special provision pertains to Project 1008-10-70 and describes accepting concrete pavement based on flexural strength. Conform to standard spec part 7 as modified in this special provision.

Add the following to standard spec table 701-2:

TEST	TEST STANDARD
Flexural Strength of Concrete	AASHTO T97

Replace standard spec 710.5.5 with the following:

#### **710.5.5 Strength**

- (1) Cast all 6-inch by 12-inch cylinders or 6-inch x 6-inch x 21-inch 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 subplot or location on the project it represents.
- (2) Provide facilities for initial curing. For up to 48 hours after casting, maintain the temperature adjacent to the specimens in the range of 60 to 80 F and prevent moisture loss. Between 24 and 48 hours after casting, transport the specimens to a department-qualified laboratory for standard curing until testing at 28 days.
- (3) Determine the 28-day strength of each specimen in psi. Test each specimen to failure. Use a testing machine that automatically records the date, time, rate of loading, and maximum load of each specimen. Provide a printout of this information for each specimen tested.

Replace standard spec 715.2.1(2) with the following:

- (2) The contractor need not provide separate laboratory mix designs for high early strength concrete nor provide routine 28-day strength tests during placement for high early strength concrete.

Replace standard spec 715.2.3.1(1) with the following:

- (1) Use at least 5 pairs of beams to demonstrate the flexural strength of a mix design. Use either laboratory strength data for new mixes or field strength data for established mixes. Demonstrate that the 28-day flexural strength of the proposed mix will equal or exceed the 85 percent within limits criterion specified in 715.5.2.

Replace standard spec 715.3.1.1(1) with the following:

- (1) Provide slump, air content, concrete temperature, and strength test results as specified in 710.5. Provide a battery of QC tests, consisting of results for each specified property, using a single sample randomly located within each subplot. Cast 3 specimens for strength evaluation.

Replace standard spec 715.3.1.3(1) with the following:

- (1) The department will perform verification testing for air content, slump, temperature, and strength at a minimum of one verification test per lot.

Replace standard spec 715.3.2.1 with the following:

#### **715.3.2.1 General**

- (1) The department will make pay adjustments for strength on a lot-by-lot basis using the strength of contractor QC specimens. The department will use flexural strength for pavements and compressive strength for structures. The department will assess concrete for removal and replacement based on a subplot-by-subplot analysis of core strength. Perform coring and testing, fill core holes with an engineer approved non-shrink grout, and provide traffic control during coring.
- (2) Randomly select 2 QC strength 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 subplot 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.

*Replace standard spec 715.3.2.2.1 with the following:*

#### **715.3.2.2.1 Pavement**

- (1) If a subplot strength is less than 500 psi, the department may direct the contractor to core that subplot to determine its structural adequacy and whether to direct removal. Cut and test cores according to AASHTO T24 as and where the engineer directs. Have an HTCP-certified PCC technician I perform or observe the coring.
- (2) The subplot pavement is conforming if the compressive strengths of all cores from the subplot are 2500 psi or greater or the engineer does not require coring.
- (3) The subplot pavement is nonconforming if the compressive strengths of any core from the subplot 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.

*Replace standard spec 715.5.1 with the following:*

#### **715.5.1 General**

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

ITEM NUMBER	DESCRIPTION	UNIT
715.0415	Incentive Strength Concrete Pavement	DOL
715.0502	Incentive Strength Concrete Structures	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 Pavement and Disincentive Strength Concrete Structures administrative items.
- (4) The department will adjust pay for each lot using PWL of the 28-day subplot average strengths for that lot. The department will measure PWL relative to the lower specification limit of 650 psi for pavements and 4000 psi for structures. 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 715.3.1.2.1.
- (5) Submit strength results to the department electronically using the MRS software. The department will validate contractor data before determining pay adjustments.
- (6) 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.

*Replace standard spec 715.5.2 with the following:*

#### **715.5.2 Pavements**

- (1) The department will adjust pay for each lot using equation "QMP 6.01" as follows:

Percent within Limits (PWL)	Pay adjustment (dollars per square yard)
≥ 95 to 100	(0.2 x PWL) - 19
≥ 85 to < 95	0
≥ 50 to < 85	(2.0/35 x PWL) - 170/35
< 50	-2

- (2) The department will not pay incentive if the lot standard deviation is greater than 60 psi.
- (3) For lots with a full battery of QC tests at less than 4 locations, there is no incentive but the department will assess a disincentive based on the individual subplot average strengths. The department will reduce pay for sublots with an average strength below 600 psi by \$2 per square yard.
- (4) For integral shoulder pavement and pavement gaps accepted using tests from the adjacent travel lane, the department will adjust pay using strength results of the travel lane for integrally placed concrete shoulders and pavement gaps regardless of mix design and placement method, included in a lane-foot lot.

## **73. Subsoiling, Item SPV.0005.500.**

### **A Description**

This special provision describes subsoiling designated areas as shown on the plans or as directed by the engineer or Corridor Vegetation Inspector, and as hereinafter provided.

### **B (Vacant)**

### **C Construction**

Subsoil the designated area as shown in the plans or as directed by the Corridor Vegetation Inspector after topsoil or compost placement. Schedule a 500-square-foot test area and demonstrate competence to the Corridor Vegetation Inspector for either swale and slope subsoiling, or basin subsoiling, prior to continuing operations. The Corridor Vegetation Inspector shall identify the test area. Subsoiling shall consist of two operations: deep tilling passes and a surface mixing pass. For the deep tilling passes, loosen subsoiled areas to a depth of 20 inches of the in-place material and placed topsoil or compost. For the surface mixing pass, loosen the subsoiled areas to a depth of 6 to 8 inches. After obtaining approval by the Corridor Vegetation Inspector that the equipment and methods are sufficient to perform the work, complete the subsoiling operation for the designated areas within the project. Work done without the Corridor Vegetation Inspector's approval will be considered as unauthorized work.

For the deep tilling passes, create subsoiling channels with a commercially available, multi-shanked implement attached to track-type equipment. There shall be a minimum of two shanks on the equipment, with each shank located behind a track so that the soil is loosened after it is tracked. Do not pull the shanks through previous channels, but instead create multiple channels. The equipment shall be capable of exerting a penetration force necessary for the site. No disc cultivators, chisel plows, or spring-loaded equipment will be allowed. Space the grid channels 24 to 30 inches apart, depending on equipment, site conditions, and the plan. The channel depth shall be to a minimum of 20 inches.

For the surface mixing pass, use a disk chisel or coulter chisel plow with twisted points, or other approved implement, to mix the top 6 to 8 inches of the soil. Do the operation in one pass with a commercially available implement attached to track-type equipment applying no more than 5 psi of pressure or to a tractor with a minimum of two tires per axle. The equipment shall be capable of exerting a penetration force necessary for the site.

If soils are saturated, delay operations until the soil dries to field capacity or less. Field capacity is the amount of water retained in the soil after it has been saturated and allowed to drain freely.

#### **C.1 Swale and Slope Subsoiling**

Complete the deep tilling operation in three passes for each ten feet of swale width. On erodible slopes steeper than 6 horizontal to 1 vertical (6:1), work at right angles to the direction of surface drainage whenever practical. Follow this with a surface mixing pass parallel to the direction of ditch flow.

#### **C.2 Basin Subsoiling**

Perform the deep tilling operation in two sets of passes to form a two-directional (90°) grid. Follow this with a surface mixing pass completed in either direction.

#### **C.3 Exceptions**

Area exceptions to subsoiling include areas within the drip line of any existing trees, over utility installations within 30 inches of the surface, when trenching/drainage lines are installed, where compaction is by design (abutments, footings or inslopes steeper than 4:1), and inaccessible slopes, as approved by the Corridor

Vegetation Inspector. In cases where exceptions occur, observe a minimum setback as directed by the Corridor Vegetation Inspector.

#### **C.4 Finish Grading**

Upon completion of the subsoiled area, finish grade the area as described in standard spec 625.3.3, except that only light-weight equipment as approved by the Corridor Vegetation Inspector may be used. Drive no other equipment over the subsoiled area after the area has been finish-graded. Any subsoiled areas that are re-compacted shall be subsoiled and finish-graded at no expense to the department.

#### **D Measurement**

The department will measure Subsoiling by the acre of area, 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.0005.000	Subsoiling	ACRE

Payment is full compensation for subsoiling designated areas shown on the plans or as directed by the Corridor Vegetation Inspector; and performing finished grading operations of these subsoiled areas.

(1/23/2018)

### **74. Pre-Planting Vegetation Treatment, Item SPV.0005.501.**

#### **A Description**

This special provision describes applying pre-seeding broadcast herbicides onto the Invasive Species and Weed Management Areas (including native seed planting areas) shown in the plans.

Notify the Corridor Vegetation Inspector at least 1 month prior to scheduled herbicide activity, after utility locates, to initiate the layout and marking of the Invasive Species and Weed Management Areas (including native seed planting areas). The department will layout and mark the boundaries of the Invasive Species and Weed Management Areas (including native seed planting areas). At least 7 days prior to scheduled herbicide activity and after locating is complete, setup a field meeting with the Corridor Vegetation Inspector to review the marked areas.

All Invasive Species and Weed Management Areas (including native seed planting areas) must be reviewed by the Corridor Vegetation Inspector before herbicide application begins.

#### **B Materials**

##### **B.1 Herbicides**

Provide manufacturers labels with appropriate application rates to the Corridor Vegetation Inspector.

The selection of herbicide(s) to be used for controlling each target weed species shall be based upon the guidelines of the Midwest Invasive Plant Network's Invasive Plant Control Database (<http://mipncontroldatabase.wisc.edu/>). This site provides broadleaf herbicides recommendations for controlling broadleaf weeds, as well as grass-selective herbicides for controlling non-native cool season perennial grasses in early spring or late fall when warm season native grasses are dormant.

If the following broadleaf weeds are present, mix the low residual broadleaf herbicide 2, 4-Dichlorophenoxyacetic acid (2, 4-D) with glyphosate herbicide to ensure control:

- Field Bindweed (*Convolvulus arvensis*)
- Canada Thistle (*Cirsium arvense*)
- Crown Vetch (*Securigera varia*)

Many broadleaf herbicides have extended periods of activity in the soil and can retard the germination and survival of many wildflower seedlings. The use of any broadleaf herbicide other than 2, 4-D must be approved by the Corridor Vegetation Inspector prior to application. Do not apply any herbicides to the seeding site that will adversely affect the germination and growth of native prairie seedlings.

Use one of the following grass-selective herbicides to control unwanted cool season grasses in native prairies:

Poast (Sethoxydim)  
Fusilade (Fluazifop-p-butyl)  
Clethodim

Each species of non-native cool season grass is more susceptible to damage by one of the above herbicides. Select the most effective herbicide for use on each target weedy grass species. Follow manufacturer's directions when mixing and applying herbicides. The addition of crop oil concentrate to the herbicide mix may be required to ensure successful control.

## **B.2 Herbicide Applicator Certification**

Provide a DATCP-certified and -licensed applicator to apply herbicides. Provide copies of certification paperwork to the Corridor Vegetation Inspector prior to herbicide treatment.

## **C Construction**

### **C.1 Pre-Seeding Treatment**

Apply herbicide to the areas delineated in the plans as Invasive Species and Weed Management Areas and Shrub Bed Limits. All existing weeds, grasses, and other vegetation must be eliminated prior to seeding or planting without disturbing the soil except for hand pulling individual weeds or woody vegetation.

After each herbicide application, fill out the department provided worksheet "Herbicide Treatment Summary". Complete one worksheet per site per application, sign the worksheet, and submit to the Corridor Vegetation Inspector.

Herbicides used to control weeds prior to seeding or planting must be selected to ensure that post-application carry over in the soil will not affect germination of native seeds or shrubs. Apply herbicide at appropriate concentration.

Existing vegetation shall be treated with herbicide at least once prior to seeding or planting to kill all existing vegetation. The treatment of the vegetation shall be timed to ensure optimal weed control. Follow the suggested eradication sequence described below or obtain approval for other methods from the Corridor Vegetation Inspector.

1. If vegetation to be sprayed is taller than 12 inches, mow vegetation to 4 inches or less in height, 4 to 6 weeks before the first application of herbicide.
2. Apply the appropriate herbicide(s) when vegetation is at 12 inches in height or has regrown to a height of at least 12 inches following mowing.
3. Re-treat undesirable vegetation after allowing it to regrow to a height of 12 inches. Do not mow, till, drive vehicles over, or disturb the vegetation in any way between herbicide applications.
4. After the final herbicide application, the area may be seeded with the native seed mixtures or planted with the shrubbery. The timing of the planting shall be according to the herbicide manufacturer's instructions.

Prevent herbicide drift onto adjacent trees and shrubs. Plants damaged due to herbicide drift will be replaced at the expense of the contractor.

## **D Measurement**

The department will measure Pre-Planting Vegetation Treatment by the acre, 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.0005.501	Pre-Planting Vegetation Treatment	ACRE

Payment is full compensation for furnishing and applying herbicide; re-applying herbicide as needed; documenting herbicide applications; and mowing.

**75. Seed Bed Preparation, Item SPV.0005.502.**

**A Description**

This special provision defines the work required to prepare the soil for native seeding areas that were identified as inadequate during the seed bed inspection performed under the item Seeding Native Mix N2 and N3.

**B (Vacant)**

**C Construction**

**C.1 Surface Treatment**

For those areas authorized by the Corridor Vegetation Inspector as not adequate for native seeding, break down all clods and lumps using the appropriate pulverizing equipment to meet the specified gradation. Dress the entire surface to present a uniform appearance. Remove clods that cannot be broken down.

**D Measurement**

The department will measure Seed Bed Preparation by the acre, 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.0005.502	Seed Bed Preparation	ACRE

Payment is full compensation for providing the equipment and labor necessary to perform the work required under this bid item.

**76. Roadway Embankment, Item SPV.0035.001.**

*Conform to standard spec 207 unless modified by this special provision.*

**A Description**

*Replace standard spec 207.1(1) with the following:*

This section describes providing and placing, in embankments and in miscellaneous backfills, material obtained under the bid items in the roadway and drainage excavation or excavation for structure sections; or material obtained under Borrow as specified in standard spec 208 and modified under these special provisions.

**B Materials**

*Conform to standard spec 207.2.*

**C Construction**

*Conform to standard spec 207.3 and as follows:*

Prior to placement of fill material, proof-roll the existing native cohesive soil using a heavily loaded triaxle truck or similar construction equipment.

**D Measurement**

*Replace standard spec 207.4(1) with the following:*

The department will measure Roadway Embankment by the cubic yard, acceptably completed in its final location using the method of average end areas, with no correction for curvature or settlement, except as follows:

1. The engineer and contractor mutually agree to an alternative volume calculation method;
2. The method of average end areas is not feasible.

If it is not possible to compute volumes of the various classes of roadway and drainage embankment by the method of average end areas due to erratic location of isolated deposits, the department may compute the volumes by alternative methods involving three-dimensional measurements.

The department will not measure embankment material beyond the limits of the required slopes as shown on the plans.

## E Payment

*Replace standard spec 207.5(1) with the following:*

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0035.001	Roadway Embankment	CY

Payment is full compensation for providing material from roadway excavation or borrow material; and for forming, compacting, shaping, sloping, trimming, finishing, and maintaining the embankments.

The department will pay for all work associated with select borrow material separately as specified under the Select Borrow bid item.

The department will pay for erosion control, fertilizing, and seeding of borrow sites and associated areas separately as specified for borrow sites and material disposal sites in standard spec 628.5.1.

ASP-5 will be applied to this item.

## 77. Topsoil Special, Item SPV.0035.501.

### A Description

This special provision describes furnishing and installing Topsoil Special at locations specified in the plans and these special provisions.

### B Materials

Furnish topsoil materials from suitable, local A horizon topsoil sources outside of the project from naturally well drained areas and consisting of loam ranging into sandy clay loam, sandy loam, silt loam, and clay loam soils as a plant growing medium for tree pits and planting beds.

Ensure the topsoil meets the requirements of the following table:

Table A	
Requirement	Range
Material Passing $\frac{3}{4}$ in sieve	100%
Material Passing No. 4 sieve	$\geq 90\%$
Clay	5% - 35%
Silt	10% - 60%
Sand	15% - 60%
Organic Matter	3% - 15%
pH	6.1 – 7.5

At least 60 days in advance of the delivery of topsoil to the project, submit the following information to the Corridor Vegetation Inspector. Label each item with the project ID and date of submittal. Samples with test reports unattached will be rejected.

1. The source(s) of topsoil meeting the quantity and quality specified. Include the location from which the topsoil is to be obtained, the crops or plants which have been grown in the soil during the past 5 years and the depth to which the topsoil is to be taken.
2. Test report from a qualified laboratory (i.e. certified in Agronomic Science and comply with Methods of Soil Analysis, Parts 1 & 2, American Society of Agronomy) verifying compliance and suitability of topsoil for use as a growth material. Test report shall indicate particle size and chemical composition, including pH, percent of organic matter and recommendations for fertilizer and amendment. The topsoil test report shall contain the Table A information and conform within ranges specified. Supply required soil test data on a minimum of 3 representative samples taken from each proposed topsoil source.

3. Furnish sample(s) of the topsoil a minimum of 14 days prior to delivery. Submit the sample(s) in a sealed container, approximately one quart in size and appropriately labeled. The container shall be filled with uncompacted topsoil.

### **C Construction**

Remove construction materials, stone, or other debris larger than 3/4" in length or diameter, debris, slag piles, and trash from area or tree pit receiving Topsoil Special.

Till, disc, or hoe subgrade to loosen and de-compact. Obtain the Corridor Vegetation Inspector's approval of subgrade preparation including depth excavated, removal of trash materials, and loosening of subgrades before placing any Topsoil Special.

Provide Topsoil Special over entire planting area to the depth indicated on the plans. Fine grade to match adjacent grades, accounting for settling. Place Topsoil Special in 6-inch lifts, watering or tamping to reduce settling potential.

### **D Measurement**

The department will measure Topsoil Special in volume by the cubic 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.0035.501	Topsoil Special	CY

Payment is full compensation for testing, providing, and placing Topsoil Special; site preparation, excavating, restoration of areas disturbed by planting; and disposing of surplus materials.

## **78. High Performance Concrete (HPC) Masonry Structures, Item SPV.0035.700.**

This special provision describes specialized material and construction requirements for high-performance concrete used in bridge structures. Conform to standard spec 501, 502, and 509, as modified in this special provision. Conform to standard spec 715 for QMP Concrete Pavement and Structures.

*Modify standard specifications as follows:*

### **501.2.5.4.1 General**

- (1) The department will sample and test aggregates as follows:

LA Wear (100 and 500 revolutions) .....	AASHTO T96
Sodium Sulfate Soundness (R-4, 5 cycles) .....	AASHTO T104
Freeze-Thaw Soundness .....	AASHTO T103
Lightweight Pieces <sup>[1]</sup> .....	AASHTO T113

<sup>[1]</sup> Material having a bulk specific gravity (saturated surface-dry basis) of less than 2.45. Determine the percentage of lightweight pieces by dividing the weight of lightweight pieces in the sample retained on the 3/8-inch sieve by the weight of the total sample.

- (2) Contact the engineer a minimum of 4 weeks prior to placing concrete to collect a sample of aggregates proposed for the project. The engineer will obtain the sample, or observe the contractor obtaining the sample. The sampler must be HTCP certified to sample aggregates.
- (3) The department will randomly sample coarse aggregate for lightweight pieces testing at least once at least once per 10,000 cubic yards during HPC structure concrete production.
- (4) Use clean, hard, durable crushed limestone free of an excess of thin or elongated pieces, frozen lumps, vegetation, deleterious substances, or adherent coatings considered injurious.
- (5) Use virgin aggregates only.

#### **501.2.5.4.2 Deleterious Substances**

*Replace paragraph one with the following:*

The amount of deleterious substances must not exceed the following percentages:

DELETERIOUS SUBSTANCE	PERCENT BY WEIGHT
Shale .....	1.0
Coal .....	1.0
Clay lumps .....	0.3
Soft fragments .....	5.0
Any combination of above .....	5.0
Thin or elongated pieces based on a 3:1 ratio .....	15.0
Materials passing the No. 200 sieve .....	1.5
Lightweight Pieces .....	2.0

#### **501.2.5.4.3 Physical Properties**

*Replace paragraph one with the following:*

The percent wear must not exceed 35, the weighted soundness loss must not exceed 6 percent, and the weighted freeze-thaw average loss must not exceed 12 percent.

#### **501.3.2.4.3.3 Extended Delivery Time**

*Delete paragraph one.*

#### **501.3.5.1 General**

*Replace paragraph one with the following:*

Use central-mixed concrete as defined in standard spec 501.3.5.1(2) for all work under this special provision.

#### **501.3.5.2 Delivery**

*Replace paragraph three with the following:*

Deliver and completely discharge concrete within 1 hour beginning when adding water to the cement, or when adding cement to the aggregates. A decrease in air temperature below 60° F or the use of department-approved retarders does not increase the discharge time.

#### **501.3.7.1 Slump**

*Replace the entire text with the following:*

Use a 2-inch to 4-inch slump.

Perform the slump tests for concrete according to AASHTO T 119.

#### **501.3.8.2.1 General**

*Replace the entire text with the following:*

The contractor is responsible for the quality of the concrete placed in hot weather. Submit a written temperature control plan at or before the pre-pour meeting. In that plan, outline the actions the contractor will take to control concrete temperature if the concrete temperature at the point of placement exceeds 80° F. Do not place concrete without the engineer's written acceptance of that temperature control plan. Perform the work as outlined in the temperature control plan.

If the concrete temperature at the point of placement exceeds 80° F, do not place concrete for items covered in this special provision.

Notify the engineer whenever conditions exist that might cause the temperature at the point of placement to exceed 80° F. If project information is not available, the contractor should obtain information from similar mixes placed for other nearby work.

The department will pay \$0.75 per pound for the quantity of ice required to reach a target temperature of 75° F if the following conditions are met:

The un-iced concrete temperature exceeds 80° F.

The contractor has performed the actions outlined in the contractor's accepted temperature control plan.

The contractor elects to use ice.

#### **501.3.8.2.2 Bridge Decks and Structural Approach Slabs**

*Replace the entire text with the following:*

- (1) Do not place concrete for bridge decks or structural approach slabs when the ambient air temperature is above 80° F.
- (2) For concrete placed in bridge decks and structural approach slabs, submit a written evaporation control plan at each pre-pour meeting. In that plan, outline the actions the contractor will take to maintain concrete surface evaporation at or below 0.15 pounds per square foot per hour. Do not place concrete for bridge decks or structural approach slabs without the engineer's written acceptance of that evaporation control plan. Perform the work as outlined in the evaporation control plan.
- (3) If predicting a concrete surface moisture evaporation rate exceeding 0.15 pounds per square foot per hour, do not place concrete for bridge decks or structural approach slabs.
- (4) Provide evaporation rate predictions to the engineer 24 hours prior to each bridge deck or structural approach slab pour.
- (5) Compute the evaporation rate from the predicted ambient conditions at the time and place of the pour using the nomograph, or computerized equivalent, specified in CMM 5.25, figure 1. Use weather information from the nearest national weather service station. The engineer will use this information to determine if the pour will proceed as scheduled.
- (6) At least 8 hours before each pour, the engineer will inform the contractor in writing whether or not to proceed with the pour as scheduled. If the actual computed evaporation rate during the pour exceeds 0.15 pounds per square foot per hour, at the sole discretion of the engineer, the contractor may be allowed to implement immediate corrective action and complete the pour.

#### **502.3.5.4 Superstructures**

*Delete paragraph five.*

#### **502.3.7.8 Floors**

*Delete paragraphs 13.*

*Replace paragraphs 14 and 15 with the following:*

- (14) If staging requires public traffic on bridge deck prior to polymer overlay application, transversely tine finish the floors of structures with approach pavements designed for speeds of 40 mph or greater as specified in 415.3.8.3, except make the tining 1/8-inch in depth and do not perform tining within 12 inches of gutters. The contractor may apply a broom finish, described below, instead of the artificial turf drag finish required before tining. The contractor may perform tining manually, if it obtains a finish satisfactory to the engineer. Perform tining within 20 degrees of the centerline of bearing of the substructure units on bridge decks having skew angles of 20 degrees or greater.
- (15) If providing a broom finish, draw the broom transversely across the full width of the pavement with adjacent strokes slightly overlapping. Perform brooming to produce uniform corrugations and approximately 1/8-inch in depth. Complete brooming before concrete hardens and this operation tears or roughens the surface. Brooming shall provide a surface free from rough or porous areas, irregularities, and depressions that result from improper broom handling. Furnish brooms of a sufficient quality, size and construction, and operate them to produce a surface finish the engineer approves. Provided the contractor obtains satisfactory results, the engineer will allow manual brooming instead of mechanical brooming.

*Add the following to the end as paragraphs 19, 20 and 21:*

- (19) Do not place bridge deck concrete more than 10 feet ahead of the finishing machine. If there is a delay of more than 10 minutes during the placement of a bridge deck, cover all concrete (unfinished and finished) with wet burlap to protect the concrete from evaporation until placement operations resume.

- (20) Hand finishing, except for the edge of deck, must be kept to a minimum. The finishing machine must be equipped with a pan behind the screed. Apply micro texture using a broom or turf drag following the use of a 10-foot straight edge. Only finish by hand as necessary to close up finished concrete. Begin wet curing the deck immediately following the micro texture.
- (21) For bridge decks with a design speed of 40 mph or greater that will not receive a polymer overlay under this contract, provide longitudinal grooving according to the provision included in this contract. For bridges receiving a polymer overlay under this contract, provide longitudinal grooving on structural approach slabs according to the provision in this contract.

#### **502.3.8.1 General**

*Replace paragraph one with the following:*

Maintain adequate moisture throughout the concrete mass to support hydration for at least 14 days.

#### **502.3.8.2.1 General**

*Replace the entire text with the following:*

Wet cure the concrete for bridge decks, sidewalks and raised medians for 14 days by use of a soaker hose system, or other engineer-approved methods. Cover the finished surface of bridge decks and overlays with one layer of wetted burlap or wetted cotton mats within 10 minutes after the finishing machine has passed. Apply the burlap/cotton gently so as to minimize marking of the fresh concrete. Keep the first layer of burlap/cotton continuously wet until the bridge deck or overlay is sufficiently hard to apply a second layer of wetted burlap/cotton. Immediately after applying the second layer of burlap/cotton, continue to keep the deck wet until placing and activating the soaker hose system. Throughout the remainder of the curing period, keep the burlap/cotton continuously wet with soaker hoses hooked up to a continuous water source. Inspect the burlap/cotton twice daily to ensure the entire surface is moist. If necessary, alter the soaker hose system as needed to ensure the entire surface is completely covered and stays moist. After 48 hours from the time of completion of the bridge deck or overlay pour, the soaker hose system and burlap/cotton may be covered with polyethylene sheeting. Provide a continuous flow of water through the soaker hose system for the entire curing period.

Do not uncover any portion of the deck at any time for any reason during the first 7 days of the curing period.

Set up and test the fogging system before each bridge deck, raised median and sidewalk pour. The fogging system must remain set up and in operating condition for the duration of the pour.

#### **502.3.8.2.3 Decks**

*Delete the entire text.*

#### **502.3.8.2.4 Parapets**

*Replace the entire text with the following:*

Cure the inside and outside concrete faces and tops of railings or parapets by covering with wetted burlap immediately after form removal and surface finish application. Keep the burlap thoroughly wet for at least 7 days; or by covering for the same period with thoroughly wet polyethylene-coated burlap conforming to standard spec 501.2.9.

Secure coverings along all edges to prevent moisture loss.

#### **502.3.9.6 Bridge Decks**

*Replace paragraph two with the following:*

Protect the underside of the deck, including the girders, for bridge deck and overlay pours by housing and heating when the national weather service forecast predicts temperatures to fall below 32° F during the cold weather protection period. Maintain a minimum temperature of 40° F in the enclosed area under the deck for the entire 14-day curing period.

#### **502.5.1 General**

*Replace paragraph one with the following:*

The department will pay for plan quantities according to standard spec 109.1.1.2 at the contract unit price and incidentals necessary to complete the work under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0035.700	High Performance Concrete (HPC) Masonry Structures	CY

## 710.5 Sampling and Testing

*Add the following:*

### 710.5.7 Chloride Penetration Resistance

- (1) For each new or changed mix design, measure chloride penetration resistance according to AASHTO T 277 (Rapid Chloride Permeability Test) at a frequency of 1 test per 3 months (quarterly) of production.
- (2) Permeability samples for AASHTO T 277 testing must be stripped of their molds and wet cured to an age of 7 days in a standard moist room or water tank. After 7 days, submerge the samples in water heated to 100° F until an age of 28 days. Upon completion of the curing process, obtain one sample from each cylinder and test according to AASHTO T 277.
- (3) Ensure that the initial accepted mix designs meet the chloride penetration resistance limit of 1,500 coulombs based on the AASHTO T 277 Rapid Chloride Permeability test. Chloride resistance testing conducted quarterly using AASHTO T 277 Rapid Chloride Permeability Test during production will not be used for acceptance of previously accepted mixes and concrete masonry mixed and placed according to the contract requirements. For quarterly chloride resistance test results exceeding 1,500 coulombs, the department may require adjustment of the concrete mix going forward to improve the chloride penetration resistance.

### 715.2.3.2 Structures

*Replace paragraph (1) with the following:*

- (1A) Develop and test each mix to be used for HPC Masonry Structures. Produce a laboratory trial mix for each mix, as well as a trial mix from each plant used to supply the project. Test all mixes at a department-qualified laboratory.
- (1B) The laboratory trial mix data must include the results of the following tests:
  1. AASHTO T119 Slump of Hydraulic Cement Concrete.
  2. AASHTO T121 Mass per Cubic Foot, Yield.
  3. AASHTO T152 Air Content.
  4. AASHTO T22 Compressive Strength.
  5. AASHTO T277 Rapid Determination of the Chloride Permeability of Concrete, using the modified curing procedure according to standard spec 710.5.7. (2) herein.
  6. AASHTO T309 Temperature.
  7. Water Cement Ratio.
- (1C) The 28-day compressive strength must be greater than or equal to 4,000 psi. The 28-day results of the permeability test must be less than or equal to 1,500 coulombs.

*Replace paragraph two with the following:*

- (2) Provide a minimum cementitious content of 470 pounds per cubic yard and a maximum cementitious content of 540 pounds per cubic yard. For all superstructure and substructure concrete, unless the engineer approves otherwise in writing, conform to one of the following:
  1. Use class C fly ash or grade 100 or 120 slag as a partial replacement for Portland cement. For binary mixes use 15% to 30% fly ash or 20% to 30% slag. For ternary mixes use 15% to 30% fly ash plus slag in combination. Percentages are stated as percent by weight of the total cementitious material in the mix.

Use a type IP or IS blended cement.

(10/26/2016)

## **79. Rapid Set Deck Repair, Item SPV.0035.701.**

### **A Description**

This special provision describes furnishing, placing and curing a rapid setting non-shrink patch material on the sawed deck preparation areas of the concrete bridge deck. Perform the work conforming to standard spec 509.

### **B Materials**

#### **B.1 Patching Materials**

Furnish a rapid setting non-shrink material designed for repairing concrete decks from the department's Approved Products List for "Rapid Setting Concrete Patch Material". The material shall be capable of obtaining a minimum compressive strength of 3000 psi within 3 hours. The patch material must be compatible with the existing concrete deck, reinforcing steel, and the polymer or asphalt overlay product (if applicable); and have a proven record of at least five successful applications in climates similar to Wisconsin. The use of chloride accelerators or other corrosion inducing products is prohibited.

A minimum of ten working days prior to construction, submit the manufacturer's product data sheets, material sources, mix designs, and supporting performance documentation to the engineer for approval.

#### **B.2 Materials Quality Control Testing**

For projects that allow 3 hours or more of cure time prior to opening to traffic, submit certified test results from an independent lab showing that the patch material can obtain 3000 psi within 3 hours of placement under the same curing conditions as the project.

For projects that require bridge decks to be open to traffic with less than 3 hours of cure time, perform quality control testing. For material extended with aggregates, perform cylinder breaks per ASTM C39. Make a minimum of two compressive strength test cylinders per shift per batch plant and cure under the same conditions as the deck patches. For material not using coarse aggregates, perform cube breaks per ASTM C109. Make a minimum of two compressive strength test cubes per shift per batch plant and cure under the same conditions as the deck patches. Provide test results to the engineer showing 3000 psi strength is obtained prior to opening the bridge deck to traffic.

For projects requiring ASTM C39 or ASTM C109 testing, furnish a department-certified mobile laboratory to perform the testing.

### **C Construction**

Clean and prepare the area to be patched per the manufacturer's recommendations and as follows. After sawed deck preparation work is complete, blast clean the area and any exposed reinforcing steel. Thoroughly clean the surface upon which the new patch material is to be placed by brooming and using air pressure to remove all loose particles and dust. Apply a bonding agent, as necessary and as recommend by the patch material manufacturer, to surfaces to be covered by patch material.

Place patch material to produce plane surfaces that conform to the grade and elevation of the adjoining surfaces. Where a polymer or asphalt overlay will not be placed over the patch, finish the surface by tining or applying exposed angular aggregate as approved by the engineer. Where a polymer or asphalt overlay will be placed over the patch, shotblast the patch in the same fashion as the remainder of the bridge deck.

### **D Measurement**

The department will measure Rapid Set Deck Repair in volume by the cubic 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.0035.701	Rapid Set Deck Repair	CY

Payment for Rapid Set Deck Repair is full compensation for furnishing, hauling, preparing, placing, finishing, curing, and protecting all materials; and for materials quality control testing.

**80. Portable Speed Trailer, Item SPV.0045.001.**

**A Description**

This special provision describes furnishing, hauling, placing, erecting, re-erecting, operating, maintaining, moving and removal of portable speed trailers during the construction of this project.

**B Materials**

Furnish portable speed trailer conforming to the appropriate requirements of standard spec 643 and the Manual on Uniform Traffic Control Devices (MUTCD), latest edition, for portable changeable message signs (PCMS).

In rural areas with no view obstructions, the contractor may reduce the minimum mounting height to 5 feet.

Provide a battery powered device with a regulatory speed limit sign and a radar speed sign displaying speed in mph. The flash rate should be between 50 and 60 cycles per minute. Place the sign so that in the operating mode the bottom of the message panel is 5 feet or higher above the top of curb or near edge of pavement. Orient the message panel so the message is legible from 850 feet under both day and night conditions.

**C Construction**

Furnish, haul, place, erect, re-erect, operate, maintain, move, and remove devices at locations as the plans show and as directed by the engineer.

Coordinate the placement and duration of these devices with the engineer/CMT traffic at least 24 hours before its intended use and accommodate within the project. Provide an area to park the devices that is still visible to traffic.

Space five traffic control drums at ten-foot intervals as needed in front of the portable speed trailer.

Move devices not performing as intended to the satisfaction of the engineer within 24 hours of notification.

**D Measurement**

The department will measure Portable Speed Trailer by the day, acceptably completed. The number of days measured is defined as the number of calendar days that the portable speed trailer is used in moving operations or short-term stationary work. A calendar day begins with each deployment within a defined time-frame and exceeding two hours.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0045.001	Portable Speed Trailer	DAY

Payment is full compensation for furnishing, hauling, placing, erecting, re-erecting, operating, maintaining, moving and removal of portable speed trailers during the construction of this project. Drums are paid separately under traffic control items.

**81. Baseline CPM Progress Schedule, Item SPV.0060.001;  
CPM Progress Schedule Updates and Accepted Revisions, Item SPV.0060.002.**

*Replace standard spec 108.4 with the following:*

**108.4 Critical Path Method Progress Schedule**

**108.4.1 Software**

Use the latest version of Oracle (Primavera) Project Manager (P6) version 7.0 or newer to prepare the Initial Work Plan Schedule, Baseline CPM Progress Schedule, and all Monthly CPM Updates.

#### **108.4.2 Personnel**

Designate a Project Scheduler who will be responsible for scheduling the Work and submit for department approval a professional resume describing a minimum of 3 years of developing and managing specific CPM scheduling experience on major (interstate) highway reconstruction projects or projects of similar size and complexity. This includes recent experience using Oracle P6 software.

#### **108.4.3 Definitions**

The department defines terms used in standard spec 108.4 as follows:

##### **Activity**

A task, event or other project element on the schedule, during the course of the project that contributes to completing the project. Activities have a description, scheduled (or actual) start and finish dates, duration and one or more logic ties.

##### **Critical Path**

The longest continuous path of activities through the project that has the least amount of total float. In general, a delay on the critical path will extend the scheduled completion date.

##### **Critical Path Method (CPM)**

A network based planning technique using activity durations and the relationships between activities to mathematically calculate a schedule for the entire project.

##### **Construction Activity**

Construction activities are discrete work activities performed by the contractor, subcontractors, utilities, or third parties within the project limits.

##### **CPM Progress Schedule**

A Critical Path Method (CPM) Progress Schedule is a network of logically related activities. The CPM schedule calculates when activities can be performed and establishes the critical or longest continuous path or paths of activities through the project.

##### **Data Date**

The earliest work period after the date through which a schedule is current. Everything occurring earlier than the data date is "as-built" and everything on or after the data date is "as-planned."

##### **Department's Preliminary Construction Schedule (PCS)**

The department's schedule for the contract work, developed during design, and provided to the contractor for informational purposes only.

##### **Float**

Float, as used herein, is the total float of an activity; i.e., it is the amount of time between the date when an activity can start (the early start), and the date when an activity must start (the late start). In cases where the total float of an activity has a different value when calculated based on the finish dates, the lower (more critical) value will govern.

##### **Forecast Completion Date**

The completion date(s) predicted by the latest accepted CPM Update, which may be earlier or later than the contract completion date(s), depending on progress.

##### **Fragnet**

A group of logically-related activities, typically inserted into an existing CPM schedule to model a portion of the project, such as the work associated with a change order or delay impact.

##### **Initial Work Plan Schedule**

The Initial Work Plan (IWP) Schedule is a time-scaled CPM schedule showing detailed activities for the first 90 calendar days of work and summary level activities for the remainder of the project.

##### **Intermediate Milestone Date**

A contractually required date for the completion of a portion of the work, so that a subsequent portion of the work or stage of traffic phasing may proceed.

## **Master Program Schedule**

The department's schedule for the overall IH 39 Corridor Management Program, including intermediate milestone dates contract completion dates and codes.

### **Procurement Activity**

Procurement activities are activities of duration reflecting contractor preparation and submittal of material submittals, department approval of material submittals, material fabrication durations, and material delivery durations.

### **Work Breakdown Structure (WBS)**

A framework for organizing the activities that makes up a project by breaking the project into successively greater detail by level. A WBS organizes the project work. It does not address the sequencing and scheduling of project activities.

#### **108.4.4 Department's Preliminary Construction Schedule**

The department's Preliminary Construction Schedule was developed during the design phase of the contract. Its purpose was to illustrate work areas per Stage/Phase of construction. Durations and resource availability are department estimates only. Contractor is solely responsible for its use of means and methods and as such is fully responsible for determining durations based on own estimate of production and available resources. The suggested use of the department's Preliminary Construction Schedule is ease of identification of work availability during each Stage/Phase and the logical relationship between the Stages/Phases. The Preliminary Construction Schedule reflects one possible approach to completing the work, consistent with the traffic phasing requirements and the interim/final completion date(s) contained in the contract. The logic contained in the Preliminary Construction Schedule is not intended to alter or supplement contract requirements for the phasing of the work, but to reflect those requirements. Any reliance on the department's Preliminary Construction Schedule is at the sole risk of the contractor.

#### **108.4.5 Contractor's Scheduling Responsibilities**

The CPM Schedule shall be a tool capable of forward planning and monitoring the Project. The schedule will further be used as a communication tool between the contractor and the department. It will be used to illustrate the plan, develop what-if scenarios, and analyze impacts. The accuracy and completeness of the CPM Schedule will benefit both the contractor and the department. The CPM schedule is the contractor's committed plan to complete all work within the completion deadlines.

The contractor shall submit to the department initial and monthly update schedules, each consistent in all respects with the time and order of work requirements of the contract. The project work shall be executed in the sequence indicated on the current accepted schedule. Schedules shall show the order in which the contractor proposes to carry out the work with logical links between activities, and calculations made using the critical path method to determine the controlling operation or operations. The contractor is responsible for assuring that each schedule shows a coordinated plan for complete performance of the work. Schedule the Work in the manner required to achieve the completion date and intermediate milestone dates specified in the Prosecution and Progress Special Provision.

Contractor project management personnel shall actively participate in the schedule development, the monthly updating of progress, and all schedule revisions throughout the entire duration of the contract. Subcontractors and suppliers working on the project shall also contribute in developing and maintaining an accurate schedule.

#### **108.4.6 Submittals**

##### **108.4.6.1 Initial Work Plan Schedule**

Submit an Initial Work Plan (IWP) Schedule consisting of the following:

1. Provide a detailed plan of activities to be performed during the first 90 calendar days of the contract. Provide construction activities with durations not greater than 28 calendar days (20 business days), unless the engineer accepts requested exceptions.
2. Provide activities as necessary to depict administrative work, including submittals, reviews, material procurements, inspections, and all else necessary to complete the work as described in the contract documents. Activities other than construction activities may have durations greater than 28 calendar days (20 business days).

3. Provide activities as necessary to depict third-party work related to the contract.
4. Provide summary activities for the balance of the project beyond the first 90 calendar days of the project. Summary activities may have durations greater than 28 calendar days (20 business days).
5. Submit the IWP Schedule, including the P6 native data file (XER) and an electronic file (PDF). Submit the P6 native data file (XER) and an electronic file (PDF) to the following DOT email boxes; [DOTDTSWMEGASCHEDULERS@dot.wi.gov](mailto:DOTDTSWMEGASCHEDULERS@dot.wi.gov) and [I39project@dot.wi.gov](mailto:I39project@dot.wi.gov).
6. Following department receipt of the IWP Schedule, allow 10 business days for department review and return of comments. Within 5 business days of receiving the IWP Schedule, the department will schedule a workshop for the contractor to present the IWP Schedule and to answer questions raised during the department's review. Provide formal responses to the comments and resubmit the IWP Schedule as necessary. A notice to proceed will not be issued until the engineer accepts the IWP Schedule. The department will use the IWP Schedule to monitor the progress of the work until the Baseline CPM Progress Schedule is accepted.
7. Submit an updated version of the IWP Schedule on a bi-monthly basis (every other week) until the engineer accepts the Baseline CPM Progress Schedule. With each update, include actual start dates, completion percentages, and remaining durations for activities started but not completed. Include actual finish dates for completed activities.

#### **108.4.6.2 Baseline CPM Progress Schedule**

Within 10 business days of receiving an approved IWP Schedule, as required in the contract, submit a Baseline CPM Progress Schedule and written narrative consisting of the following:

1. Develop the Baseline CPM schedule. The Baseline CPM is the contractor's committed plan to complete the Work within the time frames required to achieve the contract completion date and intermediate milestone dates. The department will use the schedule to monitor the progress of the work. Include the following:
  - 1.1 Provide a detailed plan of activities to be performed during the entire contract duration, including all administrative and construction activities required to complete the work as described in the contract documents. Provide construction activities with durations not greater than 28 calendar days (20 business days), unless the engineer accepts requested exceptions.
  - 1.2 Provide activities as necessary to depict administrative work, including submittals, reviews, material procurements, inspections, and all else necessary to complete the work as described in the contract documents. Activities other than construction activities may have durations greater than 28 calendar days (20 business days).
  - 1.3 Provide activities as necessary to depict third-party work related to the contract. Third-party work activities may include but is not limited to Railroads, Utilities, Real Estate and local government agencies.
  - 1.4 Make allowance for specified work restrictions, non-working days, time constraints, calendars, and potential or approved weather delays; reflect involvement and reviews by the department; and coordination efforts with adjacent contractors, utility owners, and other third parties.
  - 1.5 With the exception of the Project Start Milestone and Project Completion Milestone, all activities must have predecessors and successors. Predecessors and successors shall not be linked to the same activity with different relationship types. The start of an activity shall have a Start-to-Start or Finish-to-Start relationship with preceding activities. The completion of an activity shall have a Finish-to-Start or Finish- to-Finish relationship with succeeding activities. Do not use Start-to-Finish relationships. Do not use Finish-to-Start relationships with a lag or overlap unless the engineer accepts requested exceptions. Include and discuss request for exceptions in the schedule narrative provided with each schedule submittal.
  - 1.6 Schedule activities shall include the following:
    - a. A clear and legible description. The use of abbreviations shall be limited. Descriptions shall include an action verb describing the work performed, a basic description of the materials used, and, where applicable, a general location of the work.
    - b. Codes for Contract ID/WisDOT Project ID, Responsibility, Stage, and Area. The department may provide additional codes for use within department reporting.

- c. Activities shall carry a single Responsibility assignment.
  - c.1 Schedule all intermediate milestones in the proper sequence and input as either a “Start on or After” or “Finish on or Before” date. Do not use other constraint types, within the software, without prior approval by the engineer. Do not apply date constraints on any work tasks without prior approval by the engineer. Provide predecessors and successors for each intermediate milestone as necessary to model each Stage of the Work. Unless the engineer accepts a requested exception, the schedule shall encompass all the time in the contract period between the starting date and the specified completion date.
  - c.2 Develop and submit an anticipated cash-flow curve for the project within the P6 application, based on the Baseline CPM schedule by assigning cost values to selective work tasks within the CPM schedule that total the value of the contract.
  - c.3 Provide budgeted quantities consistent with the bid quantities on selective construction tasks within the CPM schedule. The engineer will provide a summarized list of 30 generalized quantity items that will be identified and applied by the contractor using the P6 software application.
- 2. Provide an electronic PDF of the CPM schedule depicting the CPM network. Organize the logic diagram by grouping related activities, based on the activity codes in the CPM.
- 3. Provide a written narrative with the Baseline CPM explaining the planned sequence of work, as-planned critical path, critical activities for achieving intermediate milestone dates, traffic phasing, and planned labor and equipment resources. Use the narrative to further explain:
  - 3.1 The basis for activity durations in terms of production rates for each major type of work (number of shifts per day and number of hours per shift), and equipment usage and limitations.
  - 3.2 Use of constraints.
  - 3.3 Use of calendars.
  - 3.4 Estimated number of adverse weather days on a monthly-basis.
  - 3.5 Scheduling of permit and environmental constraints, and coordination of the schedule with other contractors, utilities, and public entities.
- 4. Submit the Baseline CPM schedule including the P6 native data file (XER) and an electronic file (PDF). Submit the P6 native data file (XER) and an electronic file (PDF) to the following dot email boxes; [DOTDTSDSWMEGASCHEDULERS@dot.wi.gov](mailto:DOTDTSDSWMEGASCHEDULERS@dot.wi.gov) and [I39project@dot.wi.gov](mailto:I39project@dot.wi.gov).

Within 10 business days of receiving the Baseline CPM schedule, the department will schedule a workshop, review the submittal, and return review comments.

Within 5 business days after the Baseline CPM scheduling workshop, the department will either accept the contractor’s Baseline CPM schedule or provide additional comments. Within 5 business days, address the department’s comments and resubmit a revised Baseline CPM, including formal responses to the department’s review comments. If the engineer requests justifications for activity durations provide information that may include estimated labor, equipment, unit quantities, and production rates used to determine the activity duration.

The engineer will accept the Baseline CPM based solely on whether the schedule is complete as specified in this section and meets the requirements of the contract. The engineer’s acceptance of the schedule does not modify the contract and does not relieve the contractor from meeting the contract requirements.

The department will not consider requests for contract time extensions as specified in 108.10 or additional compensation for delay specified in standard spec 109.4.7 until the department accepts the Baseline CPM schedule.

#### **108.4.6.3 Monthly CPM Schedule Updates**

Submit CPM Schedule updates on a monthly basis after acceptance of the Baseline CPM Schedule. With each CPM Schedule update, include the following:

- 1. Actual start dates, completion percentages, and remaining durations for activities started but not completed, and actual finish dates for completed activities, through the final acceptance of the project.

2. Additional activities as necessary to depict additions to the contract by changes and logic revisions as necessary to reflect changes in the contractor's plan for prosecuting the work.
3. Include a narrative report that includes a brief description of monthly progress, changes to the critical path from the previous update, sources of potential delay, work planned for the next 30 calendar days, and all changes to the CPM Schedule. Changes to the CPM Schedule include the addition or deletion of activities, changes to activity descriptions, original durations, relationships, overlap (lag/lead), constraints, calendars, or previously recorded actual dates. Justify changes to the CPM Schedule in the narrative by describing associated changes in the planned methods or manner of performing the work or changes in the work itself.
4. Submit each CPM Schedule update; including the P6 native data file (XER) and an electronic file (PDF) on 3 separate CD-ROM's. Submit the P6 native data file (XER), the electronic file (PDF), responses to the DOT review comments, and the progress schedule update narrative to the following dot email boxes; [DOTDTSDSWMEGASCHEDULERS@dot.wi.gov](mailto:DOTDTSDSWMEGASCHEDULERS@dot.wi.gov) and [I39project@dot.wi.gov](mailto:I39project@dot.wi.gov).
5. Within 10 business days of receiving each CPM Schedule update, the engineer will provide formal review comments and schedule a meeting, if necessary, to address comments raised in the department's review. Address the department's comments and resubmit a revised CPM Schedule update within 5 business days after the department's request.

#### **108.4.6.4 Three-Week Look-Ahead Schedules**

Submit Three-Week Look-Ahead Schedules on a weekly basis after NTP. The schedule shall be prepared by computer. Provide 3 hard copies (11" x 17") to the engineer. With each Three-Week Look-Ahead include:

1. Activities underway and as-built dates for the past week.
2. Actual as-built dates for completed activities through final acceptance of the project.
3. Planned work for the upcoming 3-week period.
4. The activities of the Three-Week Look-Ahead schedule shall include the activities underway and critical RFIs and submittals, based on the CPM schedule. The Three-Week Look-Ahead may also include details on other activities not individually represented in the CPM schedule.
5. On a weekly basis, the department and the contractor shall agree on the as-built dates depicted in the Three-Week Look-Ahead schedule or document any disagreements. Use the as-built dates from the Three-Week Look-Ahead schedules for the month when updating the CPM schedule.

#### **108.4.6.5 Weekly Production Data**

Provide estimated and actual weekly production curves for items of work on a weekly basis for applicable items of work as requested by the department including but not limited to the following:

1. Provide data on the following items by the units specified:

Underground Facilities – LF per week

Retaining Walls – SF per week

- MSE Walls
- Other Wall Types

##### Bridge Construction

- Foundation Pile – EACH per week
- Foundation/Substructure Concrete – CY per week
- Structural Steel Girders – EACH per week
- Prestressed Concrete Girders – EACH per week
- Deck Formwork – SF per week
- Roadway Excavation – CY per week
- Roadway Embankment – CY per week

### Roadway Structural Section

- Grading/Subgrade Preparation – SY per week
- Base Material Placement – TON per week
- Base Material Subgrade Preparation – SY per week
- Asphaltic Base – TON per week
- Asphaltic and HMA Pavements – TON per week
- Concrete Pavement – SY per week
- Concrete Pavement – CY per week
- Finishing Items – SY per week

Note: Base material shall include all breaker run, base aggregate, subbase items or other base items included in the contract. Provide production information for each individual base material item.

2. For each item, indicate the actual daily production for the past week and the anticipated weekly production for the next week. Also include cumulative production curves showing the production information for each item to date.
3. Submit the data in an electronic spreadsheet format at the same time the Three-Week Look-Ahead is submitted. On a weekly basis, the department and the contractor shall agree on the production data or document any disagreements.

#### **108.4.7 Progress Review Meetings**

After completing the weekly submittal of the Three-Week Look-Ahead Schedules and production data, attend a weekly progress review meeting to review the submittals with the department. At the meeting, address comments as necessary, and document agreement or disagreement with the department.

After submitting the monthly update and receiving the engineer's comments, attend a job-site meeting, as scheduled by the engineer, to review the progress of the schedule. At that meeting, address comments as necessary, and document agreement or disagreement with the department. The monthly meeting will be coordinated to take place on the same day and immediately before or after a weekly meeting, whenever possible.

#### **108.4.8 CPM Progress Schedule Revisions**

A CPM Progress Schedule Revision may be submitted, prior to the next CPM Monthly Update, if necessary due to changes in the Work or project conditions as authorized by the engineer. Prepare the CPM Revision in the same format as required for CPM Monthly Updates, including justification for changes to the schedule. The process for comment and acceptance of a CPM Revision will be the same as for CPM Monthly Updates. If the CPM Revision is accepted, prepare the next monthly update based on the revised CPM. If the CPM Revision is rejected, prepare the next monthly update based on the previous month's update.

The engineer will monitor the progress of the work and may request revisions to the CPM schedule. Revise the schedule as requested by the engineer and submit a CPM Progress Schedule Revision within 10 business days of the request. The process for comment and acceptance of a CPM Revision will be the same as for CPM Monthly Updates. The engineer may request that the contractor revise the CPM schedule for one or more of the following reasons:

1. The forecast completion date is scheduled to occur more than 14 calendar days after the contract completion date.
2. An intermediate milestone is scheduled to occur more than 14 calendar days after the date required by the contract.
3. The engineer determines that the progress of the work differs significantly from the current schedule.
4. A contract change order requires the addition, deletion, or revision of activities that causes a change in the contractor's work sequence or the method and manner of performing the work.

#### 108.4.9 Documentation Required for Time Extension Requests

The information below is to be applied in compliance with Standard Specifications 108.9 and 108.10 and does not replace the above mentioned specifications. To request a time extension to an intermediate milestone date or the contract completion date associated with changes to the work, provide a narrative document separate from the monthly schedule update narrative document that specifically details the work added or deleted and the other activities affected and or impacted based on the latest accepted CPM Monthly Update. For added work including impact delay activities, submit a proposed fragnet of activities to be added or revised in the CPM schedule, indicating how the fragnet is to be tied to the CPM schedule.

To request a time extension to an intermediate milestone date or the contract completion date associated with delays to the work, provide a narrative detailing the affected activities and the cause of the delay, based on the latest accepted CPM Monthly Update. Requests for time extensions due to delays shall meet the following criteria:

1. For requests to extend the contract completion date, include a detailed description of how the delay, or additional work, affected the project's critical path, based on the latest accepted CPM Monthly Update.
2. For requests to extend an intermediate milestone date, include a description of how the delay, or additional work, affected the controlling (longest) path to the milestone, based on the latest accepted CPM Monthly Update.
3. The department and the contractor agree that the float is not for the exclusive use or financial benefit of either party. Either party has the full use of the float on a first come basis until it is depleted.

#### 108.4.10 Measurement for CPM Progress Schedule

The department will measure Baseline CPM Progress Schedule for each required submittal, acceptably completed.

The department will measure CPM Progress Schedule Updates and Accepted Revisions for each required submittal, acceptably completed.

#### 108.4.11 Payment for CPM Progress Schedule

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.001	Baseline CPM Progress Schedule	EACH
SPV.0060.002	CPM Progress Schedule Updates and Accepted Revisions	EACH

Payment is full compensation for furnishing all work required under these bid items. The department will pay the contract unit price for the Baseline CPM Progress Schedule after the department accepts the schedule. Thereafter, the department will pay the contract unit price for each monthly CPM Progress Schedule update acceptably completed. The department will pay the contract unit price for CPM Revisions, if the department accepts the revision. The department will not pay for proposed revisions that are not accepted.

Failure to provide satisfactory schedule submittals within the times specified will result in liquidated damages being assessed and may result in the department managing to the contractor's latest accepted schedule until such time as the contractor submits an updated or revised schedule.

If the contractor does not provide satisfactory progress schedule submittals, updates and revisions, within the time specified by these specifications, the department will assess liquidated damages. The department will deduct the amount of \$500 per calendar day due to the contractor for every calendar day that the submission of the Initial Work Plan Schedule, Baseline CPM Progress Schedule, Revised CPM Progress Schedule, and the Monthly Progress Schedule is delinquent.

If the Initial Work Plan Schedule, Baseline CPM Progress Schedule, Revised CPM Progress Schedule, and the Monthly Progress Schedule update submittals are not received by the department within 10 business days after the submittal time specified, and, within 10 days of the submittal date, the engineer finds the schedule submittal unacceptable, the department will only make progress payments for the value of materials, as specified in standard spec 109.6.3.2.1, until the schedule is submitted and found acceptable.

(10/25/2017)

## **82. Test Pits, Item SPV.0060.003.**

### **A Description**

This special provision describes excavating test pits and backfilling as directed by the engineer and geotechnical engineer and as hereinafter provided. Test pits are for the purpose of locating and relieving trapped water within the existing roadway embankments.

### **B Materials**

Construct test pits conforming to standard spec 205.2 for Roadway Excavation.

Provide materials to conform to standard spec 312.2 for Select Crushed Material.

### **C Construction**

All excavation of test pits shall be performed during daytime hours. The engineer and geotechnical engineer (Hassen A. Hassen, [Hassen.Hassen@dot.wi.gov](mailto:Hassen.Hassen@dot.wi.gov)) shall be present during excavation.

The location of test pits shall be determined by the engineer and geotechnical engineer. Contact the engineer at least 4 weeks prior to earthwork operations. Test pits shall be excavated at least 2 weeks prior to roadway excavation operations. Different timelines, to meet particular projects' needs, may be required by the engineer and geotechnical engineer.

Excavate the foreslope of the existing roadway embankment beginning at the edge of the existing subgrade shoulder point at a slope of 1:1 down to the elevation of the toe of existing slope, but no lower than 1 foot above the ditch flow line if a ditch is present. Excavations shall be 10 feet wide measured parallel to the roadway shoulder. The bottom of the test pit shall be sloped to drain away from the roadway.

If water is present or seeping from the embankment, backfill with select crushed where the test pit is located on an embankment that is supporting live traffic. Place select crushed to stabilize the test pit and allow water to seep out. If the embankment is not supporting live traffic, then the test pit shall remain open and maintained until seeping stops or as approved by the engineer and geotechnical engineer.

If water is not present or seeping from the embankment, backfill the test pit with roadway embankment or a material approved by the engineer and geotechnical engineer.

### **D Measurement**

The department will measure Test Pits by each unit, acceptably installed.

### **E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.003	Test Pits	EACH

Payment is full compensation for furnishing all engineer approved work specified including excavating, sloping, shaping, stockpiling, backfilling with select crushed material, compacting, and maintaining.

The department will pay for select crushed material under bid item 312.0110. The department will pay for erosion control, if required, under the erosion control bid items.

## **83. Roadway Cleanup, Item SPV.0060.004.**

### **A Description**

This special provision describes removing trash, tires and other debris from the IH 39 roadway during construction operations.

### **B (Vacant)**

### **C Construction**

Roadway cleanup will be scheduled by the department to occur on a once per month basis. For months with holiday work restrictions, the cleanup will be scheduled to occur immediately prior to the holiday break. The cleanup will occur on a weeknight, Tuesday through Thursday, during the time from 12:00 AM to 5:00 AM.

Traffic control for roadway cleanup will be provided by the department with the assistance of the Wisconsin State Patrol. A rolling slowdown will be used for traffic control. The necessary advanced signing and law enforcement personnel will be required to be on site prior to and during the rolling slowdown operation. Arrangements for implementing a rolling slowdown on IH 39 will be made by Jeff Gustafson at the Southwest Region Madison Office, (608) 516-6400. A rolling slowdown will only be allowed in one direction (northbound or southbound) at a time. Concurrent northbound and southbound rolling slowdowns will not be allowed. A northbound rolling slowdown will occur immediately following a southbound rolling slowdown, or vice versa, to complete the roadway cleanup loop (both northbound and southbound) for the project length.

Provide personnel and equipment capable of retrieving and transporting all types of roadway debris from the travel lanes and shoulders. All debris shall be removed from the roadway and shoulder areas. The debris removal area shall be extended along the outside shoulders to include the construction clear zone.

#### **D Measurement**

The department will measure Roadway Cleanup as each individual unit, acceptably completed, which includes both sides of the roadway and corresponding ramps.

#### **E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.004	Roadway Cleanup	EACH

Payment is full compensation for providing personnel and equipment to remove debris from the traffic lanes, ramps, and all shoulders of IH 39, and disposal of collected debris for the duration of the project during construction operations.

### **84. Welded Inlet Covers, Item SPV.0060.005.**

#### **A Description**

This special provision describes welding inlet covers subject to traffic loading as shown on the plans, and as hereinafter provided.

#### **B (Vacant)**

#### **C Construction**

Clean and prepare the surface of the existing inlet frames and grates which are subject to traffic loading.

Weld the grate to the frame in a manner which prevents rocking or the ability of the grate to dislodge from the frame.

Upon completion of traffic loading, remove the welds by grinding, or other method approved by the engineer, to the original condition of the frame and grate. The edges of the frame and grate shall be free of sharp edges or other defects. The contractor shall replace all frames, grates, storm sewer structures, or other associated items determined to be damaged as a result of the work at no cost to the department.

#### **D Measurement**

The department will measure Welded Inlet Covers as each individual inlet cover, 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.0060.005	Welded Inlet Covers	EACH

Payment is full compensation for preparing the surfaces; welding the grates to the frames; removing the welds; restoring the existing frames and grates to existing condition; and for protecting from damage.

**85. Pipe Bollard, Item SPV.0060.006.**

**A Description**

This special provision describes furnishing and installing pipe bollards at locations as detailed in the plans and as hereinafter provided.

**B Materials**

Fabricate pipe bollards from schedule 80 galvanized steel pipe.

Provide concrete according to standard spec 501 conforming to Grade A, A-FA, A-S, A-T, A-IS, A-IP, and A-IT.

**C Construction**

Paint the pipe bollards as specified in standard spec 517.2.4, color yellow.

Paint the pipe bollards according to standard spec 517.3. For the portion of the pipe bollard that will be fully encased in concrete, apply only the zinc-rich primer as specified in standard spec 517.3.1.7.2.

Excavate to the depth shown on the plans. Remove water or other foreign material from the excavation and inside the pipe before placing concrete. Place concrete in the excavation and inside pipe in a continuous operation at a rate that will not cause air pockets. The concrete may not have cold joints. Fill the pipe completely with concrete and consolidate to a depth as great as practicable with a mechanical vibrator or by other engineer-approved method.

Protect the pipe bollards from damage to the paint during transportation, storage, placement and concrete placement. Repair any damaged paint according to standard spec 517.3.

**D Measurement**

The department will measure Pipe Bollard as each individual pipe bollard, 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.0060.006	Pipe Bollard	EACH

Payment is full compensation for providing pipe, concrete, and paint; for excavation; for placing concrete within the pipe and for the footing; for backfilling and disposing of surplus materials; and for repairs to the paint system.

**86. Utility Line Opening (ULO), Item SPV.0060.007.**

**A Description**

This special provision describes excavating to uncover utilities for the purpose of determining elevation and potential conflicts with proposed work, as shown on the plans or as directed by the engineer.

**B (Vacant)**

**C Construction**

Perform the excavation according to Wisconsin State Statue 182.0175.

Perform the utility line openings as soon as possible, before ordering precast structures, and at least 10 days in advance of proposed utility construction to allow any conflicts to be resolved with minimal disruption. Allow the engineer a minimum of three working days once utility line opening information is received to review all relevant design information.

Coordinate and approve all utility line openings with the engineer. Notify the utilities a minimum of 3 days before the work so they may be present.

Backfill the excavation with suitable backfill material, and thoroughly compact.

## **D Measurement**

The department will measure Utility Line Opening (ULO) as each individual utility line opening (ULO), acceptably completed. Utility line openings include a trench up to 10-feet long as measured at the trench bottom, and of any width and depth required to locate the intended utility. Where utilities are within 6 feet of each other at a potential conflict location, only one utility line opening will be measured.

## **E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.007	Utility Line Opening (ULO)	EACH

Payment is full compensation for performing the excavation required to expose the utility line, backfilling, and for restoring and cleaning up the site.

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## **87. Temporary Sediment Basin, Item SPV.0060.08.**

### **A Description**

This special provision describes excavating and constructing temporary sediment basins as shown on the plans or as directed by the engineer, or both, and as hereinafter provided.

### **B Materials**

Furnish select crushed material that conforms to the pertinent requirements of the standard specifications.

Furnish backfill material with similar engineering properties to the existing native soils excavated for the sediment basins. Backfilling with the same excavated material will be allowed.

### **C Construction**

Notify the engineer sufficiently before beginning excavation for the sediment basins so the engineer may take elevations and measurements of the existing ground before disturbance.

Excavate all materials to depth, width, and slopes as the plans show and as directed by the engineer. The engineer may change the depth and width of the basins to fit field conditions.

Place select crushed material according to the plans and/or as directed by the engineer.

Remove sediment from the sediment basin when it has accumulated to one half of the basin depth.

When the temporary sediment basin is no longer needed, as directed by the engineer, backfill the excavated area to the original ground elevation or to the new ditch/channel elevation shown in the plans or as directed by the engineer.

### **D Measurement**

The department will measure Temporary Sediment Basin as each individual temporary sediment basin, 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.0060.08	Temporary Sediment Basin	EACH

Payment is full compensation for excavating and disposing of excavated material; for temporary storage of excavated material; for select crushed material; for furnishing backfill; and for backfilling the excavated basin including backfilling with the excavated material.

The department will pay for the removal and disposal of accumulated sediment and maintaining the basin under the bid item 628.1920 Cleaning Sediment Basins.

**88. Repair State Owned Energy Absorbing Terminal (EAT), Item SPV.0060.203;  
Repair State Owned Guardrail, Item SPV.0090.200.**

**A Description**

This special provision describes providing emergency repair services, including the replacement of unusable components or hardware, for state owned energy absorbing terminals or guardrail located on IH 39 or an IH 39 ramp that is damaged due to a vehicular collision during the time this contract is in effect. This work shall be according to standard spec 614, as directed by the engineer, and as hereinafter provided. Responding to the incident site with the appropriate staff, equipment and materials is covered under a separate bid item.

**B (Vacant)**

**C Construction**

Repairs shall be completed as quickly as possible once repair work is started. Repair work shall be completed off of the traveled way to the maximum extent possible.

Additional traffic control measures may be required depending on the severity and duration of the incident. The contractor shall provide any needed traffic control measures as directed by the engineer.

**D Measurement**

The department will measure Repair State Owned Energy Absorbing Terminal (EAT) as each individual unit, acceptably repaired. The department will measure Repair State Owned Guardrail by the linear foot, acceptably repaired.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.203	Repair State Owned Energy Absorbing Terminal (EAT)	EACH
SPV.0090.200	Repair State Owned Guardrail	LF

Payment is full compensation for completing the necessary repair work to restore the state owned semi-rigid barrier system to a safe and operational condition, including replacement of damaged, unusable hardware.

The department will pay for additional traffic control measures, if required, under the respective traffic control bid items in the contract.

**89. Emergency Response to Traffic Incident Involving Guardrail or EAT, Item SPV.0060.204.**

**A Description**

This special provision describes providing prompt response to an emergency repair request involving a damaged guardrail or an Energy Absorbing Terminal (EAT) device on IH 39 or an IH 39 ramp that is damaged due to a vehicular collision during the time this contract is in effect.

**B Materials (Vacant)**

**C Construction**

The contractor shall provide appropriate staff to the incident site within 45 minutes of receiving a repair request from the responding agency. Staff deployed shall be capable of immediately assessing the severity of the damage to the device and consult with the department's representative on potential repair or replacement options and the projected timeline to restore the roadside device to its proper working condition. The contractor shall provide a time log of when the repair request was received and when staff arrived at the incident site. This information shall be submitted to the engineer, for verification, within 24 hours of the repair completion.

Contact information for the contractor's responsible party (the person or persons in charge of coordinating repair efforts) shall be submitted to the engineer at the pre-construction meeting. This person(s) shall be available 24/7 during the duration of this contract. The contact information for the department's representative will be supplied to the contractor at the pre-construction meeting.

If the contractor fails to be on-site of an incident with appropriate staff within 45 minutes of receiving a repair request, the department will assess the contractor \$2,500 in liquidated damages for each 15-minute interval that the contractor is not present following the allotted 45-minute response time. Increments of 15 minutes or less will be assessed as a 15-minute increment. The engineer, or designated representative, will be the sole authority in determining assessable 15-minute increments. Liquidated damages will be assessed under the administrative item Failing to Open Road to Traffic.

For contractor owned devices, repair work shall be completed according to standard spec 614, and as directed by the engineer. For state-owned devices, repair work is covered under articles "Repair State Owned Guardrail" and "Repair State Owned EAT" of these special provisions. In either case, once repair work has been started, work shall continue until completion. Repair work shall be completed off the traveled way to the maximum extent allowable.

Additional traffic control measures may be required depending on the severity and duration of the incident. The contractor shall provide any needed traffic control measures as directed by the department's representative.

#### **D Measurement**

The department will measure Emergency Response to Traffic Incident Involving Guardrail or EAT as each individual response, 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.0060.204	Emergency Response to Traffic Incident Involving Guardrail or EAT	EACH

Payment is full compensation for providing a prompt staff response to an emergency repair request for a damaged guardrail or an EAT located within the project limits.

The cost of providing the appropriate level of on-call staff for 24/7 incident response shall be included in the Mobilization bid item for this project.

The department will pay for any additional traffic control measures, if required, under the respective traffic control bid items in the contract.

(11/29/2017)

### **90. Emergency Response to Pavement Repairs, Item SPV.0060.205.**

#### **A Description**

This special provision describes providing prompt response to an emergency repair request of damaged or deteriorated concrete or HMA pavement located on IH 39 or an IH 39 ramp. The provisions of this article will not be applicable during a project's winter shutdown period.

#### **B Materials (Vacant)**

#### **C Construction**

The contractor shall provide staff, equipment, and materials to the incident site within 45 minutes of receiving a repair request from the responding agency. The contractor shall consult with the department's representative on potential repair or replacement options to restore the damaged or deteriorated pavement section to a safe and drivable condition. Staff and equipment deployed shall be capable of completing the needed repairs as quickly as possible once repair work is started. The contractor shall provide a time log of when the repair request was received and when staff arrived at the incident site. This information shall be submitted to the engineer, for verification, within 24 hours of the repair completion.

Contact information for the contractor's responsible party (the person or persons in charge of coordinating and completing repair efforts) shall be submitted to the engineer at the pre-construction meeting. This person(s) shall be available 24/7 during the duration of this contract. The contact information for the department's representative will be supplied to the contractor at the pre-construction meeting.

If the contractor fails to be on-site of an incident with appropriate staff and equipment within 45 minutes of receiving a repair request, the department will assess the contractor \$2,500 in liquidated damages for each 15-minute interval that the contractor is not present following the allotted 45-minute response time. Increments of 15 minutes or less will be assessed as a 15-minute increment. The engineer, or designated representative, will be the sole authority in determining assessable 15-minute increments. Liquidated damages will be assessed under the administrative item Failing to Open Road to Traffic.

Additional traffic control measures may be required depending on the severity and duration of the incident. The contractor shall provide any needed traffic control measures as directed by the department's representative.

#### **D Measurement**

The department will measure Emergency Response to Pavement Repairs as each individual response, 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.0060.205	Emergency Response to Pavement Repairs	EACH

Payment is full compensation for providing prompt response to an emergency repair request for damaged or deteriorated concrete or HMA pavement located within the project's construction limits.

The cost of providing the appropriate level of on-call staff, equipment, and materials for 24/7 incident response shall be included in the Mobilization bid item for this project.

The department will pay for concrete pavement or HMA pavement repairs under the respective concrete pavement or HMA pavement bid items in the contract.

The department will pay for any additional traffic control measures, if required, under the respective traffic control bid items in the contract.

(5/6/2019)

### **91. Emergency Response to Traffic Incident Involving Concrete Barrier Temporary Precast, Item SPV.0060.206.**

#### **A Description**

This special provision describes providing prompt response to an emergency repair request for damaged and/or dislodged temporary concrete barrier located on IH 39 or an IH 39 ramp that is damaged or displaced due to a vehicular collision during the time this contract is in effect.

#### **B Materials (Vacant)**

#### **C Construction**

The contractor shall provide staff, equipment, and materials to the incident site within 45 minutes of receiving a repair request from the responding agency. The contractor shall consult with the department's representative on potential repair or replacement options to restore the temporary concrete barrier to proper working condition. Staff and equipment deployed shall be capable of completing the needed repairs as quickly as possible once repair work is started. Repair work shall be completed off the traveled way to the maximum extent allowable. The contractor shall provide a time log of when the repair request was received and when staff arrived at the incident site. This information shall be submitted to the engineer, for verification, within 24 hours of the repair completion.

Contact information for the contractor's responsible party (the person or persons in charge of coordinating and completing repair efforts) shall be submitted to the engineer at the pre-construction meeting. This person(s) shall be available 24/7 during the duration of this contract. The contact information for the department's representative will be supplied to the contractor at the pre-construction meeting.

If the contractor fails to be on-site of an incident with appropriate staff and equipment within 45 minutes of receiving a repair request, the department will assess the contractor \$2,500 in liquidated damages for each 15-minute interval that the contractor is not present following the allotted 45-minute response time. Increments of 15 minutes or less will be assessed as a 15-minute increment. The engineer, or designated

representative, will be the sole authority in determining assessable 15-minute increments. Liquidated damages will be assessed under the administrative item Failing to Open Road to Traffic.

For contractor owned temporary barrier, repair work shall be completed according to standard spec 603 and 643, and as directed by the engineer. For state-owned temporary barrier, repair work is covered under article "Repair State Owned Concrete Barrier Temporary Precast" of these special provisions.

Additional traffic control measures may be required depending on the severity and duration of the incident. The contractor shall provide any needed traffic control measures as directed by the department's representative.

#### **D Measurement**

The department will measure Emergency Response to Traffic Incident Involving Concrete Barrier Temporary Precast as each individual response, 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.0060.206	Emergency Response to Traffic Incident Involving Concrete Barrier Temporary Precast	EACH

Payment is full compensation for providing prompt response to an emergency repair request for damaged and/or dislodged temporary concrete barrier located within the project limits.

The cost of providing the appropriate level of on-call staff, equipment, and materials for 24/7 incident response shall be included in the Mobilization bid item for this project.

The department will pay for any additional traffic control measures, if required, under the respective traffic control bid items in the contract.

(11/29/2017)

### **92. Emergency Response to Traffic Incident Involving Crash Cushion, Item SPV.0060.207.**

#### **A Description**

This special provision describes providing prompt response to an emergency repair request involving a damaged crash cushion device on IH 39 or an IH 39 ramp that is displaced or damaged due to a vehicular collision during the time this contract is in effect.

#### **B (Vacant)**

#### **C Construction**

The contractor shall provide appropriate staff to the incident site within 45 minutes of receiving a repair request from the responding agency. Staff deployed shall be capable of immediately assessing the severity of the damage to the device and consult with the department's representative on potential repair or replacement options and the projected timeline to restore the roadside device to its proper working condition. The contractor shall provide a time log of when the repair request was received and when staff arrived at the incident site. This information shall be submitted to the engineer, for verification, within 24 hours of the repair completion.

Contact information for the contractor's responsible party (the person or persons in charge of coordinating repair efforts) shall be submitted to the engineer at the pre-construction meeting. This person(s) shall be available 24/7 during the duration of this contract. The contact information for the department's representative will be supplied to the contractor at the pre-construction meeting.

If the contractor fails to be on-site of an incident with appropriate staff within 45 minutes of receiving a repair request, the department will assess the contractor \$2,500 in liquidated damages for each 15-minute interval that the contractor is not present following the allotted 45-minute response time. Increments of 15 minutes or less will be assessed as a 15-minute increment. The engineer, or designated representative, will be the sole authority in determining assessable 15-minute increments. Liquidated damages will be assessed under the administrative item Failing to Open Road to Traffic.

For contractor owned devices, repair work shall be completed according to standard spec 614, and as directed by the engineer. For state-owned devices, repair work is covered under articles "Repair State Owned Crash Cushion" or "Repair State Owned Crash Cushion Low Maintenance" of these special provisions. In either case, once repair work has been started, work shall continue until completion. Repair work shall be completed off the traveled way to the maximum extent allowable.

Additional traffic control measures may be required depending on the severity and duration of the incident. The contractor shall provide any needed traffic control measures as directed by the department's representative.

#### **D Measurement**

The department will measure Emergency Response to Traffic Incident Involving Crash Cushion as each individual response, 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.0060.207	Emergency Response to Traffic Incident Involving Crash Cushion	EACH

Payment is full compensation for providing a prompt staff response to an emergency repair request for a damaged crash cushion device located within the project limits.

The cost of providing the appropriate level of on-call staff for 24/7 incident response shall be included in the Mobilization bid item for this project.

The department will pay for any additional traffic control measures, if required, under the respective traffic control bid items in the contract.

(11/29/2017)

### **93. Remove Communication Vault, Item SPV.0060.401.**

#### **A Description**

This special provision describes removing an existing communication vault and all included equipment (that is not being salvaged or relocated by the project).

#### **B Materials**

Provide all tools and equipment necessary to remove the existing communication vault and all included equipment (that is not being salvaged or relocated by the project).

#### **C Construction**

Carefully remove the existing communication vault and all included equipment (that is not being salvaged or relocated by the project) at the location indicated on the plans.

Dispose of removed materials off department right-of-way.

#### **D Measurement**

The department will measure Remove Communication Vault as each individual communication vault removed, acceptably completed.

#### **E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.401	Remove Communication Vault	EACH

Payment is full compensation for removing the communication vault and all included equipment (that is not being salvaged or relocated by the project).

**94. Install Radio, Item SPV.0060.402.**

**A Description**

This special provision describes installing a radio, antenna, and associated riser and cabling.

**B Materials**

The department will furnish the radio and antenna. Provide the antenna riser (including conduit rigid metallic, conduit, and weatherhead) and cabling to make the radio operational.

**C Construction**

Mount the radio and associated equipment as indicated on the plans. Connect it to devices as shown on the plans, or as directed by the engineer.

**D Measurement**

The department will measure Install Radio as each individual radio, 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.0060.402	Install Radio	EACH

Payment is full compensation for installation of the radio and associated antenna, riser, and cabling; furnishing and installing all necessary hardware; and making all necessary connections.

**95. Native Seed Surveillance and Care Cycles, Item SPV.0060.501.**

**A Description**

This special provision describes the post-seeding monitoring, documentation, and care for the native seed planting areas.

**A.1 Native Seed Establishment Period**

The native seed surveillance and care period is from initial planting until December 15 of the succeeding year.

A surveillance and care cycle is defined as a 30 day interval. The number of and duration between surveillance and care cycles may be reduced or extended by the Corridor Vegetation Inspector as conditions dictate.

**B Materials**

**B.1 Herbicides**

Comply with the material specified in the article Pre-Planting Vegetation Treatment.

**C Construction**

**C.1 General**

Proper surveillance and care of native plants consists of weeding, re-seeding, and any other work necessary to maintain the native plants and promote continued establishment.

Remove any trash, debris, slurry, sediment, or other material deposited by wind, water, or other means in any of the native seeded areas.

**C.2 Care Specialist**

Provide one person, called the care specialist, responsible for the well-being of the native seed planting areas. Also provide any other personnel, licenses, certifications, vehicles, equipment, tools, and materials needed to carry out the care specialist's recommendations throughout the full term of the establishment period. The care specialist will do the following:

1. For each care cycle, perform surveillance and care of the native seed planting areas throughout the growing season to promote native seed growth.
2. After each visual inspection, but prior to executing the work for each care cycle, fill out the pertinent information required on the department provided worksheet "Native Seed Scouting Report". After all care activities have been completed for a care cycle, fill out the remainder of the same worksheet. Complete one worksheet per site per care cycle, sign the worksheet, and submit to the Corridor Vegetation Inspector.
3. Conduct a field assessment native plant survey during July or August for each seeding site. Fill out the department provided worksheet "Native Plant Survey" or an equivalent worksheet approved by the Corridor Vegetation Inspector. Complete one worksheet per site, sign the worksheet, and submit to the Corridor Vegetation Inspector.
4. Do a final examination of the native seed planting sites by December 1 of the establishment period. Fill out the department provided worksheet "Final Assessment of Native Plantings". Include required attachments, a written summary of management efforts for the year, a written summary of management recommendations for the following years, locations and description of areas of concern and a list of the established plant species at each site. Complete one worksheet per site, sign the worksheet, and submit to the Corridor Vegetation Inspector for review and approval.
5. Follow the Performance Standards contained in this article.

### **C.3 Re-Seeding**

If the July/August field assessment finds that bare ground exceeds 10% of the native seeded area, re-seed all bare spots larger than 4-square feet. Re-seed all areas, at the earliest appropriate planting time. Areas to be re-seeded must be approved by the Corridor Vegetation Inspector before work begins.

### **C.4 Invasive Species and Weed Management**

Identify and manage weeds within the Invasive Species and Weed Management Areas (including native seeding areas) shown in the plans. Common approaches to control invasive species and weeds within and near native prairie sites are described below. Submit other techniques to the Corridor Vegetation Inspector for approval.

#### **C.4.1 General Herbicide**

Do not begin the process of undesirable weed control and eradication using herbicides until native plant establishment is at a point where the native plants can be readily recognized and identified. Other weed control methods may be applied earlier as appropriate.

Herbicide applications will occur in the spring and fall, starting at the first sight of weeds, and will target invasive and non-native species as decided by the contractor and the Corridor Vegetation Inspector. Additional herbicide applications must be approved by the Corridor Vegetation Inspector but may be needed in order to meet the established performance criteria.

All herbicide(s) shall contain colored dye, such as "Bas-oil", mixed at a rate of four ounces to five gallons applied, to aid in identification of areas or objects that have received herbicide.

Persistent herbicides such as Atrazine are not to be used.

#### **C.4.2 Spot Herbicide Treatment**

Spot treatment entails the use of an absorbent material that has been soaked in an appropriate selective herbicide to control undesirable weeds. Apply herbicide at appropriate concentration. Identify all weeds and prairie plants when not in flower.

#### **C.4.3 Spray Herbicide Treatment**

Select the appropriate herbicide for treating newly emerging weeds. Spray weeds in the spring when emerging from the soil, and no more than 6 inches in height. Focus the herbicide application at the ground level to minimize drift onto nearby desirable species.

#### C.4.4 Inverted Cone Herbicide Treatment

Place a three- to four-inch diameter inverted cone over the sprayer nozzle by affixing it to the sprayer wand just above the point of attachment to the nozzle. The cone can be constructed by cutting off the narrow stem of a funnel so that only the cone remains. Remove the sprayer nozzle and fit the inverted funnel cone over the sprayer wand. Reattach the sprayer nozzle so the cone sits just above it and affix the cone onto the sprayer wand. Cover the unwanted vegetation with the cone and spray herbicide so that the drift is contained within the cone.

Treat undesirable cool season weeds such as Quackgrass, Kentucky Bluegrass, and Smooth Brome grass by using grass-selective herbicides. Remove weeds in mid- to late fall after the warm season prairie grasses are dormant and the cool season weedy grasses are actively growing. Air temperature must be above 60° F to ensure satisfactory results. If the site contains significant components of cool season native grasses, obtain approval of the Corridor Vegetation Inspector before proceeding.

#### C.4.5 Mowing

During each growing season, defined as May 1 – October 1, mow the Invasive Species and Weed Management areas (including the native seeding areas) per the specifications below.

Mow when vegetation reaches a height of 12 inches. Set the mower height to 6 inches. Multiple mowing's will be required.

Mowing should be timed to occur before any weeds produce viable seeds to prevent future weed infestations. Mowing will not be allowed if target weed species possess mature seeds. Coordinate the scheduling of all mowing's with the Corridor Vegetation Inspector prior to performing this work.

Mowing should be performed only when soils are dry and not subject to rutting or compaction. Areas that are damaged by indiscriminate mowing shall be re-seeded at the expense of the contractor.

Selective mowing may be required once the native vegetation is established to reduce weed seed production. Mowing may not be possible in very wet areas.

Use a flail-type mower. Verify that the cut vegetation does not bury small seedlings with large clumps of plant debris. Remove all undesirable plant material from the landscape site. Mowing equipment shall be washed prior to using at project sites to minimize the spread of weedy species.

#### C.4.6 Mechanical Methods

Techniques include hoeing, cutting, girdling, and tilling.

#### C.4.7 Digging/Hand-pulling

Remove entire root to prevent re-sprouting. Use with small or young plants, sandy or loose soils, or when soils are damp.

#### C.5 Weedy Species

The following weedy species must be controlled in the Invasive Species and Weed Management areas as soon as they become evident/visible:

##### GRASSES

<u>Common Name</u>	<u>Scientific Name</u>
Tall Fescue	<i>Festuca arundinacea</i>
Reed Canary Grass	<i>Phalaris arundinacea</i>
Giant Reed Grass	<i>Phragmites australis</i>
Kentucky Bluegrass	<i>Pro pratensis</i>
Smooth Brome	<i>Bromus inermis</i>
Orchard Grass	<i>Dactylis glomerata</i>
Quackgrass	<i>Elytrigia repens</i>

## BROADLEAF WEEDS

Common Name	Scientific Name
Perennial Pepperweed*	Lepidium latifolium
Japanese Knotweed	Polygonum cuspidatum or Fallopia japonica
Canada Goldenrod	Solidago canadensis
Canada Thistle*	Cirsium arvense
Crown Vetch*	Securigera varia
Field Bindweed*	Convolvulus arvensis
Horsenettle*	Solanum carolinense
Leafy Spurge	Euphorbia esula
Wild Parsnip	Pastinaca sativa
White Sweet Clover	Melilotus alba
Yellow Sweet Clover	Melilotus officinale

*\*Denotes weeds that cannot be killed by Glyphosate and require the addition of the appropriate broadleaf herbicide to the glyphosate tank mix in the first herbicide treatment.*

### C.6 Damages for Failing to Perform

If the care specialist fails to perform any of the required care cycles, the department will assess daily damages in the amount of \$1,000 per day to cover the cost of performing the work with other forces. The department will assess these damages for each day the requirements of the care cycle remain incomplete, except when the engineer extends the required time period.

### C.7 Acceptance Of Native Seed Areas

The Corridor Vegetation Inspector will make a final inspection near the end of the native seed surveillance and care period and accept those areas conforming to the following performance standards:

#### Native Seed Performance Standards

1. Native plants must be established, healthy, thriving, upright and green.
2. The Corridor Vegetation Inspector will randomly choose sampling sites. The contract work will be accepted if each sampling site is covered with at least 50% native species in at least 90% of the sampled site.
3. All Invasive Species and Weed Management Areas (including native seed planting areas) are stabilized and have been managed as described in this specification.
4. No invasive or nuisance species within the limits of the areas planted will comprise more than 25% of the native seeding areas. All noxious weeds have been destroyed.
5. Required surveillance and care of the native seed beds has occurred, required documentation has been delivered to the department, problem areas documented in the required reports have been addressed.

## D Measurement

The department will measure Native Seed Surveillance and Care Cycles as each individual care cycle, acceptably completed. Each "Native Seeding Area", as shown in the plans, shall receive the specified number of care cycles listed in the plan quantities.

## E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.501	Native Seed Surveillance and Care Cycles	EACH

Payment is full compensation for providing a Care Specialist, inspecting and caring for the native plant sites, documenting site visits and care activities, identifying weeds for removal; furnishing and applying herbicide; reseeding/overseeding; re-applying herbicide as needed; mowing; hoeing; cutting; girdling; tilling; digging; hand-pulling; and disposing of weeds off-site. Multiple mobilizations and work efforts at the same site will not be paid for separately.

**96. Delineator Post Steel Modified, Item SPV.0060.502.**

**A Description**

This special provision describes furnishing and installing steel posts and attaching sign I56-50, 12"x18" to the post. Conform to the requirements of standard spec 633, the standard detail drawing, and the construction detail shown in the plans.

Providing sign is included in the bid item Signs Type II Reflective H.

**B Materials**

Conform to standard spec 633.

**C Construction**

Install the sign posts at the edge of the native seeding areas at locations shown in the plans. Sign post locations on plans are approximate. Stake proposed locations and review with Corridor Vegetation Inspector prior to installing sign posts. Attach sign to post so message faces away from the native seed planting area.

**D Measurement**

The department will measure Delineator Post Steel Modified as each individual post, 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.0060.502	Delineator Post Steel Modified	EACH

Payment is full compensation for furnishing, locating, and installing posts; installing the sign on the posts.

**97. Tension Anchor Rods, Item SPV.0060.701.**

**A Description**

This special provision describes re-tensioning loose anchor rod nuts as shown on the plans, and as hereinafter provided.

**B Materials**

Furnish materials that are according to the pertinent provisions of standard spec 641 and as shown in the plans.

**C Construction**

Use construction methods that are according to the pertinent provisions of standard spec 641 and as shown in the plans. This work will consist of re-tensioning all loose anchor rod nuts as specified in the plans. The contractor shall follow the re-tensioning procedure outlined herein:

1. The contractor shall verify the grade of the anchor rod. If an anchor rod grade cannot be verified, the department shall be contracted for direction. Note that A36 rods have different tensioning requirements.
2. The contractor shall field verify the size and number of nuts required to be replaced. Note that if one or more are found to be loose, all are required to be replaced.
3. Remove all jam nuts (if applicable).
4. The contractor shall furnish flat washers and heavy hex nuts conforming to Standard spec 641.2.2.3. Existing jam nuts<sup>1</sup> may be reused.
5. Remove rodent screen 1.
6. Remove and dispose of the grout pad (if applicable) according to standard spec 509.3.4.
7. Tighten all nuts that are loose to snug tight (leveling and top nut). Reference the department's Form DT2321 for snug tight torque values.
8. Contact the department for direction of the top nut is not fully snugged and cannot be turned.

9. Once all nuts are snug, remove one and only one top nut at a time and follow the remaining procedure. Top nuts, flat washers, and locking washers (if applicable) shall be discarded, the leveling nuts shall remain, and jam nuts may be reused (if applicable).
10. Remove rust and dirt, from anchor rod and base plate with a wire brush.
11. Apply a coat of fast drying zinc rich primer or spray-on cold galvanized (if rust is present) to the full length of the anchor bolt and at damaged base plates. Repair any damaged galvanized coating incidental to the re-tensioning process.
12. Apply wax-based lubricant to the anchor rod.
13. Install top nut to snug tight. Reference the department's form DT2321 for snug tight torque values.
14. Repeat steps 3 through 12 in this specification until all washers and nuts have been replaced.
15. Tension the anchor rod nuts. Follow the department's Form DT2321 procedure steps 5 through 7 and record the tensioning process.
16. Clean, lubricate and install jam nut (if applicable) per step 8 of Form DT2321.
17. Apply two coats of zinc rich primer to any damaged areas of the structure base plates and used jam nuts.
18. Reinstall the rodent screen (if applicable).
19. Complete Form DT2321 for each structure and submit to Jason Zemke, (262) 548-8734, for transmittal to Bureau of Structures (BOS) and inclusion in HSIS.

All work for this item, including site clean-up, shall be completed in one shift. If it is a cantilever structure with a connection which has 6 or less bolts, the truss or mast arm shall be supported by a crane during bolt replacement. In lieu of a supporting crane, the contractor may instead submit a structural analysis of the structure addressing proposed constructability which ensure the stability and safety of workers and the traveling public. Analysis computation and support document shall be signed, sealed and dated by a professional engineer licensed in Wisconsin, and shall be submitted to the engineer and BOS for permanent record.

#### **D Measurement**

The department will measure Tension Anchor Rods as each individual anchor rod location, acceptably completed.

#### **E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.701	Tension Anchor Rod	EACH

Payment is full compensation for tensioning loose anchor rod nuts; for removing and properly disposing of existing materials being replaced; for furnishing all materials and miscellaneous items to complete the repair; for fabricating, handling, transporting, and erecting.

### **98. Install ID Plaque, Item SPV.0060.702.**

#### **A Description**

This special provision describes installing sign, signal and high mast light ID plaques as shown on the plans, and as hereinafter provided.

#### **B Materials**

Furnish materials that are according to SDD Identification Plaques Underdeck and High Mast Lighting and/or SDD Structure Identification Plaques, Ramp Gates, Sign Bridges, Overhead Sign Supports and Traffic Signals as required by structure type.

#### **C Construction**

Install the sign bridge ID plaque according to SDD Identification Plaques Underdeck and High Mast Lighting and/or SDD Structure Identification Plaques, Ramp Gates, Sign Bridges, Overhead Sign Supports and Traffic Signals as required by structure type. Miscellaneous hardware required to securely install the ID plaque will be considered incidental to this item.

## **D Measurement**

The department will measure Install ID Plaque as each individual ID plaque, 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.0060.702	Install ID Plaque	EACH

Payment is full compensation for installing ID plaque; for removing and properly disposing of existing materials being replaced; for furnishing and installing all materials and miscellaneous items to complete the installation; and for fabricating, handling, transporting, and erecting.

## **99. Seeding Native Mix N2, Item SPV.0085.501; Seeding Native Mix N3, Item SPV.0085.502.**

### **A Description**

This special provision describes furnishing and sowing the required native seed mix on areas shown in the plans.

### **B Materials**

#### **B.1 Native Seed**

##### **B.1.1 Labeling**

Each native seed species will be packaged separately for each seed mixture. Packages for each species shall document seed test and date, mix composition, and the following information:

1. Scientific name of genus and species (subspecies and variety as necessary)
2. Guarantee that seeds are true to species
3. Bulk Weight
4. PLS Weight
5. Percent PLS
6. Year of harvest and any specialized treatments that have been applied to ensure or enhance germination
7. Seed Origin (geographical location)
8. Seed supplier contact information including company name, address, phone number, and contact person's name and e-mail address
9. Percent Weed Seed
10. Noxious Weeds Found

Provide copies of shipment and certification paperwork to the Corridor Vegetation Inspector before the native seed mixtures arrive at the landscaping site.

##### **B.1.2 Purity and Germination**

Seed lots with testing data over 12 months old will be rejected. Seed tests shall be provided for each individual seed lot, with the following required information:

1. Seed Origin and Source
2. Crop Year
3. Date of Seed Test
4. % Purity
5. % Germination
6. % Inert Material
7. % Other Crop Seed and Other Crop Species
8. % Weed Seed (as allowed per standards of the Wisconsin Crop Improvement Association)
9. Noxious Weeds Found (none allowable)

No seed lots containing Wisconsin Noxious Weeds will be approved for native prairie plantings, as per the list of noxious weed species identified by the Wisconsin Crop Improvement Association, <https://wcia.wisc.edu/2015Standards09102015.pdf>.

### B.1.3 Inoculation

All legume seeds shall be inoculated with fresh Rhizobium bacteria of the appropriate strain for each legume species prior to seeding.

### B.1.4 Storing Seed

Store any seed delivered before use in a way that protects it from damage by heat, moisture, rodents, or other causes. Discard and replace, at no cost to the department, any previously tested and accepted seed that becomes damaged. Seed should not be stored on site more than seven days.

### B.1.5 Native Seed Mixtures

The following Native Seed Mixtures will be used within the native seed planting areas, dependent on soil and moisture conditions:

#### MIX N1 - NATIVE PRAIRIE SEED MIX – DRY SOILS

Sun Conditions: Full sun to one-half day full sun

Suitable Soil Moisture Conditions: Dry to dry-mesic soils

Suitable Soil Types: Well-drained sand and loamy sand

#### MIX N2 - NATIVE PRAIRIE SEED MIX – MESIC SOILS

Sun Conditions: Full sun to one-half day full sun

Suitable Soil Moisture Conditions: Mesic to wet-mesic soils

Suitable Soil Types: Well-drained sandy loam, loam, silt loam, clay loam

#### MIX N3 – WET PRAIRIE NATIVE SEED MIX

Sun Conditions: Full sun to one-half day sun

Suitable Soil Moisture Conditions: Wet-mesic to wet soils

Suitable Soil Types: Moist loamy sand, sandy loam, loam, silt loam, clay loam

#### MIX N4 - INFILTRATION AREA NATIVE SEED MIX FOR SANDY SOILS

Sun Conditions: Full sun to one-half day full sun

Suitable Soil Moisture Conditions: Wet-mesic to wet soils

Suitable Soil Types: Well-draining sand-based engineered soils

The appropriate mix for each landscaping site is identified in the plans. The seed mixtures shall be composed of seeds of the proportions, by weight, listed in Table 1 below.

Table 1 – Native Seed Mixtures						
			Mix N1	Mix N2	Mix N3	Mix N4
Species		Common Name	PLS Oz/Acre	PLS Oz/Acre	PLS Oz/Acre	PLS Oz/Acre
Forbs	Agastache foeniculum	Lavender Hyssop	1.0	1.0		1.0
	Allium cernuum	Nodding Pink Onion		8.0		4.0
	Amorpha canescens	Leadplant	2.0			
	Asclepias incarnata	Marsh Milkweed		12.0	12.0	10.0
	Asclepias syriaca	Common Milkweed	4.0	5.0	9.0	6.0
	Asclepias tuberosa	Butterflyweed	12.0			
	Aster azureus	Sky Blue Aster	2.0	2.0		

Table 1 – Native Seed Mixtures						
			Mix N1	Mix N2	Mix N3	Mix N4
Species	Common Name		PLS Oz/Acre	PLS Oz/Acre	PLS Oz/Acre	PLS Oz/Acre
	Aster laevis	Smooth Aster	2.0	2.0		
	Aster novae-angliae	New England Aster		2.0	3.0	2.0
	Aster ptarmicoides	White Aster	1.0			
	Astragalus canadensis	Canada Milkvetch	2.0			
	Baptisia alba	White Wild Indigo		8.0	9.0	6.0
	Coreopsis lanceolata	Lanceleaf Coreopsis	3.0			
	Dalea candida	White Prairie Clover	8.0			
	Dalea purpurea	Purple Prairie Clover	12.0			
	Echinacea purpurea	Purple Coneflower		8.0		
	Eryngium yuccifolium	Rattlesnake Master		8.0		
	Eupatorium maculatum	Spotted Joe Pye Weed			3.0	4.0
	Eupatorium perfoliatum	Boneset			1.5	2.0
	Helenium autumnale	Sneezeweed			1.5	2.0
	Helianthus pauciflorus	Showy Sunflower	1.0			
	Heliopsis helianthoides	Ox Eye Sunflower	2.0	3.0	4.5	5.0
	Lespedeza capitata	Roundhead Bushclover	6.0			
	Liatris aspera	Rough Blazingstar	8.0			
	Liatris pycnostachya	Prairie Blazingstar		8.0	9.0	16.0
	Liatris spicata	Marsh Blazingstar			9.0	
	Lobelia siphilitica	Great Blue Lobelia			1.5	
	Lupinus perennis	Wild Lupine	16.0			
	Monarda fistulosa	Bergamot	1.0	1.0	1.5	1.0
	Monarda punctata	Dotted Mint	1.0			
	Penstemon digitalis	Smooth Penstemon		2.0		
	Penstemon grandiflorus	Beardtongue	8.0			
	Ratibida pinnata	Yellow Coneflower	4.0	5.0	7.5	4.0
	Rudbeckia hirta	Black Eyed Susan	4.0	4.0	6.0	4.0
	Rudbeckia laciniata	Green Headed Coneflower			4.5	
	Rudbeckia subtomentosa	Sweet Black Eyed Susan		2.0	3.0	3.0
	Rudbeckia triloba	Brown Eyed Susan	2.0	2.0		3.0
	Senna hebecarpa	Wild Senna		6.0		7.0
	Siphium integrifolium	Rosinweed	1.0			1.0
	Silphium laciniatum	Compassplant	5.0	6.0		
	Silphium terebinthinaceum	Prairie Dock		4.0	12.0	6.0

Table 1 – Native Seed Mixtures						
			Mix N1	Mix N2	Mix N3	Mix N4
Species		Common Name	PLS Oz/Acre	PLS Oz/Acre	PLS Oz/Acre	PLS Oz/Acre
	Solidago rigida	Stiff Goldenrod	1.0	1.0	1.5	1.0
	Solidago speciosa	Showy Goldenrod	1.0			
	Tradescantia ohiensis	Ohio Spiderwort	8.0	6.0		6.0
	Verbena hastata	Blue Vervain		1.0	1.5	2.0
	Verbena stricta	Hoary Vervain	2.0			
	Vernonia fasciculata	Ironweed		4.0		4.0
	Veronicastrum virginicum	Culver's Root		1.0		
	Zizia aurea	Golden Alexanders		8.0	7.5	8.0
Forbs Sub Total:			120.0	120.0	108.0	108.0
Graminoids	Andropogon gerardii	Big Bluestem	4.0	4.0	6.0	4.0
	Bouteloua curtipendula	Side Oats Grama	30.0	30.0		
	Bromus ciliatus	Fringed Brome			24.0	16.0
	Carex bebbii	Bebb's Sedge			6.0	6.0
	Carex stipata	Awl Fruited Sedge			6.0	6.0
	Carex vulpinoidea	Brown Fox Sedge			6.0	6.0
	Sporobolus heterolepis	Prairie Dropseed	12.0			
	Elymus canadensis	Canada Wild Rye	32.0	32.0		32.0
	Elymus virginicus	Virginia Wild Rye			66.0	32.0
	Glyceria striata	Fowl Manna Grass			4.5	
	Panicum virgatum	Switchgrass	2.0	2.0		4.0
	Schizachyrium scoparium	Little Bluestem	32.0	32.0		16.0
	Scirpus atrovirens	Dark Green Bulrush			6.0	
	Scirpus cyperinus	Woolgrass			4.5	
	Sorghastrum nutans	Indiangrass	8.0	8.0		8.0
	Spartina pectinata	Prairie Cordgrass			3.0	2.0
	Sporobolus heterolepis	Prairie Dropseed		12.0		
Graminoids Sub Total:			120.0	120.0	132.0	132.0
TOTAL:			240.0	240.0	240.0	240.0

Table 1 (cont.) – Native Seed Mixtures						
			Mix N1	Mix N2	Mix N3	Mix N4
Substitute Species		Common Name	PLS Oz/Acre	PLS Oz/Acre	PLS Oz/Acre	PLS Oz/Acre
Substitute Forbs	Anemone canadensis	Canada Anemone		X		
	Anemone cylindrica	Thimbleweed	X			
	Astragalus canadensis	Canada Milkvetch		X		
	Aster Ptarmicoides	White Aster	X			
	Aster puniceus	Swamp Aster			X	X
	Baptisia bracteata	Cream False Indigo	X			
	Ceanothus americanus	New Jersey Tea	X			
	Euphorbia corollata	Flowering Spurge	X			
	Gentiana andrewsii	Bottle Gentian			X	
	Helianthus occidentalis	Western Sunflower	X	X		
	Iris shrevei	Wild Iris			X	X
	Kuhnia eupatorioides	False Boneset	X			
	Mimulus ringens	Monkey Flower			X	X
	Pycnanthemum virginianum	Mountain Mint			X	X
	Ruellia humilis	Wild Petunia	X			
	Senna hebecarpa	Wild Senna			X	
	Solidago ohioensis	Ohio Goldenrod			X	X
	Solidago riddellii	Riddell's Goldenrod			X	X
	Solidago speciosa	Showy Goldenrod		X		
	Thalictrum dasycarpum	Purple Meadow Rue			X	X
	Vernonia fasciculata	Ironweed			X	
	Veronicastrum virginicum	Culver's Root			X	X
	Zizi Aurea	Golden Alexanders		X		
Substitute Graminoids	Bromus kalmii	Kalm's Bromegrass	X			
	Calamagrostis canadensis	Canada Blue Joint Grass		X	X	X
	Carex bicknellii	Copper Shouldered Oval Sedge	X			
	Carex crinita	Fringed Sedge		X	X	X
	Carex scoparia	Lance-Fruited Sedge		X	X	X
	Danthonia spicata	Poverty Oats Grass	X			
	Elymus trachycaulus	Slender Wheatgrass	X	X		

Verify and inspect individual seed species at the grower's nursery, the place of collection, or at the collector's holding site. Recommend the seed lots for mixture. Seed lots must be approved by the Corridor Vegetation Inspector prior to blending any seed. Verify and inspect the final mixtures and recommend the mixtures to the Corridor Vegetation Inspector for approval. Inform Corridor Vegetation Inspector of any concerns with the seed prior to sowing.

Furnish copies of seed bag tags and/or seed tests results for each seed lot, performed by a certified seed testing lab to the Corridor Vegetation Inspector.

All seed shall be Pure Live Seed (PLS) and originating and obtained from Wisconsin, Minnesota, Eastern Iowa or Northern Illinois nurseries, specializing in growing native species from Upper Midwestern genotypes in Zone 5a or lower of the US Agricultural Research Service, Plant Hardiness Zone Map, Miscellaneous Publication Vol. No. 1475, Issued January, 1990, Updated January 24, 2012, <http://planthardiness.ars.usda.gov/PHZMWeb/>

Ensure that all seed used is cold, dry stratified.

If a listed species is not available, substitutions may be made from the alternative seed species listed in Table 1 under **Substitute Species** for each of the seed mixtures. Before using an alternate, provide documentation showing that a required species is not available to the Corridor Vegetation Inspector. Obtain substitution approval from the Corridor Vegetation Inspector prior to ordering substitute seed.

If substitutions in a seed mix are made, maintain the forbs to graminoids ratios and numbers of species counts listed in Table 2. The weight of any item substituted cannot be more than twice or less than half by weight, in comparison to the item it is replacing. All substitutions are to be approved by the Corridor Vegetation Inspector.

Table 2 - Table of Minimum Requirements for Native Seed Mixtures

	% Forbs by Weight	% Graminoids by Weight	# of Forbs	# of Graminoids	# of Total Prairie Species per Mix
Mix N1 – Native Prairie Seed Mix – Dry Soils	50	50	28	7	35
Mix N2 - Native Prairie Seed Mix – Mesic Soils	50	50	27	7	34
Mix N3 - Wet Prairie Native Seed Mix	45	55	20	10	30
Mix N4 - Infiltration Area Native Seed Mix for Sandy Soils	45	55	24	11	35

## C Construction

### C.1 General

Propose any native seeding location changes to the Corridor Vegetation Inspector, who will review and approve any suggested changes prior to native seeding placement.

If the native seeding is not completed within the specified calendar window the department will assess daily damages in the amount of \$1,000 per day. The department will assess these damages for each day the native seeding remains incomplete outside the specified calendar windows except when the department extends the required time period.

### C.2 Seed Bed Inspection

The native seeding areas have been finished with topsoil and possibly sewn with a grass cover by others under a previous highway construction contract. Verify that the existing topsoil does or does not provide a suitable native seed planting bed that meets the following criteria: for the upper 2 inches of the topsoil, 100 percent of the material must pass a 1-inch sieve and at least 90 percent must pass the No. 10 sieve.

Visually inspect the proposed native seed area to verify that no foreign or deleterious material or liquid such as paint, paint washout, concrete slurry, concrete layers or chunks, cement, plaster, oils, gasoline, diesel fuel, paint thinner, turpentine, tar, roofing compound, acid, stones larger than 1" in diameter, loose erosion control matting, and/or any other construction refuse has been deposited within area(s) to be seeded.

Remove and dispose of any non-hazardous, unsuitable, or foreign materials from the seed bed and inform the Corridor Vegetation Inspector of any hazardous materials.

After seed bed inspection and at least 1 week prior to seeding, report the condition of the native seed area to the Corridor Vegetation Inspector. The Corridor Vegetation Inspector shall review the site by evaluating seed beds for proper weed control and site/soil condition prior to authorizing contractor to proceed with seeding. Additional seed bed preparation to work up the soil may be authorized by the Corridor Vegetation Inspector and will be paid for under the Seed Bed Preparation bid item.

### **C.3 Vegetation Eradication**

Pre-planting herbicide treatment is described in the Pre-Planting Vegetation Treatment article.

If little or no perennial vegetation is present on the site, the Corridor Vegetation Inspector may approve a truncated site preparation process at his/her discretion.

The Corridor Vegetation Inspector shall have sole authority in determining when the seed bed has been properly prepared for seeding.

### **C.4 Seeding Methods and Timing**

Three seeding methods are approved for sowing the Native Seed Mixtures. Adjust seeding method(s) for site conditions and seasonal installation. No later than 60 days prior to seeding submit the proposed seeding method and procedure, with any suggested changes, to the Corridor Vegetation Inspector for review.

1. No-till prairie seed drills.
2. Broadcast roller seeders.
3. Pull-behind broadcast seeders that can be calibrated to seed prairies at the appropriate low rates per acre.

No-till seed drills shall be set up to handle the flow characteristics and calibration requirements for the proper distribution of prairie flower and grass seeds. The seed bed must be graded to extremely smooth conditions for no-till drills to work properly, with the maximum variation in soil elevations of no more than one-half inch in height. The no-till seeder should be set so that the seed is placed only one-quarter inch deep in the soil. Any micro-variations in topography will result in the seed being planted either too deeply so that it will not germinate or is dropped onto the surface of the soil rather than being deposited into the soil itself.

Broadcast roller seeders require a freshly worked up seed bed in order to be effective. The soil must be loose, with maximum variation in soil elevation of no more than 4 inches in height prior to using a broadcast roller seeder.

Pull-behind broadcast seeders require a freshly worked up seed bed for success. The soil must be bare and loose, with a maximum variation in soil elevation of no more than 1 inch. The site must be dragged smooth and rolled with a cultipacker immediately following seeding.

Hydro-seeding is not an approved method for seeding native prairies and shall not be used for this purpose.

All native seeding will be fall dormant seeding, unless otherwise approved by the Corridor Vegetation Inspector. Sow seed between November 1 to the time when the soil is frozen. Planting may occur on partially frozen soil if the seed makes good contact with the soil at time of planting. The Corridor Vegetation Inspector must approve seeding on partially frozen soil.

### **C.5 Seeding Rates**

Use the following sowing rate for native seeding: Native Seed Mixtures at 15.0 pounds/acre

The entire native seeding area shall be seeded with the equipment set at one-half the designated rate. Then the entire site shall be seeded again with the remaining seed and with the equipment traveling in a direction perpendicular to the first seeding. On small areas the entire amount of seed may be sown in one direction at the discretion of the Corridor Vegetation Inspector.

### **C.6 Native Seeding Competency Test**

Perform demonstration seeding, one per each seeding method, for differing site conditions, materials, and locations.

1. Notify Corridor Vegetation Inspector to determine dates for on-site review of seeding.

2. Supply all materials as needed for seeding.
3. Competency seeding test areas, approved by the Corridor Vegetation Inspector, will be retained as permanent installation, and used as a reference for approved installation standard.
4. Do not proceed with native seeding operations until the competency tests have been completed and approved.

### **C.7 Erosion Control**

For seeding areas on bare soil, areas of existing water runoff, or where potential erosion may occur, cover the native seed with erosion control mat.

Place Erosion Mat Class I Type A or B Urban over Soil Stabilizer Type B on native seeding areas only where directed by the engineer.

Place Seeding Mixture No. 30 and Fertilizer, Type A on areas within the Invasive Species and Weed Management limits that are not seeded with a native seed mix.

### **C.8 Seed Establishment Period**

The work necessary during the establishment period is described in the Native Seeding Surveillance and Care Cycles article.

### **D Measurement**

The department will measure Seeding Native Mix (mixture) by the pound, acceptably completed.

### **E Payment**

#### **E.1 General**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0085.501	Seeding Native Mix N2	LB
SPV.0085.502	Seeding Native Mix N3	LB

Payment is full compensation for providing, inspecting, handling, and storing seed; for providing the required culture and inoculating seed as specified; for removing foreign and deleterious objects, construction materials, and stones from the seed bed, sowing, and covering and firming the seed.

Seed bed preparation that involves working up the topsoil will be paid for under the Seed Bed Preparation bid item.

Pre-planting herbicide treatment will be paid for under the Pre-Planting Vegetation Treatment bid item.

Erosion Control items will be paid for under the respective standard bid items.

Seeding Mixture No. 30 and Fertilizer Type A will be paid for under the respective bid items.

Follow-up care during the establishment period will be paid for under the Native Seed Surveillance and Care Cycles bid item.

#### **E.2 Payment Schedule**

The department will pay 80% of the contract value of the work each time an item or portion of an item is acceptably completed. Each time an item or portion of an item completes the growing season, including surveillance and care, and meets the native seed performance standards, the department will pay the final 20 percent of the contract value of this work.

The department will make final payments upon final acceptance and completion of all work required under the contract.

## **100. Concrete Pavement Joint Sealing, Item SPV.0090.001.**

### **A Description**

This special provision provides for the sealing of the longitudinal joint located a distance, as shown on the plans, from the base of S42 and S42A concrete barrier only when this joint is created by a full-depth sawcut. Joint sealing shall consist of cleaning the joint in preparation for sealing and sealing the joint in the concrete pavement with a hot applied joint sealing material.

## **B Materials**

All designated joints shall be sealed with a hot applied joint sealant conforming to the Specification for Joint and Crack Sealants, Hot-Applied, for Concrete and Asphalt Pavements, ASTM Designation D6690, type II. A Certification of Compliance shall be furnished to the engineer prior to application.

Sawed joints designated to be sealed under this bid item will not require Concrete Protective Surface Treatment as described in a separate article of these special provisions.

## **C Construction**

The operation of sealing shall be performed as soon as practicable upon elapse of the curing period and in any event prior to the time traffic of any kind uses the pavement.

Joints shall not be sealed until they have been inspected and approved by the engineer.

Application of the joint sealer shall be made when the joint surfaces are clean and dry.

Immediately before sealing the joint, thoroughly clean the joints of all laitance, curing compound and other foreign material. Exposed joint faces shall be cleaned by sandblasting, or by water blasting with sufficient pressure to thoroughly and completely clean the joint. A multiple-pass technique shall be used until the surfaces are free of material that might prevent bonding. For final cleaning immediately prior to installation of the sealer, the joints shall be blown clean with oil-free compressed air. The joint faces must be surface dry when sealant is applied.

The sealing compound shall be heated to the pouring temperature recommended by the manufacturer in an approved kettle or tank, constructed as a double boiler, with the space between the inner and outer shells filled with oil or other satisfactory heat transfer medium. The heating kettle shall be equipped with a mechanical agitator, positive temperature control and an approved dial thermometer for checking temperatures of the compound. The heating kettle, if and when operated on concrete, shall be properly insulated against the radiation of heat to the concrete surface.

The sealing compound shall not be heated above the maximum safe heating temperature. The maximum safe heating temperature shall be determined from tests made on samples from each lot or shipment of the material delivered to the project. When so approved by the engineer, the manufacturer's recommended maximum safe heating temperature may be used in lieu of test determinations where relatively small quantities of sealer are used. Any material heated above the maximum safe heating temperature shall be discarded.

Pouring of joints shall be made when the sealing material is at the required temperature and, insofar as practicable, the sealing compound shall be maintained at a uniform temperature during pouring operations. Pouring shall not be permitted when the temperature of the sealing compound in the applicator, as it is applied to the joint, is more than 10° F below the recommended pouring temperature. Pouring of the molten sealer in the joint opening shall be done with such equipment that the sealer completely fills the joint opening without overflowing on the adjoining surface and when finished, after shrinkage, the sealer is approximately flush with the adjoining surfaces. In the event satisfactory sealing of a joint is not accomplished in a single pouring, the sealing compound shall be placed in 2 pours. At least one-half of the required amount shall be placed in the first pouring, and the second pouring shall follow the first as soon as practicable after the first pouring has attained maximum shrinkage but not later than 1 hour after the first pouring.

## **D Measurement**

The department will measure Concrete Pavement Joint Sealing by the linear foot in place along the joint, 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.0090.001	Concrete Pavement Joint Sealing	LF

Payment is full compensation for cleaning the joint, and for furnishing and applying the joint sealant.

(1/31/2017)

**101. Bore and Jack Storm Sewer Pipe Reinforced Concrete Class IV 24-Inch, Item SPV.0090.002.**

**A Description**

This special provision describes furnishing and installing culvert pipe by jacking and boring with or without a casing pipe. The method of installation may be selected, but open-cut will not be allowed.

**B Materials**

Furnish Culvert Pipe Reinforced Concrete (type and size) as shown on the plans, conforming to standard spec 522.

Steel casing shall conform to ASTM A53, Grade B Steel Pipe, 35,000 psi minimum yield, with a minimum wall thickness of 0.469 inches. Casing shall be a minimum of 4 inches larger than the outside diameter of the carrier pipe.

If casing is used, annular space shall be filled with lean concrete proportioned of 1 1/2 bags of Portland cement, 6 cubic feet of concrete sand, and 12 cubic feet of coarse aggregate, or one bag Portland cement and 12 cubic feet of graded aggregate.

**C Construction**

Establish reference point and bench marks required to control jacking of casing pipe to elevations indicated on drawings.

Excavate access pit, shaft or approach tunnel according to standard spec 206.

If a casing pipe is used, weld joints with a continuous circumferential weld. Contractor shall be responsible for providing stress transfer across joints capable of resisting jacking forces applied.

Pipe shall be attached to concrete brick supports to be used as a carrier for insertion into casing. Support and brace pipe to prevent shifting or flotation during filler material placement.

Carrier pipe or casing pipe shall be jacked and bored by selected method to line and grade indicated on drawings.

Upon completion of installation of pipe, completely fill annular space between carrier pipe and pipe casing with lean concrete. Fill ends of casing pipe with a minimum 1 foot thick bulkhead.

Backfill casing pipe ends according to standard spec 206 and restore surface.

Demonstrate to satisfaction of the department that the entire length of the casing has been backfilled.

**D Measurement**

The department will measure Bore and Jack Culvert Storm Sewer Pipe (type and size) by the linear foot based on the "limits of payment" denoted in plan detail drawing, 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.0090.002	Bore and Jack Storm Sewer Pipe Reinforced Concrete Class IV 24-Inch	LF

Payment is full compensation for providing all materials, including culvert pipe reinforced concrete, steel casing pipe, and connections; for all excavating except rock excavation; for sheeting and shoring; for providing and laying pipe; for sealing joints and making connections to new or existing fixtures; for filling annular space and constructing bulkheads; for backfilling; for providing granular backfill material; for removing sheeting and shoring; and for cleaning out and restoring the worksite.

**102. Pipe Underdrain (6-Inch) with Geotextile Fabric and Aggregate, Item SPV.0090.003.**

**A Description**

This special provision describes providing and placing pipe underdrain, geotextile fabric, and aggregate as shown on the plans and hereinafter provided. The work under this item shall be according to the standard specifications for each component.

**B Materials**

### **B.1 Pipe**

Provide Pipe Underdrain 6-Inch conforming to the pertinent requirements of standard spec 612.2.

### **B.2 Geotextile Fabric**

Provide Geotextile Fabric Type DF Schedule B conforming to the pertinent requirements of standard spec 645.2.1 and 645.2.4.

### **B.3 Aggregate**

Provide coarse aggregate size No. 1 conforming to the pertinent requirements of standard spec 501.2.5.4.

### **C Construction**

Construct the Pipe Underdrain (6-Inch) with Geotextile Fabric and Aggregate as the plans show and conforming to standard spec 612.3.1, 612.3.3, 612.3.5, and 645.3.4.

### **D Measurement**

The department will measure Pipe Underdrain (6-Inch) with Geotextile Fabric and Aggregate 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.0090.003	Pipe Underdrain (6-Inch) with Geotextile Fabric and Aggregate	LF

Payment is full compensation for providing and placing all materials, including pipe underdrain, geotextile fabric, aggregate, backfill, connections, fittings, and caps or plugs; and for all excavating, recompacting, disposing of surplus material, and restoring the work site.

swr-612-001 (20160205)

## **103. Gawk Screen Furnished, Item SPV.0090.201; Gawk Screen Installed, Item SPV.0090.202.**

### **A Description**

This special provision describes furnishing and installing traffic control gawk screen on concrete barrier as a traffic control device and removal upon completion of the project.

### **B Materials**

Furnish rectangular shaped screen for temporary mounting on top of concrete barrier.

Furnish a polymer, polyethylene, or UV protected thermoplastic, or similar lightweight product that will not shatter when impacted and is proven crashworthy.

Submit shop drawings a minimum of 2 weeks prior to the proposed use of Traffic Control Gawk Screen.

Requirements:

- 24 inches in height.
- The same length as the concrete barrier on which it will be mounted, without splicing, except account for longitudinal overhang between the concrete barrier as shown in the plans.
- Mounted with 2 poles, at the spacing shown in the plan, attached to the mounting plate with the mounting plate drilled into the top of the concrete barrier.
- Secured with a chain and pin, or other approved method, to the mounting pole.
- Capable of being securely connected to the adjacent screen section using polyethylene brackets, or similar approved fasteners, made of non-metallic materials.
- Capable of expanding without buckling.
- Capable of contracting without creating gaps in the screening and while remaining securely fastened to the adjacent screen.

- Gray in color and opaque.
- Has finished faces on both sides of the screen.
- Capable of remaining in place from traffic gusts, wind gusts, and other outdoor elements that may move or displace the screen.

Furnish and install mounting pipe and hardware according to manufacturer/supplier directions.

Installations and removals of the gawk screen to/from its supports on the jobsite shall not require any tools.

### **C Construction**

Furnish and deliver traffic control gawk screen to worksites within the project. Install the screen according to manufacturer's recommendations at contract-identified locations or as the engineer directs. Fasten screen sections together.

Provide surveillance and maintenance as specified in standard spec 643.3.2. Repair or replace any portion of the screen that is damaged as directed by the engineer at no additional cost. Replace any screen sections that buckle, deform, shrink, or have any other material or installation failure, as determined by the engineer, at no additional cost.

Remove screen when no longer needed at the installation site, during winter when directed by the engineer, and upon project completion. In permanent concrete barrier, concrete parapet, and department owned temporary concrete barrier, remove mounting hardware to below the concrete surface.

Encapsulate all exposed metal and fill all holes left by anchorage methods with an epoxy from the department's approved products list. Fill holes as the screen is removed.

### **D Measurement**

The department will measure Gawk Screen Furnished by the linear foot, acceptably delivered to the project site.

The department will measure Gawk Screen Installed by the linear foot, acceptably completed, measured along the base of the screen after installation for each contract-identified or engineer-directed initial installation. The department will also measure subsequent contract-identified or engineer-directed reinstallations. The department will not measure installations made solely to accommodate the contractor's means and methods.

### **E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.201	Gawk Screen Furnished	LF
SPV.0090.202	Gawk Screen Installed	LF

Payment for Gawk Screen Furnished is full compensation for furnishing traffic control screen, mounting posts, and mounting and fastening hardware; initial delivery; and storage until installation.

Payment for Gawk Screen Installed is full compensation for each installation; moving/trucking to another worksite within the project, unloading, and reinstalling; screen surveillance, maintenance, repair, and replacement; removing; disposal; and concrete barrier repair due to screen installation and after screen removal.

(5/31/2016)

## **104. Department Owned Concrete Barrier Temporary Precast Delivered, Item SPV.0090.203.**

### **A Description**

This special provision describes delivering department owned concrete barrier temporary precast according to standard spec 603.

### **B (Vacant)**

### **C Construction**

Deliver department owned temporary barrier to worksites within the project. Delivering department owned temporary barrier includes loading, hauling, and delivery of department owned temporary barrier, located within five miles of the project, to worksites within the project.

Department Owned Concrete Barrier Temporary Precast Delivered remains the property of the department upon project completion.

#### **D Measurement**

The department will measure Department Owned Concrete Barrier Temporary Precast Delivered in length 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.0090.203	Department Owned Concrete Barrier Temporary Precast Delivered	LF

Payment is full compensation for loading, hauling, and delivery of department owned concrete barrier temporary precast to worksites within the project.

### **105. Removing Department Owned Concrete Barrier Precast, Item SPV.0090.204.**

#### **A Description**

This special provision describes handling of the department owned precast concrete barrier when it is no longer needed for the project work activities.

#### **B (Vacant)**

#### **C Construction**

Remove the department owned precast concrete barrier and stockpile it at a location to be determined by the engineer. The location for delivery is anticipated to be within 20 miles of the project limits. Place the barrier outside of the clear zone at a location approved by the engineer. Dispose of any barrier that the engineer inspects and determines that it is not suitable for future use.

#### **D Measurement**

The department will measure Removing Department Owned Concrete Barrier Precast 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.0090.204	Removing Department Owned Concrete Barrier Precast	LF

Payment is full compensation for removing, hauling, disposing, and stockpiling.

### **106. Concrete Pavement Joint Layout Project 1007-12-79, Item SPV.0105.001; Concrete Pavement Joint Layout Project 1007-12-80, Item SPV.0105.002; Concrete Pavement Joint Layout Project 1008-10-70, Item SPV.0105.003.**

#### **A Description**

This special provision describes designing the joint layout and staking the location of all joints on the project, including mainline, ramps and intersections to accommodate the concrete paving operation.

#### **B (Vacant)**

#### **C Construction**

Design the joint layout and stake the location of all joints on the project, including mainline, ramps and intersections (traditional and roundabouts), to accommodate the concrete paving operation. Plan and set all points necessary to establish the horizontal position of the transverse and longitudinal joints in the concrete pavement according to the plans, the American Concrete Pavement Association Intersection

Joint Layout Guidelines, and as directed by the engineer. Establish the joint layout in a manner to best fit field conditions, construction staging, the plan, and as directed by the engineer.

#### **D Measurement**

The department will measure Concrete Pavement Joint Layout (Project) as a single lump sum 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.0105.001	Concrete Pavement Joint Layout Project 1007-12-79	LS
SPV.0105.002	Concrete Pavement Joint Layout Project 1007-12-80	LS
SPV.0105.003	Concrete Pavement Joint Layout Project 1008-10-70	LS

Payment is full compensation for designing the joint layout on the mainline, ramps and all intersections; for completing all surveying work necessary to locate all transverse and longitudinal joints; and for making adjustments to match field conditions and construction staging.

- 107. Survey Project 1007-12-79 with Optional AMG for Concrete Pavement and Base Course, Item SPV.0105.004;  
Survey Project 1007-12-80 with Optional AMG for Concrete Pavement and Base Course, Item SPV.0105.005;  
Survey Project 1008-10-70 with Optional AMG for Concrete Pavement and Base Course, Item SPV.0105.006.**

#### **A Description**

Standard spec 105.6 and 650 are modified to define the requirements for construction staking for this contract.

*Add the following to standard spec 105.6.1:*

Horizontal and vertical control points, provided by the department, are generally at 1 mile intervals for horizontal control and at ½ mile intervals for vertical control. Control points will be provided in a hard copy and ASCII electronic format.

*Replace standard spec 105.6.2 with the following:*

The department will not perform any construction staking for this contract. The contractor shall perform all survey required to layout and construct the work under this contract, subject to engineer's approval.

The survey includes establishing horizontal and vertical position for all aspects of construction including but not limited to storm sewer, subgrade, base, curb, gutter, curb and gutter, pipe culverts, structure layout, pavement, barriers (temporary and permanent), electrical installations, supplemental control, slope stakes, ponds, ITS, FTMS, ramp gates, parking lots, utilities, landscaping elements, irrigation system layout, installation of community sensitive design elements, traffic control items, fencing, etc.

The department may choose to perform quality assurance survey during construction. This quality assurance survey does not relieve the contractor of the responsibility for furnishing all survey work required under this contract.

*Delete standard spec 650.1.*

#### **B (Vacant)**

#### **C Construction**

Survey required under this item shall be according to all pertinent requirements of standard spec 650 and shall include all other miscellaneous survey required to layout and construct all work under this contract.

*Replace standard spec 650.3.8 with the following:*

## **650.3.8 Concrete Pavement**

### **650.3.8.1 General**

Under the Construction Staking Concrete Pavement bid item the contractor may substitute automated machine guidance (AMG) for conventional staking on all or part of the concrete pavement and underlying base. The engineer may require the contractor to revert to conventional staking methods for all or part of the work at any point during construction if, in the engineer's opinion, AMG is producing unacceptable results.

### **650.3.8.2 Conventional Concrete Pavement Staking**

Set construction stakes or marks at 25-foot intervals. Set and maintain additional stakes as necessary to establish location and grade along intersecting road radii; and for auxiliary lanes, vertical curves, horizontal curves, and curve transitions according to the plans. Locate stakes to within 0.02 feet horizontally and establish elevations to within 0.01 feet vertically. Set and maintain sufficient additional stakes at each cross-section to achieve the required accuracy and to support the method of operations.

### **650.3.8.3 Automated Machine Guidance for Concrete Pavement**

#### **650.3.8.3.1 General**

No base or paving stakes or stringlines are required for AMG work.

Coordinate with the engineer throughout the course of construction to ensure that work performed using AMG conforms to the contract tolerances and that the methods employed conform to the contractor's AMG work plan and accepted industry standards. Address AMG issues at weekly progress meetings.

Use a total station to provide station, offset, and elevations at locations specified in 650.3.8.3.5 and at additional engineer-directed locations after fine grading the base and after placing the concrete pavement. Allow the engineer access to view current display data on the contractor's AMG equipment during paving and fine grading operations.

Provide the department field staff up to 8 hours of formal training on contractor's AMG systems.

#### **650.3.8.3.2 AMG Work Plan**

Submit a comprehensive written AMG work plan for department review at least 5 business days before beginning AMG work. The engineer will review the plan to determine if it conforms to the requirements of this special provision.

Construct the base and concrete pavement as the contractor's AMG work plan provides. Update the plan as necessary during construction.

The AMG work plan should discuss how AMG technology will be integrated into other technologies employed on the project. Include, but do not limit the contents to, the following:

1. Designate which portions of the contract will be done using AMG and which portions will be done using conventional staking.
2. Describe the manufacturer, model, and software version of the AMG equipment including the angular accuracy and the measurement frequency of the guidance system.
3. Provide information on the qualifications of contractor staff. Include formal training and field experience. Designate a single staff person as the primary contact for AMG technology issues. This person shall be on site during all AMG concrete placement.
4. Describe how project control is to be established. Include a list and map or kml file showing 3D control points enveloping the site. Incorporate department-provided primary control and contractor-provided secondary control into a single site control network. At a minimum provide sufficient 3D control to utilize not less than 3 control points in each total station setup, be it within a resection or as a setup point, backsight, and third point for an independent check. Use engineer-approved survey markers and/or targets. Ensure that secondary control points are accurate to within 0.02 feet horizontally and to within 0.01 feet vertically.
5. Describe total station setup procedures including methods used to set and relocate total stations for each day's paving. Record or note the residual error in any resection calculation. Take and record check shots on 3D control points at varying distances from the instrument that represent the varying distances used in guiding the paving machine. Submit notes or digital reports of setup data and control-point checks daily.

6. Describe the contractor's quality control procedures. Describe procedures for checking, mechanical calibration, and maintenance of equipment. Include the frequency and type of checks performed to ensure that the trimmed base and concrete pavement conform to the contract plans.

#### **650.3.8.3.3 Equipment**

Use robotic total stations machine guidance or other engineer approved combination of methodologies to meet the contract requirements.

Perform periodic sensor and/or pan calibrations and other routine adjustments as required to ensure that the trimmed base and concrete pavement conform to the contract plans.

#### **650.3.8.3.4 Geometric and Surface Information**

##### **650.3.8.3.4.1 Department Responsibilities**

The department will provide electronic design data in the contractor data packet. See the Contractor Data Packet contract special provision for a list of design data content.

##### **650.3.8.3.4.2 Contractor Responsibilities**

Obtain elevations of adjacent pavement and bridges at centerline, edge of pavement, and other locations necessary to characterize existing profile and cross slope. Adjust design profile grade and cross slope to provide a smooth transition from the new pavement to the existing pavement or bridge. Notify the engineer when a smooth profile cannot be provided. Submit final adjusted plan elevations to the engineer.

Review department-provided design model data for areas of the project employing AMG. Report inconsistencies between that data and the contract plans to the engineer and work with the engineer to resolve those inconsistencies. Use the resulting revised design model data and matching as-built surface data from above paragraph to develop a contractor construction model.

Provide the resulting construction model data proposed for the paving operation to the department in LandXML v1.2 or AutoCAD DWG.

##### **650.3.8.3.4.3 Managing and Updating Information**

Notify the department of any errors or discrepancies in department-provided information. The department will determine what revisions may be required. The department will revise the contract plans, if necessary, to address errors or discrepancies that the contractor identifies. The department will provide the best available information related to those contract plan revisions.

Revise the construction model as required to support construction operations and to reflect any contract plan revisions the department makes. Perform checks to confirm that the revised construction model agrees with the contract plan revisions. Provide a copy of the resulting adjusted construction model data to the engineer in LandXML v1.2 or AutoCAD DWG. The department will pay for costs incurred to incorporate contract plan revisions as extra work.

#### **650.3.8.3.5 Construction Checks**

##### **650.3.8.3.5.1 Final Base Checks**

Check the trimmed base against the final adjusted plan elevation at randomly selected points on cross sections located at stations evenly divisible by 100. Conduct at least one random check per 250 lane-feet corresponding to the basic units used to assess pavement thickness under standard spec 415.3.16. Also, check the trimmed base at additional points as the engineer directs. Notify the engineer at least 2 business days before making final checks so the engineer can observe the process.

Ensure that no individual check is off by more than 0.02-foot vertically of the final adjusted plan elevation. Notify the engineer if this criterion is exceeded.

The department may conduct periodic independent base checks. The department will notify the contractor if any individual check differs by more than 0.02-foot vertically from the final adjusted plan elevation.

##### **650.3.8.3.5.2 Final Pavement Checks**

Check the finished concrete immediately after placement against the accepted plan elevation at randomly selected points on cross sections. Conduct at least one random check per 250 lane-feet corresponding to the basic units used to assess pavement thickness under standard spec 415.3.16. Also, check the pavement at drainage structures, bridges, driveways, intersections, ramp termini, and additional points as the engineer directs. Notify the engineer before making final checks so the engineer can observe the process.

Notify the engineer immediately if the final pavement surface does not match the final adjusted plan elevation within 0.02-foot vertically.

The department may conduct periodic independent pavement elevation checks. The department will notify the contractor if any individual check differs by more than 0.05-foot horizontally or 0.02-foot vertically from the final adjusted plan elevation.

#### **D Measurement**

The department will measure Survey (Project) with Optional AMG for Concrete Pavement and Base Course each as a single lump sum 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.0105.004	Survey Project 1007-12-79 with Optional AMG for Concrete Pavement and Base Course	LS
SPV.0105.005	Survey Project 1007-12-80 with Optional AMG for Concrete Pavement and Base Course	LS
SPV.0105.006	Survey Project 1008-10-70 with Optional AMG for Concrete Pavement and Base Course	LS

Payment is full compensation for performing all survey work required to layout and construct all work under this contract.

### **108. Salvage ITS Equipment CCTV-13-0014, Item SPV.0105.401; Salvage ITS Equipment SDS-13-0091, Item SPV.0105.402; Salvage ITS Equipment Dejope Cabinet, Item SPV.0105.403; Salvage ITS Equipment SDS-13-0015, Item SPV.0105.404;**

#### **A Description**

This special provision describes salvaging existing ITS equipment as indicated on the plans.

#### **B Materials**

Provide all tools and equipment necessary to salvage the existing ITS equipment.

#### **C Construction**

Prior to salvaging, the Field System Integrator must determine if the ITS equipment is fully functional. If any part of the ITS equipment is found to not meet original manufacturer's specifications, contact Kyle Hemp of the WisDOT SW Region at (608) 246-5367.

Carefully salvage the existing ITS equipment at the location indicated on the plans. Salvage all mounting hardware and cables/wires associated with the ITS equipment.

Reinstallation of the ITS equipment, as indicated on the plans or as directed by the engineer, including any new materials required (cables or mounting hardware for example) will be paid for under other bid items.

Deliver ITS equipment that will not be reinstalled to Dale Roth at the WisDOT SW Region, 2101 Wright Street, Madison, WI 53704 at a mutually agreed upon time during normal state office hours. Contact Dale Roth at (608) 516-6435 to coordinate delivery of equipment.

Storage of materials prior to reinstallation and/or delivery is the responsibility of the contractor and is incidental to this item.

Any materials which are damaged during the salvaging, delivery, or reinstallation process will be repaired or replaced at the expense of the contractor.

#### **D Measurement**

The department will measure Salvage ITS Equipment as a single complete unit of work for each location, acceptably completed.

#### **E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.401	Salvage ITS Equipment CCTV-13-0014	LS
SPV.0105.402	Salvage ITS Equipment SDS-13-0091	LS
SPV.0105.403	Salvage ITS Equipment Dejope Cabinet	LS
SPV.0105.404	Salvage ITS Equipment SDS-13-0015	LS

Payment is full compensation for salvaging the ITS equipment including delivery of salvaged ITS equipment that will not be reinstalled to the department.

#### **109. Relocate Solar Power Microwave Detector, Item SPV.0105.405.**

##### **A Description**

This special provision describes relocating an existing solar-powered microwave detector assembly as indicated on the plans.

##### **B Materials**

Provide all tools and equipment necessary to relocate the existing solar-powered microwave detector assembly.

##### **C Construction**

Prior to relocating, the Field System Integrator must determine if the solar-powered microwave detector assembly is fully functional. If any part of the solar-powered microwave detector assembly is found to not meet original manufacturer's specifications, contact Kyle Hemp of the WisDOT SW Region at (608) 246-5367.

Carefully relocate the existing solar-powered microwave detector assembly as indicated on the plans. Relocate the pole, mounting hardware, cables/wires, and all accessories associated with the solar-powered microwave detector assembly. Remount the antenna to maximize signal strength.

Relocate and make operational the solar-powered microwave detector assembly within five days.

Storage of materials during the relocation process is the responsibility of the contractor and is incidental to this item.

Any materials which are damaged during the relocation process will be repaired or replaced at the expense of the contractor.

##### **D Measurement**

The department will measure Relocate Solar Power Microwave Detector, completed in accordance to the contract and accepted, as a single complete unit of work.

##### **E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.405	Relocate Solar Power Microwave Detector	LS

Payment is full compensation for relocating the solar-powered microwave detector assembly.

#### **110. Relocate Bluetooth Detector, Item SPV.0105.406.**

##### **A Description**

This special provision describes relocating an existing solar-powered Bluetooth sensor as indicated on the plans.

##### **B Materials**

Provide all tools and equipment necessary to relocate the existing solar-powered Bluetooth sensor.

Provide all tools and equipment necessary to convert the existing solar-powered Bluetooth sensor to a hardwired Bluetooth sensor.

### **C Construction**

Prior to relocating, the Field System Integrator must determine if the solar-powered Bluetooth sensor is fully functional. If any part of the solar-powered Bluetooth sensor is found to not meet original manufacturer's specifications, contact Kyle Hemp of the WisDOT SW Region at (608) 246-5367.

Carefully relocate the existing solar-powered Bluetooth sensor as indicated on the plans. Relocate all mounting hardware and cables/wires associated with the solar-powered Bluetooth sensor. Remount the antenna to maximize signal strength.

Relocate and make operational the Bluetooth sensor within five days.

Storage of materials during the relocation process is the responsibility of the contractor and is incidental to this item.

Any materials which are damaged during the relocation process will be repaired or replaced at the expense of the contractor.

### **D Measurement**

The department will measure Relocate Bluetooth Detector, completed according to the contract and accepted, as a single complete unit of work.

### **E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.406	Relocate Bluetooth Detector	LS

Payment is full compensation for relocating the solar-powered Bluetooth sensor.

## **111. Temporary Sand Bag Dike C-13-044, Item SPV.0105.701.**

### **A Description**

This work shall consist of the construction of dikes or barriers with sand filled bags as shown on the plans and as hereinafter provided.

Remove and dispose of the sand bags and all surplus material upon completion of its use under this contract.

### **B Materials**

The bags shall be canvas, burlap, nylon or other approved material. The bags shall contain a minimum of one-half cubic foot of sand, be of one size and shape and be securely closed.

The sand shall conform to the requirements standard spec 501.2.5.3 except that standard spec 501.2.5.3.4 shall be deleted. The maximum size of particle shall pass a No. 4 sieve.

Materials other than sand bags may be used for the dike required to construct Structure C-13-044 with prior approval of the engineer.

### **C (Vacant)**

### **D Measurement**

The department will measure Temporary Sand Bag Dike as a single lump sum unit of work, 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.0105.701	Temporary Sand Bag Dike C-13-044	LS

Payment is full compensation for furnishing and installing sand filled bags; for furnishing all excavation; for removal and disposal of the sand bags and all waste or surplus materials, included eroded materials; and for shaping and restoring the area.

Payment is also full compensation for any other materials that were approved by the engineer used for the dike.

Any required topsoiling, fertilizing, seeding or mulching will be paid for under the applicable item.

## **112. Insulation Board (4-Inch), Item SPV.0165.001.**

### **A Description**

This special provision describes providing insulation board.

### **B Materials**

Insulation shall be polystyrene suitable for underground installation. It shall have a compressive strength of at least 40 PSI, minimum R-value of 5, and maximum water absorption of 0.17% by volume.

### **C Construction**

**C.1** Perform all construction conforming to Chapter 4.17.2(a) of the Standard Specifications for Sewer and Water Construction in Wisconsin (latest edition).

### **D Measurement**

The department will measure Insulation Board (4-Inch) 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.0165.001	Insulation Board (4-Inch)	SF

Payment is full compensation for all excavation; and for furnishing and placing the insulation board.

## **113. Repair Galvanized Coating, Item SPV.0165.002.**

### **A Description**

This special provision describes providing surface cleaning and repair of galvanized surfaces at locations specified in the plans, and as hereinafter provided.

### **B Materials**

Supply specific product data sheets to the engineer prior to starting work. Galvanize per ASTM A780.

### **C Construction**

Repair all zinc coating that is chipped or damaged or as otherwise noted by plans or the engineer by metallizing according to ASTM A780. Thoroughly clean the places receiving coating before applying the new coating.

### **D Measurement**

The department will measure Repair Galvanized Coating by the square foot acceptably completed with a minimum quantity of 1 square foot at each repair location.

### **E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0165.002	Repair Galvanized Coating	SF

Payment is full compensation for cleaning; for protecting traffic and property; for furnishing all materials and miscellaneous items to complete the replacement; for handling, transporting, and erecting.

## **114. Wall Modular Block Mechanically Stabilized Earth R-13-335, Item SPV.0165.701.**

### **A Description**

This special provision describes designing, furnishing materials and erecting a permanent earth retention system according to the lines, dimension, elevations and details as shown on the plans and provided in the contract. The design life of the wall and all wall components shall be 75 years minimum.

This special provision describes the quality management program (QMP) for Mechanically Stabilized Earth (MSE) walls. A quality management program is defined as all activities, including process control, inspection, sampling and testing, and necessary adjustments in the process that are related to the construction of the MSE wall, which meets all the requirements of this provision.

This special provision describes contractor quality control (QC) sampling and testing for backfill density testing, documenting those results, and documenting related production and placement process changes. This special provision also describes department quality verification (QV), independent assurance (IA), and dispute resolution.

Chapter 8 of the department's construction and materials manual (CMM) provides additional detailed guidance for QMP work and describes sampling and testing procedures.

### **B Materials**

#### **B.1 Proprietary Wall Systems**

The supplied wall system must be from the department's approved list of Modular Block Mechanically Stabilized Earth Wall systems. Proprietary wall systems must conform to the requirements of this specification and be pre-approved for use by the department's Bureau of Structures. The department maintains a list of pre-approved proprietary wall systems. The name of the pre-approved proprietary wall system selected shall be furnished to the engineer within 25 days after the award of contract. The location of the plant manufacturing the facing units shall be furnished to the engineer at least 14 days prior to the project delivery.

To be eligible for use on this project, a system must have been pre-approved by the Bureau of Structures and added to that list prior to the bid closing date. To receive pre-approval, the retaining wall system must comply with all pertinent requirements of this provision and be prepared according to the requirements of Chapter 14 of the department's LRFD Bridge Manual. Information and assistance with the pre-approval process can be obtained by contacting the Bureau of Structures, Structures Maintenance Section at the following email address: [DOTDLStructuresFabrication@dot.wi.gov](mailto:DOTDLStructuresFabrication@dot.wi.gov).

#### **B.2 Design Requirements**

It is the responsibility of the contractor to submit a design and supporting documentation as required by this special provision, for review and acceptance by the department, to show the proposed wall design is in compliance with the design specifications. The submittal shall include the following items for review: detailed plans and shop drawings, complete design calculations, explanatory notes, supporting materials, and specifications. The detailed plans and shop drawings shall include all details, dimensions, quantities and cross-sections necessary to construct the walls. Submit shop drawings to the engineer conforming to 105.2 with electronic submittal to the fabrication library under 105.2.2. Certify that shop drawings conform to quality control standards by submitting department form [DT2329](#) with each set of shop drawings. Department review does not relieve the contractor from responsibility for errors or omissions on shop drawings. Submit no later than 60 days from the date of notification to proceed with the project and a minimum of 30 days prior to the date proposed to begin wall construction.

The plans and shop drawings shall be prepared on reproducible sheets 11 inch x 17 inch, including borders. Each sheet shall have a title block in the lower right corner. The title block shall include the WisDOT project identification number and structure number. Design calculations and notes shall be on 8-½ inch x 11 inch sheets, and shall contain the project identification number, name or designation of the wall, date of preparation, initials of designer and checker, and page number at the top of the page. All plans, shop drawings, and calculations shall be signed, sealed and dated by a professional engineer licensed in the State of Wisconsin.

The design of the wall shall be in compliance with the current American Association of State Highway and Transportation Officials LRFD (AASHTO LRFD) Bridge Design Specifications with latest interim specifications for Mechanically Stabilized Earth Walls, WisDOT's current Standard Specifications for Highway and Structure Construction (standard spec), Chapter 14 of the WisDOT LRFD Bridge Manual

and standard engineering design procedures as determined by the department. Loads, load combinations, load and resistance factors shall be as specified in AASHTO LRFD Section 11. The associated resistance factors shall be defined according to Table 11.5.7-1 in AASHTO LRFD.

Design and construct the walls according to the lines, grades, heights and dimensions shown on the plans, as herein specified, and as directed by the engineer.

Walls parallel to supporting highway traffic shall be designed for the effects of highway surcharge loading equivalent of 2 feet soil surcharge weight or 240 psf. The design shall also consider the traffic barrier impact where applicable. Walls that do not carry highway traffic shall be designed for a live load surcharge of 100 psf according to Chapter 14 of the WisDOT LRFD Bridge Manual or as stated on the plans.

A maximum value of the angle of internal friction of the wall backfill material used for design shall be assumed to be 30 degrees without a certified report of tests. If a certified report of tests yields an angle of internal friction greater than 30 degrees, the larger test value may be used for design, up to a maximum value of 36 degrees.

An external stability check at critical wall stations showing Capacity Demand Ratio (CDR) for sliding, eccentricity, and bearing checks is provided by the department and are provided on the wall plans.

The design of the wall by the contractor shall consider the internal and compound stability of the wall mass according to AASHTO LRFD 11.10.6. The internal stability shall include soil reinforcement pullout, soil reinforcement rupture, and wall facing-reinforcement connection failure at each soil reinforcement level. The design shall be performed using the Simplified Method or Coherent Gravity Method. Calculations for factored stresses and resistances shall be based upon assumed conditions at the end of the design life. Compound stability shall be computed for the applicable strength limits. Sample analyses and hand calculations shall be submitted to verify the output of any software used. The design calculations and notes shall clearly indicate the Capacity to Demand Ratios (CDR) for all internal and external stabilities as defined in AASHTO LRFD.

Wall facing units shall be designed according to AASHTO LRFD 11.10.2.3.

The minimum length of soil reinforcement measured from the back face of the wall shall be equal to 0.7 of the wall height, or as shown on the plan. In no case shall this length be less than 6.0 feet. The soil reinforcement length shall be the same from the bottom to the top of the wall. All soil reinforcement layers shall be connected to facings. The soil reinforcement shall extend a minimum of 3.0 feet beyond the theoretical failure plane in all cases. The maximum vertical spacing of soil reinforcement layers shall be two times the block width (front face to back face) or 32 inches, whichever is less. The first (bottom) layer of reinforcement shall be placed no further than 12 inches above the top of the leveling pad or the height of the block, but at least one block height above the leveling pad. The last (top) layer of soil reinforcement shall be no further than 21 inches below the top of the uppermost block.

All soil reinforcement required for the reinforced soil zone shall be connected to the wall facing.

Soil reinforcement shall be fabricated or designed to avoid piling, drainage structures or other obstacles in the fill without field modifications. Unless approved by the Bureau of Structures cutting or altering of the basic structural section of either the strip or grid at the site is prohibited, a minimum clearance of 3 inches shall be maintained between any obstruction and reinforcement, and splicing reinforcement is not allowed.

The minimum embedment of the wall shall be 1 foot 6 inches below finished grade, or as given on the plans. All walls shall be provided with a concrete leveling pad. Minimum wall embedment does not include the leveling pad depth. Step the leveling pad to follow the general slope of the ground line. Frost depth shall not be considered in designing the wall for depth of leveling pad.

Wall facing units shall be installed on a leveling pad.

### **B.3 Wall System Components**

Materials furnished for wall system components under this contract shall conform to the requirements of this specification. All documentation related to material and components of the wall systems specified in this subsection shall be submitted to the engineer.

#### **B.3.1 Wall Facing**

Wall facing units shall consist of precast modular concrete blocks. Furnish concrete produced by a dry-cast or wet-cast process. Concrete for all blocks shall not contain less than 565 pounds of cementitious materials per cubic yard. The contractor may use cement conforming to standard spec. 501.2.1 or may

substitute for portland cement at the time of batching conforming to standard spec. 501.2.6 for fly, 501.2.7 for slag, or 501.2.8 for other pozzolans. In either case the maximum total supplementary cementitious content is limited to 30% of the total cementitious content by weight.

Dry-cast concrete blocks shall be manufactured according to ASTM C1372 and this specification.

All units shall incorporate a mechanism or devices that develop a mechanical connection between vertical block layers. Units that are broken, have cracks wider than 0.02 inches and longer than 25% of the nominal height of the unit, chips larger than 1 inch, have excessive efflorescence, or are otherwise deemed unacceptable by the engineer, shall not be used within the wall. A single block front face style shall be used throughout each wall. The color and surface texture of the block shall be as given on the plan.

The top course of facing units shall be as noted on the plans, either:

- Solid precast concrete unit designed to be compatible with the remainder of the wall. The finishing course shall be bonded to the underlying facing units with a durable, high strength, flexible adhesive compound compatible with the block material.
- A formed cast-in-place concrete cap. A cap of this type shall have texture, color, and appearance, as noted on the plans. The vertical dimension of the cap shall not be less than 3 1/2 inches. Expansion joints shall be placed in the cap at a maximum spacing of 20 feet unless noted otherwise on the plan. Use Grade A, A-FA, A-S, A-T, A-IS, A-IP or A-IT concrete conforming to standard spec 501 as modified in standard spec 716. Provide QMP for cast in place cap and coping concrete as specified in standard spec 716, Class II Concrete.

Block dimensions may vary no more than  $\pm 1/8$ -inch from the standard values published by the manufacturer. Blocks must have a minimum width (front face to back face) of 8 inches. The minimum front face thickness of blocks shall be 4 inches measured perpendicular from the front face to inside voids greater than 4 square inches. The minimum allowed thickness of any other portions of the block is 1 3/4 inches. The front face of the blocks shall conform to plan requirements for color, texture, or patterns.

If pins are used to align modular block facing units, they shall consist of a non-degrading polymer, or hot dipping galvanized steel and be made for the express use with the modular block units supplied, to develop mechanical interlock between facing unit block layers. Connecting pins shall be capable of holding the wall in the proper position during backfilling. Furnish documentation that establishes and substantiates the design life of such devices.

#### **B.3.1.1 Material Testing**

Provide independent quality verification testing of project materials according to the following requirements:

Test	Method	Requirement	
		Dry-cast	Wet-cast
Compressive Strength (psi)	ASTM C140	5,000 min.	4,000 min.
Air Content (%)	AASHTO T152	N/A	6.0 +/-1.5
Water Absorption (%)	ASTM C140	6 max. <sup>[3]</sup>	N/A
Freeze-Thaw Loss (%) 40 cycles, 5 of 5 samples 50 cycles, 4 of 5 samples	ASTM C1262 <sup>[1]</sup>	1.0 max. <sup>[2] [3]</sup> 1.5 max. <sup>[2] [3]</sup>	N/A

<sup>[1]</sup> Test shall be run using a 3% saline solution and blocks greater than 45 days old.

<sup>[2]</sup> Test results that meet either of the listed requirements for Freeze-Thaw Loss are acceptable.

<sup>[3]</sup> The independent testing laboratory shall control and conduct all sampling and testing. Prior to sampling, the manufacturer's representative shall identify materials by lot. Five blocks per lot shall be randomly selected for testing. Solid blocks used as a finishing or top course shall not be selected. The selected blocks shall remain under the control of the person who conducted the sampling until shipped or delivered to the testing laboratory. All pallets of blocks within a lot shall be strapped or wrapped to secure the contents and tagged or marked for identification. The engineer will reject any pallet of blocks delivered to the project without intact security measures. At no expense to the department, the contractor shall remove all rejected blocks from the project. If a random sample of five blocks of any lot tested by the department fails to meet any of the above testing requirements, the entire lot will be considered non-conforming.

The contractor and fabricator shall coordinate with the independent testing agency to ensure that strength and air content samples can be taken appropriately during manufacturing. At the time of delivery of materials, furnish the engineer a certified report of test from an AASHTO-registered or ASTM-accredited independent testing laboratory for each lot.

The certified test report shall include the following:

- Project ID
- Production process used (dry-cast or wet-cast)
- Name and location of testing facility
- Name of sampling technician
- Lot number and lot size

Testing of project materials shall be completed not more than 18 months prior to delivery. Independent testing frequency shall not exceed 5,000 blocks for dry-cast blocks and the lesser of 150 CY or 1 day's production for wet-cast blocks. The certified test results will represent all blocks within the lot. Each pallet of blocks delivered shall bear lot identification information. Block lots that do not meet the requirements of this specification or blocks without supporting certified test reports will be rejected and shall be removed from the project at no expense to the department.

Nonconforming materials will be subject to evaluation according to standard spec 106.5.

### B.3.2 Leveling Pad

Provide an unreinforced cast-in-place concrete leveling pad. Use Grade A, A-FA, A-S, A-T, A-IS, A-IP, or A-IT concrete conforming to standard spec 501 as modified in standard spec 716. Provide QMP for leveling pad concrete as specified in standard spec 716, Class III Concrete.

The minimum width of the concrete leveling pad shall be as wide as the proposed blocks plus 6 inches, with 6-inches of the leveling pad extending beyond the front face of the blocks. The minimum thickness of the leveling pad shall be 6 inches.

### B.3.3 Backfill

Furnish and place backfill for the wall as shown on the plans and as hereinafter provided.

Wall Backfill, Type A, shall comply with the requirements for Coarse Aggregate No. 1 as given in standard spec 501.2.5.4.4. All backfill placed within a zone from the top of the leveling pad to the top of the final layer of wall facing units and within 1 foot behind the back face of the wall shall be Wall Backfill, Type A. This includes all material used to fill openings in the wall facing units.

Wall Backfill, Type B, shall be placed in a zone extending horizontally from 1 foot behind the back face of the wall to 1 foot beyond the end of the reinforcement and extending vertically from the top of the leveling pad to a minimum of 3 inches above the final reinforcement layer.

Use natural sand or a mixture of sand with gravel, crushed gravel or crushed stone. Do not use foundry sand, bottom ash, blast furnace slag, crushed/recycled concrete, crushed/milled asphaltic concrete or other potentially corrosive material.

Provide material conforming to the following gradation requirements as per AASHTO T27.

Sieve Size	% by Weight Passing
1 inch	100
No. 40	0 - 60
No. 200	0 - 15

The material shall have a liquid limit not greater than 25, as per AASHTO T89, and a plasticity index not greater than 6, as per AASHTO T90. Provide the percent by weight, passing the #4 sieve.

In addition, backfill material Type A and Type B shall meet the following requirements.

Test	Method	Value
pH	AASHTO T-289	4.5 - 9.0
Sulfate content <sup>[1]</sup>	AASHTO T-290	200 ppm max.
Chloride content <sup>[1]</sup>	AASHTO T-291	100 ppm max.
Electrical Resistivity <sup>[1]</sup>	AASHTO T-288	3000 ohm-cm min.
Organic Content <sup>[1]</sup>	AASHTO T-267	1.0% max.
Angle of Internal Friction	AASHTO T-236 <sup>[2]</sup>	30 degrees min. (At 95.0% of maximum density and optimum moisture, per AASHTO T99, or as modified by C.2)

<sup>[1]</sup> Requirement does not apply to walls with non-metallic reinforcement and non-metallic connectors.

<sup>[2]</sup> If the amount of P-4 material is greater than 60%, use AASHTO 236 with a standard-size shear box. Test results of this method may allow the use of larger angles of internal friction, up to the maximum allowed by this specification.

If the amount of P-4 material is less than or equal to 60%, two options are available to determine the angle of internal friction. The first method is to perform a fractured faces count, per ASTM D5821, on the R-4 material. If more than 90% of the material is fractured on one face and more than 50% is fractured on two faces, the material meets the specifications and the angle of internal friction can be assumed to be 30 degrees. The second method allows testing all P-1" material, as per AASHTO T-236, with a large shear box. Test results of this second method may allow the use of larger angles of internal friction, up to the maximum allowed by this specification.

Prior to placement of the backfill, obtain and furnish to the engineer a certified report of test results that the backfill material complies with the requirements of this specification. Specify the method used to determine the angle of internal friction. This certified report of test shall be less than 6 months old. Tests will be performed by a certified independent laboratory. In addition, when backfill characteristics and/or sources change, provide a certified report of tests for the new backfill material. Additional certified report of tests are also required. These additional backfill tests may be completed at the time of material production or material placement, with concurrence of the engineer. If this additional testing is completed at the time of material production, complete testing for every 2,000 cubic yards of backfill or portion thereof. If this additional testing is completed at the time of material placement, complete testing for every 2,000 cubic yards of backfill, or portion thereof, used per wall. For the additional required testing for every 2,000 cubic yards of backfill placement, if the characteristic of the backfill and/or the source has not changed then Angle of Internal Friction tests are not included in the additional required testing. All certified reports of test results shall be less than 6 months old and performed by a certified independent laboratory.

### **B.3.4 Soil Reinforcement**

#### **B.3.4.1 Geogrids**

Geogrid supplied as reinforcing members shall be manufactured from long chain polymers limited to polypropylene, high-density polyethylene, polyaramid, and polyester. Geogrids shall form a uniform rectangular grid of bonded, formed, or fused polymer tensile strands crossing with a nominal right angle orientation. The minimum grid aperture shall be 0.5 inch. The geogrid shall maintain dimension stability during handling, placing, and installation. The geogrid shall be insect, rodent, mildew, and rot resistant. The geogrid shall be furnished in a protective wrapping that shall prevent exposure to ultraviolet radiation and damage from shipping or handling. The geogrid shall be kept dry until installed. Each roll shall be clearly marked to identify the material contained.

The wall supplier shall provide the nominal long-term design strength ( $T_{al}$ ) and nominal long-term connection strength,  $T_{alc}$  as discussed below.

#### Nominal Long-Term Design Strength ( $T_{al}$ )

The wall supplier shall supply the nominal long-term design strength ( $T_{al}$ ) used in the design for each reinforcement layer and shall be determined by dividing the Ultimate Tensile Strength ( $T_{ult}$ ) by the factors  $RF_{ID}$ ,  $RF_{CR}$ ,  $RF_D$ .

Hence,

$$T_{al} = \frac{T_{ult}}{RF_{ID} \times RF_{CR} \times RF_D}$$

where:

- $T_{ult}$  = Ultimate tensile strength of the reinforcement determined from wide width tensile tests (ASTM D6637) for geogrids based on the minimum average roll value (MARV) for the product.
- $RF_{ID}$  = Strength reduction factor to account for installation damage to the reinforcement. In no case shall  $RF_{ID}$  be less than 1.1.
- $RF_{CR}$  = Strength reduction factor to prevent long-term creep rupture of the reinforcement. In no case shall  $RF_{CR}$  be less than 1.2.
- $RF_D$  = Strength reduction factor to prevent rupture of the reinforcement due to chemical and biological degradation. In no case shall  $RF_D$  be less than 1.1.

Values for  $RF_{ID}$ ,  $RF_{CR}$ , and  $RF_D$  shall be determined from product specific test results. Guidelines for determining  $RF_{ID}$ ,  $RF_{CR}$ , and  $RF_D$  from product specific data are provided in FHWA Publication No. FHWA-NHI-10-024 and FHWA-NHI-10-025 "Design and Construction of Mechanically Stabilized Earth Walls and Reinforced Soil Slopes".

### Nominal Long-term Connection Strength $T_{ac}$

The nominal long term connection strength,  $T_{ac}$ , shall be based on laboratory geogrid connection tests between wall facing and geogrids.  $T_{ac}$  shall be as given below:

$$T_{ac} = \frac{T_{ult} * CR_{cr}}{RF_D}$$

where:

- $T_{ac}$  = Nominal long-term reinforcement facing connection strength per unit reinforcement width at a specified confining pressure.
- $T_{ult}$  = Ultimate tensile strength of the reinforcement for geogrids defined as the minimum average roll value (MARV) for the product.
- $CR_{cr}$  = Long term connection strength reduction factor to account for reduced ultimate strength resulting from connection.
- $RF_D$  = Strength reduction factor to prevent rupture of the reinforcement due to chemical and biological degradation.

$T_{ac}$  shall be developed from the tests conducted by an independent laboratory on the same facing blocks and geogrids as proposed for the wall and shall cover a range of overburden pressures comparable to those anticipated in the proposed wall. The connection strength reduction factor  $CR_{cr}$  shall be determined according to long-term connection test as described in Appendix B of FHWA Publication No. FHWA-NHI 10-025 "Design and Construction of Mechanically Stabilized Earth Walls and Reinforced Soil Slopes".  $CR_{cr}$  may also be obtained from the short term connection test meeting the requirements of NCMA test method SRWU-1 in Simac et al 1993 or ASTM D4884.

The contractor shall provide a manufacturer's certificate that the  $T_{ult}$  (MARV) of the supplied geogrid has been determined according to ASTM D4595 or ASTM D6637 as appropriate. Contractor shall also provide block to block and block to reinforcement connection test reports prepared and certified by an independent laboratory. Also provide calculations according to AASHTO LRFD, and using the results of laboratory tests, that the block-geogrid connections shall be capable of resisting 100% of the maximum tension load in the soil reinforcements at any level within the wall, for the design life of the wall system.

### B.3.4.2 Galvanized Metal Reinforcement

In lieu of polymeric geogrid earth reinforcement, galvanized metal reinforcement may be used. Design and materials shall be according to AASHTO LRFD 11.10.6.4.2. The design life of steel soil reinforcements shall also comply with AASHTO LRFD. Steel soil reinforcement shall be prefabricated into single or multiple elements before galvanizing.

## C Construction

### C.1 Excavation and Backfill

Excavation and preparation of the foundation for the MSE wall and the leveling pad shall be according to standard spec 206. The volume of excavation covered is limited to the width of the reinforced mass and to the depth of the leveling pad unless shown or noted otherwise on the plan. At the end of each working day, provide good temporary drainage such that the backfill shall not become contaminated with run-off soil or water if it should rain. Do not stockpile or store materials or large equipment within 10 feet of the back of the wall.

Place backfill materials in the areas as indicated on the plans and as detailed in this specification. Backfill lifts shall be no more than 8-inches in depth, after compaction. Backfilling shall closely follow erection of each course of wall facing units.

Conduct backfilling operations in such a manner as to prevent damage or misalignment of the wall facing units, soil reinforcement, or other wall components. At no expense to the department, correct any such damage or misalignment as directed by the engineer. A field representative of the wall supplier shall be available during wall construction to provide technical assistance to the contractor and the engineer.

Place and compact the MSE backfill to the level of the next higher layer of MSE reinforcement before placing the MSE reinforcement or connecting it to the wall facing. Place and compact material beyond the reinforced soil zone to allow for proper compaction of material within the reinforced zone. The MSE reinforcement shall lay horizontally on top of the most recently placed and compacted layer of MSE backfill.

Do not operate tracked or wheeled equipment on the backfill within 3 feet from the back face of modular blocks. The engineer may order the removal of any large or heavy equipment that may cause damage or misalignment of the wall facing units.

## **C.2 Compaction**

Compact wall backfill Type A with at least three passes of lightweight manually operated compaction equipment acceptable to the engineer.

Compact all backfill Type B as specified in standard spec 207.3.6. Compact the backfill Type B to 95.0% of maximum dry density as determined by AASHTO T-99 (modified to compute densities to the nearest 0.1 pcf).

Ensure adequate moisture is present in the backfill during placement and compaction to prevent segregation and to help achieve compaction.

Compaction of backfill within 3 feet of the back face of the wall should be accomplished using lightweight compaction devices. Use of heavy compaction equipment or vehicles should be avoided within 3 feet of the modular blocks. Do not use sheepfoot or padfoot rollers within the reinforced soil zone.

A minimum of 6 inches of backfill shall be placed over the MSE reinforcement prior to working above the reinforcement.

## **C.3 Wall Components**

### **C.3.1 General**

Erect wall facing units and other associated elements according to the wall manufacturer's construction guide and to the lines, elevations, batter, and tolerances as shown on the plans. Center the initial layer of facing units on the leveling pad; then level them and properly align them. Fill formed voids or openings in the facing units with wall backfill, Type A. Remove all debris on the top of each layer of facing units, before placing the next layer of facing units.

Install all pins, rods, clips, or other devices used to develop mechanical interlock between facing unit layers according to the manufacturer's directions.

The MSE reinforcement shall lay horizontally on the top of the most recently placed and compacted layer of MSE backfill. Bending of MSE reinforcement that result in a kink in the reinforcement shall not be allowed. If skewing of the reinforcement is required due to obstructions in the reinforced fill, the maximum skew angle shall not exceed 15 degrees from the normal position unless a greater angle is shown on the plans. The adequacy of the skewed reinforcement in such a case shall be addressed by supporting calculations.

### **C.3.2 Leveling Pad**

Provide an unreinforced cast-in-place concrete leveling pad as shown on the plans.

Vertical tolerances shall not exceed 3/4-inch when measured along a 10-foot straightedge. Allow the concrete to set at least 12 hours prior to placing wall facing units.

The bottom row of wall facing units shall be horizontal and 100% of the unit surface shall bear on the leveling pad.

### **C.3.3 Soil Reinforcement**

#### **C.3.3.1 Geogrid Layers**

Place soil reinforcement at the positions and to the lengths as indicated on the accepted shop drawings. Take care that backfill placement over the positioned soil reinforcement elements does not cause damage or misalignment of these elements. Correct any such damage or misalignment as directed by the engineer. Do not operate wheeled or tracked equipment directly on the soil reinforcement. A minimum cover of 6 inches is required before such operation is allowed.

Place and anchor geogrid material between wall unit layers in the same manner as used to determine the Geogrid Block-to-Connection Strength. Place the grid material so that the machine direction of the grid is perpendicular to the wall face. Each grid layer shall be continuous throughout the lengths indicated on the plans. Join grid strips with straps, rings, hooks or other mechanical devices to prevent movement during backfilling operations. Prior to placing backfill on the grid, pull the grid taut and hold in position with pins, stakes or other methods approved by the engineer.

#### **C.3.3.2 Steel Layers**

Place the steel reinforcement full width in one piece as shown on the plans. No splicing will be allowed. Maintain elements in position during backfilling.

### **C.4 Quality Management Program**

#### **C.4.1 Quality Control Plan**

Submit a comprehensive written quality control plan to the engineer at or before the pre-construction meeting. Do not perform MSE wall construction work before the engineer reviews and accepts the plan. Construct the project as the plan provides.

Do not change the quality control plan without the engineer's review and acceptance. Update the plan with changes as they become effective. Provide a current copy of the plan to the engineer and post in the contractor's laboratory as changes are adopted. Ensure that the plan provides the following elements:

1. An organizational chart with names, telephone numbers, current certifications and/or titles, and roles and responsibilities of QC personnel.
2. The process used to disseminate QC information and corrective action efforts to the appropriate persons. Include a list of recipients, the communication process that will be used, and action time frames.
3. A list of source locations, section and quarter descriptions, for all aggregate materials requiring QC testing.
4. Descriptions of stockpiling and hauling methods.
5. An outline for resolving a process control problem. Include responsible personnel, required documentation, and appropriate communication steps.
6. Location of the QC laboratory, retained sample storage, and other documentation.
7. A summary of the locations and calculated quantities to be tested under this provision.
8. A proposed sequencing plan of wall construction operations and random test locations.

#### **C.4.2 Quality Control Personnel**

Perform the quality control sampling, testing, and documentation required under this provision using HTCP certified technicians. Have a HTCP Grading Technician I (GRADINGTEC-I); or Assistant Certified Technician, Grading (ACT-GRADING); or Aggregate Technician I (AGGTEC-I); or Assistant Certified Technician, Aggregate (ACT-AGG) present at each grading site during all wall backfill placement, compaction, and nuclear testing activities. Have a HTCP Nuclear Density Technician I (NUCDENSITYTEC-I) or Assistant Certified Technician, Nuclear Density Gauge Operator (ACT-NUC) perform field density and field moisture content testing.

If an Assistant Certified Technician (ACT) is performing sampling or testing, a certified technician must coordinate and take responsibility for the work an ACT performs. Have a certified technician Ensure that all sampling and testing is performed correctly, analyze test results, and post resulting data. No more than one ACT can work under a single certified technician.

#### **C.4.3 Equipment**

Furnish the necessary equipment and supplies for performing quality control testing. Ensure that all testing equipment conforms to the equipment specifications applicable to the required testing methods. The engineer may inspect the measuring and testing devices to confirm both calibration and condition. Calibrate all testing equipment according to the CMM and maintain a calibration record at the laboratory.

Furnish nuclear gauges from the department's approved product list at:

<https://wisconsindot.gov/Pages/doing-bus/eng-consultants/cnslt-rsrcs/tools/appr-prod/default.aspx>

Ensure that the nuclear gauge manufacturer or an approved calibration service calibrates the gauge the same calendar year it is used on the project. Retain a copy of the calibration certificate with the gauge.

Conform to AASHTO T310 and CMM 8-15 for density testing and gauge monitoring methods.

Split each Proctor sample and identify so as to provide comparison with the department's test results. Unless the engineer directs otherwise, retain the QC split samples for 14 calendar days and promptly deliver the department's split samples to the department.

#### **C.4.4 Documentation**

Document all observations, inspection records, and process adjustments daily. Submit test results to the department's project materials coordinator on the same day they become available.

Use forms provided in CMM Chapter 8. Note other information in a permanent field record and as a part of process control documentation enumerated in the contractor's quality control plan. Enter QC data and backfill material certified report results into the applicable materials reporting system (MRS) software within 5 business days after results are available.

Submit final testing records and other documentation to the engineer electronically within 10 business days after all contract-required information becomes available. The engineer may allow submission of scanned copies of hand-written documentation.

#### **C.4.5 Quality Control (QC) Testing**

Perform compaction testing on the backfill. Conform to CMM 8-15 for testing and gauge monitoring methods. Conduct testing at a minimum frequency of 1 test per 150 cubic yards of backfill, or major portion thereof in each lift. A minimum of one test for every lift is required. Deliver documentation of all compaction testing results to the engineer at the time of testing.

Perform 1 gradation test every 750 cubic yards of fill and one 5-point Proctor test (or as modified in C.2) every 2,250 cubic yards of fill. Provide the region split samples of both within 72 hours of sampling, at the region laboratory. Test sites shall be selected using ASTM Method D3665. Provide Proctor test results to the engineer within 48 hours of sampling. Provide gradation test results to the engineer within 24 hours of sampling.

#### **C.4.6 Department Testing**

##### **C.4.6.1 General**

The department will conduct verification testing to validate the quality of the product and independent assurance testing to evaluate the sampling and testing. The department will provide the contractor with a listing of names and telephone numbers of all QV and IA personnel for the project and provide test results to the contractor within 2 business days after the department obtains the sample.

##### **C.4.6.2 Quality Verification (QV) Testing**

The department will have an HTCP technician, or ACT working under a certified technician, perform QV sampling and testing. Department verification testing personnel must meet the same certification level requirements specified in C.4.2 for contractor testing personnel for each test result being verified. The department will notify the contractor before sampling so the contractor can observe QV sampling.

The department will conduct QV tests at the minimum frequency of 30% of the required contractor density, Proctor and gradation tests.

The department will locate density tests and gradation samples randomly, at locations independent of the contractor's QC work. The department will split each Proctor and gradation QV sample, testing half for QV, and retaining the remaining half for 10 business days.

The department will conduct QV Proctor and gradation tests in a separate laboratory and with separate equipment from the contractor's QC tests. The department will use the same methods specified for QC testing.

The department will assess QV results by comparing to the appropriate specification limits. If QV test results conform to this special provision, the department will take no further action. If density QV test results are nonconforming, the area shall be reworked until the density requirements of this special provision are met. If the gradation test results are nonconforming, standard spec 106.5 will apply. Differing QC and QV nuclear density values of more than 1.5 pcf will be investigated and resolved. QV density tests will be based on the appropriate QC Proctor test results, unless the QV and QC Proctor result difference is greater than 3.0 pcf. Differing QC and QV Proctor values of more than 3.0 pcf will be investigated and resolved.

#### **C.4.6.3 Independent Assurance (IA)**

Independent assurance is unbiased testing the department performs to evaluate the department's QV and the contractor's QC sampling and testing, including personnel qualifications, procedures, and equipment. The department will perform an IA review according to the department's independent assurance program. That review may include one or more of the following:

1. Split sample testing.
2. Proficiency sample testing.
3. Witnessing sampling and testing.
4. Test equipment calibration checks.
5. Reviewing required worksheets and control charts.
6. Requesting that testing personnel perform additional sampling and testing.

If the department identifies a deficiency, and after further investigation confirms it, correct that deficiency. If the contractor does not correct or fails to cooperate in resolving identified deficiencies, the engineer may suspend placement until action is taken. Resolve disputes as specified in C.4.6.4.

#### **C.4.6.4 Dispute Resolution**

The engineer and contractor should make every effort to avoid conflict. If a dispute between some aspect of the contractor's and the engineer's testing program does occur, seek a solution mutually agreeable to the project personnel. The department and contractor may review the data, examine data reduction and analysis methods, evaluate sampling and testing procedures, and perform additional testing. Use ASTM E178 to evaluate potential statistically outlying data.

Production test results, and results from other process control testing, may be considered when resolving a dispute.

If the project personnel cannot resolve a dispute, and the dispute affects payment or could result in incorporating non-conforming product or work, the department will use third party testing to resolve the dispute. The department's central office laboratory, or a mutually agreed on independent testing laboratory, will provide this testing. The engineer and contractor will abide by the results of the third party tests. The party in error will pay service charges incurred for testing by an independent laboratory. The department may use third party test results to evaluate the quality of questionable materials and determine the appropriate payment. The department may reject material or otherwise determine the final disposition of nonconforming material as specified in standard spec 106.5.

### **C.5 Geotechnical Information**

Geotechnical data to be used in the design of the wall is given on the wall plan. After completing wall excavation of the entire reinforced soil zone, notify the department and allow the Regional Soils Engineer two working days to review the foundation.

#### **D Measurement**

The department will measure Wall Modular Block Mechanically Stabilized Earth by the square foot, acceptably completed. The department will compute the measured quantity from the theoretical pay limits the contract plans show. The department will make no allowance for wall area constructed above or below the theoretical pay limits. All work beyond the theoretical pay limits is incidental to the cost of work. The department will make no allowance for as-built quantities.

#### **E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0165.701	Wall Modular Block Mechanically Stabilized Earth R-13-335	SF

Payment is full compensation for supplying a design and shop drawings; preparing the site, including all necessary excavation and disposal of materials; supplying all necessary wall components to produce a functional wall system including cap, copings, leveling pad, and leveling pad steps; constructing the retaining system and providing temporary drainage; providing backfill, backfilling, compacting, developing/completing/documenting the quality management program, and performing compaction testing.

The department will pay separately for parapets, traffic barriers, railings, and other items above the wall cap or coping.

SPV.0165 (20191016)

## **115. Compost, Item SPV.0180.501.**

### **A Description**

This special provision replaces standard spec 632.2.3.1 and describes furnishing and incorporating Compost at locations specified by the Corridor Vegetation Inspector.

### **B Materials**

Compost shall be a landscape planting medium and meet the following requirements:

1. Derived from the decomposition of blended and ground leaf, wood and other plant-based material, or a blend, composted for a minimum of 9 months and at temperatures sufficient to break down all woody fibers, seeds and leaf structures, free of toxic material at levels that are harmful to plants or humans.
2. Texture shall be dry and crumbly like shredded peat or pulverized topsoil.
3. The decomposition shall be complete as evidenced by the total breakdown of the raw ingredients and lack of odor or heat generation.
4. Shall bear no pathogenic bacteria or weed seed and shall be free of stones, sand, glass, and other extraneous matter and less than 3% plastic bag pieces.
5. Does not use animal and poultry manure or municipal solid waste and sludge in the composting process.
6. Have no recognizable leaves or pines cones.

Provide a two-gallon sample, to the Corridor Vegetation Inspector, with manufacturer's literature and material certification that the product meets the requirements.

### **C Construction**

Incorporate 4-inches of Compost into the soil as described under standard spec 632.

### **D Measurement**

The department will measure Compost in area 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.0180.501	Compost	SY

Payment is full compensation for providing compost, for providing sample(s) and material certification, and incorporating compost into the soil.

## ADDITIONAL SPECIAL PROVISION 3

### DISADVANTAGED BUSINESS ENTERPRISE [DBE] PROGRAM IMPLEMENTATION

#### 1. Description

- a. The federal DBE program requirements outlined in the Code of Federal Regulations at 49 CFR Part 26 apply to this Wisconsin Department of Transportation contract. WisDOT is a recipient of federal funds and this contract includes federal funds. United States Department of Transportation Federal DBE Program requires the following provisions:
  - (1) Pursuant to the federal DBE program regulation at 49 CFR Part 26, a contractor's failure to comply with any provision of the DBE regulations will be considered a material breach of contract. This is non-negotiable. If a contractor fails to carry out the DBE program and Title VI nondiscrimination requirements of its contracts, the following sanctions will be assessed depending upon the facts, reasoning, severity and remedial efforts of the contractor: termination of contract, withholding payment, assessment of monetary sanctions, assessment of liquidated damages and/or suspension/debarment proceedings that may result in the disqualification of the contractor from bidding for a designated period of time.
  - (2) The contractor shall utilize the specific DBEs listed to perform the work and supply the materials for which each is listed unless the contractor obtains the federal fund recipient's [DOT] written consent. Unless [WisDOT] consent is provided, the contractor shall not be entitled to any payment for work or material unless it is performed or supplied by the listed DBE.
- b. The Wisconsin Department of Transportation [WisDOT] is committed to the compliant administration of the DBE Program. Each WisDOT Secretary affirms this commitment with his/her signed assurance.  
<https://wisconsindot.gov/Documents/doing-bus/civil-rights/dbe/policy-statement.pdf>
  - (1) The department encourages the contractor to assist and develop DBE firms to become fully knowledgeable contractors to successfully perform on its contracts. Under the contract, the contractor agrees to provide the assistance to participating DBE's in the following areas:
    - i. Produce accurate and complete quotes.
    - ii. Understand highway plans applicable to their work.
    - iii. Understand specifications and contract requirements applicable to their work.
    - iv. Understand contracting reporting requirements.
  - (2) Wisconsin DOT identifies the assigned DBE goal in its contract advertisements and posts the contract DBE goal on the cover of the bidding proposal. The contractor can meet the assigned, specified contract DBE goal by subcontracting work to a DBE or by procuring services or materials from a DBE. The department calculates the DBE participation as the dollar value of DBE participation included in the bid expressed as a percentage of the total contract bid amount.
  - (3) For more comprehensive information on the disadvantaged business program, visit the department's Civil Rights and Compliance Section website at:  
<https://wisconsindot.gov/Pages/doing-bus/civil-rights/dbe/default.aspx>

## 2. Definitions

Interpret these terms, used throughout this additional special provision, as follows:

- a. **Bid Percentage:** The DBE percentage indicated in the bidding proposal at the time of bid.
- b. **DBE:** A small business certified as disadvantaged business enterprise (DBE) under the federal DBE program and included on the Wisconsin UCP DBE Directory deemed ready, willing and able.
- c. **DBE goal:** The amount of DBE participation expected in the contract as shown on the cover of the Highway Work Proposal.
- d. **Manufacturer:** A firm that operates or maintains a factory or establishment that produces, on the premises, the materials, supplies, articles, or equipment required under the contract.
- e. **Supplier:** A firm that owns, operates, or maintains a store, warehouse, or other establishment in which the materials, supplies, articles or equipment required under the contract are bought, kept in stock, and regularly sold or leased to the public.
- f. **Voluntary Achievement:** The amount of DBE participation achieved and reported in the contract in excess of the assigned goal.

## 3. DBE Percentage Required at Bid Submission

Indicate the bid percentage (i.e. 0% through 100%) of DBE participation on the completed bidding proposal. For electronic submittals, show the percentage in the miscellaneous data folder, Item 3, DBE Percent. For paper submittals, show the percentage on the sheet included after the schedule of items. By submission of the bid, the bidder contractually commits to DBE participation at or above the bid percentage, or certifies that they have utilized comprehensive good faith efforts to solicit and utilize DBE firms to meet the DBE participation requirements of this contract proposal, and that the bid percentage is reflective of these good faith efforts. The bid percentage should demonstrate the efforts of the prime contractor prior to bid. If the bidder does not indicate the bid percentage of DBE participation on the completed bidding proposal, the department will consider the bid irregular and may reject the bid.

## 4. WisDOT Interpretation of Federal DBE Program Provision

Prime contractors must utilize the specific DBEs listed to perform the work and/or supply the materials for which each is listed on the Commitment to Subcontract to DBE Form [DT1506] and approved by WisDOT's DBE office to execute its contract. The approved Commitment to Subcontract to DBE Form [DT1506] becomes a contract document/record.

### a. Department's DBE Evaluation Process

WisDOT evaluates DBE using the Commitment to Subcontract to DBE, payments to subcontractors and contract documentation. The prime contractor shall list the specific DBE certified firms and items of work s/he intends to use toward the fulfillment of the assigned DBE contract goal. The prime contractor receives DBE credit for payments made to the DBE firms performing the work listed on the approved Form DT1506.

### b. Documentation Submittal

The contractor is to identify, by name, the DBE firms whose utilization is intended to satisfy this provision, the items of work of the DBE subcontract or supply agreement and the dollar value of those items of work by completing the Commitment to Subcontract to DBE Form [DT1506]. Effective January 1, 2017, the contractor will be required to submit the documentation within 5 business days after bid opening. All necessary supporting documentation including Attachment 'A' forms and/or Good Faith Efforts Form

[DT1202] must be submitted no later than 2 business days from contractor's initial submission of the DT 1506. The contractor must provide a signed Attachment 'A' form to the DBE office within the time limit in order to receive authorization for contract execution; the DBE office reserves the right accept alternate documentation in lieu of the signed form in extenuating circumstances. Documentation must be submitted to the DBE Office by email at [DBE\\_Alert@dot.wi.gov](mailto:DBE_Alert@dot.wi.gov) ([DBE\\_Alert@dot.wi.gov](mailto:DBE_Alert@dot.wi.gov)) or by postal mail ATTN: DBE Office, PO Box 7965, Madison, WI 53707-7965.

(1) **Bidder Meets DBE Goal**

If the bidder indicates that the contract DBE goal is met, after award and before execution, the department will evaluate the Commitment to Subcontract to DBE Form DT1506 and attachment A(s) to verify the actual DBE percentage calculation. If the DBE commitment is verified, the contract is eligible for execution with respect to the DBE commitment.

(2) **Bidder Does Not Meet DBE Goal**

- i. If the bidder indicates a bid percentage on the Commitment to Subcontract to DBE Form [DT1506] that does not meet the contract DBE goal, the bidder must submit a Good Faith Efforts Form [DT1202] and supporting documentation. After award and before execution, the department will evaluate the bidder's DBE commitment and consider the bidder's good faith efforts submission.
- ii. The department will evaluate the bidder's good faith effort request and notify the bidder of one of the following:
  - (a) If the department grants a good faith efforts, the bid is eligible for contract execution with respect to DBE commitment.
  - (b) If the department rejects the good faith efforts request, the department may declare the bid ineligible for execution. The department will provide a written explanation of why the good faith efforts request was rejected. The bidder may appeal the department's rejection as allowed under 7 a. & b.

c. **Bidder Fails to Submit Documentation**

If the contractor fails to furnish the Commitment to Subcontract to DBE Form [DT1506] within the specified time, the department may cancel the award. Delay in fulfilling this requirement is not a cause for extension of the contract time and shall not be used as a tool to delay execution.

## 5. Department's Criteria for Good Faith Effort

Appendix A of 49 CFR Part 26, is the guiding regulation concerning good faith efforts. However, the federal regulations do not explicitly define "good faith" but states that bidder must actively and aggressively attempt to meet the goal. The federal regulations are general and do not include every factor or effort that can be considered. As a result, each state must establish its own processes and consider the factors established in its own practices to create a process for making a determination of adequate good faith. WisDOT evaluates good faith on a contract basis just as each contract award is evaluated individually.

The department will only approve a contractor's good faith efforts if the bidder has made the effort, given the relevant circumstances under the contract that a bidder actively and aggressively seeking to meet the goal would make. The department will evaluate the bidder's good faith effort to determine whether a good faith efforts will be granted. The bidder must demonstrate, on the DT1202 that they have aggressively solicited DBE participation in an attempt to meet the contract DBE goal and attaining the stated DBE goal is not feasible.

- a. The department, in conjunction with industry stakeholders, has developed the following guidance for contractor good faith effort. The guidance and the attached appendices provide a framework for the actions required by all parties in the processing and evaluation of bidder's total efforts to achieve the project specific DBE goal prior to the bid letting date.

## b. Prime Contractors should:

- (1) Document all efforts and decisions made toward achieving the DBE goal on the contract. The bidder should use the Civil Rights & Compliance System [CRCS] and related WisDOT- approved DBE outreach tools, including the Bid Express Small Business Network, to foster DBE participation on all applicable contracts.
- (2) Prime contractors may request assistance with DBE outreach and follow-up by contacting the department's DBE Support Services Office by phone or email request at least 14 days prior to the bid letting date. Requesting assistance with outreach is not a decisive factor in the review Good faith effort evaluation. Phone numbers are 414-438-4584 and/or 414-659-0487; Fax: 414-438-5392; E-mail: [DOTDBESupportServices@dot.wi.gov](mailto:DOTDBESupportServices@dot.wi.gov).
- (3) Request quotes by identifying potential items to subcontract and solicit. Prime contractors are strongly encouraged to include in their initial contacts a single page including a detailed list of items for which they are accepting quotes, by project, within a letting. *See attached sample entitled "Sample Contractor Solicitation Letter" in Appendix A.* Prime contractors should also indicate a willingness to accept quotes in areas they are planning to perform themselves, as required by federal rules. In some cases, it might be appropriate to use DBE's to do work in a prime contractor's area of specialization.
  - i. Solicit quotes from certified DBE firms who match 'possible items to subcontract' using all reasonable and available means. Additionally, forward copies of solicitations highlighting the work areas for which you are seeking quotes to [DOTDBESupportServices@dot.wi.gov](mailto:DOTDBESupportServices@dot.wi.gov).
  - ii. SBN is the preferred outreach tool. <https://www.bidx.com/wi/main>. Other acceptable means include postal mail, email, fax, phone call.
    - (a) Primes must ask DBE firms for a response in their solicitations. See *Sample Contractors Solicitation Letter* in Appendix. This letter can be included as an attachment to the SBN sub-quote request.
    - (b) Solicit quotes at least 10 calendar days prior to the letting date, at least two Fridays before the letting, to allow DBE firms sufficient time to respond. Prime contractors should contact DBE firms early, asking if they need help organizing their quote, assistance confirming equipment needs, or other assistance supporting their submission of a competitive quote for their services.
    - (c) Second solicitation should take place within 5 calendar days. Email and SBN are the preferred delivery of the follow-up solicitation.
  - iii. Upon request, provide interested DBE firms with adequate information about plans, specifications and the requirements of the contract by letter, information session, email, phone call and/or referral.
  - iv. When potential exists, the contractor should advise interested DBE firms on how to obtain bonding, line of credit or insurance if requested.
  - v. Document DBE firm's interest in quoting by taking appropriate steps to follow up initial solicitation with:
    - (a) Email to all prospective DBE firms in relevant work areas.
    - (b) Phone call log to DBE firms who express interest via written response or call.
    - (c) Fax/letter confirmation
    - (d) Signed copy of Bid Express SBN Record of Subcontractor Outreach Effort.

c. Evaluate DBE quotes Documentation is critical if a prime does not utilize the DBE firm's quote for any reason.

- (1) Evaluate DBE firm's capability to perform 'possible items to subcontract' using legitimate reasons, including but not limited to, **a discussion with the DBE firm** regarding its capabilities prior to the bid letting. If lack of capacity is your reason for not utilizing the DBE quote, you are required to contact the DBE by phone and email regarding their ability to perform the work indicated in the UCP directory listed as their work area by NAICS code. Only the work area and/or NAICS code listed in the UCP directory can be counted toward DBE credit. Documentation of the conversation is required.
- (2) In striving to meet an assigned DBE contract goal, prime contractors are expected to use DBE quotes that are responsive and reasonable. This includes DBE quotes that are not the low quote.

- (3) **Special Circumstance** - Evaluation of DBE quotes with tied bid items. "Tied quotes are the condition in which a subcontractor submits quotes including multiple areas of expertise across multiple work areas noting that the items and price are tied. Typically this type of quoting represents a cost saving to the prime but is not clearly stated as a discount; tied quotes are usually presented as 'all or none' quote to the prime." When non-DBE subcontractors submit tied bid items in their quotes to the prime, the DBE firms' quote may seem not competitive. In such a case, the following steps are taken in comparing the relevant quotes. These are qualitative examples.
- i. Compare bid items common to both quotes, noting the reasonableness in the price comparison.
  - ii. Review quotes from other firms for the bid items not quoted by the DBE firm to see if combining both can provide the same competitive advantage that the tied bid items offered.
- d. Immediately after notification of contract award, the prime submits all **'Commitment to Subcontract'** forms to the DBE Office. Prime contractor has 5 days to submit the completed form for the DBE firms it intends to use on the contract for DBE credit. If the goal is not met in full, the prime contractor must provide the following information along with WisDOT form DT1202: Certificate of Good Faith Efforts.
- (1) The names, addresses, e-mail addresses, telephone numbers of DBE's contacted. The dates of both initial and follow-up contact.
  - (2) A description of information provided to the DBE's regarding the plans, specifications, and estimated quantities for portions of the work to be performed by that DBE.
  - (3) Photocopies or electronic copies of all written solicitations to DBE's. A printed copy of SBN solicitation is acceptable.
  - (4) Documentation of each quote received from a DBE and, if rejected, the reason for that rejection.
  - (5) Bidder attendance at any pre-solicitation or pre-bid meetings the department held to inform DBE's of participation opportunities available on the project.

The prime contractor must obtain written consent from the DBE Office to change or replace any DBE firm listed on the approved Commitment to Subcontract to DBE Form [DT1506]. If the prime contractor utilizes another contractor, including the use of its own workforce, to perform the work assigned to a DBE on the approved DT1506, the prime contractor will not be entitled to payment for that work. Any changes to DBE after the approval of the DT1506 must be reviewed and approved by the DBE office prior to the change.

## 6. Use of Joint Checks

*The use of joint checks is allowable if it is a commonly recognized business practice in the material industry. A joint check is defined as a two-party check between a DBE, a prime contractor and the regular dealer of materials supplier who is neither the prime nor an affiliate of the prime. Typically, the prime contractor issues one check as payor to the DBE subcontractor and to the supplier jointly (to guarantee payment to the supplier) as payment for the material/supplies used by the DBE in cases where the prime has submitted the DBE and material for DBE credit. The DBE subcontractor gains the opportunity to establish a direct contracting relationship with the supplier to potentially facilitate a business rapport that results in a line of credit or increased partnering opportunities.*

The cost of material and supplies purchased by the DBE is part of the value of work performed by the DBE to be counted toward the goal. To receive credit, the DBE must be responsible for negotiating price, determining quality and quantity, ordering the materials, and installing (where applicable) and "paying for the material itself." See 49 CFR 26.55(c)(1).

The approval to use joint checks constitutes a commitment to provide further information to WisDOT, upon request by staff. WisDOT will allow the use of joint checks when the following conditions are met:

- a. The Prime must request permission to use joint checks from the DBE Office by submitting the Application to Use Joint Checks.
  - (1) Request should be made when the DBE Commitment form or Request to Sublet is submitted; the request will not be considered if submitted after the DBE Subcontractor starts its work.
  - (2) Approval/Permission must be granted prior to the issuance of any joint checks.
  - (3) The payment schedule for the supplier must be presented to the DBE office before the first check is issued.
  - (4) The joint check for supplies must be strictly for the cost of supplies.
- b. DBE subcontractor is responsible to furnish and/or install the material/work item. The DBE subcontractor shall not be an 'extra participant' in the transaction; the DBE's role in the transaction cannot be limited solely to signing the check(s) to release payment to the material supplier. At a minimum, the DBE subcontractor's tasks should include the following.
  - (1) The DBE subcontractor (not the prime/payor) negotiates the quantities, price and delivery of materials;
  - (2) The DBE subcontractor consents to sign/release the check to the supplier by signing the Application to Use Joint Checks after establishing the conditions and documentation of payment within the subcontract terms or in a separate written document.
- c. The Prime contractor/payor acts solely as a guarantor,
  - (1) The prime agrees to furnish the check used for the payment of materials/supplies under the contract.
  - (2) The prime contractor/payor cannot require the subcontractor to use a specific supplier or the prime contractors negotiated unit price.

## 7. Bidder's Appeal Process

- a. A bidder can appeal the department's decision to deny the bidder's good faith effort submission. The bidder must provide written documentation refuting the specific reasons for rejection as stated in the department's rejection notice. The bidder may meet in person with the department if so requested. Failure to appeal within 7 calendar days after receiving the department's written denial notice of a good faith effort evaluation constitutes a forfeiture of the bidder's right of appeal. A contract cannot be executed without documentation that the DBE provisions have been fulfilled.
- b. The department will appoint a representative, who did not participate in the original determination, to assess the bidder's appeal. The department will issue a written decision within 5 calendar days after the bidder presents all written and oral testimony. In that written decision, the department will explain the basis for finding that the bidder did or did not meet the contract DBE goal or make an adequate good faith effort to meet the contract DBE goal. The department's decision is final. If the department finds that the bidder did not meet the contract DBE goal or did not make adequate efforts to meet the DBE goal, the department may declare the bid ineligible for execution.

## 8. Department's Criteria for DBE Participation

### Directory of DBE firms

- a. The only resource for DBE certified firms certified in the state of Wisconsin is the Wisconsin Unified Certification Program [UCP] DBE List. Wisconsin Department of Transportation maintains a current list of certified DBE firms titled Wisconsin UCP DBE Directory on the website at:  
<https://wisconsin.gov/Documents/doing-bus/civil-rights/dbe/dbe-ucp-directory.xlsx>
- b. The DBE office is also available to assist at 414-438-4583 or 608-267-3849.

## 9. Counting DBE Participation

### Assessing DBE Work

- a. The department will only count the DBE usage towards the contract DBE goal if the DBE firm is certified as a DBE by one of the unified certification program agencies. If a firm becomes DBE certified before entering into a subcontract, the department may consider that DBE usage towards the contract goal. The department only counts the value of the work a DBE actually performs towards the DBE goal. The department assesses the DBE work as follows:
- b. The department counts work performed by the DBE's own resources. The department includes the cost of materials and supplies the DBE obtains for the work. The department also includes the cost of equipment the DBE leases for the work. The department will not include the cost of materials, supplies, or equipment the DBE purchases or leases from the prime contractor or its affiliate, except the department will count non-project specific leases the DBE has in place before the work is advertised.
- c. The department counts fees and commissions the DBE charges for providing a bona fide professional, technical, consultant, or managerial services. The department also counts fees and commissions the DBE charges for providing bonds or insurance. The department will only count costs the engineer deems reasonable based on experience or prevailing market rates.
- d. If a DBE subcontracts work, the department counts the value of the subcontracted work only if the DBE's subcontractor is also a DBE.
- e. The contractor shall maintain records and may be required to furnish periodic reports documenting its performance under this item.
- f. It is the prime contractor's responsibility to determine whether the work that is committed and/or contracted to a DBE certified firm can be counted for DBE credit by referencing the work type and NAICS code listed for the DBE firm on the Wisconsin UCP DBE Directory.
- g. It is the prime contractor's responsibility to assess the DBE firm's ability to perform the work for which s/he is committing/contracting the DBE to do. Note that the department encourages the prime contractor to assist and develop DBE firms to become fully knowledgeable contractors to successfully perform on its contracts.

## 10. Commercially Useful Function

- a. Commercially useful function is evaluated after the contract has been executed, while the DBE certified firm is performing its work items. A DBE performs a commercially useful function when it is responsible for execution of the work of the contract and is carrying out its responsibilities by actually performing, managing, and supervising the work involved.
- b. The department uses Form DT1011: DBE Commercially Useful Function Review and Certification to evaluate whether the DBE is performing a commercially useful function. WisDOT counts expenditures of a DBE toward the DBE goal only if the DBE is performing a commercially useful function on that contract.
- c. A DBE is performing a commercially useful function if the following conditions are met:
  - (1) For contract work, the DBE is responsible for executing a distinct portion of the contract work and it is carrying out its responsibilities by actually performing, managing, and supervising that work.
  - (2) For materials and supplies, the DBE is responsible for negotiating price, determining quality and quantity, ordering, and paying for those materials and supplies.

## 11. Credit Evaluation for Trucking

All bidders are expected to adhere to the department's current trucking policy posted on the HCCI website at <https://wisconsindot.gov/Documents/doing-bus/civil-rights/dbe/trucking-utilization-policy.pdf>

## 12. Credit Evaluation for Manufacturers, Suppliers, Brokers

The department will calculate the amount of DBE credit awarded to a prime using a DBE firm for the provisions of materials and supplies on a contract-by-contract basis. The department will count the material and supplies that a DBE provides under the contract for DBE credit based on whether the DBE is a manufacturer, supplier or broker. Generally, DBE crediting measures and evaluates the DBE owner's role, responsibility and contribution to the transaction: maximum DBE credit when the DBE manufactures materials or supplies; DBE credit decreases when the DBE solely supplies material and minimal credit is allotted when the DBE's role is administrative or transactional.

It is the bidder's responsibility to find out if the DBE is considered a supplier or a manufacturer before listing them on Commitment to Subcontract to DBE form DT1506.

### a. Manufacturers

- (1) A manufacturer is a firm that operates or maintains a factory or establishment that produces, on the premises, the materials, supplies, articles, or equipment required under the contract and of the general character described by the specifications.
- (2) If the materials or supplies are obtained from a DBE manufacturer, count **100%** percent of the cost of the materials or supplies toward DBE goals.

### b. Regular Dealers of Material and/or Supplies

- (1) A regular dealer is a firm that owns, operates, or maintains a store, warehouse, or other establishment in which the materials, supplies, articles or equipment of the general character described by the specifications and required under the contract are bought, kept in stock, and regularly sold or leased to the public in the usual course of business.
- (2) If the materials or supplies are purchased from a DBE regular dealer, count **60%** percent of the cost of the materials or supplies toward DBE goals.
- (3) At a minimum, a regular dealer must meet the following criteria to be counted for DBE credit:
  - i. The DBE firm must be an established, regular business that engages, as its principal business and under its own name, in the purchase and sale or lease of the products in question.
  - ii. The DBE firm must both own and operate distribution equipment for the product--bulk items such as petroleum products, steel, cement, gravel, stone, or asphalt. If some of the distribution equipment is leased, the lease agreement must accompany the DBE Commitment form for evaluation of the dealer's control before the DBE office approves the DBE credit.

### c. Brokers, Transaction Expeditors, Packagers, Manufacturers Representatives

- (1) No portion of the cost of the materials, supplies, services themselves will count for DBE credit; however, WisDOT will evaluate the fees or commissions charged when a prime purchases materials, supplies or services from a DBE certified firm which is neither a manufacturer nor a regular dealer, namely: brokers, packagers, manufacturers' representatives or other persons who arrange or expedite transactions.
- (2) Brokerage fees have historically been calculated as **10%** of the purchase amount.
- (3) WisDOT may count the amount of fees or commissions charged for assistance in the procurement of the materials and supplies, or fees or transportation charges for the delivery of materials or supplies required on a job site.
- (4) The evaluation will review the contract need for the item/service, review the sub-contract or invoice for the item/service, compare the fees customarily allowed for similar services to determine whether they are reasonable.

When DBE suppliers are contracted, additional documentation must accompany the DT1506 and Attachment 'A' forms. An invoice or bill-of-sale that includes the company names of the bidder and the DBE supplier and documentation of the calculations used as the basis for the purchase agreement, subcontract or invoice.

*WisDOT recognizes that the amount on the Attachment 'A' form may be more or less than the amount on the invoice.* Please respond to the following questions and submit with your DBE Commitment Form.

1. What is the product or material?
2. Is this item in the prime's inventory or was the item purchased when contract was awarded?
3. Which contract line items were referenced to develop this quote?
4. What is the amount of material or product used on the project?

### **13. Credit Evaluation for DBE Primes**

Wisconsin DOT calculates DBE credit based on the amount and type of work performed by DBE certified firms. If the prime contractor is a DBE certified firm, the department will only count the work that DBE prime contractor performs with its own forces for DBE credit. We will also calculate DBE credit for the work performed by any other DBE certified subcontractor, DBE certified supplier, DBE certified manufacturer on that contract in that DBE's approved work areas/NAICS code. Crediting for manufacturers and suppliers is calculated consistent with paragraph 12 of this document and 49 CFR Part 26.

### **14. Joint Venture**

If a DBE performs as a participant in a joint venture, the department will only count that portion of the total dollar value of the contract equal to that portion of the work that the DBE performs with its own forces for DBE credit.

### **15. Mentor Protégé**

- a. If a DBE performs as a participant in a mentor protégé agreement, the department will count for credit the portion of the work performed by the DBE protégé firm.
- b. DBE credit will be evaluated and confirmed by the DBE Office for any contracts on which the mentor protégé team identifies itself to the DBE Office as a current participant of the Mentor Protégé Program.
- c. Refer to WisDOT's Mentor Protégé guidelines for guidance on the number of contracts and amount of DBE credit that can be counted on any WisDOT project.

### **16. DBE Replacement or Termination**

#### **Contractual Requirement**

The contractor shall utilize the specific DBEs listed to perform the work and supply the materials for which each is listed unless the contractor obtains written consent from the Department's DBE Office. If the Department does not provide consent to replace or terminate a DBE firm, the prime contractor shall not be entitled to any payment for work or material unless it is performed or supplied by the listed DBE.

#### **Contractor Considerations**

- a. A prime contractor cannot terminate and/or replace a DBE subcontractor listed on the approved Commitment to Subcontract to DBE Form [DT1506] without prior written consent from the DBE Office. This includes, but is not limited to, instances in which a prime contractor seeks to perform work originally designated for a DBE subcontractor with its own forces or those of an affiliate, a non-DBE firm, or with another DBE firm.

- b. If a prime contractor feels it is necessary to replace or terminate a DBE firm that has been approved for DBE credit toward its contract, s/he will be required to provide reasons and documentation to support why the prime cannot fulfill the contractual commitment that it made to the Department regarding the DBE utilization.
- c. Prime contractor is required to make affirmative efforts to find another DBE subcontractor to perform at least the same amount of work under the contract as the DBE that was terminated, to the extent needed to meet the assigned DBE contract goal.
- d. In circumstances when a DBE subcontractor fails to complete its work on the contract for any reason or is terminated from a contract, the prime contractor is expected to make affirmative efforts to maintain its commitment to the assigned DBE goal.
- e. The DBE firm should communicate with the prime contractor regarding its schedule and capacity in the context of the contract. If the DBE anticipates that it cannot fulfill its subcontract, s/he shall advise the prime contractor and suggest a DBE that may replace their services or provide written consent to be released from its subcontract.
  - (1) Before the prime contractor can request to terminate or substitute a DBE firm; s/he must:
    - i. Make every effort to fulfill the DBE commitment by working with the listed DBE to ensure that they are fully knowledgeable of your expectations for successful performance on the contract. Document these efforts in writing.
    - ii. If those efforts fail, provide written notice to the DBE subcontractor of your *intent* to request to terminate and/or replace the firm including the reason(s) you want to pursue this action.
    - iii. Copy the DBE Office on all correspondence related to changing a DBE firm who has been approved for DBE credit on a contract including the preparation and coordination efforts with the DBE on the contract.
    - iv. Clearly state the amount of time the DBE firm has to remedy and/or respond to your notice of intent to replace/terminate their firm from the contract. The DBE shall be allowed five days to respond, in writing. **EXCEPTION:** The prime contractor must provide a verifiable reason for a response period shorter than five days. For example a WisDOT project manager must verify that waiting 5 days for a DBE performing traffic control work to respond would affect the public safety.
    - v. The DBE subcontractor must forward a written response to the prime contractor and copy the DBE Office. The written response must outline why it objects to the proposed termination of its subcontract and list the reasons that WisDOT should not approve the request for their firm to be replaced or removed from the contract.

### **The Request to Replace or Terminate a DBE**

The prime contractor must provide a written request to replace or terminate a DBE firm that has been approved for DBE credit on a WisDOT contract. The written request can be an email or printed document delivered by email or fax; at minimum, the request must contain the following:

1. Contract ID number.
2. Wisconsin DOT Contract Project Manager name and contact information.
3. DBE name and work type and/or NAICS code.
4. Contract's progress schedule.
5. Reason(s) for requesting that the DBE be replaced or terminated.
6. Attach/include all communication with the DBE to deploy/address/resolve work completion,

WisDOT will review your request and any supporting documentation that you submit to evaluate whether the circumstance and the reasons constitute a good cause for replacing or terminating the DBE that was approved for DBE credit on that contract.

*Examples of Good Causes to Replace a DBE according to the federal DBE program guidelines {49 CFR part 26.53}*

- The listed DBE subcontractor fails or refuses to execute a written contract.
- The listed DBE subcontractor fails or refuses to perform the work of its subcontract in a way consistent with normal industry standards. Provided, however, that good cause does not exist if the failure or refusal of the DBE subcontractor to perform its work on the subcontract results from the bad faith or discriminatory action of the prime contractor.
- The listed DBE subcontractor fails or refuses to meet the prime contractor's reasonable, nondiscriminatory bond requirements.
- The listed DBE subcontractor becomes bankrupt, insolvent, or exhibits credit unworthiness.
- The listed DBE subcontractor is ineligible to work on public works projects because of suspension and debarment proceedings pursuant 2 CFR Parts 180, 215 and 1,200 or applicable state law.
- You have determined that the listed DBE subcontractor is not a responsible contractor.
- The listed DBE subcontractor voluntarily withdraws from the project and provides to you written notice of its withdrawal.
- The listed DBE is ineligible to receive DBE credit for the type of work required.
- A DBE owner dies or becomes disabled with the result that the listed DBE contractor is unable to complete its work on the contract.

**Evaluation and Response to the Request**

If WisDOT determines that your reasons comply with the good cause standards; the DBE office will send the prime contractor and the WisDOT project manager an email stating that we concur with the reasons and approve the replacement or termination.

If WisDOT determines that your reasons do not comply with the good cause standards of the federal DBE program, the DBE Office will send the prime contractor an email that includes *the requirement* to utilize the committed DBE, *remedial actions* to support the completion of the contractual commitment, a list of available WisDOT support services *and administrative remedies that may be invoked* for failure to comply with federal DBE guidelines for DBE replacement.

The Wisconsin Department of transportation contact for all actions related to replacing a DBE is the DBE Program Chief and/or the DBE Program Engineer which can be reached at [DBE\\_Alert@dot.wi.gov](mailto:DBE_Alert@dot.wi.gov) or by calling 608-267-3849.

**17. DBE Utilization beyond the approved DBE Commitment Form DT1506**

If the Prime/subcontractor increases the scope of work for a participating DBE or adds a DBE subcontractor that was not on the approved Form DT1506 at any time after contract award, s/he should follow these steps so that the participation can be accurately credited toward the DBE goal.

- a. Send an email to the DBE Engineer at [DBE\\_Alert@dot.wi.gov](mailto:DBE_Alert@dot.wi.gov) describing the work to be performed by the new DBE including the proposed schedule or duration, DBE name and contact information. You may also call the DBE Engineer at 414-659-0487 to notify him of the change verbally.  
If the scope change added work for a participating DBE; list the date and reason for the scope change.
- b. Forward a complete, signed Attachment 'A' form to the DBE Office at [DBE\\_Alert@dot.wi.gov](mailto:DBE_Alert@dot.wi.gov). A complete Attachment A includes DBE contact information, signature, subcontract value and proper description of the work areas to be performed by the DBE.  
The DBE office will confirm the DBE participation and revise the DT1506 based on the email/discussion and attach the new/revised Attachment A to the Contract record/documentation.

## **18. Contract Modifications**

When additional opportunity is available by contract modifications, the Prime Contractor shall utilize DBE Subcontractors that were committed to equal work items, in the original contract.

## **19. Payment**

Costs for conforming to this Additional Special Provision (ASP) and any associated DBE requirements are incidental to the contract.

## APPENDIX A

### Sample Contractor Solicitation Letter Page 1

*This sample is provided as a guide not a requirement*

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#### GFW SAMPLE MEMORANDUM

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TO: DBE FIRMS  
 FROM: POTENTIAL PRIME CONTRACTOR OR MAJOR SUBCONTRACTOR  
 SUBJECT: REQUEST FOR DBE QUOTES  
 LET DATE & TIME  
 DATE: MONTH DAY YEAR  
 CC: DBE OFFICE ENGINEER

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Our company is considering bidding on the projects indicated on the next page, as a prime and/or a subcontractor for the Wisconsin Department of Transportation Month- date -year Letting. Page 2 lists the projects and work items that we may subcontract for this letting. We are interested in obtaining subcontractor quotes for these projects and work categories. Also note that we are willing to accept quotes in areas we may be planning to perform ourselves as required by federal rules.

Please review page 2, respond whether you plan to quote, highlight the projects and work items you are interested in performing and return it via fax or email within 3 days. Plans, specifications and addenda are available through WisDOT at the DBE Support Services office or at the Highway Construction Contract Information (HCCI) site at <https://wisconsindot.gov/Pages/doing-bus/contractors/hcci/default.aspx>

Your quote should include all of the costs required to complete the items you propose to perform including labor, equipment, material, and related bonding or insurance. The quote should note items that you are DBE certified to perform, tied items, and any special terms. Page 2, with the indicated projects and items you plan to quote, should be used as a cover sheet for your quote.

Please make every effort to have your quotes into our office by time deadline the prior to the letting date. **Make sure the correct letting date, project ID and proposal number, unit price and extension are included in your quote.** We prefer quotes be sent via SBN but prime's alternatives are acceptable. Our office hours are include hours and days. Please call our office as soon as possible prior to the letting if you need information/clarification to prepare your quote at contact number.

If you wish to discuss or evaluate your quote in more detail, contact us after the contract is awarded. Status of the contract can be checked at WisDOT's HCCI site at <https://wisconsindot.gov/Pages/doing-bus/contractors/hcci/default.aspx>

All questions should be directed to:

Project Manager, John Doe,

Phone: (000) 123-4567

Email: [Joe@joetheplumber.com](mailto:Joe@joetheplumber.com)

Fax: (000) 123- 4657

## Sample Contractor Solicitation Letter Page 2

*This sample is provided as a guide not a requirement*

### REQUEST FOR QUOTATION

**Prime's Name:** \_\_\_\_\_

**Letting Date:** \_\_\_\_\_

**Project ID:** \_\_\_\_\_

**Please check all that apply**

- .. Yes, we will be quoting on the projects and items listed below
- .. No, we are not interested in quoting on the letting or its items referenced below
- .. Please take our name off your monthly DBE contact list
- .. We have questions about quoting this letting. Please have someone contact me at this number

**Prime Contractor 's Contact Person**

Phone: _____
Fax: _____
Email: _____
_____

**DBE Contractor Contact Person**

Phone _____
Fax _____
Email _____
_____

**Please circle the jobs and items you will be quoting below**

Proposal No.	1	2	3	4	5	6	7
County							

**WORK DESCRIPTION:**

Clear and Grub	X		X	X		X	X
Dump Truck Hauling	X		X	X		X	X
Curb & Gutter/Sidewalk, Etc.	X		X	X		X	X
Erosion Control Items	X		X	X		X	X
Signs and Posts/Markers	X		X	X		X	X
Traffic Control		X	X	X		X	X
Electrical Work/Traffic Signals		X	X	X		X	
Pavement Marking		X	X	X	X	X	X
Sawing Pavement		X	X	X	X	X	X
QMP, Base	X	X		X	X	X	X
Pipe Underdrain	X			X			
Beam Guard				X	X	X	X
Concrete Staining							X
Trees/Shrubs	X						X

Again please make every effort to have your quotes into our office by time deadline prior to the letting date.

We prefer quotes be sent via SBN but prime's preferred alternatives are acceptable.

If there are further questions please direct them to the prime contractor's contact person at phone number.

## **APPENDIX B**

### **BEST PRACTICES FOR PRIME CONTRACTOR & DBE SUBCONTRACTOR GOOD FAITH EFFORT**

*This list is not a set of requirements; it is a list of potential strategies*

#### **Primes**

- Ø Prime contractor open houses inviting DBE firms to see the bid “war room” or providing technical assistance.
- Ø Participate in speed networking and mosaic exercises as arranged by DBE office.
- Ø Host information sessions not directly associated with a bid letting.
- Ø Participate in a formal mentor protégé or joint venture with a DBE firm.
- Ø Participate in WisDOT advisory committees i.e. TRANSAC, or Mega Project committee meetings.
- Ø Facilitate a small group DBE ‘training session’ Clarifying how your firm prepares for bid letting, evaluates subcontractors, preferred qualifications and communication methods.
- Ø Encourage subcontractors to solicit and highlight DBE participation in their quotes to you.
- Ø Quality of communication, not quantity creates the best results. Contractors should do as thorough a job as possible in communicating with DBE firms before the bid and provide any assistance requested to assure best possible bid.

#### **DBE**

- Ø DBE firms should contact primes as soon as possible with questions regarding their quotes or bid; seven days prior is optimal.
- Ø Continually check for contract addendums on the HCCI website through the Thursday prior to letting to stay abreast of changes.
- Ø Review the status of contracts on the HCCI website reviewing the ‘apparent low bidder’ list, and bid tabs at a minimum.
- Ø Prepare a portfolio or list of related projects and prime and supplier references; be sure to note transportation-related projects of similar size and scope, firm expertise and staffing.
- Ø Participate in DBE office assessment programs.
- Ø Participate on advisory and mega-project committees.
- Ø Sign up to receive the DBE Contracting Update.
- Ø Consider membership in relevant industry or contractor organizations.
- Ø Active participation is a must. Quote as many projects as you can reasonably work on; quoting the primes and bidding as a prime with the department are the only ways to get work.

## APPENDIX C

### Types of Efforts considered in determining GFE

*This list represents concepts being assessed; analysis requires additional steps*

1. Whether the contractor attended any pre-solicitation or pre-bid meetings that were scheduled by WisDOT to inform DBEs of contracting and subcontracting opportunities.
2. Whether the contractor provided written notice to a reasonable number of specific DBEs that their interest in the contract was being solicited, in sufficient time to allow the DBEs to participate effectively.
3. Whether the contractor followed up initial solicitations of interest by contacting DBEs to determine if the DBEs were interested; returned the phone calls of interested DBE firms.
4. Whether the contractor selected portions of the work to be performed by DBEs in order to increase the likelihood of meeting the DBE goal.
5. Whether the contractor provided interested DBEs with adequate information about the plans, specifications and requirements of the contract.
6. Whether the contractor negotiated in good faith with interested DBEs, not rejected DBEs as unqualified without sound reasons based on a thorough investigation of their capabilities.
7. Whether the contractor made efforts to assist interested DBEs in being more competitive.
8. Whether the contractor effectively used the services of available minority community organizations: minority contractors groups, local, state, and Federal minority business assistance offices, and other organizations that provide assistance to small businesses and DBE firms.
9. Whether Prime used CRCS to identify DBE who specialize in relevant work areas.
10. Whether the contractor used available resources including contacting the DBE office, using WisDOT's website
11. Whether the contractor returned calls of firms expressing interest in a timely manner.

## **APPENDIX D**

### **Good Faith Effort Evaluation Guidance**

*Excerpt from Appendix A of 49 CFR Part 26*

#### **APPENDIX A TO PART 26 -- GUIDANCE CONCERNING GOOD FAITH EFFORTS**

- I. When, as a recipient, you establish a contract goal on a DOT assisted contract, a bidder must, in order to be responsible and/or responsive, make good faith efforts to meet the goal. The bidder can meet this requirement in either of two ways. First, the bidder can meet the goal, documenting commitments for participation by DBE firms sufficient for this purpose. Second, even if it doesn't meet the goal, the bidder can document adequate good faith efforts. This means that the bidder must show that it took all necessary and reasonable steps to achieve a DBE goal or other requirement of this part which, by their scope, intensity, and appropriateness to the objective, could reasonably be expected to obtain sufficient DBE participation, even if they were not fully successful.
- II. In any situation in which you have established a contract goal, part 26 requires you to use the good faith efforts mechanism of this part. As a recipient, it is up to you to make a fair and reasonable judgment whether a bidder that did not meet the goal made adequate good faith efforts. It is important for you to consider the quality, quantity, and intensity of the different kinds of efforts that the bidder has made. The efforts employed by the bidder should be those that one could reasonably expect a bidder to take if the bidder were actively and aggressively trying to obtain DBE participation sufficient to meet the DBE contract goal. Mere pro forma efforts are not good faith efforts to meet the DBE contract requirements. We emphasize, however, that your determination concerning the sufficiency of the firm's good faith efforts is a judgment call: meeting quantitative formulas is not required.
- III. The Department also strongly cautions you against requiring that a bidder meet a contract goal (i.e., obtain a specified amount of DBE participation) in order to be awarded a contract, even though the bidder makes an adequate good faith efforts showing. This rule specifically prohibits you from ignoring bona fide good faith efforts.
- IV. The following is a list of types of actions which you should consider as part of the bidder's good faith efforts to obtain DBE participation. It is not intended to be a mandatory checklist, nor is it intended to be exclusive or exhaustive. Other factors or types of efforts may be relevant in appropriate cases.
  - A. Soliciting through all reasonable and available means (e.g. attendance at pre-bid meetings, advertising and/or written notices) the interest of all certified DBEs who have the capability to perform the work of the contract. The bidder must solicit this interest within sufficient time to allow the DBEs to respond to the solicitation. The bidder must determine with certainty if the DBEs are interested by taking appropriate steps to follow up initial solicitations.
  - B. Selecting portions of the work to be performed by DBEs in order to increase the likelihood that the DBE goals will be achieved. This includes, where appropriate, breaking out contract work items into economically feasible units to facilitate DBE participation, even when the prime contractor might otherwise prefer to perform these work items with its own forces.
  - C. Providing interested DBEs with adequate information about the plans, specifications, and requirements of the contract in a timely manner to assist them in responding to a solicitation.
  - D.
    - (1) Negotiating in good faith with interested DBEs. It is the bidder's responsibility to make a portion of the work available to DBE subcontractors and suppliers and to select those portions of the work or material needs consistent with the available DBE subcontractors and suppliers, so as to facilitate DBE participation. Evidence of such negotiation includes the names, addresses, and telephone numbers of DBEs that were considered; a description of the information provided regarding the plans and specifications for the work selected for subcontracting; and evidence as to why additional agreements could not be reached for DBEs to perform the work.
    - (2) A bidder using good business judgment would consider a number of factors in negotiating with subcontractors, including DBE subcontractors, and would take a firm's price and capabilities as well as contract goals into consideration. However, the fact that there may be some additional costs involved in finding and using DBEs is not in itself sufficient reason for a bidder's failure to meet the contract DBE goal, as long as such costs are reasonable. Also, the ability or desire of a prime contractor to perform the work of a

contract with its own organization does not relieve the bidder of the responsibility to make good faith efforts. Prime contractors are not, however, required to accept higher quotes from DBEs if the price difference is excessive or unreasonable.

- E. Not rejecting DBEs as being unqualified without sound reasons based on a thorough investigation of their capabilities. The contractor's standing within its industry, membership in specific groups, organizations, or associations and political or social affiliations (for example union vs. non-union employee status) are not legitimate causes for the rejection or non solicitation of bids in the contractor's efforts to meet the project goal.
  - F. Making efforts to assist interested DBEs in obtaining bonding, lines of credit, or insurance as required by the recipient or contractor.
  - G. Making efforts to assist interested DBEs in obtaining necessary equipment, supplies, materials, or related assistance or services.
  - H. Effectively using the services of available minority/women community organizations; minority/women contractors' groups; local, state, and Federal minority/women business assistance offices; and other organizations as allowed on a case-by-case basis to provide assistance in the recruitment and placement of DBEs.
- V. In determining whether a bidder has made good faith efforts, you may take into account the performance of other bidders in meeting the contract. For example, when the apparent successful bidder fails to meet the contract goal, but others meet it, you may reasonably raise the question of whether, with additional reasonable efforts, the apparent successful bidder could have met the goal. If the apparent successful bidder fails to meet the goal, but meets or exceeds the average DBE participation obtained by other bidders, you may view this, in conjunction with other factors, as evidence of the apparent successful bidder having made good faith efforts.

## Appendix E

### Small Business Network [SBN] Overview

The Small Business Network is a part of the Bid Express® service that was created to ensure that prime bidders have a centralized online location to find subs - including small and disadvantaged business enterprises (DBEs). It is available for prime bidders to use as part of their Basic Service subscription.

Within the Small Business Network, **Prime Contractors** can:

1. Easily select proposals, work types and items:
  - a. After adding applicable work types, select items that you wish to quote. Enter the sub-quote quantities and add comments, if desired. Adding or removing items and work types can be done quickly. If needed, you can save the sub-quote for completion at a later time.
2. Create sub-quotes for the subcontracting community:
  - a. Create sub-quotes with ease using the intuitive sub-quote creator. In seven short steps, you can rapidly create a custom sub-quote directed to all subcontractors that bid on the applicable work types. Steps include: provide contact information and sub-quote expiration date, select letting and proposal, add work types and items, specify terms and conditions, upload attachments, and select vendors.
  - b. Create a sub-quote to send to subcontractors or suppliers that lists the items in a proposal that you want quoted
  - c. Create an unlimited number of sub-quotes for items you want quoted, and optionally mark them as a DBE-preferred request.
  - d. Add attachments to sub-quotes.
3. View sub-quote requests & responses:
  - a. After logging into the Bid Express service, you can quickly review all of your sub-quote requests and all unsolicited sub-quote requests from subcontractors. To simplify the Small Business Network home screen, sub-quote requests can be hidden with one click if they are not applicable.
  - b. View or receive unsolicited sub-quotes that subcontractors have posted, complete with terms, conditions and pricing.
4. View Record of Subcontractor Outreach Effort:
  - a. For each sub-quote produced, a *Record of Subcontractor Outreach Effort* is generated that shows the response statistics for a particular sub-quote. If accepted by the letting agency, this report may serve as proof of a “Good Faith” effort in reaching out to the DBE community.
  - b. Easily locate pre-qualified and certified small and disadvantaged businesses.
  - c. Advertise to small and disadvantaged businesses more efficiently and cost effectively.
  - d. Document your interactions with subs/DBEs by producing an Outreach Report (may be accepted as proof of DBE outreach at the discretion of each agency).

The Small Business Network is a part of the Bid Express® service that was created to ensure that small businesses have a centralized area to access information about upcoming projects. It can help small businesses learn more about opportunities, compete more effectively, network with other contractors and subcontractors, and win more jobs.

1. View and reply to sub-quote requests from primes:
  - a. After logging into the Bid Express service, you can quickly review all incoming sub-quote requests and all unsolicited sub-quotes created by your company. Receive notifications by selected work type. To simplify on the Small Business Network home screen, sub-quote requests can be filtered by work types relevant to your interests, or hidden with one click if they are not applicable.
2. Select items when responding to sub-quote requests from primes:
  - a. You have the freedom to choose and price any number of items when responding to a sub-quote request. Quantities can be modified, and per-item comments are also available.
  - b. View requests for sub-quotes for work that primes have posted for projects they are bidding, add your pricing, terms, and conditions, and submit completed sub-quotes to the requesting primes.
  - c. Add attachments to a sub-quote.
3. Create and send unsolicited sub-quotes to specific contractors:
  - a. Create unsolicited sub-quotes with ease using the intuitive sub-quote creator. In eight short steps, you can rapidly create a custom sub-quote directed at any number of specific vendors of your choosing. Steps include: provide contact information and sub-quote expiration date, select letting and proposal, add work types and items, specify terms and conditions, upload attachments, and select vendors.
4. Easily select and price items for unsolicited sub-quotes:
  - a. After adding applicable work types, select items that you wish to quote. The extended price calculates automatically, cutting out costly calculation errors. Comments can be provided on a per-item basis as well.
  - b. Create an unsolicited sub-quote that lists the items from a proposal that you want to quote, include pricing, terms and conditions, and send it to selected prime/plan holder.
  - c. Add attachments to a sub-quote.
  - d. Add unsolicited work items to sub-quotes that you are responding to.
5. Easy Access to Valuable Information
  - a. Receive a confirmation that your sub-quote was opened by a prime.
  - b. View Bid Tab Analysis data from past bids, including the high, average and low prices of items.
  - c. View important notices and publications from DOT targeted to small and disadvantaged businesses.
6. Accessing Small Business Network for WisDOT contracting opportunities
  - a. If you are a contractor not yet subscribing to the Bid Express service, go to [www.bidx.com](http://www.bidx.com) and select "Order Bid Express." The Small Business Network is a part of the Bid Express Basic Service.
  - b. DBE firms can request a Bid Express Small Business Network Account at no cost by calling 414-438-4588.

## **ADDITIONAL SPECIAL PROVISION 4**

### **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 may also withhold routine 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.

### **Release of Routine Retainage**

After granting substantial completion the department may reduce the routine retainage withheld from the prime contractor to 75 percent of the original total amount retained.

When the Department sends the semi-final estimate the department may reduce the routine retainage withheld from the prime contractor to 10 percent of the original total amount retained.

Within 30 calendar days of receiving the semi-final estimate from the department, submit written certification that subcontractors at all tiers are paid in full for acceptably completed work and that no routine retainage is being withheld. The department will pay the prime contractor in full and reduce the routine retainage withheld from the prime contractor to zero when the department approves the final estimate.

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.

**ADDITIONAL SPECIAL PROVISIONS 5****Fuel Cost Adjustment****A Description**

Fuel Cost Adjustments will be applied to partial and final payments for work items categorized in Section B as a payment to the contractor or a credit to the department. ASP-5 shall not apply to any force account work.

**B Categories of Work Items**

The following items and Fuel Usage Factors shall be used to determine Fuel Cost Adjustments:

(1) Earthwork.		Unit	Gal. Fuel Per Unit
205.0100	Excavation Common	CY	0.23
205.0200	Excavation Rock	CY	0.39
205.0400	Excavation Marsh	CY	0.29
208.0100	Borrow	CY	0.23
208.1100	Select Borrow	CY	0.23
209.1100	Backfill Granular Grade 1	CY	0.23
209.1500	Backfill Granular Grade 1	Ton	0.115
209.2100	Backfill Granular Grade 2	CY	0.23
209.2500	Backfill Granular Grade 2	Ton	0.115
350.0102	Subbase	CY	0.28
350.0104	Subbase	Ton	0.14
350.0115	Subbase 6-Inch	SY	0.05
350.0120	Subbase 7-Inch	SY	0.05
350.0125	Subbase 8-Inch	SY	0.06
350.0130	Subbase 9-Inch	SY	0.07
350.0135	Subbase 10-Inch	SY	0.08
350.0140	Subbase 11-Inch	SY	0.09
350.0145	Subbase 12-Inch	SY	0.09

### C Fuel Index

A Current Fuel Index (CFI) in dollars per gallon will be established by the Department of Transportation for each month. The CFI will be the price of No. 2 fuel oil, as reported in U.S. Oil Week, using the first issue dated that month. The CFI will be the average of prices quoted for Green Bay, Madison, Milwaukee and Minneapolis.

The base Fuel Index (BFI) for this contract is \$1.15 per gallon.

### D Computing the Fuel Cost Adjustment

The engineer will compute the ratio CFI/BFI each month. If the ratio falls between 0.85 and 1.15, inclusive, no fuel adjustment will be made for that month. If the ratio is less than 0.85 a credit to the department will be computed. If the ratio is greater than 1.15 additional payment to the contractor will be computed. Credit or additional payment will be computed as follows:

- (1) The engineer will estimate the quantity of work done in that month under each of the contract items categorized in Section B.
- (2) The engineer will compute the gallons of fuel used in that month for each of the contract items categorized in Section B by applying the unit fuel usage factors shown in Section B.
- (3) The engineer will summarize the total gallons (Q) of fuel used in that month for the items categorized in Section B.
- (4) The engineer will determine the Fuel Cost Adjustment credit or payment from the following formula:

$$FA = \frac{CFI}{BFI} - 1 \times Q \times BFI$$

(plus is payment to contractor; minus is credit to the department)

Where	FA	=	Fuel Cost Adjustment (plus or minus)
	CFI	=	Current Fuel Index
	BFI	=	Base Fuel Index
	Q	=	Monthly total gallons of fuel

### E Payment

A Fuel Cost Adjustment credit to the department will be deducted as a dollar amount each month from any sums due to the contractor. A Fuel Cost Adjustment payment to the contractor will be made as a dollar amount each month.

Upon completion of the work under the contract, any difference between the estimated quantities and the final quantities will be determined. An average CFI, calculated by averaging the CFI for all months that fuel cost adjustment was applied, will be applied to the quantity differences. The average CFI shall be applied in accordance with the procedure set forth in Section D.

## Additional Special Provision 6

### ASP 6 - Modifications to the standard specifications

Make the following revisions to the standard specifications:

---

#### 104.3 Contractor Notification

Replace the entire text with the following effective with the December 2019 letting:

##### 104.3.1 General

- (1) Subsection 104.3 specifies the step-by-step communication process to be followed to expedite the resolution of potential contract revisions identified by the contractor. Both contractor actions and department responses are outlined. The contractor's non-compliance with the requirements of 104.3 may constitute a waiver of entitlement to a pay adjustment under 109.4 or a time extension under 108.10. The department and contractor can mutually agree to extend any time frame specified throughout 104.3.

##### 104.3.2 Contractor Initial Oral Notification

- (1) If required by 104.2, or if the contractor believes that the department's action, the department's lack of action, or some other situation results in or necessitates a contract revision, the contractor must promptly provide oral notification to the project engineer. Upon notification, the project engineer will attempt to resolve the identified issue.

##### 104.3.3 Contractor 5-Day Written Statement

- (1) If the project engineer has not responded or resolved the identified issue within 5 business days after receipt of initial notification, provide a contractor written statement to the project engineer in the following format:

###### Part 1 - Executive Summary (label page 1.1 through page 1.x)

Include a detailed, factual statement of the request for additional compensation and contract time. Include the date the issue was identified, the date initial notification was given to the project engineer, and the dates and specific locations of work involved.

###### Part 2 - Contractor's Basis of Entitlement (label page 2.1 through page 2.x)

Include references to relevant contract provisions and a narrative summarizing how the contract provisions support the request for a revision to the original contract.

###### Part 3 - Contractor's Request for Damages (label page 3.1 through page 3.x)

When requesting additional compensation, include an itemized list of costs with a narrative supporting the requested amount and explaining how the costs are tied to the requested contract revision.

When requesting additional contract time, include a copy of the schedule that was in effect when the issue occurred and a detailed narrative explaining how the issue impacted controlling items of work. Provide a time impact analysis utilizing base and updated schedules.

If the full extent of either compensation or time is not known at the date of submittal of the contractor 5-Day written statement, provide a brief statement as to why, and include estimated compensation and time.

###### Part 4 - Supporting Documentation (label page 4.1 through page 4.x)

Include copies of the following:

- A. Relevant excerpts from specifications, special provisions, plans, change orders, or other contract documents.
  - B. Communication on the issue, including: letters, e-mails, meeting minutes, etc.
  - C. Any other documentation to support or clarify the contractor's position, including: daily work records, cost summary sheets, weigh tickets, test results, sketches, etc.
- (2) With the submittal of the written statement, the contractor may also request a meeting with the region.

##### 104.3.4 Region One-Day Written Acknowledgment

- (1) Within one business day after the contractor provides the 5-day written statement, the project engineer will provide a region one-day written acknowledgment to the contractor. The project engineer will continue to resolve the issue.

##### 104.3.5 Region 5-Day Written Response

- (1) Within 5 business days after receiving the contractor 5-day written statement, the project engineer may request specific additional information to allow the project engineer to decide whether item 1 or 2 of 104.3.6(1) applies. The project engineer will state the information needed and date it is to be

received for further review. Submit additional information as an amendment to the contractor 5-day written statement.

#### **104.3.6 Region Final Decision**

- (1) Within 10 business days after receiving the contractor 5-day written statement or additional information requested in 104.3.5(1), whichever comes last, the region will consider all information and provide a region final decision in writing to the contractor with one or more of the following responses:
    1. The region will confirm that the contractor is entitled to a contract revision and a contract change order is necessary as specified in 104.2. The project engineer will give direction concerning the potential change.
    2. The region will deny that the contractor is entitled to a contract revision. The project engineer will provide a statement as to why the issue is not a change to the contract. At a minimum, the project engineer will respond to the contractor's issues and refer to the contract to show why the issues are not a change from the original contract.
  - (2) If the contractor does not agree with the region's decision the contractor may pursue the issue as a claim as specified in 105.13. Alternatively, if the contractor and department mutually agree, the department will get a third-party advisory opinion according to the department's dispute resolution procedures.
  - (3) If a third party reviews the issue, their recommendation is not binding on either party. The region has 10 business days after receipt of the third party's written recommendation to render a decision. If the department fails to respond in writing within those 10 business days or the contractor disagrees with the region's decision, the contractor may pursue the issue as a claim as specified in 105.13.
- 

#### **104.6.1.2.1 General**

Replace paragraph one with the following effective with the December 2019 letting:

- (1) Conduct construction operations and provide facilities required to maintain the portion of the project open to the public in a condition that safely and adequately accommodates public traffic. Use barricades, signs, flaggers, and temporary barrier as specified in part VI, of the WMUTCD and ensure that the contractor's use of the right-of-way conforms to 107.9. Throughout the life of the contract, and as the engineer directs, conduct construction operations and provide facilities as follows:
    - Conduct flagging operations conforming to plan details and the department's flagging handbook.
    - Use drums, barricades, and temporary barrier to delineate and shield abrupt drop-offs and other hazards.
    - Furnish, erect, and maintain traffic control devices and facilities conforming to 643.
    - Furnish, erect, and maintain temporary pedestrian devices and facilities conforming to 644.
- 

#### **104.6.1.2.2 Flagging**

Replace paragraph three with the following effective with the December 2019 letting:

- (3) Provide associated advanced warning signs that meet the retroreflective requirements of 637.2.2.2. Provide temporary portable rumble strips from the department's APL installed according to manufacturer's instructions and as specified in the flagging plan details. Provide guidance service through the worksite using pilot vehicles if required.

Replace paragraph five with the following effective with the December 2019 letting:

- (5) Flagging is incidental to the contract and includes costs for advance signing, temporary portable rumble strips, and pilot vehicle guidance service.

---

**104.8 Rights in the Use of Materials Found on the Project**

Replace paragraph two with the following effective with the December 2019 letting:

- (2) Do not excavate or remove material from within the right-of-way that is not within the vertical and horizontal excavation limits the plans show except as follows:
- If the contract does not identify potential source areas, obtain written authorization from the engineer to use those sources. Complete required environmental documentation and obtain necessary permits. The department will reduce pay by \$1.50 per cubic yard under the Material from Right-of-Way administrative item for material obtained from those areas.
  - If the contract identifies potential source areas that were evaluated and permitted in the original environmental document, do not begin excavating in those areas until the engineer allows in writing. Additional environmental documentation and environmental permits are not required. The department will not reduce pay for material obtained from those areas.

The department may suspend use of these sources if the contractor's operation affects the essential functions or characteristics of the project.

---

**104.10.1 General**

Replace paragraph one with the following effective with the December 2019 letting:

- (1) Subsection 104.10 specifies a 2-step process for contractors to follow in submitting a cost reduction incentive (CRI) for modifying the contract in order to reduce direct construction costs computed at contract bid prices. The initial submittal is referred to as a CRI concept and the second submittal is a CRI proposal. The contractor and the department will equally share all savings generated to the contract due to a CRI as specified in 104.10.4.2(1). The department encourages the contractor to submit CRI concepts for the following situations:
1. The contractor generates the original cost savings idea and formulates it into a concept.
  2. The department generates the original cost savings idea and obtains the contractor's assistance to formulate the idea into a concept.

Replace paragraph five with the following effective with the December 2019 letting:

- (5) The department will consider a CRI that changes but does not impair the essential functions or characteristics of the project. These functions or characteristics include, but are not limited to, appearance, service life, economy of operations, ease of maintenance, design, and safety of structures and pavements, construction phasing or procedures, or other contract requirements. The department will not consider a CRI that changes the following:
- Permanent pavement type.
  - Permanent structural cross section above the subgrade.
- 

**104.10.2 Submittal and Review of a CRI Concept**

Replace paragraphs five and six with the following effective with the December 2019 letting:

- (5) The department may consider a CRI concept that addresses a potential change under 104.2.
- (6) The department will not implement a contractor-initiated CRI concept, or portion of that concept, without sharing the cost savings with the contractor as specified in 104.10.4.2.
- (7) The savings generated by the CRI must be sufficient to warrant its review and processing and offset the level of risk. The department will assess the risk of the CRI relative to departmental design policies and criteria for the project. The department may reject a CRI concept for the following reasons:
1. It requires excessive time or costs for the contractor to develop the CRI proposal.
  2. It requires excessive time or costs for review, evaluation, investigation, or implementation.
  3. It introduces an inappropriate level of risk.

**104.10.4.2 Payment for the CRI Work**

*Replace paragraph one with the following effective with the December 2019 letting:*

- (1) The department will pay for completed CRI work as specified for progress payments under 109.6. The department will pay for CRI's under the Cost Reduction Incentive administrative item. When all CRI costs are determined, the department will execute a contract change order that does the following:
  1. Adjusts the contract time, interim completion dates, or both.
  2. Pays the contractor for the unpaid balance of the CRI work.
  3. Pays the contractor 50 percent of the net savings resulting from the CRI, calculated as follows:

$$NS = CW - CRW - CC - DC$$

**Where:**

**NS** = Net Savings

**CW** = The cost of the work required by the original contract that is revised by the CRI. CW is computed at contract bid prices if applicable.

**CRW** = The cost of the revised work, computed at contract bid prices if applicable.

**CC** = The contractor's cost of developing the CRI proposal.

**DC** = The department's cost for investigating, evaluating, and implementing the CRI proposal.

**105.13 Claims Process for Unresolved Changes**

*Replace the entire text with the following effective with the December 2019 letting:*

**105.13.1 General**

- (1) Before submitting a claim, the department and contractor can mutually agree to have the department get a third-party advisory opinion as specified in 104.3.6.
- (2) The department and contractor can mutually agree to extend any time frame specified throughout 105.13 and can mutually agree to utilize an alternative dispute resolution method at any point before the department renders its final decision.
- (3) The department and contractor share costs related to referral to a dispute review board (DRB) as prescribed in the department's dispute resolution procedures.

**105.13.2 Notice of Claim**

- (1) If the contractor has followed the procedures for revising the contract specified in 104.2 and provided the notification specified in 104.3, but still disagrees with the region, the contractor may pursue the issue as a claim. File a notice of claim with the project engineer concerning the disagreement within 14 calendar days of receiving the region's decision under 104.3.6(1).
- (2) The project engineer may deny the applicable portion of a claim if the contractor does not do the following:
  1. File the notice of claim within 14 calendar days as specified in 105.13.2(1).
  2. Give the project engineer sufficient access to keep a record of the actual labor, materials, and equipment used to perform the claimed work.

- (3) Upon filing the notice of claim, maintain records as specified for force account statements in 109.4.5. Unless the project engineer issues a suspension, continue to perform the disputed work. The department will continue to make progress payments to the contractor as specified in 109.6.

**105.13.3 Submission of Claim**

- (1) Submit the claim to the project engineer as promptly as possible following the submission of the Notice of Claim, but not later than the end of the time allowed under 109.7 for the contractor to respond in writing to the engineer-issued semi-final estimate. If the contractor does not submit the claim within that response time, the department will deny the claim.
- (2) The department will not accept the submission of a claim until the resolution process in 104.3 has been completed and the contractor makes no further requests to submit updated information that may affect the region's final decision.

**105.13.4 Content of Claim**

- (1) The final contractor written statement under 104.3.3 is considered the content of the claim. If the contractor makes a request to submit updated information that may affect the region's final decision under 104.3.6, submit the updated information as an amendment to the contractor written statement and continue the resolution process in 104.3 before submitting a claim.
- (2) The department may refer the claimant of a false claim to the appropriate authority for criminal prosecution. Certify the claim using the following form:

The undersigned is duly authorized to certify this claim on behalf of (the contractor).

(The contractor) certifies that this claim is made in good faith, that the supporting data are accurate and complete to the best of (the contractor's) knowledge and belief, and that the amount requested accurately reflects the contract adjustment for which (the contractor) believes that the department is liable.

(THE CONTRACTOR)

By: \_\_\_\_\_

(Name and Title)

Date of Execution: \_\_\_\_\_

**105.13.5 Department Final Decision**

- (1) The department will have up to 28 calendar days, from the contractor's submission of the claim, to perform a final review of the claim and conduct all meetings. The department may request, in writing, that the contractor submit additional information related to the claim. Submit that additional information, or notify the department in writing to base its decision on the information previously submitted. Either the contractor or region may request a meeting to present their views. Before the meeting, both parties will agree upon written ground rules for the meeting.
- (2) Upon completion of the 28 calendar days for the department's review and meetings, the department will have up to 21 calendar days to render a written decision. The department will consider written and oral submissions from the contractor and region, and may consider other relevant information in the project records.
- (3) The department will provide the following in its final decision:
  1. A concise description of the claim.
  2. A clear, contractual basis for its decision that includes a reference to 104.2 on revisions to the contract and as appropriate, specific reference to language regarding the bid items in question.
  3. Other facts the department relies on to support its decision.
  4. A concise statement of the circumstances surrounding the claim and reasons for its decision. If the department rejects the claim in whole or in part, the department will explain why the claimed work is not a change to the contract work.
  5. The amount of money or other relief, if any, the department will grant the contractor.
- (4) If the contractor disagrees with the department's final decision, the contractor may initiate a legal action pursuant to state statutes.

**106.3.4.2.2.2 Freeze-Thaw Soundness**

Replace paragraph one with the following effective with the December 2019 letting:

- (1) Perform freeze-thaw soundness testing according to AASHTO T103 as modified in CMM 8-60.2. Provide freeze/thaw soundness test results based on the fraction retained on the No. 4 sieve as follows:
  1. Using virgin crushed stone aggregates produced from limestone/dolomite sources in one or more of the following counties or from out of state:
 

Brown	Columbia	Crawford	Dane	Dodge
Fond du Lac	Grant	Green	Green Lake	Iowa
Jefferson	Lafayette	Marinette	Oconto	Outagamie
Rock	Shawano	Walworth	Winnebago	
  2. Using gravel aggregates produced from pit sources in one or more of the following counties or from out of state:
 

Dodge	Washington	Waukesha
-------	------------	----------

**208.5 Payment**

Replace paragraph three with the following effective with the December 2019 letting:

- (3) The department will adjust pay for material obtained from within the project right-of-way limits but outside project excavation limits, furnished under 208.2.2, as specified in 104.8.

**301.2.3 Sampling and Testing**

Replace paragraph one with the following effective with the December 2019 letting:

- (1) Department and contractor testing shall conform to the following:

Sampling <sup>[1]</sup> .....	AASHTO T2
Percent passing the 200 sieve .....	AASHTO T11
Gradation <sup>[1]</sup> .....	AASHTO T27
Gradation of extracted aggregate .....	AASHTO T30
Moisture content <sup>[1]</sup> .....	AASHTO T255
Liquid limit .....	AASHTO T89
Plasticity index .....	AASHTO T90
Wear .....	AASHTO T96
Sodium sulfate soundness (R-4, 5 cycles) .....	AASHTO T104
Freeze/thaw soundness <sup>[1]</sup> .....	AASHTO T103
Lightweight Pieces in Aggregate .....	AASHTO T113
Fracture .....	ASTM D5821 as modified in CMM 8-60
Moisture/density <sup>[1]</sup> .....	AASHTO T99 and AASHTO T180
In-place density <sup>[1]</sup> .....	AASHTO T191
Asphaltic material extraction .....	CMM 8-36 WisDOT Test Method 1560

<sup>[1]</sup> As modified in CMM 8-60.

**301.2.4.5 Aggregate Base Physical Properties**

*Replace paragraph one with the following effective with the December 2019 letting:*

- (1) Furnish aggregates conforming to the following:

**TABLE 301-2 AGGREGATE BASE PHYSICAL PROPERTIES**

PROPERTY	CRUSHED STONE	CRUSHED GRAVEL	CRUSHED CONCRETE	RECLAIMED ASPHALT	REPROCESSED MATERIAL	BLENDED MATERIAL
Gradation AASHTO T27						
dense	305.2.2.1	305.2.2.1	305.2.2.1	305.2.2.2	305.2.2.1	305.2.2.1 <sup>[1]</sup>
open-graded	310.2	310.2	<u>not allowed</u>	<u>not allowed</u>	<u>not allowed</u>	<u>not allowed</u>
Wear AASHTO T96 loss by weight	<=50%	<=50%	note <sup>[2]</sup>	—	note <sup>[2]</sup>	note <sup>[3]</sup>
Sodium sulfate soundness AASHTO T104 loss by weight						
dense	<=18%	<=18%	—	—	—	note <sup>[3]</sup>
open-graded	<=12%	<=12%	<u>not allowed</u>	<u>not allowed</u>	<u>not allowed</u>	<u>not allowed</u>
Freeze/thaw soundness AASHTO T103 <sup>[6]</sup> loss by weight						
dense	<=18%	<=18%	note <sup>[2]</sup>	—	—	note <sup>[3]</sup>
open-graded	<=18%	<=18%	<u>not allowed</u>	<u>not allowed</u>	<u>not allowed</u>	<u>not allowed</u>
Liquid limit AASHTO T89	<=25	<=25	<=25	—	—	note <sup>[3]</sup>
Plasticity AASHTO T90	<=6 <sup>[4]</sup>	<=6 <sup>[4]</sup>	<=6 <sup>[4]</sup>	—	—	note <sup>[3]</sup>
Fracture ASTM D5821 <sup>[6]</sup> min one face by count						
dense	58%	58%	58%	—	note <sup>[5]</sup>	note <sup>[3]</sup>
open-graded	90%	90%	<u>not allowed</u>	<u>not allowed</u>	<u>not allowed</u>	<u>not allowed</u>

<sup>[1]</sup> The final aggregate blend must conform to the specified gradation.

<sup>[2]</sup> No requirement for material taken from within the project limits. For material supplied from a source outside the project limits:

- LA wear maximum of 50 percent loss, by weight.
- Freeze thaw maximum of 42 percent loss, by weight.

<sup>[3]</sup> Required as specified for the individual component materials defined in columns 2 - 6 of the table before blending.

<sup>[4]</sup> For base placed between old and new pavements, use crushed stone, crushed gravel, or crushed concrete with a plasticity index of 3 or less.

<sup>[5]</sup> >=75 percent by count of non-asphalt coated particles.

<sup>[6]</sup> as modified in CMM 8-60.

**450.2.2 Aggregate Sampling and Testing**

*Replace paragraph one with the following effective with the December 2019 letting:*

- (1) The department and the contractor will sample and test according to the following methods, except as revised with the engineer's approval:
- |  |             |
|--|-------------|
| Sampling aggregates .....                                      | AASHTO T2   |
| Material finer than No. 200 sieve .....                        | AASHTO T11  |
| Sieve analysis of aggregates .....                             | AASHTO T27  |
| Mechanical analysis of extracted aggregate .....               | AASHTO T30  |
| Sieve analysis of mineral filler .....                         | AASHTO T37  |
| Los Angeles abrasion of coarse aggregate .....                 | AASHTO T96  |
| Freeze-thaw soundness of coarse aggregate <sup>[1]</sup> ..... | AASHTO T103 |
| Sodium sulfate soundness of aggregates (R-4, 5 cycles) .....   | AASHTO T104 |
| Extraction of bitumen .....                                    | AASHTO T164 |

<sup>[1]</sup> As modified in CMM 8-60.2.

**450.3.2.6.3 Compaction Roller Pattern Determined by Growth Curve**

*Add 450.3.2.6.3 as a new subsection effective with the December 2019 letting:*

**450.3.2.6.3 Compaction Roller Pattern Determined by Growth Curve**

- (1) When specified in 460.3.3.1, compact asphaltic mixture using the roller pattern established during construction of a control strip. Use 2 or more rollers per paver if placing more than 165 tons per hour.
- (2) On the first day of production, construct a control strip under the direct observation of department personnel. After compacting the control strip with a minimum of 3 passes, mark the gauge outline and take a one-minute wet density measurement using a nuclear density gauge in back scatter mode at a single location. Take a density measurement at the same location after each subsequent pass. Continue compacting and testing until the increase in density is less than 1 pcf for 3 consecutive passes. Submit the final roller pattern to the engineer in writing. Once the roller pattern is established do not change the pattern or decrease the number, type, or weight of rollers without the engineer's written approval.
- (3) After establishing the roller pattern, and under the direct observation of the engineer, cut at least one 4-inch diameter or larger core from the control strip density gauge outline. Prepare cores and determine density according to AASHTO T166. Dry cores after testing. Fill core holes 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.

**450.3.2.8 Jointing**

*Replace paragraph three with the following effective with the December 2019 letting:*

- (3) Construct notched wedge longitudinal joints for mainline paving of HMA layers 1.75 inches or greater. Extend the wedge beyond the normal lane width as the plans show or as the engineer directs.

*Replace paragraph five with the following effective with the December 2019 letting:*

- (5) Construct the wedge for each layer using an engineer-approved strike-off device that will provide a uniform slope and will not restrict the main screed. Shape and compact the wedge with a weighted steel side roller wheel or vibratory plate compactor the same width as the wedge. Apply a tack coat to the wedge surface and both notches before placing the adjacent lane.
- (6) Clean longitudinal and transverse joints coated with dust and, if necessary, paint with hot asphaltic material, a cutback, or emulsified asphalt to ensure a tightly bonded, sealed joint.

**455.2.5 Tack Coat**

*Replace paragraph one with the following effective with the December 2019 letting:*

- (1) Under the Tack Coat bid item, furnish type SS-1h, CSS-1h, QS-1h, CQS-1h, or modified emulsified asphalt with an "h" suffix, unless the contract specifies otherwise.

**460.2.2.3 Aggregate Gradation Master Range**

*Replace paragraph one with the following effective with the December 2019 letting:*

- (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)	No. 2 (25.0 mm)	No. 3 (19.0 mm)	No. 4 (12.5 mm)	No. 5 (9.5 mm)	No. 6 (4.75 mm)	SMA No. 4 (12.5 mm)	SMA No. 5 (9.5 mm)
50.0-mm	100							
37.5-mm	90 - 100	100						
25.0-mm	90 max	90 - 100	100					
19.0-mm	—	90 max	90 - 100	100			100	
12.5-mm	—	—	90 max	90 - 100	100		90 - 97	100
9.5-mm	—	—	—	90 max	90 - 100	100	58 - 80	90 - 100
4.75-mm	—	—	—	—	90 max	90 - 100	25 - 35	35 - 45
2.36-mm	15 - 41	19 - 45	23 - 49	28 - 58	32 - 67	90 max	15 - 25	18 - 28
1.18-mm	—	—	—	—	—	30 - 55	—	—
0.60-mm	—	—	—	—	—	—	18 max	18 max
0.075-mm	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 <sup>[1]</sup>	15.0 min <sup>[2]</sup>	16.0 - 17.5	16.0 min	17.0 min

<sup>[1]</sup> 14.5 for LT and MT mixes.

<sup>[2]</sup> 15.5 for LT and MT mixes.

**460.2.7 HMA Mixture Design**

*Replace paragraph one with the following effective with the December 2019 letting:*

- (1) For each HMA mixture type used under the contract, develop and submit an asphaltic mixture design according to CMM 8-66 and conforming to the requirements of table 460-1 and table 460-2. Ensure that SMA mixture designs adhere to AASHTO R 46 and AASHTO M 325 in addition to the required test procedures outlined in CMM 8-66 table 1 and CMM 8-66 table 2. Determine the specific gravity of fines or super fines used as a mineral filler or additional stabilizer in SMA designs according to AASHTO T 100. The values listed are design limits; production values may exceed those limits. The department will review mixture designs and report the results of that review to the designer according to CMM 8-66.

TABLE 460-2 MIXTURE REQUIREMENTS

Mixture type	LT	MT	HT	SMA
LA Wear (AASHTO T96)				
100 revolutions(max % loss)	13	13	13	13
500 revolutions(max % loss)	50	45	45	35
Soundness (AASHTO T104) (sodium sulfate, max % loss)	12	12	12	12
Freeze/Thaw (AASHTO T103 as modified in CMM 8-60.2) (specified counties, max % loss)	18	18	18	18
Fractured Faces (ASTM D5821 as modified in CMM 860) (one face/2 face, % by count)	65/___	75 / 60	98 / 90	100/90
Flat & Elongated (ASTM D4791) (max %, by weight)	5 (5:1 ratio)	5 (5:1 ratio)	5 (5:1 ratio)	20 (3:1 ratio)
Fine Aggregate Angularity (AASHTO T304, method A, min)	40 <sup>[1]</sup>	43 <sup>[1]</sup>	45	45
Sand Equivalency (AASHTO T176, min)	40	40 <sup>[2]</sup>	45	50
Clay Lumps and Friable Particle in Aggregate (AASHTO T112)	<= 1%	<= 1%	<= 1%	<= 1%
Plasticity Index of Material Added to Mix Design as Mineral Filler (AASHTO T89/90)	<= 4	<= 4	<= 4	<= 4
Gyratory Compaction				
Gyrations for Nini	6	7	8	7
Gyrations for Ndes	40	75	100	65
Gyrations for Nmax	60	115	160	100
Air Voids, %Va (%Gmm Ndes)	4.0 (96.0)	4.0 (96.0)	4.0 (96.0)	4.5 (95.5)
% Gmm Nini	<= 91.5 <sup>[3]</sup>	<= 89.0 <sup>[3]</sup>	<= 89.0	___
% Gmm Nmax	<= 98.0	<= 98.0	<= 98.0	<= 98.0
Dust to Binder Ratio <sup>[4]</sup> (% passing 0.075/Pbe)	0.6 - 1.2 <sup>[5]</sup>	0.6 - 1.2 <sup>[5]</sup>	0.6 - 1.2 <sup>[5]</sup>	1.2 - 2.0
Voids filled with Binder (VFB or VFA, %)	68 - 80 <sup>[6] [8]</sup>	65 - 75 <sup>[6] [7] [9]</sup>	65 - 75 <sup>[6] [7] [9]</sup>	70 - 80
Tensile Strength Ratio (TSR) (AASHTO T283) <sup>[10] [11]</sup>				
no antistripping additive	0.75 min	0.75 min	0.75 min	0.80 min
with antistripping additive	0.80 min	0.80 min	0.80 min	0.80 min
Draindown (AASHTO T305) (%)	___	___	___	<= 0.30
Minimum Effective Asphalt Content, Pbe (%)	___	___	___	5.5

<sup>[1]</sup> For No 6 (4.75 mm) nominal maximum size mixes, the specified fine aggregate angularity is 43 for LT and 45 MT mixes.

<sup>[2]</sup> For No 6 (4.75 mm) nominal maximum size mixes, the specified sand equivalency is 43 for MT mixes.

<sup>[3]</sup> The percent maximum density at initial compaction is only a guideline.

<sup>[4]</sup> For a gradation that passes below the boundaries of the caution zone (ref. AASHTO M323), the dust to binder ratio limits are 0.6 - 1.6.

<sup>[5]</sup> For No 6 (4.75 mm) nominal maximum size mixes, the specified dust to binder ratio limits are 1.0 - 2.0 for LT mixes and 1.5 - 2.0 for MT and HT mixes.

<sup>[6]</sup> For No. 6 (4.75mm) nominal maximum size mixes, the specified VFB is 67 - 79 percent for LT mixes and 66 - 77 percent for MT and HT mixes.

<sup>[7]</sup> For No. 5 (9.5mm) and No. 4 (12.5 mm) nominal maximum size mixtures, the specified VFB range is 70 - 76 percent.

<sup>[8]</sup> For No. 2 (25.0mm) nominal maximum size mixes, the specified VFB lower limit is 67 percent.

<sup>[9]</sup> For No. 1 (37.5mm) nominal maximum size mixes, the specified VFB lower limit is 67 percent.

<sup>[10]</sup> WisDOT eliminates freeze-thaw conditioning cycles from the TSR test procedure.

<sup>[11]</sup> Run TSR at asphalt content corresponding to 3.0% air void regressed design, or 4.5% air void design for SMA, using distilled water for testing.

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#### **460.2.8.2.1.3.1 Contracts with 5000 Tons of Mixture or Greater**

*Replace paragraph four with the following effective with the December 2019 letting:*

- (4) Use the test methods identified below, or other methods the engineer approves, to perform the following tests at the frequency indicated:

Blended aggregate gradations:

Drum plants:

- Field extraction by ignition oven according to AASHTO T308 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. Gradation of resulting aggregate sample determined according to AASHTO T30.
- Belt samples, optional for virgin mixtures, obtained from stopped belt or from the belt discharge using an engineer-approved sampling device and performed according to AASHTO T11 and T27.

Batch plants:

- Field extraction by ignition oven according to AASHTO T308 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. Gradation of resulting aggregate sample determined according to AASHTO T30.

Asphalt content (AC) in percent:

AC by ignition oven according to AASHTO T308 (CMM 8-36.6.3.6), by chemical extraction according to AASHTO T-164 method A or B; or by automated extraction according to ASTM D8159 as modified in CMM 8-36.6.3.1. Gradation of resulting aggregate sample determined according to AASHTO T30.

Bulk specific gravity of the compacted mixture according to AASHTO T166.

Maximum specific gravity according to AASHTO T209.

Air voids (Va) by calculation according to AASHTO T269.

VMA by calculation according to AASHTO R35.

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#### **460.2.8.2.1.4.2 Control Charts**

*Replace paragraph one with the following effective with the December 2019 letting:*

- (1) Maintain standardized control charts at the laboratory. Record contractor test results on the charts the same day as testing. Record data on the standardized control charts as follows:
- Blended aggregate gradation tests in percent passing. Of the following, plot sieves required in table 460-1: 37.5-mm, 25.0-mm, 19.0-mm, 12.5-mm, 9.5-mm, 4.75-mm, 2.36-mm, 1.18-mm, 0.60-mm, and 0.075-mm.
  - Asphalt material content in percent.
  - Air voids in percent.
  - VMA in percent.
- (2) Plot both the individual test point and the running average of the last 4 data points on each chart. Show QC data in black with the running average in red. Draw the warning limits with a dashed green line and the JMF limits with a dashed red line. The contractor may use computer generated black-and-white printouts with a legend that clearly identifies the specified color-coded components.

**460.2.8.2.1.5 Control Limits**

*Replace paragraph one with the following effective with the December 2019 letting:*

- (1) Conform to the following control limits for the JMF and warning limits based on a running average of the last 4 data points:

ITEM	JMF LIMITS	WARNING LIMITS
Percent passing given sieve:		
37.5-mm	+/- 6.0	+/- 4.5
25.0-mm	+/- 6.0	+/- 4.5
19.0-mm	+/- 5.5	+/- 4.0
12.5-mm	+/- 5.5	+/- 4.0
9.5-mm	+/- 5.5	+/- 4.0
4.75-mm	+/- 5.0	+/- 4.0
2.36-mm	+/- 5.0	+/- 4.0
1.18-mm	+/- 4.0	+/- 3.0
0.60-mm	+/- 4.0	+/- 3.0
0.075-mm	+/- 2.0	+/- 1.5
Asphaltic content in percent	- 0.3	- 0.2
Air voids in percent <sup>[1]</sup>	+1.3/-1.0	+1.0/-0.7
VMA in percent <sup>[2]</sup>	- 0.5	- 0.2

<sup>[1]</sup> For SMA, JMF limits are +/-1.3 and warning limits are +/-1.0.

<sup>[2]</sup> VMA limits are based on requirements for each mix design nominal maximum aggregate size in table 460-1. For No. 6 (4.75mm) mixes, JMF limits are +/- 0.5 and warning limits are +/- 0.2.

**460.3.2 Thickness**

*Replace paragraph one with the following effective with the December 2019 letting:*

- (1) Provide the plan thickness for lower and upper layers limited as follows:

NOMINAL SIZE	MINIMUM LAYER THICKNESS (in inches)	MAX LOWER LAYER THICKNESS (in inches)	MAX UPPER LAYER THICKNESS (in inches)	MAX SINGLE LAYER THICKNESS <sup>[3]</sup> (in inches)
No. 1 (37.5 mm)	4.5	6	4.5	6
No. 2 (25.0 mm)	3.0	5	4	6
No. 3 (19.0 mm)	2.25	4	3	5
No. 4 (12.5 mm) <sup>[1]</sup>	1.75	3 <sup>[2]</sup>	2.5	4
No. 5 (9.5 mm) <sup>[1]</sup>	1.25	3 <sup>[2]</sup>	2	3
No. 6 (4.75 mm)	0.75	1.25	1.25	1.25

<sup>[1]</sup> SMA mixtures use nominal size No. 4 (12.5 mm) or No. 5 (9.5 mm).

<sup>[2]</sup> SMA mixtures with nominal sizes of No. 4 (12.5 mm) and No. 5 (9.5 mm) have no maximum lower layer thickness specified.

<sup>[3]</sup> For use on cross-overs and shoulders.

- (2) Place leveling layers using No. 4 (12.5 mm), No. 5 (9.5 mm), or No. 6 (4.75 mm) mixtures. Leveling layers may be thinner than the minimum lower layer thickness for the mixture used.
- (3) Place wedging layers as the contract specifies or engineer directs. Wedging layers have no specified minimum or maximum thickness.

**460.3.3.1 Minimum Required Density**

Replace paragraph one with the following effective with the December 2019 letting:

- (1) Compact No. 6 mixtures in lower layers as specified in 450.3.2.6.2 and in upper layers as specified in 450.3.2.6.3. For other HMA mixtures, compact all layers to the density table 460-3 specifies.

**TABLE 460-3 MINIMUM REQUIRED DENSITY<sup>[1]</sup>**

LOCATION	LAYER	PERCENT OF TARGET MAXIMUM DENSITY		
		MIXTURE TYPE		
		LT and MT	HT	SMA <sup>[5]</sup>
TRAFFIC LANES <sup>[2]</sup>	LOWER	93.0 <sup>[3]</sup>	93.0 <sup>[4]</sup>	—
	UPPER	93.0	93.0	93.0
SHOULDERS & APPURTENANCES	LOWER	91.0	91.0	—
	UPPER	92.0	92.0	92.0

<sup>[1]</sup> The table values are for average lot density. If any individual 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 according to CMM 8-15.11.

<sup>[2]</sup> Includes side roads, crossovers, turn lanes, ramps, parking lanes, bike lanes, and park-and-ride lots as defined by the contract plans.

<sup>[3]</sup> Minimum reduced by 2.0 percent for a lower layer constructed directly on crushed aggregate or recycled base courses.

<sup>[4]</sup> Minimum reduced by 1.0 percent for a lower layer constructed directly on crushed aggregate or recycled base courses.

**460.3.3.2 Pavement Density Determination**

Replace paragraph three with the following effective with the December 2019 letting:

- (3) A lot is defined in CMM 8-15 and placed within a single layer for each location and target maximum density category indicated in table 460-3. The lot density is the average of all samples taken for that lot. The department determines the number of tests per lot according to CMM 8-15.

**460.5.2.1 General**

Replace paragraph six with the following effective with the December 2019 letting:

- (6) If during a QV dispute resolution investigation the department discovers unacceptable mixture defined by one or more of the following:
- Va less than 2.5 or greater than 6.5 percent for SMA, or for other mixes, less than 1.5 or greater than 5.0 percent.
  - VMA more than 1.0 percent below the minimum or above the maximum specified in table 460-1.
  - AC more than 0.5 % below the JMF target.

Remove and replace the material, or if the engineer allows the mixture to remain in place, the department will pay for the quantity of affected material at 50 percent of the contract price.

**501.2.5.5 Sampling and Testing**

*Replace paragraph one with the following effective with the December 2019 letting:*

- (1) Sample and test aggregates for concrete according to the following:

Sampling aggregates <sup>[1]</sup> .....	AASHTO T2
Lightweight pieces in aggregate .....	AASHTO T113
Material finer than No. 200 sieve <sup>[1]</sup> .....	AASHTO T11
Unit weight of aggregate .....	AASHTO T19
Organic impurities in sands .....	AASHTO T21
Sieve analysis of aggregates .....	AASHTO T27
Effect of organic impurities in fine aggregate .....	AASHTO T71
Los Angeles abrasion of coarse aggregate .....	AASHTO T96
Alkali Silica Reactivity of Aggregates .....	ASTM C1260
Alkali Silica Reactivity of Combinations of Cementitious Materials and Aggregates .....	ASTM C1567
Freeze-thaw soundness of coarse aggregate <sup>[1]</sup> .....	AASHTO T103
Sodium sulfate soundness of coarse aggregates (R-4, 5 cycles) .....	AASHTO T104
Specific gravity and absorption of fine aggregate .....	AASHTO T84
Specific gravity and absorption of coarse aggregate <sup>[1]</sup> .....	AASHTO T85
Flat & elongated pieces based on a 3:1 ratio <sup>[1]</sup> .....	ASTM D4791
Sampling fresh concrete .....	AASHTO R60
Making and curing concrete compressive strength test specimens .....	AASHTO T23
Compressive strength of molded concrete cylinders .....	AASHTO T22

<sup>[1]</sup> As modified in CMM 8-60.

**505.2.2 Bar Steel Reinforcement**

*Replace paragraph one with the following effective with the December 2019 letting:*

- (1) Conform to AASHTO M31, type S or type W.

**505.2.3 High-Strength Bar Steel Reinforcement**

*Replace paragraph one with the following effective with the December 2019 letting:*

- (1) Conform to AASHTO M31, grade 60, type S or type W.

**505.2.4.1 General**

*Replace paragraph one with the following effective with the December 2019 letting:*

- (1) Conform to AASHTO M31, grade 60, type S or type W. Ensure that the coating is applied in a CRSI certified epoxy coating plant. Bend bars that require bending before coating, unless the fabricator can bend the bar without damaging the coating.

**505.2.6.1 General**

*Replace paragraph one with the following effective with the December 2019 letting:*

- (1) For dowel bars and straight tie bars, there is no requirement for bend tests. Ensure that the bars are the specified diameter and length the plans show.

**505.2.6.2.2 Solid Dowel Bars**

*Replace paragraph one with the following effective with the December 2019 letting:*

- (1) Furnish coated bars conforming to AASHTO M31 grade 40 or 60. Alternatively the contractor may furnish dowel bars conforming to AASHTO M227 grade 70-80. Coat in a plant certified by the Concrete Reinforcing Steel Institute with a thermosetting epoxy conforming to AASHTO M254, type B.

**625.3.2 Processing Topsoil or Salvaged Topsoil**

*Delete paragraph four effective with the December 2019 letting.*

**701.3.1 General**

*Replace the entire text with the following effective with the December 2019 letting:*

- (1) Perform contract required QC tests for samples randomly located according to CMM 8-30. Use the test methods specified in table 701-1.

**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 8-30.9.2	Transportation Materials Sampling Technician (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 <sup>[1][4]</sup>	TMS, AGGTEC-1, ACT-AGG
Percent passing the No. 200 sieve	AASHTO T11 <sup>[1]</sup>	AGGTEC-I, ACT-AGG
Fine and coarse aggregate gradation	AASHTO T27 <sup>[1]</sup>	
Aggregate moisture content	AASHTO T255 <sup>[1]</sup>	
Fractured faces	ASTM D5821 <sup>[1]</sup>	
Liquid limit	AASHTO T89	Aggregate Testing for Transportation Systems (ATTS) GRADINGTEC-I, or ACT-GRADING
Plasticity index	AASHTO T90 <sup>[3]</sup>	
Sampling freshly mixed concrete	AASHTO R60	PCCTEC-1 ACT-PCC
Air content of fresh concrete	AASHTO T152 <sup>[2]</sup>	
Air void system of fresh concrete	AASHTO TP118 <sup>[5]</sup>	
Concrete slump	AASHTO T119 <sup>[2]</sup>	
Concrete temperature	ASTM C1064	
Making and curing concrete cylinders	AASHTO T23	
Moist curing for concrete cylinders	AASHTO M201	
Concrete compressive strength	AASHTO T22	Concrete Strength Tester (CST) CST Assistant Certified Technician (ACT-CST)
Concrete flexural strength	AASHTO T97	
Profiling	—	PROFILER

<sup>[1]</sup> As modified in CMM 8-60.

<sup>[2]</sup> As modified in CMM 8-70.

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

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

<sup>[5]</sup> Consolidate by rodding.

**715.2.1 General**

*Replace paragraph five with the following effective with the December 2019 letting:*

- (5) For new lab-qualified mixes, test the air void system of the proposed concrete mix. Include the SAM number as a part of the mix design submittal.

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**715.3.1.1 General**

Replace paragraph two with the following effective with the December 2019 letting:

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

**730.3.1 General**

Replace paragraph three with the following effective with the December 2019 letting:

- (3) Stockpile tests<sup>[1]</sup> can be used for multiple projects. If placement on a project does not begin within 120 calendar days after the date the stockpile sample was obtained, retest the stockpile before placement begins.

<sup>[1]</sup> Replace the stockpile test with an in-place production test for concrete pavement recycled and processed on-site; test on the first day of production.

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**730.3.2 Contractor QC Testing**

Replace paragraph four with the following effective with the December 2019 letting:

- (4) Submit test results to the engineer within one business day of obtaining the sample, except any aggregate classification with recycled asphalt may be submitted within two business days.
- 

**730.3.4.1 Contractor QC Testing**

Replace the entire text with the following effective with the December 2019 letting:

- (1) For small quantity contracts with  $\leq 500$  tons, submit 2 production tests or 1 stockpile test. Production tests are valid for 3 years from the date the production sample was obtained. Begin placement within 3 years of the date sampled.
- (2) For small quantity contracts with  $\leq 6000$  tons and  $\geq 500$  tons, do the following:
1. Conduct one QC stockpile test before placement.
  2. Submit 2 production tests or conduct 1 loadout test instead of placement tests. Production tests are valid for 3 years from the date the production sample was obtained; the first day of placement must be within 3 years of the date sampled.
  3. If the actual quantity placed is more than 6000 tons, on the next day of placement perform one additional random QC test for each 3000 tons of overrun, or fraction thereof.
- 

**740.3.2 Contractor QC Testing**

Replace paragraph three with the following effective with the December 2019 letting:

- (3) Field-locate the beginning and ending points for each profile run. Measure the profiles of each standard and partial segment. Define primary segments starting at a project terminus and running contiguously along the mainline to the other project terminus. Define segments one wheel path wide and distinguished by length as follows:
1. Standard segments are 500 feet long.
  2. Partial segments are less than 500 feet long.

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**Errata**

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**104.6.1.2.3 Drop-Off and Hazard Protection**

Correct errata by changing 2 inches or greater to greater than 2 inches.

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

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**305.3.3.3 Shoulders Adjacent to Asphaltic Pavement or Surfacing**

Correct errata by changing 2-inch or more to greater than 2-inch.

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

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**614.3.6 Thrie Beam Structure Approach Retro Fits**

Correct errata by deleting the galvanization reference already required under 614.3.1.

- (2) Install posts and drill holes into existing thrie beam conforming to 614.3.2.

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**628.3.7 Mobilizations for Erosion Control**

Correct errata by clarifying that mobilizations for erosion control include proceeding with the work.

- (1) Move personnel, equipment, and materials to the project site and promptly proceed with construction of erosion control items at the stages the contract indicates or the engineer directs.

### ADDITIONAL SPECIAL PROVISION 7

- A. Reporting 1<sup>st</sup> 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](mailto:paul.ndon@dot.wi.gov) within 5 days of payment receipt to be logged manually.

\*\*\*Additionally, for information on Subcontractor Sublet assignments, Subcontractor Payments and Payment Tracking, please refer to the CRCS Payment and Sublets manual at:

<https://wisconsindot.gov/Documents/doing-bus/civil-rights/labornwage/crcs-payments-sublets-manual.pdf>

## **ADDITIONAL SPECIAL PROVISION 9**

### **Electronic Certified Payroll or Labor Data Submittal**

(1) Use the department's Civil Rights Compliance System (CRCS) 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](mailto: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>

## REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS

- I. General
- II. Nondiscrimination
- III. Nonsegregated Facilities
- IV. Davis-Bacon and Related Act Provisions
- V. Contract Work Hours and Safety Standards Act Provisions
- VI. Subletting or Assigning the Contract
- VII. Safety: Accident Prevention
- VIII. False Statements Concerning Highway Projects
- IX. Implementation of Clean Air Act and Federal Water Pollution Control Act
- X. Compliance with Governmentwide Suspension and Debarment Requirements
- XI. Certification Regarding Use of Contract Funds for Lobbying

### ATTACHMENTS

A. Employment and Materials Preference for Appalachian Development Highway System or Appalachian Local Access Road Contracts (included in Appalachian contracts only)

### I. GENERAL

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under Title 23 (excluding emergency contracts solely intended for debris removal). The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services).

The applicable requirements of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The prime contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Form FHWA-1273 must be included in all Federal-aid design-build contracts, in all subcontracts and in lower tier subcontracts (excluding subcontracts for design services, purchase orders, rental agreements and other agreements for supplies or services). The design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Contracting agencies may reference Form FHWA-1273 in bid proposal or request for proposal documents, however, the Form FHWA-1273 must be physically incorporated (not referenced) in all contracts, subcontracts and lower-tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services related to a construction contract).

2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract.

3. A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.

4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by convicts who are on parole, supervised release, or probation. The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors.

### II. NONDISCRIMINATION

The provisions of this section related to 23 CFR Part 230 are applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more. The provisions of 23 CFR Part 230 are not applicable to material supply, engineering, or architectural service contracts.

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR 60, 29 CFR 1625-1627, Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The contractor and all subcontractors must comply with: the requirements of the Equal Opportunity Clause in 41 CFR 60-1.4(b) and, for all construction contracts exceeding \$10,000, the Standard Federal Equal Employment Opportunity Construction Contract Specifications in 41 CFR 60-4.3.

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR 60, and 29 CFR 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), and Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The following provision is adopted from 23 CFR 230, Appendix A, with appropriate revisions to conform to the U.S. Department of Labor (US DOL) and FHWA requirements.

**1. Equal Employment Opportunity:** Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (28 CFR 35, 29 CFR 1630, 29 CFR 1625-1627, 41 CFR 60 and 49 CFR 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140 shall constitute the EEO and specific affirmative action standards for the contractor's project activities under

this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract.

b. The contractor will accept as its operating policy the following statement:

"It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, national origin, age or disability. Such action shall include: 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, pre-apprenticeship, and/or on-the-job training."

**2. EEO Officer:** The contractor will designate and make known to the contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active EEO program and who must be assigned adequate authority and responsibility to do so.

**3. Dissemination of Policy:** All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:

a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer.

b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.

c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minorities and women.

d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.

e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

**4. Recruitment:** When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.

a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish with such identified sources procedures whereby minority and women applicants may be referred to the contractor for employment consideration.

b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.

c. The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such applicants will be discussed with employees.

**5. Personnel Actions:** Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, national origin, age or disability. The following procedures shall be followed:

a. The contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.

b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.

c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.

d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of their avenues of appeal.

**6. Training and Promotion:**

a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are

applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.

b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).

c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.

d. The contractor will periodically review the training and promotion potential of employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.

**7. Unions:** If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:

a. The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.

b. The contractor will use good faith efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age or disability.

c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the contracting agency and shall set forth what efforts have been made to obtain such information.

d. In the event the union is unable to provide the contractor with a reasonable flow of referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age or disability; making full efforts to obtain qualified and/or qualifiable minorities and women. The failure of a union to provide sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.

**8. Reasonable Accommodation for Applicants / Employees with Disabilities:** The contractor must be familiar

with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established there under. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.

**9. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment:** The contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.

a. The contractor shall notify all potential subcontractors and suppliers and lessors of their EEO obligations under this contract.

b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

#### **10. Assurance Required by 49 CFR 26.13(b):**

a. The requirements of 49 CFR Part 26 and the State DOT's U.S. DOT-approved DBE program are incorporated by reference.

b. The contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the contracting agency deems appropriate.

**11. Records and Reports:** The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.

a. The records kept by the contractor shall document the following:

(1) The number and work hours of minority and non-minority group members and women employed in each work classification on the project;

(2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and

(3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women;

b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on [Form FHWA-1391](#). The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor

will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

### III. NONSEGREGATED FACILITIES

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more.

The contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color, religion, sex, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location, under the contractor's control, where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

### IV. DAVIS-BACON AND RELATED ACT PROVISIONS

This section is applicable to all Federal-aid construction projects exceeding \$2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size). The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. Contracting agencies may elect to apply these requirements to other projects.

The following provisions are from the U.S. Department of Labor regulations in 29 CFR 5.5 "Contract provisions and related matters" with minor revisions to conform to the FHWA-1273 format and FHWA program requirements.

#### 1. Minimum wages

a. All laborers and mechanics employed or working upon the site of the work, will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions

of paragraph 1.d. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph 1.b. of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

b. (1) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

(i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(ii) The classification is utilized in the area by the construction industry; and

(iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(2) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(3) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. The Wage and Hour Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or

will notify the contracting officer within the 30-day period that additional time is necessary.

(4) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs 1.b.(2) or 1.b.(3) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

c. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

d. If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program. Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

## **2. Withholding**

The contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor under this contract, or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the contracting agency may, after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

## **3. Payrolls and basic records**

a. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-

Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

b. (1) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the contracting agency. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at <http://www.dol.gov/esa/whd/forms/wh347instr.htm> or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the contracting agency for transmission to the State DOT, the FHWA or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the contracting agency..

(2) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(i) That the payroll for the payroll period contains the information required to be provided under §5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under §5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;

(ii) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;

(iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(2) of this section.

(4) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.

c. The contractor or subcontractor shall make the records required under paragraph 3.a. of this section available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the FHWA may, after written notice to the contractor, the contracting agency or the State DOT, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

#### **4. Apprentices and trainees**

##### **a. Apprentices (programs of the USDOL).**

Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice.

The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly

rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

##### **b. Trainees (programs of the USDOL).**

Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration.

The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration.

Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

c. Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.

d. Apprentices and Trainees (programs of the U.S. DOT).

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeymen shall not be greater than permitted by the terms of the particular program.

**5. Compliance with Copeland Act requirements.** The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.

**6. Subcontracts.** The contractor or subcontractor shall insert Form FHWA-1273 in any subcontracts and also require the subcontractors to include Form FHWA-1273 in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.

**7. Contract termination: debarment.** A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

**8. Compliance with Davis-Bacon and Related Act requirements.** All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.

**9. Disputes concerning labor standards.** Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

**10. Certification of eligibility.**

a. By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

c. The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

**V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT**

The following clauses apply to any Federal-aid construction contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.

**1. Overtime requirements.** No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

**2. Violation; liability for unpaid wages; liquidated damages.** In the event of any violation of the clause set forth in paragraph (1.) of this section, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1.) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1.) of this section.

**3. Withholding for unpaid wages and liquidated damages.** The FHWA or the contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2.) of this section.

**4. Subcontracts.** The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1.) through (4.) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1.) through (4.) of this section.

## VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System.

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).

a. The term "perform work with its own organization" refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions:

- (1) the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;
- (2) the prime contractor remains responsible for the quality of the work of the leased employees;
- (3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and
- (4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.

b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract.

2. The contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.

3. The contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.

4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is

evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.

5. The 30% self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements.

## VII. SAFETY: ACCIDENT PREVENTION

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract.

2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).

3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C.3704).

## VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR 635) in one or more places where it is readily available to all persons concerned with the project:

18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 1, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined under this title or imprisoned not more than 5 years or both."

## **IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT**

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

By submission of this bid/proposal or the execution of this contract, or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

1. That any person who is or will be utilized in the performance of this contract is not prohibited from receiving an award due to a violation of Section 508 of the Clean Water Act or Section 306 of the Clean Air Act.

2. That the contractor agrees to include or cause to be included the requirements of paragraph (1) of this Section X in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements.

## **X. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION**

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost \$25,000 or more – as defined in 2 CFR Parts 180 and 1200.

### **1. Instructions for Certification – First Tier Participants:**

a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.

b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this

covered transaction. The prospective first tier participant 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 first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction.

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

d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

e. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction 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 or agency entering into this transaction.

g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.

h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (<https://www.epls.gov/>), which is compiled by the General Services Administration.

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

j. Except for transactions authorized under paragraph (f) of these instructions, if a participant 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 or agency may terminate this transaction for cause or default.

\* \* \* \* \*

## **2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:**

a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:

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

(2) 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;

(3) 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 offenses enumerated in paragraph (a)(2) of this certification; and

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

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

## **2. Instructions for Certification - Lower Tier Participants:**

(Applicable to all subcontracts, purchase orders and other lower tier transactions requiring prior FHWA approval or estimated to cost \$25,000 or more - 2 CFR Parts 180 and 1200)

a. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.

b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which

this transaction originated may pursue available remedies, including suspension and/or debarment.

c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.

d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction 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 or agency with which this transaction originated.

f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.

g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (<https://www.epls.gov/>), which is compiled by the General Services Administration.

h. 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 participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

i. Except for transactions authorized under paragraph e of these instructions, if a participant 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 or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

\* \* \* \* \*

**Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:**

1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency.

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

\* \* \* \* \*

**XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING**

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts which exceed \$100,000 (49 CFR 20).

1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

**ATTACHMENT A - EMPLOYMENT AND MATERIALS  
PREFERENCE FOR APPALACHIAN DEVELOPMENT  
HIGHWAY SYSTEM OR APPALACHIAN LOCAL ACCESS  
ROAD CONTRACTS**

This provision is applicable to all Federal-aid projects funded under the Appalachian Regional Development Act of 1965.

1. During the performance of this contract, the contractor undertaking to do work which is, or reasonably may be, done as on-site work, shall give preference to qualified persons who regularly reside in the labor area as designated by the DOL wherein the contract work is situated, or the subregion, or the Appalachian counties of the State wherein the contract work is situated, except:

a. To the extent that qualified persons regularly residing in the area are not available.

b. For the reasonable needs of the contractor to employ supervisory or specially experienced personnel necessary to assure an efficient execution of the contract work.

c. For the obligation of the contractor to offer employment to present or former employees as the result of a lawful collective bargaining contract, provided that the number of nonresident persons employed under this subparagraph (1c) shall not exceed 20 percent of the total number of employees employed by the contractor on the contract work, except as provided in subparagraph (4) below.

2. The contractor shall place a job order with the State Employment Service indicating (a) the classifications of the laborers, mechanics and other employees required to perform the contract work, (b) the number of employees required in each classification, (c) the date on which the participant estimates such employees will be required, and (d) any other pertinent information required by the State Employment Service to complete the job order form. The job order may be placed with the State Employment Service in writing or by telephone. If during the course of the contract work, the information submitted by the contractor in the original job order is substantially modified, the participant shall promptly notify the State Employment Service.

3. The contractor shall give full consideration to all qualified job applicants referred to him by the State Employment Service. The contractor is not required to grant employment to any job applicants who, in his opinion, are not qualified to perform the classification of work required.

4. If, within one week following the placing of a job order by the contractor with the State Employment Service, the State Employment Service is unable to refer any qualified job applicants to the contractor, or less than the number requested, the State Employment Service will forward a certificate to the contractor indicating the unavailability of applicants. Such certificate shall be made a part of the contractor's permanent project records. Upon receipt of this certificate, the contractor may employ persons who do not normally reside in the labor area to fill positions covered by the certificate, notwithstanding the provisions of subparagraph (1c) above.

5. The provisions of 23 CFR 633.207(e) allow the contracting agency to provide a contractual preference for the use of mineral resource materials native to the Appalachian region.

6. The contractor shall include the provisions of Sections 1 through 4 of this Attachment A in every subcontract for work which is, or reasonably may be, done as on-site work.

## **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).

SEPTEMBER 2002

**NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE  
EQUAL EMPLOYMENT OPPORTUNITY (EXECUTIVE ORDER 11246)**

1. The Offeror's or Bidder's attention is called to the "Employment Practices" and "Equal Opportunity Clause" set forth in the Required Contract Provisions, FHWA 1273.
2. The goals and timetables for minority and female participation expressed in percentage terms for the contractor's aggregate work force in each trade, on all construction work in the covered area, are as follows:

**Goals for Minority Participation for Each Trade:**

<u>County</u>	<u>%</u>	<u>County</u>	<u>%</u>	<u>County</u>	<u>%</u>
Adams	1.7	Iowa	1.7	Polk	2.2
Ashland	1.2	Iron	1.2	Portage	0.6
Barron	0.6	Jackson	0.6	Price	0.6
Bayfield	1.2	Jefferson	7.0	Racine	8.4
Brown	1.3	Juneau	0.6	Richland	1.7
Buffalo	0.6	Kenosha	3.0	Rock	3.1
Burnett	2.2	Kewaunee	1.0	Rusk	0.6
Calumet	0.9	La Crosse	0.9	St. Croix	2.9
Chippewa	0.5	Lafayette	0.5	Sauk	1.7
Clark	0.6	Langlade	0.6	Sawyer	0.6
Columbia	1.7	Lincoln	0.6	Shawano	1.0
Crawford	0.5	Manitowoc	1.0	Sheboygan	7.0
Dane	2.2	Marathon	0.6	Taylor	0.6
Dodge	7.0	Marinette	1.0	Trempealeau	0.6
Door	1.0	Marquette	1.7	Vernon	0.6
Douglas	1.0	Menominee	1.0	Vilas	0.6
Dunn	0.6	Milwaukee	8.0	Walworth	7.0
Eau Claire	0.5	Monroe	0.6	Washburn	0.6
Florence	1.0	Oconto	1.0	Washington	8.0
Fond du Lac	1.0	Oneida	0.6	Waukesha	8.0
Forest	1.0	Outagamie	0.9	Waupaca	1.0
Grant	0.5	Ozaukee	8.0	Waushara	1.0
Green	1.7	Pepin	0.6	Winnebago	0.9
Green Lake	1.0	Pierce	2.2	Wood	0.6

**Goals for female participation for each trade: 6.9%**

These goals are applicable to all the contractor's construction work, (whether or not it is federal or federally assisted), performed in the covered area. If the contractor performs construction work in the geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the contractor also is subject to the goals for both its federally involved and nonfederally involved construction.

The contractor's compliance with the Executive Order and the Regulations in 41 CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3(a), and its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from contractor to contractor or from project to project for the sole purpose of meeting the contractor's goals shall be a violation of the contract, the Executive Order and the Regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

3. The contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs within ten (10) working days of award of any construction subcontract in excess of \$10,000.00 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address and telephone number of the subcontractor, employer identification number of the subcontractor; estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the subcontract is to be performed.

As referred to in this section, the Director means:

Director  
Office of Federal Contract Compliance Programs  
Ruess Federal Plaza  
310 W. Wisconsin Ave., Suite 1115  
Milwaukee, WI 53202

The "Employer Identification Number" means the Federal Social Security number used on the Employer's Quarterly Federal Tax Return, U.S. Treasury Department Form 941.

4. As used in this notice, and in the contract resulting from solicitation, the "covered area" is the county(ies) in Wisconsin to which this proposal applies.

**APRIL 2013**

**ADDITIONAL FEDERAL-AID PROVISIONS**

**NOTICE TO ALL BIDDERS**

To report bid rigging activities call:

**1-800-424-9071**

The U.S. Department of Transportation (DOT) operates the above toll-free "hotline" Monday through Friday, 8:00 a.m. to 5:00 p.m., Eastern Time. Anyone with knowledge of possible bid rigging, bidding collusion, or other fraudulent activities should use the "hotline" to report such activities.

The "hotline" is part of the DOT's continuing effort to identify and investigate highway construction contract fraud and abuse and is operated under the direction of the DOT Inspector General. All information will be treated confidentially and caller anonymity will be respected.

**Effective August 2015 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 WS4567, 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 WS4567 is available at:

<https://wisconsindot.gov/hcciDocs/contracting-info/ws4567.doc>

## Cargo Preference Act Requirement

All Federal-aid projects shall comply with 46 CFR 381.7 (a) – (b) as follows:

*(a) Agreement Clauses. "Use of United States-flag vessels:"*

(1) Pursuant to Pub. L. 664 (43 U.S.C. 1241(b)) at least 50 percent of any equipment, materials or commodities procured, contracted for or otherwise obtained with funds granted, guaranteed, loaned, or advanced by the U.S. Government under this agreement, and which may be transported by ocean vessel, shall be transported on privately owned United States-flag commercial vessels, if available.

(2) Within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, 'on-board' commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph (a)(1) of this section shall be furnished to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590."

*(b) Contractor and Subcontractor Clauses. "Use of United States-flag vessels: The contractor agrees—"*

(1) To utilize privately owned United States-flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to this contract, to the extent such vessels are available at fair and reasonable rates for United States-flag commercial vessels.

(2) To furnish within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, 'on-board' commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph (b) (1) of this section to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590.

(3) To insert the substance of the provisions of this clause in all subcontracts issued pursuant to this contract.

**WISCONSIN DEPARTMENT OF TRANSPORTATION  
DIVISION OF TRANSPORTATION AND SYSTEM DEVELOPMENT**

**SUPPLEMENTAL REQUIRED CONTRACT PROVISIONS  
FOR PROJECTS WITH FEDERAL AID**

**I. PREVAILING WAGE RATES**

The attached U.S. Department of Labor (Davis-Bacon Minimum Wage Rates) furnishes the minimum prevailing wage rates pursuant to the Davis-Bacon and Related Acts. The wage rates shown are the minimum rates required by the contract to be paid during its life, however this is not a representation that labor can be obtained at these rates. It is the responsibility of bidders to inform themselves as to the local labor conditions and prospective changes or adjustments of wage rates. No increase in the contract price will be allowed or authorized on account of the payment of wage rates in excess of those listed herein.

**II. COVERAGE OF TRUCK DRIVERS**

Truck drivers are covered by Davis-Bacon Minimum Wage Rates in the following circumstances:

- Drivers of a contractor or subcontractor for time spent working on the site of the work.
- Drivers of a contractor or subcontractor for time spent loading and/or unloading materials and supplies on the site of the work, if such time is not de minimis. [https://www.dol.gov/whd/FOH/FOH\\_Ch15.pdf](https://www.dol.gov/whd/FOH/FOH_Ch15.pdf)
- Truck drivers transporting materials or supplies between a facility that is deemed part of the site of the work and the actual construction site.
- Truck drivers transporting portions of the building or work between a site established specifically for the performance of the contract where a significant portion of such building or work is constructed and the physical place where the building or work called for in the contract will remain.

Truck drivers are not covered by Davis-Bacon Minimum Wage Rates in the following circumstances:

- Material delivery truck drivers while off the site of the work.
- Drivers of a contractor or subcontractor traveling between a Davis-Bacon job and a commercial supply facility while they are off the site of the work."
- Truck drivers whose time spent on the site of the work is de minimis, such as only a few minutes at a time merely to pick up or drop off materials or supplies.

Details are available online at:

<https://www.dol.gov/whd/recovery/pwrb/Tab9.pdf>

<https://wisconsindot.gov/Pages/doing-bus/civil-rights/labornwage/trckng.aspx>

### **III. POSTINGS AT THE SITE OF THE WORK**

In addition to the required postings furnished by the department, the contractor shall post the following in at least one conspicuous and accessible place at the site of work:

- a. A copy of the contractor's Equal Employment Opportunity Policy.

All required documents shall be posted by the first day of work and be accurate and complete. Postings must be readable, in an area where they will be noticed, and maintained until the last day of work.

### **IV. RESOURCES**

Required information regarding compliance with federal provisions is found in the following resources:

- FHWA-1273 included in this contract
- U.S. Department of Labor Prevailing Wage Resource Book
- U.S. Department of Labor Field Operations Handbook
- U.S. Code of Federal Regulations
- Any applicable law, Act, or Executive Order enacted by the federal government at the time of the letting of this contract

"General Decision Number: WI20200010 03/06/2020

Superseded General Decision Number: WI20190010

State: Wisconsin

Construction Type: Highway

Counties: Wisconsin Statewide.

HIGHWAY, AIRPORT RUNWAY & TAXIWAY CONSTRUCTION PROJECTS (does not include bridges over navigable waters; tunnels; buildings in highway rest areas; and railroad construction)

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.80 for calendar year 2020 applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.80 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2020. If this contract is covered by the EO and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must pay workers in that classification at least the wage rate determined through the conformance process set forth in 29 CFR 5.5(a)(1)(ii) (or the EO minimum wage rate, if it is higher than the conformed wage rate). The EO minimum wage rate will be adjusted annually. Please note that this EO applies to the above-mentioned types of contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but it does not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60). Additional information on contractor requirements and worker protections under the EO is available at [www.dol.gov/whd/govcontracts](http://www.dol.gov/whd/govcontracts).

Modification Number	Publication Date
0	01/03/2020
1	01/24/2020
2	02/28/2020
3	03/06/2020

BRWI0001-002 06/03/2019

CRAWFORD, JACKSON, JUNEAU, LA CROSSE, MONROE, TREMPLEAU, AND VERNON COUNTIES

	Rates	Fringes
BRICKLAYER.....	\$ 33.80	24.28
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BRWI0002-002 06/01/2019		

ASHLAND, BAYFIELD, DOUGLAS, AND IRON COUNTIES

	Rates	Fringes
BRICKLAYER.....	\$ 39.94	23.30
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BRWI0002-005 06/01/2019		

ADAMS, ASHLAND, BARRON, BROWN, BURNETT, CALUMET, CHIPPEWA,  
CLARK, COLUMBIA, DODGE, DOOR, DUNN, FLORENCE, FOND DU LAC,  
FOREST, GREEN LAKE, IRON, JEFFERSON, KEWAUNEE, LANGLADE,  
LINCOLN, MANITOWOC, MARATHON, MARINETTE, MARQUETTE, MENOMINEE,  
OCONTO, ONEIDA, OUTAGAMIE, POLK, PORTAGE, RUSK, ST CROIX, SAUK,  
SHAWANO, SHEBOYGAN, TAYLOR, VILAS, WALWORTH, WAUPACA, WAUSHARA,  
WINNEBAGO, AND WOOD COUNTIES

	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER...	\$ 35.51	23.37
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BRWI0003-002 06/03/2019		

BROWN, DOOR, FLORENCE, KEWAUNEE, MARINETTE, AND OCONTO COUNTIES

	Rates	Fringes
BRICKLAYER.....	\$ 34.18	23.90
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BRWI0004-002 06/01/2019		

KENOSHA, RACINE, AND WALWORTH COUNTIES

	Rates	Fringes
BRICKLAYER.....	\$ 38.43	25.10
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BRWI0006-002 06/01/2019		

ADAMS, CLARK, FOREST, LANGLADE, LINCOLN, MARATHON, MENOMINEE,  
ONEIDA, PORTAGE, PRICE, TAYLOR, VILAS AND WOOD COUNTIES

	Rates	Fringes
BRICKLAYER.....	\$ 35.06	23.02
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BRWI0007-002 06/03/2019		

GREEN, LAFAYETTE, AND ROCK COUNTIES

	Rates	Fringes
BRICKLAYER.....	\$ 35.57	24.22
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BRWI0008-002 06/01/2019		

MILWAUKEE, OZAUKEE, WASHINGTON, AND WAUKESHA COUNTIES

	Rates	Fringes
BRICKLAYER.....	\$ 38.93	24.22
-----		
BRWI0011-002 06/03/2019		

CALUMET, FOND DU LAC, MANITOWOC, AND SHEBOYGAN COUNTIES

	Rates	Fringes
BRICKLAYER.....	\$ 34.18	23.90
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BRWI0019-002 06/03/2019		

BARRON, BUFFALO, BURNETT, CHIPPEWA, DUNN, EAU CLAIRE, PEPIN,  
PIERCE, POLK, RUSK, ST. CROIX, SAWYER AND WASHBURN COUNTIES

	Rates	Fringes
BRICKLAYER.....	\$ 33.40	24.68
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BRWI0034-002 06/03/2019		

COLUMBIA AND SAUK COUNTIES

	Rates	Fringes
BRICKLAYER.....	\$ 35.56	24.23
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CARP0087-001 05/01/2016		

BURNETT (W. of Hwy 48), PIERCE (W. of Hwy 29), POLK (W. of Hwys  
35, 48 & 65), AND ST. CROIX (W. of Hwy 65) COUNTIES

	Rates	Fringes
Carpenter & Piledrivermen.....	\$ 36.85	18.39
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CARP0252-002 06/01/2016		

ADAMS, BARRON, BAYFIELD (Eastern 2/3), BROWN, BUFFALO,  
BURNETT (E. of Hwy 48), CALUMET, CHIPPEWA, CLARK, COLUMBIA,  
CRAWFORD, DANE, DODGE, DOOR, DUNN, EAU CLAIRE, FLORENCE (except  
area bordering Michigan State Line), FOND DU LAC, FOREST,  
GRANT, GREEN, GREEN LAKE, IOWA, IRON, JACKSON, JEFFERSON,  
JUNEAU, KEWAUNEE, LA CROSSE, LAFAYETTE, LANGLADE, LINCOLN,  
MANITOWOC, MARATHON, MARINETTE (except N.E. corner), MARQUETTE,  
MENOMINEE, MONROE, OCONTO, ONEIDA, OUTAGAMIE, PEPIN, PIERCE (E.  
of Hwys 29 & 65), POLK (E. of Hwys 35, 48 & 65), PORTAGE,  
PRICE, RICHLAND, ROCK, RUSK, SAUK, SAWYER, SHAWANO, SHEBOYGAN,  
ST CROIX (E. of Hwy 65), TAYLOR, TREMPLEAU, VERNON, VILAS,  
WALWORTH, WASHBURN, WAUPACA, WAUSHARA, WINNEBAGO, AND WOOD  
COUNTIES

	Rates	Fringes
CARPENTER		
CARPENTER.....	\$ 33.56	18.00
MILLWRIGHT.....	\$ 35.08	18.35
PILEDRIIVER.....	\$ 34.12	18.00

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CARP0252-010 06/01/2016

ASHLAND COUNTY

	Rates	Fringes
Carpenters		
Carpenter.....	\$ 33.56	18.00
Millwright.....	\$ 35.08	18.35
Pile Driver.....	\$ 34.12	18.00

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CARP0264-003 06/01/2016

KENOSHA, MILWAUKEE, OZAUKEE, RACINE, WAUKESHA, AND WASHINGTON COUNTIES

	Rates	Fringes
CARPENTER.....	\$ 35.78	22.11

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CARP0361-004 05/01/2018

BAYFIELD (West of Hwy 63) AND DOUGLAS COUNTIES

	Rates	Fringes
CARPENTER.....	\$ 36.15	20.43

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CARP2337-001 06/01/2016

ZONE A: MILWAUKEE, OZAUKEE, WAUKESHA AND WASHINGTON

ZONE B: KENOSHA & RACINE

	Rates	Fringes
PILEDRIVERMAN		
Zone A.....	\$ 31.03	22.69
Zone B.....	\$ 31.03	22.69

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ELEC0014-002 06/03/2019

ASHLAND, BARRON, BAYFIELD, BUFFALO, BURNETT, CHIPPEWA, CLARK (except Maryville, Colby, Unity, Sherman, Fremont, Lynn & Sherwood), CRAWFORD, DUNN, EAU CLAIRE, GRANT, IRON, JACKSON, LA CROSSE, MONROE, PEPIN, PIERCE, POLK, PRICE, RICHLAND, RUSK, ST CROIX, SAWYER, TAYLOR, TREMPLEAU, VERNON, AND WASHBURN COUNTIES

	Rates	Fringes
Electricians:.....	\$ 35.59	20.87

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ELEC0014-007 06/03/2019

REMAINING COUNTIES

	Rates	Fringes
Teledata System Installer Installer/Technician.....	\$ 27.25	14.34

Low voltage construction, installation, maintenance and removal of teledata facilities (voice, data, and video) including outside plant, telephone and data inside wire, interconnect, terminal equipment, central offices, PABX, fiber optic cable and equipment, micro waves, V-SAT, bypass, CATV, WAN (wide area networks), LAN (local area networks), and ISDN (integrated systems digital network).

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ELEC0127-002 06/01/2019

KENOSHA COUNTY

	Rates	Fringes
Electricians:.....	\$ 40.49	30%+12.07

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ELEC0158-002 06/03/2019

BROWN, DOOR, KEWAUNEE, MANITOWOC (except Schleswig), MARINETTE (Wausaukee and area South thereof), OCONTO, MENOMINEE (East of a line 6 miles West of the West boundary of Oconto County), SHAWANO (Except Area North of Townships of Aniwa and Hutchins) COUNTIES

	Rates	Fringes
Electricians:.....	\$ 33.52	29.75%+10.26

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ELEC0159-003 06/01/2019

COLUMBIA, DANE, DODGE (Area West of Hwy 26, except Chester and Emmet Townships), GREEN, LAKE (except Townships of Berlin, Seneca, and St. Marie), IOWA, MARQUETTE (except Townships of Neshkoka, Crystal Lake, Newton, and Springfield), and SAUK COUNTIES

	Rates	Fringes
Electricians:.....	\$ 40.30	22.24

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ELEC0219-004 06/01/2016

FLORENCE COUNTY (Townships of Aurora, Commonwealth, Fern, Florence and Homestead) AND MARINETTE COUNTY (Township of Niagara)

	Rates	Fringes
Electricians:		
Electrical contracts over \$180,000.....	\$ 32.38	18.63
Electrical contracts under \$180,000.....	\$ 30.18	18.42

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ELEC0242-005 05/16/2018

DOUGLAS COUNTY

	Rates	Fringes
Electricians:.....	\$ 36.85	26.17

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ELEC0388-002 06/03/2019

ADAMS, CLARK (Colby, Freemont, Lynn, Mayville, Sherman, Sherwood, Unity), FOREST, JUNEAU, LANGLADE, LINCOLN, MARATHON, MARINETTE (Beecher, Dunbar, Goodman & Pembine), MENOMINEE (Area West of a line 6 miles West of the West boundary of Oconto County), ONEIDA, PORTAGE, SHAWANO (Aniwa and Hutchins), VILAS AND WOOD COUNTIES

	Rates	Fringes
Electricians:.....	\$ 33.56	26%+11.01

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ELEC0430-002 01/01/2020

RACINE COUNTY (Except Burlington Township)

	Rates	Fringes
Electricians:.....	\$ 40.30	22.19

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ELEC0494-005 06/01/2019

MILWAUKEE, OZAUKEE, WASHINGTON, AND WAUKESHA COUNTIES

	Rates	Fringes
Electricians:.....	\$ 41.03	25.11

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\* ELEC0494-006 01/01/2020

CALUMET (Township of New Holstein), DODGE (East of Hwy 26 including Chester Township), FOND DU LAC, MANITOWOC (Schleswig), and SHEBOYGAN COUNTIES

	Rates	Fringes
Electricians:.....	\$ 34.99	22.31
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ELEC0494-013 06/01/2019		

DODGE (East of Hwy 26 including Chester Twp, excluding Emmet Twp), FOND DU LAC (Except Waupun), MILWAUKEE, OZAUKEE, MANITOWOC (Schleswig), WASHINGTON, AND WAUKESHA COUNTIES

	Rates	Fringes
Sound & Communications		
Installer.....	\$ 20.53	18.13
Technician.....	\$ 30.18	19.58

Installation, testing, maintenance, operation and servicing of all sound, intercom, telephone interconnect, closed circuit TV systems, radio systems, background music systems, language laboratories, electronic carillon, antenna distribution systems, clock and program systems and low-voltage systems such as visual nurse call, audio/visual nurse call systems, doctors entrance register systems. Includes all wire and cable carrying audio, visual, data, light and radio frequency signals. Includes the installation of conduit, wiremold, or raceways in existing structures that have been occupied for six months or more where required for the protection of the wire or cable, but does not mean a complete conduit or raceway system. work covered does not include the installation of conduit, wiremold or any raceways in any new construction, or the installation of power supply outlets by means of which external electric power is supplied to any of the foregoing equipment or products

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ELEC0577-003 06/01/2019

CALUMET (except Township of New Holstein), GREEN LAKE (N. part including Townships of Berlin, St Marie, and Seneca), MARQUETTE (N. part including Townships of Crystal Lake, Neshkoro, Newton, and Springfield), OUTAGAMIE, WAUPACA, WAUSHARA, AND WINNEBAGO COUNTIES

	Rates	Fringes
Electricians:.....	\$ 33.15	28.50%+10.00
-----		
ELEC0890-003 06/01/2019		

DODGE (Emmet Township only), GREEN, JEFFERSON, LAFAYETTE, RACINE (Burlington Township), ROCK AND WALWORTH COUNTIES

	Rates	Fringes
Electricians:.....	\$ 35.91	25.95%+10.83

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ELEC0953-001 06/02/2019

	Rates	Fringes
Line Construction:		
(1) Lineman.....	\$ 47.53	21.43
(2) Heavy Equipment Operator.....	\$ 42.78	19.80
(3) Equipment Operator.....	\$ 38.02	18.40
(4) Heavy Groundman Driver..	\$ 33.27	16.88
(5) Light Groundman Driver..	\$ 30.89	16.11
(6) Groundsman.....	\$ 26.14	14.60

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ENGI0139-005 06/03/2019

	Rates	Fringes
Power Equipment Operator		
Group 1.....	\$ 41.17	23.03
Group 2.....	\$ 40.67	23.03
Group 3.....	\$ 40.17	23.03
Group 4.....	\$ 39.91	23.03
Group 5.....	\$ 39.62	23.03
Group 6.....	\$ 33.72	23.03

#### HAZARDOUS WASTE PREMIUMS:

EPA Level ""A"" protection - \$3.00 per hour  
EPA Level ""B"" protection - \$2.00 per hour  
EPA Level ""C"" protection - \$1.00 per hour

#### POWER EQUIPMENT OPERATORS CLASSIFICATIONS

GROUP 1: Cranes, tower cranes, and derricks with or without attachments with a lifting capacity of over 100 tons; or cranes, tower cranes, and derricks with boom, leads and/or jib lengths measuring 176 feet or longer.

GROUP 2: Cranes, tower cranes and derricks with or without attachments with a lifting capacity of 100 tons or less; or cranes, tower cranes, and derricks with boom, leads, and/or jibs lengths measuring 175 feet or under and Backhoes (excavators) weighing 130,000 lbs and over; caisson rigs; pile driver; dredge operator; dredge engineer; Boat Pilot.

GROUP 3: Mechanic or welder - Heavy duty equipment; cranes with a lifting capacity of 25 tons or under; concrete breaker (manual or remote); vibratory/sonic concrete breaker; concrete laser screed; concrete slipform paver; concrete batch plant operator; concrete pvt. spreader - heavy duty (rubber tired); concrete spreader & distributor; automatic subgrader (concrete); concrete grinder & planing machine; concrete slipform curb & gutter machine; slipform concrete placer; tube finisher; hydro blaster (10,000 psi & over); bridge paver; concrete conveyor system; concrete

pump; Rotec type Conveyor; stabilizing mixer (self-propelled); shoulder widener; asphalt plant engineer; bituminous paver; bump cutter & grooving machine; milling machine; screed (bituminous paver); asphalt heater, planer & scarifier; Backhoes (excavators) weighing under 130,000 lbs; grader or motor patrol; tractor (scraper, dozer, pusher, loader); scraper - rubber tired (single or twin engine); endloader; hydraulic backhoe (tractor type); trenching machine; skid rigs; tractor, side boom (heavy); drilling or boring machine (mechanical heavy); roller over 5 tons; percussion or rotary drilling machine; air track; blaster; loading machine (conveyor); tugger; boatmen; winches & A-frames; post driver; material hoist.

GROUP 4: Greaser, roller steel (5 tons or less); roller (pneumatic tired) - self propelled; tractor (mounted or towed compactors & light equipment); shouldering machine; self- propelled chip spreader; concrete spreader; finishing machine; mechanical float; curing machine; power subgrader; joint sawer (multiple blade) belting machine; burlap machine; texturing machine; tractor endloader (rubber tired) - light; jeep digger; forklift; mulcher; launch operator; fireman, environmental burner

GROUP 5: Air compressor; power pack; vibrator hammer and extractor; heavy equipment, leadman; tank car heaters; stump chipper; curb machine operator; Concrete proportioning plants; generators; mudjack operator; rock breaker; crusher or screening plant; screed (milling machine); automatic belt conveyor and surge bin; pug mill operator; Oiler, pump (over 3 inches); Drilling Machine Tender.

GROUP 6: Off-road material hauler with or without ejector.

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IRON0008-002 06/01/2019

BROWN, CALUMET, DOOR, FOND DU LAC, KEWAUNEE, MANITOWOC, MARINETTE, OCONTO, OUTAGAMI, SHAWANO, SHEBOYGAN, AND WINNEBAGO COUNTIES:

	Rates	Fringes
IRONWORKER.....	\$ 35.07	27.62

Paid Holidays: New Year's Day, Memorial Day, July 4th, Labor Day, Thanksgiving Day & Christmas Day.

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IRON0008-003 06/01/2019

KENOSHA, MILWAUKEE, OZAUKEE, RACINE, WALWORTH (N.E. 2/3), WASHINGTON, AND WAUKESHA COUNTIES

	Rates	Fringes
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IRONWORKER.....\$ 37.12 27.87

Paid Holidays: New Year's Day, Memorial Day, July 4th, Labor Day, Thanksgiving Day & Christmas Day.

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IRON0383-001 06/01/2019

ADAMS, COLUMBIA, CRAWFORD, DANE, DODGE, FLORENCE, FOREST, GRANT, GREENE, (Excluding S.E. tip), GREEN LAKE, IOWA, JEFFERSON, JUNEAU, LA CROSSE, LAFAYETTE, LANGLADE, MARATHON, MARQUETTE, MENOMINEE, MONROE, PORTAGE, RICHLAND, ROCK (Northern area, vicinity of Edgerton and Milton), SAUK, VERNON, WAUPACA, WAUSHARA, AND WOOD COUNTIES

	Rates	Fringes
IRONWORKER.....	\$ 35.50	26.57

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IRON0498-005 06/01/2019

GREEN (S.E. 1/3), ROCK (South of Edgerton and Milton), and WALWORTH (S.W. 1/3) COUNTIES:

	Rates	Fringes
IRONWORKER.....	\$ 40.25	40.53

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IRON0512-008 06/03/2019

BARRON, BUFFALO, CHIPPEWA, CLARK, DUNN, EAU CLAIRE, JACKSON, PEPIN, PIERCE, POLK, RUSK, ST CROIX, TAYLOR, AND TREMPLEAU COUNTIES

	Rates	Fringes
IRONWORKER.....	\$ 37.60	29.40

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IRON0512-021 06/03/2019

ASHLAND, BAYFIELD, BURNETT, DOUGLAS, IRON, LINCOLN, ONEIDA, PRICE, SAWYER, VILAS AND WASHBURN COUNTIES

	Rates	Fringes
IRONWORKER.....	\$ 33.19	29.40

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LAB00113-002 06/03/2019

MILWAUKEE AND WAUKESHA COUNTIES

	Rates	Fringes
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LABORER

Group 1.....	\$ 29.02	21.92
Group 2.....	\$ 29.17	21.92
Group 3.....	\$ 29.37	21.92
Group 4.....	\$ 29.52	21.92
Group 5.....	\$ 29.67	21.92
Group 6.....	\$ 25.51	21.92

LABORERS CLASSIFICATIONS

GROUP 1: General Laborer; Tree Trimmer; Conduit Layer; Demolition and Wrecking Laborer; Guard Rail, Fence, and Bridge Builder; Landscaper; Multiplate Culvert Assembler; Stone Handler; Bituminous Worker (Shoveler, Loader, and Utility Man); Batch Truck Dumper or Cement Handler; Bituminous Worker (Dumper, Ironer, Smoother, and Tamper); Concrete Handler

GROUP 2: Air Tool Operator; Joint Sawyer and Filler (Pavement); Vibrator or Tamper Operator (Mechanical Hand Operated); Chain Saw Operator; Demolition Burning Torch Laborer

GROUP 3: Bituminous Worker (Raker and Luteman); Formsetter (Curb, Sidewalk, and Pavement); Strike Off Man

GROUP 4: Line and Grade Specialist

GROUP 5: Blaster and Powderman

GROUP 6: Flagperson; traffic control person

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LAB00113-003 06/03/2019

OZAUKEE AND WASHINGTON COUNTIES

	Rates	Fringes
LABORER		
Group 1.....	\$ 28.27	21.92
Group 2.....	\$ 28.37	21.92
Group 3.....	\$ 28.42	21.92
Group 4.....	\$ 28.62	21.92
Group 5.....	\$ 28.47	21.92
Group 6.....	\$ 25.36	21.92

LABORERS CLASSIFICATIONS

GROUP 1: General Laborer; Tree Trimmer; Conduit Layer; Demolition and Wrecking Laborer; Guard Rail, Fence, and Bridge Builder; Landscaper; Multiplate Culvert Assembler; Stone Handler; Bituminous Worker (Shoveler, Loader, and Utility Man); Batch Truck Dumper or Cement Handler; Bituminous Worker (Dumper, Ironer, Smoother, and Tamper); Concrete Handler

GROUP 2: Air Tool Operator; Joint Sawyer and Filler

(Pavement); Vibrator or Tamper Operator (Mechanical Hand Operated);

GROUP 3: Bituminous Worker (Raker and Luteman); Formsetter (Curb, Sidewalk, and Pavement); Strike Off Man

GROUP 4: Line and Grade Specialist

GROUP 5: Blaster; powderman

GROUP 6: Flagperson and Traffic Control Person

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LAB00113-011 06/03/2019

KENOSHA AND RACINE COUNTIES

	Rates	Fringes
LABORER		
Group 1.....	\$ 28.08	21.92
Group 2.....	\$ 28.23	21.92
Group 3.....	\$ 28.43	21.92
Group 4.....	\$ 28.40	21.92
Group 5.....	\$ 28.73	21.92
Group 6.....	\$ 25.22	21.92

LABORERS CLASSIFICATIONS:

GROUP 1: General laborer; Tree Trimmer; Conduit Layer; Demolition and Wrecking Laborer; Guard Rail, Fence, and Bridge Builder; Landscaper; Multiplate Culvert Assembler; Stone Handler; Bituminous Worker (Shoveler, Loader, and Utility Man); Batch Truck Dumper or Cement Handler; Bituminous worker (Dumper, Ironer, Smoother, and Tamper); Concrete Handler

GROUP 2: Air Tool Operator; Joint Sawyer and Filler (Pavement); Vibrator or Tamper Operator (Mechanical Hand Operated); Chain Saw Operator; Demolition Burning Torch Laborer

GROUP 3: Bituminous Worker (Raker and Luteman); Formsetter (Curb, Sidewalk, and Pavement); Strike Off Man

GROUP 4: Line and Grade Specialist

GROUP 5: Blaster and Powderman

GROUP 6: Flagman; traffic control person

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LAB00140-002 06/03/2019

ADAMS, ASHLAND, BARRON, BAYFIELD, BROWN, BUFFALO, BURNETT, CALUMET, CHIPPEWA, CLARK, COLUMBIA, CRAWFORD, DODGE, DOOR, DOUGLAS, DUNN, EAU CLAIRE, FLORENCE, FOND DU LAC, FOREST, GRANT, GREEN, GREEN LAKE, IRON, JACKSON, JUNEAU, IOWA,

JEFFERSON, KEWAUNEE, LA CROSSE, LAFAYETTE, LANGLADE, LINCOLN,  
 MANITOWOC, MARATHON, MARINETTE, MARQUETTE, MENOMINEE, MONROE,  
 OCONTO, ONEIDA, OUTAGAMIE, PEPIN, PIERCE, POLK, PORTAGE, PRICE,  
 RICHLAND, ROCK, RUSK, SAUK, SAWYER, SHAWANO, SHEBOYGAN, ST.  
 CROIX, TAYLOR, TREMPLEAU, VERNON, VILLAS, WALWORTH, WASHBURN,  
 WAUPACA, WAUSHARA, WINNEBAGO, AND WOOD COUNTIES

	Rates	Fringes
LABORER		
Group 1.....	\$ 32.84	17.54
Group 2.....	\$ 32.94	17.54
Group 3.....	\$ 32.99	17.54
Group 4.....	\$ 33.19	17.54
Group 5.....	\$ 33.04	17.54
Group 6.....	\$ 29.47	17.54

#### LABORER CLASSIFICATIONS

GROUP 1: General Laborer; Tree Trimmer; Conduit Layer;  
 Demolition and Wrecking Laborer; Guard Rail, Fence, and  
 Bridge Builder; Landscaper; Multiplate Culvert Assembler;  
 Stone Handler; Bituminous Worker (Shoveler, Loader, and  
 Utility Man); Batch Truck Dumper or Cement Handler;  
 Bituminous Worker (Dumper, Ironer, Smoother and Tamper);  
 Concrete Handler

GROUP 2: Air Tool Operator; Joint Sawyer and Filler  
 (Pavement); Vibrator or Tamper Operator (Mechanical Hand  
 Operated); Chain Saw Operator, Demolition Burning Torch  
 Laborer

GROUP 3: Bituminous Worker (Raker and Luteman); Formsetter  
 (Curb, Sidewalk and Pavement); Strike Off Man

GROUP 4: Line and Grade Specialist

GROUP 5: Blaster; powderman

GROUP 6: Flagperson; Traffic Control

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 LAB00464-003 06/03/2019

#### DANE COUNTY

	Rates	Fringes
LABORER		
Group 1.....	\$ 33.12	17.54
Group 2.....	\$ 33.22	17.54
Group 3.....	\$ 33.27	17.54
Group 4.....	\$ 33.47	17.54
Group 5.....	\$ 33.32	17.54
Group 6.....	\$ 29.47	17.54

#### LABORERS CLASSIFICATIONS:

GROUP 1: General Laborer; Tree Trimmer; Conduit Layer; Demolition and Wrecking Laborer; Guard Rail, Fence, and Bridge Builder; Landscaper; Multiplate Culvert Assembler; Stone Handler; Bituminous Worker (Shoveler, Loader, and Utility Man); Batch Truck Dumper or Cement Handler; Bituminous Worker (Dumper, Ironer, Smoother, and Tamper); Concrete Handler

GROUP 2: Air Tool Operator; Joint Sawyer and Filler (Pavement); Vibrator or Tamper Operator (Mechanical Hand Operated); Chain Saw Operator; Demolition Burning Torch Laborer

GROUP 3: Bituminous Worker (Raker and Luteman); Formsetter (Curb, Sidewalk, and Pavement); Strike Off Man

GROUP 4: Line and Grade Specialist

GROUP 5: Blaster; Powderman

GROUP 6: Flagperson and Traffic Control Person

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PAIN0106-008 05/01/2017

ASHLAND, BAYFIELD, BURNETT, AND DOUGLAS COUNTIES

	Rates	Fringes
Painters:		
New:		
Brush, Roller.....	\$ 30.33	17.27
Spray, Sandblast, Steel....	\$ 30.93	17.27
Repaint:		
Brush, Roller.....	\$ 28.83	17.27
Spray, Sandblast, Steel....	\$ 29.43	17.27

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PAIN0108-002 06/01/2019

RACINE COUNTY

	Rates	Fringes
Painters:		
Brush, Roller.....	\$ 36.08	20.36
Spray & Sandblast.....	\$ 37.08	20.36

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PAIN0259-002 05/01/2008

BARRON, CHIPPEWA, DUNN, EAU CLAIRE, PEPIN, PIERCE, POLK, RUSK, SAWYER, ST. CROIX, AND WASHBURN COUNTIES

	Rates	Fringes
PAINTER.....	\$ 24.11	12.15

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PAIN0259-004 05/01/2015

BUFFALO, CRAWFORD, JACKSON, LA CROSSE, MONROE, TREMPLEAU, AND  
VERNON COUNTIES

	Rates	Fringes
PAINTER.....	\$ 22.03	12.45

PAIN0781-002 06/01/2019

JEFFERSON, MILWAUKEE, OZAUKEE, WASHINGTON, AND WAUKESHA COUNTIES

	Rates	Fringes
Painters:		
Bridge.....	\$ 33.30	23.86
Brush.....	\$ 32.95	23.86
Spray & Sandblast.....	\$ 33.70	23.86

PAIN0802-002 06/01/2019

COLUMBIA, DANE, DODGE, GRANT, GREEN, IOWA, LAFAYETTE, RICHLAND,  
ROCK, AND SAUK COUNTIES

	Rates	Fringes
PAINTER		
Brush.....	\$ 30.93	18.44

PREMIUM PAY:  
    Structural Steel, Spray, Bridges =   \$1.00 additional per  
    hour.

PAIN0802-003 06/01/2019

ADAMS, BROWN, CALUMET, CLARK, DOOR, FOND DU LAC, FOREST, GREEN  
LAKE, IRON, JUNEAU, KEWAUNEE, LANGLADE, LINCOLN, MANITOWOC,  
MARATHON, MARINETTE, MARQUETTE, MENOMINEE, OCONTO, ONEIDA,  
OUTAGAMIE, PORTAGE, PRICE, SHAWANO, SHEBOYGAN, TAYLOR, VILAS,  
WAUSHARA, WAUPACA, WINNEBAGO, AND WOOD COUNTIES

	Rates	Fringes
PAINTER.....	\$ 30.93	18.58

PAIN0934-001 06/01/2017

KENOSHA AND WALWORTH COUNTIES

	Rates	Fringes
Painters:		
Brush.....	\$ 33.74	18.95

Spray.....	\$ 34.74	18.95
Structural Steel.....	\$ 33.89	18.95

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PAIN1011-002 06/02/2019

FLORENCE COUNTY

	Rates	Fringes
Painters:.....	\$ 25.76	13.33

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PLAS0599-010 06/01/2017

	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER		
Area 1.....	\$ 39.46	17.17
Area 2 (BAC).....	\$ 35.07	19.75
Area 3.....	\$ 35.61	19.40
Area 4.....	\$ 34.70	20.51
Area 5.....	\$ 36.27	18.73
Area 6.....	\$ 32.02	22.99

AREA DESCRIPTIONS

AREA 1: BAYFIELD, DOUGLAS, PRICE, SAWYER, AND WASHBURN COUNTIES

AREA 2: ADAMS, ASHLAND, BARRON, BROWN, BURNETT, CALUMET, CHIPPEWA, CLARK, COLUMBIA, DODGE, DOOR, DUNN, FLORENCE, FOND DU LAC, FOREST, GREEN LAKE, IRON, JEFFERSON, KEWAUNEE, LANGLADE, LINCOLN, MANITOWOC, MARATHON, MARINETTE, MARQUETTE, MENOMINEE, OCONTO, ONEIDA, OUTAGAMIE, POLK, PORTAGE, RUSK, ST CROIX, SAUK, SHAWANO, SHEBOYGAN, TAYLOR, VILAS, WALWORTH, WAUPACA, WAUSHARA, WINNEBAGO, AND WOOD COUNTIES

AREA 3: BUFFALO, CRAWFORD, EAU CLAIRE, JACKSON, JUNEAU, LA CROSSE MONROE, PEPIN, PIERCE, RICHLAND, TREMPLEAU, AND VERNON COUNTIES

AREA 4: MILWAUKEE, OZAUKEE, WASHINGTON, AND WAUKESHA COUNTIES

AREA 5: DANE, GRANT, GREEN, IOWA, LAFAYETTE, AND ROCK COUNTIES

AREA 6: KENOSHA AND RACINE COUNTIES

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TEAM0039-001 06/01/2019

	Rates	Fringes
TRUCK DRIVER		
1 & 2 Axles.....	\$ 29.57	22.03
3 or more Axles; Euclids Dumptor & Articulated,		

Truck Mechanic.....	\$ 29.72	22.03
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WELL DRILLER.....	\$ 16.52	3.70
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WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

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Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at [www.dol.gov/whd/govcontracts](http://www.dol.gov/whd/govcontracts).

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

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The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of ""identifiers"" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

#### Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than ""SU"" or ""UAVG"" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing

the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

#### Survey Rate Identifiers

Classifications listed under the ""SU"" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

#### Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

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#### WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- \* an existing published wage determination
- \* a survey underlying a wage determination
- \* a Wage and Hour Division letter setting forth a position on a wage determination matter

\* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations  
Wage and Hour Division  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISION"

**August 2018**

## **NOTICE TO BIDDERS WAGE RATE DECISION**

The wage rate decision of the Department of Labor which has been incorporated in these advertised specifications is incomplete in that the classifications may be omitted from the Department of Labor's decision.

Since the bidder is responsible, independently, for ascertaining area practice with respect to the necessity, or lack of necessity, for the use of these classifications in the prosecution of the work contemplated by this project, no inference may be drawn from the omission of these classifications concerning prevailing area practices relative to their use. Further, this omission will not, per se, be construed as establishing any governmental liability for increased labor cost if it is subsequently determined that such classifications are required.

There may be omissions and/or errors in the federal wage rates. The bidder is responsible for evaluating and determining the correct applicable rate.

If a project includes multiple types of construction (highway, bridge over navigable water, sanitary sewer and water main, building) and there is not a separate wage determination for this type of work included in the proposal, use the wage determination that is in the proposal.

If a project includes multiple types of construction, different wage rate determinations may be inserted into the contract (WI10/Highway = in all WisDOT highway contracts, WI15/Heavy = bridge over navigable water per USDOL and US Coast Guard designation, WI8/Heavy (Sewer & Water Line & Tunnel) = sanitary sewer and water main if the cost is more than 20% of the contract and/or at least \$1,000,000, and Building). If multiple wage rate determinations are inserted into the contract, use the classification in the wage determination for the work being done. Use WI15 wage rates when working on the bridge and/or structure from bank to bank. Use WI8 wage rates when working on any sanitary sewer or water main work. Use Building wage rates for all work done within the footprint of the building. Use WI10 wage rates for all other highway work in the contract and approaches to structures. For example, if a laborer is working within the footprint of a building, use the Laborer rate in the Building wage determination inserted in the contract. If a laborer is working on a bridge/structure within the banks, use the Laborer rate in the WI15/Heavy wage determination if inserted in the contract. If the laborer is working on the highway, use the Laborer rate in the WI10/Highway wage determination.



## Proposal Schedule of Items

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Proposal ID: 20200609001 Project(s): 1007-12-79, 1007-12-80, 1008-10-70

Federal ID(s): WISC 2020313, WISC 2020314, WISC 2020315

SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0002	201.0105 Clearing	50.000 STA	_____.	_____.
0004	201.0120 Clearing	88.000 ID	_____.	_____.
0006	201.0205 Grubbing	50.000 STA	_____.	_____.
0008	201.0220 Grubbing	88.000 ID	_____.	_____.
0010	203.0200 Removing Old Structure (station) 700. 1184 'XSB'+52	LS	LUMP SUM	_____.
0012	203.0200 Removing Old Structure (station) 701. 1582 'BCN'+52	LS	LUMP SUM	_____.
0014	203.0500.S Removing Old Structure Over Waterway (station) 800. 1212+84 'XSB'	LS	LUMP SUM	_____.
0016	203.0500.S Removing Old Structure Over Waterway (station) 801. 1213+00 'XNB'	LS	LUMP SUM	_____.
0018	204.0100 Removing Pavement	82,120.000 SY	_____.	_____.
0020	204.0105 Removing Pavement Butt Joints	126.000 SY	_____.	_____.
0022	204.0110 Removing Asphaltic Surface	18,715.000 SY	_____.	_____.
0024	204.0120 Removing Asphaltic Surface Milling	6,130.000 SY	_____.	_____.
0026	204.0150 Removing Curb & Gutter	2,162.000 LF	_____.	_____.
0028	204.0155 Removing Concrete Sidewalk	535.000 SY	_____.	_____.
0030	204.0157 Removing Concrete Barrier	8,984.000 LF	_____.	_____.
0032	204.0165 Removing Guardrail	7,089.000 LF	_____.	_____.



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Proposal ID: 20200609001 Project(s): 1007-12-79, 1007-12-80, 1008-10-70

Federal ID(s): WISC 2020313, WISC 2020314, WISC 2020315

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	204.0170 Removing Fence	10,561.000 LF	_____.	_____.
0036	204.0180 Removing Delineators and Markers	32.000 EACH	_____.	_____.
0038	204.0195 Removing Concrete Bases	5.000 EACH	_____.	_____.
0040	204.0220 Removing Inlets	39.000 EACH	_____.	_____.
0042	204.0230 Removing Building (station) 001. STA.110+50'NN'	LS	LUMP SUM	_____.
0044	204.0230 Removing Building (station) 002. STA.110+61'NN'	LS	LUMP SUM	_____.
0046	204.0245 Removing Storm Sewer (size) 01. 12-Inch	846.000 LF	_____.	_____.
0048	204.0245 Removing Storm Sewer (size) 02. 18-Inch	425.000 LF	_____.	_____.
0050	204.0245 Removing Storm Sewer (size) 03. 24-Inch	20.000 LF	_____.	_____.
0052	204.0245 Removing Storm Sewer (size) 04. 30-Inch	69.000 LF	_____.	_____.
0054	204.0245 Removing Storm Sewer (size) 05. 24-Inch	108.000 LF	_____.	_____.
0056	204.0270 Abandoning Culvert Pipes	1.000 EACH	_____.	_____.
0058	204.9060.S Removing (item description) 01. Apron Endwall	10.000 EACH	_____.	_____.
0060	204.9060.S Removing (item description) 02. Business Sign	2.000 EACH	_____.	_____.



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Proposal ID: 20200609001 Project(s): 1007-12-79, 1007-12-80, 1008-10-70

Federal ID(s): WISC 2020313, WISC 2020314, WISC 2020315

SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0062	204.9060.S Removing (item description) 03. Removing Type 1 Sign Covers	6.000 EACH	_____.	_____.
0064	204.9060.S Removing (item description) 04. Removing Temporary Sign Support	2.000 EACH	_____.	_____.
0066	205.0100 Excavation Common	216,450.000 CY	_____.	_____.
0068	206.1000 Excavation for Structures Bridges (structure) 700. B-13-462	LS	LUMP SUM	_____.
0070	206.1000 Excavation for Structures Bridges (structure) 701. B-13-463	LS	LUMP SUM	_____.
0072	206.2000 Excavation for Structures Culverts (structure) 702. C-13-44	LS	LUMP SUM	_____.
0074	208.1100 Select Borrow	8,019.000 CY	_____.	_____.
0076	210.1500 Backfill Structure Type A	280.000 TON	_____.	_____.
0078	210.2500 Backfill Structure Type B	1,870.000 TON	_____.	_____.
0080	211.0200 Prepare Foundation for Concrete Pavement (project) 01. 1008-10-70	LS	LUMP SUM	_____.
0082	213.0100 Finishing Roadway (project) 01. 1007- 12-79	1.000 EACH	_____.	_____.
0084	213.0100 Finishing Roadway (project) 02. 1007- 12-80	1.000 EACH	_____.	_____.
0086	213.0100 Finishing Roadway (project) 03. 1008- 10-70	1.000 EACH	_____.	_____.
0088	214.0100 Obliterating Old Road	12.000 STA	_____.	_____.



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Proposal ID: 20200609001 Project(s): 1007-12-79, 1007-12-80, 1008-10-70

Federal ID(s): WISC 2020313, WISC 2020314, WISC 2020315

SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0090	305.0110 Base Aggregate Dense 3/4-Inch	6,259.000 TON	_____.	_____.
0092	305.0120 Base Aggregate Dense 1 1/4-Inch	124,373.000 TON	_____.	_____.
0094	305.0130 Base Aggregate Dense 3-Inch	1,315.000 TON	_____.	_____.
0096	310.0110 Base Aggregate Open-Graded	1,888.000 TON	_____.	_____.
0098	312.0110 Select Crushed Material	102,395.000 TON	_____.	_____.
0100	415.0090 Concrete Pavement 9-Inch	2,996.000 SY	_____.	_____.
0102	415.0100 Concrete Pavement 10-Inch	10,705.000 SY	_____.	_____.
0104	415.0110 Concrete Pavement 11-Inch	22,026.000 SY	_____.	_____.
0106	415.0120 Concrete Pavement 12-Inch	83,937.000 SY	_____.	_____.
0108	415.0125 Concrete Pavement 12 1/2-Inch	62,851.000 SY	_____.	_____.
0110	415.0410 Concrete Pavement Approach Slab	1,024.000 SY	_____.	_____.
0112	415.1120 Concrete Pavement HES 12-Inch	2,320.000 SY	_____.	_____.
0114	415.1410 Concrete Pavement Approach Slab HES	611.000 SY	_____.	_____.
0116	415.4100 Concrete Pavement Joint Filling	29,983.000 SY	_____.	_____.
0118	415.6000.S Rout and Seal	28,127.000 LF	_____.	_____.
0120	416.0610 Drilled Tie Bars	8,414.000 EACH	_____.	_____.
0122	416.0620 Drilled Dowel Bars	5,487.000 EACH	_____.	_____.



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Proposal ID: 20200609001 Project(s): 1007-12-79, 1007-12-80, 1008-10-70

Federal ID(s): WISC 2020313, WISC 2020314, WISC 2020315

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	416.1010 Concrete Surface Drains	5.000 CY	_____.	_____.
0126	416.1110 Concrete Shoulder Rumble Strips	39,122.000 LF	_____.	_____.
0128	416.1710 Concrete Pavement Repair	365.000 SY	_____.	_____.
0130	416.1715 Concrete Pavement Repair SHES	2,196.000 SY	_____.	_____.
0132	416.1720 Concrete Pavement Replacement	50.000 SY	_____.	_____.
0134	416.1725 Concrete Pavement Replacement SHES	330.000 SY	_____.	_____.
0136	455.0605 Tack Coat	3,295.000 GAL	_____.	_____.
0138	460.2000 Incentive Density HMA Pavement	12,260.000 DOL	1.00000	12,260.00
0140	460.7222 HMA Pavement 2 HT 58-28 S	11,840.000 TON	_____.	_____.
0142	460.7424 HMA Pavement 4 HT 58-28 H	5,225.000 TON	_____.	_____.
0144	460.7624 HMA Pavement 4 HT 58-28 V	2,510.000 TON	_____.	_____.
0146	465.0105 Asphaltic Surface	110.000 TON	_____.	_____.
0148	465.0110 Asphaltic Surface Patching	120.000 TON	_____.	_____.
0150	465.0315 Asphaltic Flumes	278.000 SY	_____.	_____.
0152	465.0400 Asphaltic Shoulder Rumble Strips	13,920.000 LF	_____.	_____.
0154	501.1000.S Ice Hot Weather Concreting	3,125.000 LB	_____.	_____.
0156	502.0100 Concrete Masonry Bridges	202.000 CY	_____.	_____.



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Proposal ID: 20200609001 Project(s): 1007-12-79, 1007-12-80, 1008-10-70

Federal ID(s): WISC 2020313, WISC 2020314, WISC 2020315

SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0158	502.3210 Pigmented Surface Sealer	175.000 SY	_____.	_____.
0160	502.4204 Adhesive Anchors No. 4 Bar	530.000 EACH	_____.	_____.
0162	502.4205 Adhesive Anchors No. 5 Bar	549.000 EACH	_____.	_____.
0164	502.4206 Adhesive Anchors No. 6 Bar	96.000 EACH	_____.	_____.
0166	503.0136 Prestressed Girder Type I 36-Inch	735.000 LF	_____.	_____.
0168	504.0100 Concrete Masonry Culverts	154.000 CY	_____.	_____.
0170	504.0500 Concrete Masonry Retaining Walls	2.000 CY	_____.	_____.
0172	505.0400 Bar Steel Reinforcement HS Structures	21,440.000 LB	_____.	_____.
0174	505.0600 Bar Steel Reinforcement HS Coated Structures	67,050.000 LB	_____.	_____.
0176	506.2605 Bearing Pads Elastomeric Non-Laminated	30.000 EACH	_____.	_____.
0178	506.4000 Steel Diaphragms (structure) 700. B-13-462	6.000 EACH	_____.	_____.
0180	506.4000 Steel Diaphragms (structure) 701. B-13-463	9.000 EACH	_____.	_____.
0182	509.0301 Preparation Decks Type 1	35.000 SY	_____.	_____.
0184	509.0302 Preparation Decks Type 2	6.000 SY	_____.	_____.
0186	509.0310.S Sawing Pavement Deck Preparation Areas	420.000 LF	_____.	_____.



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Proposal ID: 20200609001 Project(s): 1007-12-79, 1007-12-80, 1008-10-70

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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	509.1500 Concrete Surface Repair	300.000 SF	_____.	_____.
0190	509.2000 Full-Depth Deck Repair	6.000 SY	_____.	_____.
0192	509.2100.S Concrete Masonry Deck Repair	2.000 CY	_____.	_____.
0194	509.5100.S Polymer Overlay	8,880.000 SY	_____.	_____.
0196	509.9050.S Cleaning Parapets	345.000 LF	_____.	_____.
0198	511.1200 Temporary Shoring (structure) 700. B-13-462	670.000 SF	_____.	_____.
0200	511.1200 Temporary Shoring (structure) 701. B-13-463	710.000 SF	_____.	_____.
0202	516.0500 Rubberized Membrane Waterproofing	83.000 SY	_____.	_____.
0204	517.1010.S Concrete Staining (structure) 700. B-13-462	1,660.000 SF	_____.	_____.
0206	517.1010.S Concrete Staining (structure) 701. B-13-463	1,655.000 SF	_____.	_____.
0208	517.1010.S Concrete Staining (structure) 702. S-13-509	775.000 SF	_____.	_____.
0210	517.1010.S Concrete Staining (structure) 703. S-13-510	715.000 SF	_____.	_____.
0212	520.2084 Culvert Pipe Temporary 84-Inch	150.000 LF	_____.	_____.
0214	520.8000 Concrete Collars for Pipe	14.000 EACH	_____.	_____.
0216	521.1012 Apron Endwalls for Culvert Pipe Steel 12-Inch	11.000 EACH	_____.	_____.



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Proposal ID: 20200609001 Project(s): 1007-12-79, 1007-12-80, 1008-10-70

Federal ID(s): WISC 2020313, WISC 2020314, WISC 2020315

SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0218	521.1524 Apron Endwalls for Culvert Pipe Sloped Side Drains Steel 24-Inch 6 to 1	2.000 EACH	_____.	_____.
0220	522.0118 Culvert Pipe Reinforced Concrete Class III 18-Inch	40.000 LF	_____.	_____.
0222	522.0124 Culvert Pipe Reinforced Concrete Class III 24-Inch	234.000 LF	_____.	_____.
0224	522.1018 Apron Endwalls for Culvert Pipe Reinforced Concrete 18-Inch	11.000 EACH	_____.	_____.
0226	522.1021 Apron Endwalls for Culvert Pipe Reinforced Concrete 21-Inch	1.000 EACH	_____.	_____.
0228	522.1024 Apron Endwalls for Culvert Pipe Reinforced Concrete 24-Inch	11.000 EACH	_____.	_____.
0230	522.1030 Apron Endwalls for Culvert Pipe Reinforced Concrete 30-Inch	2.000 EACH	_____.	_____.
0232	550.1100 Piling Steel HP 10-Inch X 42 Lb	1,375.000 LF	_____.	_____.
0234	601.0409 Concrete Curb & Gutter 30-Inch Type A	4,886.000 LF	_____.	_____.
0236	601.0555 Concrete Curb & Gutter 6-Inch Sloped 36-Inch Type A	477.000 LF	_____.	_____.
0238	601.0600 Concrete Curb Pedestrian	22.000 LF	_____.	_____.
0240	602.0410 Concrete Sidewalk 5-Inch	5,240.000 SF	_____.	_____.
0242	602.0505 Curb Ramp Detectable Warning Field Yellow	180.000 SF	_____.	_____.
0244	603.1142 Concrete Barrier Type S42	8,044.000 LF	_____.	_____.



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Proposal ID: 20200609001 Project(s): 1007-12-79, 1007-12-80, 1008-10-70

Federal ID(s): WISC 2020313, WISC 2020314, WISC 2020315

SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0246	603.1242 Concrete Barrier Type S42A	4,096.000 LF	_____.	_____.
0248	603.8000 Concrete Barrier Temporary Precast Delivered	26,440.000 LF	_____.	_____.
0250	603.8125 Concrete Barrier Temporary Precast Installed	77,550.000 LF	_____.	_____.
0252	604.0500 Slope Paving Crushed Aggregate	1,303.000 SY	_____.	_____.
0254	604.9015.S Reseal Crushed Aggregate Slope Paving	1,245.000 SY	_____.	_____.
0256	606.0200 Riprap Medium	188.000 CY	_____.	_____.
0258	606.0300 Riprap Heavy	65.000 CY	_____.	_____.
0260	608.0412 Storm Sewer Pipe Reinforced Concrete Class IV 12-Inch	228.000 LF	_____.	_____.
0262	608.0418 Storm Sewer Pipe Reinforced Concrete Class IV 18-Inch	1,499.000 LF	_____.	_____.
0264	608.0421 Storm Sewer Pipe Reinforced Concrete Class IV 21-Inch	27.000 LF	_____.	_____.
0266	608.0424 Storm Sewer Pipe Reinforced Concrete Class IV 24-Inch	1,104.000 LF	_____.	_____.
0268	608.0430 Storm Sewer Pipe Reinforced Concrete Class IV 30-Inch	56.000 LF	_____.	_____.
0270	611.0530 Manhole Covers Type J	1.000 EACH	_____.	_____.
0272	611.0606 Inlet Covers Type B	1.000 EACH	_____.	_____.
0274	611.0610 Inlet Covers Type BW	51.000 EACH	_____.	_____.



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Proposal ID: 20200609001 Project(s): 1007-12-79, 1007-12-80, 1008-10-70

Federal ID(s): WISC 2020313, WISC 2020314, WISC 2020315

SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0276	611.0624 Inlet Covers Type H	4.000 EACH	_____.	_____.
0278	611.0642 Inlet Covers Type MS	2.000 EACH	_____.	_____.
0280	611.0654 Inlet Covers Type V	16.000 EACH	_____.	_____.
0282	611.2004 Manholes 4-FT Diameter	1.000 EACH	_____.	_____.
0284	611.2005 Manholes 5-FT Diameter	3.000 EACH	_____.	_____.
0286	611.3004 Inlets 4-FT Diameter	26.000 EACH	_____.	_____.
0288	611.3220 Inlets 2x2-FT	11.000 EACH	_____.	_____.
0290	611.3225 Inlets 2x2.5-FT	20.000 EACH	_____.	_____.
0292	611.3230 Inlets 2x3-FT	4.000 EACH	_____.	_____.
0294	611.3902 Inlets Median 2 Grate	1.000 EACH	_____.	_____.
0296	611.8115 Adjusting Inlet Covers	2.000 EACH	_____.	_____.
0298	612.0106 Pipe Underdrain 6-Inch	2,830.000 LF	_____.	_____.
0300	612.0206 Pipe Underdrain Unperforated 6-Inch	859.000 LF	_____.	_____.
0302	612.0212 Pipe Underdrain Unperforated 12-Inch	576.000 LF	_____.	_____.
0304	612.0406 Pipe Underdrain Wrapped 6-Inch	430.000 LF	_____.	_____.
0306	612.0806 Apron Endwalls for Underdrain Reinforced Concrete 6-Inch	18.000 EACH	_____.	_____.



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Proposal ID: 20200609001 Project(s): 1007-12-79, 1007-12-80, 1008-10-70

Federal ID(s): WISC 2020313, WISC 2020314, WISC 2020315

SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0308	614.0150 Anchor Assemblies for Steel Plate Beam Guard	4.000 EACH	_____.	_____.
0310	614.0800 Crash Cushions Permanent	1.000 EACH	_____.	_____.
0312	614.0905 Crash Cushions Temporary	16.000 EACH	_____.	_____.
0314	614.2300 MGS Guardrail 3	4,368.000 LF	_____.	_____.
0316	614.2500 MGS Thrie Beam Transition	1,064.000 LF	_____.	_____.
0318	614.2610 MGS Guardrail Terminal EAT	16.000 EACH	_____.	_____.
0320	614.2620 MGS Guardrail Terminal Type 2	2.000 EACH	_____.	_____.
0322	616.0100 Fence Woven Wire (height) 01. 4-FT	10,130.000 LF	_____.	_____.
0324	616.0700.S Fence Safety	4,820.000 LF	_____.	_____.
0326	618.0100 Maintenance And Repair of Haul Roads (project) 01. 1007-12-79	1.000 EACH	_____.	_____.
0328	618.0100 Maintenance And Repair of Haul Roads (project) 02. 1007-12-80	1.000 EACH	_____.	_____.
0330	619.1000 Mobilization	1.000 EACH	_____.	_____.
0332	624.0100 Water	1,272.000 MGAL	_____.	_____.
0334	625.0500 Salvaged Topsoil	138,529.000 SY	_____.	_____.
0336	627.0200 Mulching	77,357.000 SY	_____.	_____.
0338	628.1104 Erosion Bales	495.000 EACH	_____.	_____.



## Proposal Schedule of Items

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Proposal ID: 20200609001 Project(s): 1007-12-79, 1007-12-80, 1008-10-70

Federal ID(s): WISC 2020313, WISC 2020314, WISC 2020315

SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0340	628.1504 Silt Fence	13,456.000 LF	_____.	_____.
0342	628.1520 Silt Fence Maintenance	13,456.000 LF	_____.	_____.
0344	628.1905 Mobilizations Erosion Control	37.000 EACH	_____.	_____.
0346	628.1910 Mobilizations Emergency Erosion Control	27.000 EACH	_____.	_____.
0348	628.1920 Cleaning Sediment Basins	295.000 CY	_____.	_____.
0350	628.2002 Erosion Mat Class I Type A	63,548.000 SY	_____.	_____.
0352	628.2008 Erosion Mat Urban Class I Type B	25,232.000 SY	_____.	_____.
0354	628.2023 Erosion Mat Class II Type B	5,060.000 SY	_____.	_____.
0356	628.6005 Turbidity Barriers	419.000 SY	_____.	_____.
0358	628.6505 Soil Stabilizer Type A	10.000 ACRE	_____.	_____.
0360	628.6510 Soil Stabilizer Type B	10.000 ACRE	_____.	_____.
0362	628.7005 Inlet Protection Type A	6.000 EACH	_____.	_____.
0364	628.7010 Inlet Protection Type B	98.000 EACH	_____.	_____.
0366	628.7020 Inlet Protection Type D	2.000 EACH	_____.	_____.
0368	628.7504 Temporary Ditch Checks	1,154.000 LF	_____.	_____.
0370	628.7555 Culvert Pipe Checks	27.000 EACH	_____.	_____.
0372	628.7560 Tracking Pads	7.000 EACH	_____.	_____.



## Proposal Schedule of Items

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Proposal ID: 20200609001 Project(s): 1007-12-79, 1007-12-80, 1008-10-70

Federal ID(s): WISC 2020313, WISC 2020314, WISC 2020315

SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0374	628.7570 Rock Bags	385.000 EACH	_____.	_____.
0376	629.0205 Fertilizer Type A	106.700 CWT	_____.	_____.
0378	630.0110 Seeding Mixture No. 10	1,249.000 LB	_____.	_____.
0380	630.0130 Seeding Mixture No. 30	1,198.000 LB	_____.	_____.
0382	630.0140 Seeding Mixture No. 40	235.000 LB	_____.	_____.
0384	630.0200 Seeding Temporary	4,237.000 LB	_____.	_____.
0386	630.0300 Seeding Borrow Pit	1,000.000 LB	_____.	_____.
0388	630.0500 Seed Water	3,743.200 MGAL	_____.	_____.
0390	632.0101 Trees (species) (size) (root) 001. Oak, Bur, B&B, 2-Inch Cal.	5.000 EACH	_____.	_____.
0392	632.0101 Trees (species) (size) (root) 002. Oak, Chinkapin, B&B, 2-Inch Cal.	5.000 EACH	_____.	_____.
0394	632.0101 Trees (species) (size) (root) 003. Oak, Swamp White, B&B, 2-Inch Cal.	28.000 EACH	_____.	_____.
0396	632.0101 Trees (species) (size) (root) 004. Oak, Regal Prince, B&B, 2-Inch Cal.	14.000 EACH	_____.	_____.
0398	632.0101 Trees (species) (size) (root) 005. Maple, Sugar, B&B, 2-Inch Cal.	9.000 EACH	_____.	_____.
0400	632.0101 Trees (species) (size) (root) 006. Hickory, Shagbark, B&B, 2-Inch Cal.	10.000 EACH	_____.	_____.
0402	632.0101 Trees (species) (size) (root) 007. Exclamation, Planetree, B&B, 2-Inch Cal.	5.000 EACH	_____.	_____.



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Proposal ID: 20200609001 Project(s): 1007-12-79, 1007-12-80, 1008-10-70

Federal ID(s): WISC 2020313, WISC 2020314, WISC 2020315

SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0404	632.0101 Trees (species) (size) (root) 008. Cedar, Eastern Red, B&B, 8-Foot HT.	36.000 EACH	_____.	_____.
0406	632.0101 Trees (species) (size) (root) 009. Baldcypress, Shawnee Brave, B&B, 2-Inch Cal.	47.000 EACH	_____.	_____.
0408	632.0101 Trees (species) (size) (root) 010. Hemlock, Canadian, B&B, 6-Foot HT.	19.000 EACH	_____.	_____.
0410	632.0101 Trees (species) (size) (root) 012. Pine, Vanderwolf's Pyramid, B&B, 8-Foot HT.	37.000 EACH	_____.	_____.
0412	632.0101 Trees (species) (size) (root) 013. Birch, Whitespire, B&B, 6-Foot HT.	72.000 EACH	_____.	_____.
0414	632.0101 Trees (species) (size) (root) 014. Hawthorn, Thornless Cockspur, B&B, 6-Foot HT.	3.000 EACH	_____.	_____.
0416	632.0201 Shrubs (species) (size) (root) 001. Pine, Enci Mugo, Container, 30-Inch HT/24" W, #5	133.000 EACH	_____.	_____.
0418	632.0201 Shrubs (species) (size) (root) 002. Juniper, Oldfield Common, Container, 30-inch HT #5	38.000 EACH	_____.	_____.
0420	632.0201 Shrubs (species) (size) (root) 003. Chokecherry, Brilliant Red, Container, 30-Inch HT. #3	60.000 EACH	_____.	_____.
0422	632.0201 Shrubs (species) (size) (root) 004. Bayberry, Northern, Container, 30-Inch HT, #3	22.000 EACH	_____.	_____.
0424	632.0201 Shrubs (species) (size) (root) 005. Dogwood, Redtwig, Container, 30-Inch HT, #3	257.000 EACH	_____.	_____.



## Proposal Schedule of Items

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Proposal ID: 20200609001 Project(s): 1007-12-79, 1007-12-80, 1008-10-70

Federal ID(s): WISC 2020313, WISC 2020314, WISC 2020315

SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0426	632.0201 Shrubs (species) (size) (root) 007. Sumac, Smooth, Container, 30-Inch HT. #3	152.000 EACH	_____.	_____.
0428	632.9101 Landscape Planting Surveillance and Care Cycles	13.000 EACH	_____.	_____.
0430	633.0100 Delineator Posts Steel	110.000 EACH	_____.	_____.
0432	633.0500 Delineator Reflectors	168.000 EACH	_____.	_____.
0434	633.1000 Delineators Barrier Wall	80.000 EACH	_____.	_____.
0436	633.5200 Markers Culvert End	26.000 EACH	_____.	_____.
0438	634.0414 Posts Wood 4x4-Inch X 14-FT	1.000 EACH	_____.	_____.
0440	634.0612 Posts Wood 4x6-Inch X 12-FT	65.000 EACH	_____.	_____.
0442	634.0614 Posts Wood 4x6-Inch X 14-FT	14.000 EACH	_____.	_____.
0444	634.0616 Posts Wood 4x6-Inch X 16-FT	24.000 EACH	_____.	_____.
0446	634.0618 Posts Wood 4x6-Inch X 18-FT	45.000 EACH	_____.	_____.
0448	634.0620 Posts Wood 4x6-Inch X 20-FT	20.000 EACH	_____.	_____.
0450	635.0200 Sign Supports Structural Steel HS	2,328.000 LB	_____.	_____.
0452	636.0100 Sign Supports Concrete Masonry	199.600 CY	_____.	_____.
0454	636.0500 Sign Supports Steel Reinforcement	540.000 LB	_____.	_____.



## Proposal Schedule of Items

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Proposal ID: 20200609001 Project(s): 1007-12-79, 1007-12-80, 1008-10-70

Federal ID(s): WISC 2020313, WISC 2020314, WISC 2020315

SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0456	636.1500 Sign Supports Steel Coated Reinforcement HS	32,440.000 LB	_____.	_____.
0458	637.1220 Signs Type I Reflective SH	3,977.000 SF	_____.	_____.
0460	637.1230 Signs Type I Reflective F	584.000 SF	_____.	_____.
0462	637.2210 Signs Type II Reflective H	854.430 SF	_____.	_____.
0464	637.2230 Signs Type II Reflective F	1,285.000 SF	_____.	_____.
0466	638.2101 Moving Signs Type I	12.000 EACH	_____.	_____.
0468	638.2102 Moving Signs Type II	34.000 EACH	_____.	_____.
0470	638.2601 Removing Signs Type I	29.000 EACH	_____.	_____.
0472	638.2602 Removing Signs Type II	138.000 EACH	_____.	_____.
0474	638.3000 Removing Small Sign Supports	123.000 EACH	_____.	_____.
0476	638.3100 Removing Structural Steel Sign Supports	4.000 EACH	_____.	_____.
0478	638.3150 Removing Overhead Sign Supports Cantilever (structure) 01. S-13-135	1.000 EACH	_____.	_____.
0480	638.3155 Removing Overhead Sign Supports Full Span (structure) 01. S-13-134	1.000 EACH	_____.	_____.
0482	638.3155 Removing Overhead Sign Supports Full Span (structure) 02. S-13-138	1.000 EACH	_____.	_____.
0484	638.3155 Removing Overhead Sign Supports Full Span (structure) 03. S-13-139	1.000 EACH	_____.	_____.



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Proposal ID: 20200609001 Project(s): 1007-12-79, 1007-12-80, 1008-10-70

Federal ID(s): WISC 2020313, WISC 2020314, WISC 2020315

SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0486	641.1200 Sign Bridge Cantilevered (structure) 700. S-13-507	LS	LUMP SUM	_____.
0488	641.6600 Sign Bridge (structure) 700. S-13-508	LS	LUMP SUM	_____.
0490	641.6600 Sign Bridge (structure) 701. S-13-511	LS	LUMP SUM	_____.
0492	641.6600 Sign Bridge (structure) 702. S-13-509	LS	LUMP SUM	_____.
0494	641.6600 Sign Bridge (structure) 703. S-13-510	LS	LUMP SUM	_____.
0496	641.6600 Sign Bridge (structure) 704. S-13-512	LS	LUMP SUM	_____.
0498	641.8100 Overhead Sign Support (structure) 700. S-13-506	LS	LUMP SUM	_____.
0500	641.8100 Overhead Sign Support (structure) 701. S-13-513	LS	LUMP SUM	_____.
0502	642.5201 Field Office Type C	1.000 EACH	_____.	_____.
0504	642.5401 Field Office Type D	1.000 EACH	_____.	_____.
0506	643.0300 Traffic Control Drums	106,002.000 DAY	_____.	_____.
0508	643.0420 Traffic Control Barricades Type III	3,390.000 DAY	_____.	_____.
0510	643.0500 Traffic Control Flexible Tubular Marker Posts	400.000 EACH	_____.	_____.
0512	643.0600 Traffic Control Flexible Tubular Marker Bases	400.000 EACH	_____.	_____.
0514	643.0705 Traffic Control Warning Lights Type A	6,262.000 DAY	_____.	_____.



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Proposal ID: 20200609001 Project(s): 1007-12-79, 1007-12-80, 1008-10-70

Federal ID(s): WISC 2020313, WISC 2020314, WISC 2020315

SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0516	643.0715 Traffic Control Warning Lights Type C	10,246.000 DAY	_____.	_____.
0518	643.0800 Traffic Control Arrow Boards	776.000 DAY	_____.	_____.
0520	643.0900 Traffic Control Signs	45,630.000 DAY	_____.	_____.
0522	643.0910 Traffic Control Covering Signs Type I	36.000 EACH	_____.	_____.
0524	643.0920 Traffic Control Covering Signs Type II	15.000 EACH	_____.	_____.
0526	643.1000 Traffic Control Signs Fixed Message	592.750 SF	_____.	_____.
0528	643.1050 Traffic Control Signs PCMS	858.000 DAY	_____.	_____.
0530	643.1055.S Truck or Trailer Mounted Attenuator	100.000 DAY	_____.	_____.
0532	643.1205.S Basic Traffic Queue Warning System	382.000 DAY	_____.	_____.
0534	643.5000 Traffic Control	1.000 EACH	_____.	_____.
0536	645.0105 Geotextile Type C	285.000 SY	_____.	_____.
0538	645.0111 Geotextile Type DF Schedule A	1,670.000 SY	_____.	_____.
0540	645.0120 Geotextile Type HR	572.000 SY	_____.	_____.
0542	645.0220 Geogrid Type SR	6,000.000 SY	_____.	_____.
0544	646.1020 Marking Line Epoxy 4-Inch	11,167.000 LF	_____.	_____.
0546	646.1040 Marking Line Grooved Wet Ref Epoxy 4-Inch	118,393.000 LF	_____.	_____.



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Proposal ID: 20200609001 Project(s): 1007-12-79, 1007-12-80, 1008-10-70

Federal ID(s): WISC 2020313, WISC 2020314, WISC 2020315

SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0548	646.1555 Marking Line Grooved Contrast Permanent Tape 4-Inch	20,645.000 LF	_____.	_____.
0550	646.3020 Marking Line Epoxy 8-Inch	703.000 LF	_____.	_____.
0552	646.3555 Marking Line Grooved Contrast Permanent Tape 8-Inch	15,950.000 LF	_____.	_____.
0554	646.5020 Marking Arrow Epoxy	7.000 EACH	_____.	_____.
0556	646.5220 Marking Symbol Epoxy	8.000 EACH	_____.	_____.
0558	646.5520 Marking Outfall Epoxy	7.000 EACH	_____.	_____.
0560	646.6120 Marking Stop Line Epoxy 18-Inch	16.000 LF	_____.	_____.
0562	646.6464 Cold Weather Marking Epoxy 4-Inch	17,530.000 LF	_____.	_____.
0564	646.6468 Cold Weather Marking Epoxy 8-Inch	3,378.000 LF	_____.	_____.
0566	646.7020 Marking Diagonal Epoxy 6-Inch	1,080.000 LF	_____.	_____.
0568	646.7220 Marking Chevron Epoxy 24-Inch	1,132.000 LF	_____.	_____.
0570	646.7420 Marking Crosswalk Epoxy Transverse Line 6-Inch	490.000 LF	_____.	_____.
0572	646.8320 Marking Parking Stall Epoxy	9,992.000 LF	_____.	_____.
0574	646.9010 Marking Removal Line Water Blasting 4-Inch	58,100.000 LF	_____.	_____.
0576	646.9110 Marking Removal Line Water Blasting 8-Inch	4,880.000 LF	_____.	_____.



## Proposal Schedule of Items

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Proposal ID: 20200609001 Project(s): 1007-12-79, 1007-12-80, 1008-10-70

Federal ID(s): WISC 2020313, WISC 2020314, WISC 2020315

SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0578	646.9210 Marking Removal Line Water Blasting Wide	500.000 LF	_____.	_____.
0580	646.9310 Marking Removal Special Marking Water Blasting	3.000 EACH	_____.	_____.
0582	649.0105 Temporary Marking Line Paint 4-Inch	181,640.000 LF	_____.	_____.
0584	649.0120 Temporary Marking Line Epoxy 4-Inch	71,025.000 LF	_____.	_____.
0586	649.0150 Temporary Marking Line Removable Tape 4-Inch	300.000 LF	_____.	_____.
0588	649.0205 Temporary Marking Line Paint 8-Inch	14,540.000 LF	_____.	_____.
0590	649.0220 Temporary Marking Line Epoxy 8-Inch	14,165.000 LF	_____.	_____.
0592	649.0760 Temporary Marking Raised Pavement Marker Type I	810.000 EACH	_____.	_____.
0594	652.0125 Conduit Rigid Metallic 2-Inch	48.000 LF	_____.	_____.
0596	652.0225 Conduit Rigid Nonmetallic Schedule 40 2-Inch	2,169.000 LF	_____.	_____.
0598	652.0235 Conduit Rigid Nonmetallic Schedule 40 3-Inch	308.000 LF	_____.	_____.
0600	652.0615 Conduit Special 3-Inch	50.000 LF	_____.	_____.
0602	653.0164 Pull Boxes Non-Conductive 24x42-Inch	17.000 EACH	_____.	_____.
0604	653.0222 Junction Boxes 18x12x6-Inch	4.000 EACH	_____.	_____.
0606	653.0905 Removing Pull Boxes	3.000 EACH	_____.	_____.



## Proposal Schedule of Items

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Proposal ID: 20200609001 Project(s): 1007-12-79, 1007-12-80, 1008-10-70

Federal ID(s): WISC 2020313, WISC 2020314, WISC 2020315

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Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0608	654.0105 Concrete Bases Type 5	3.000 EACH	_____.	_____.
0610	654.0106 Concrete Bases Type 6	9.000 EACH	_____.	_____.
0612	654.0111 Concrete Bases Type 11	1.000 EACH	_____.	_____.
0614	654.0230 Concrete Control Cabinet Bases Type L30	1.000 EACH	_____.	_____.
0616	654.1150 Concrete Bases Camera Pole 50-FT	1.000 EACH	_____.	_____.
0618	655.0515 Electrical Wire Traffic Signals 10 AWG	6,003.000 LF	_____.	_____.
0620	655.0610 Electrical Wire Lighting 12 AWG	1,860.000 LF	_____.	_____.
0622	655.0620 Electrical Wire Lighting 8 AWG	6,748.000 LF	_____.	_____.
0624	655.0625 Electrical Wire Lighting 6 AWG	798.000 LF	_____.	_____.
0626	656.0200 Electrical Service Meter Breaker Pedestal (location) 01. Rest Area #22	LS	LUMP SUM	_____.
0628	656.0200 Electrical Service Meter Breaker Pedestal (location) 401. SDS-13-0135	LS	LUMP SUM	_____.
0630	656.0500 Electrical Service Breaker Disconnect Box (location) 401. CCTV-13-0014	LS	LUMP SUM	_____.
0632	656.0500 Electrical Service Breaker Disconnect Box (location) 402. SDS-13-0135	LS	LUMP SUM	_____.
0634	657.0255 Transformer Bases Breakaway 11 1/2-Inch Bolt Circle	12.000 EACH	_____.	_____.
0636	657.0322 Poles Type 5-Aluminum	2.000 EACH	_____.	_____.



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Proposal ID: 20200609001 Project(s): 1007-12-79, 1007-12-80, 1008-10-70

Federal ID(s): WISC 2020313, WISC 2020314, WISC 2020315

SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0638	657.0327 Poles Type 6-Aluminum	9.000 EACH	_____.	_____.
0640	657.0715 Luminaire Arms Truss Type 4 1/2-Inch Clamp 15-FT	11.000 EACH	_____.	_____.
0642	659.0700 Lighting Units Walkway	1.000 EACH	_____.	_____.
0644	659.1125 Luminaires Utility LED C	11.000 EACH	_____.	_____.
0646	659.2130 Lighting Control Cabinets 120/240 30-Inch	1.000 EACH	_____.	_____.
0648	670.0100 Field System Integrator	LS	LUMP SUM	_____.
0650	670.0200 ITS Documentation	LS	LUMP SUM	_____.
0652	671.0112 Conduit HDPE 1-Duct 2-Inch	1,105.000 LF	_____.	_____.
0654	671.0132 Conduit HDPE 3-Duct 2-Inch	3,436.000 LF	_____.	_____.
0656	671.0212 Conduit HDPE Directional Bore 1-Duct 2-Inch	323.000 LF	_____.	_____.
0658	671.0232 Conduit HDPE Directional Bore 3-Duct 2-Inch	371.000 LF	_____.	_____.
0660	673.0110 Communication Vault Type Round	2.000 EACH	_____.	_____.
0662	673.0200 Tracer Wire Marker Posts	2.000 EACH	_____.	_____.
0664	673.0225.S Install Pole Mounted Cabinet	2.000 EACH	_____.	_____.
0666	674.0200 Cable Microwave Detector	3,106.000 LF	_____.	_____.
0668	674.0300 Remove Cable	5,612.000 LF	_____.	_____.



## Proposal Schedule of Items

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Proposal ID: 20200609001 Project(s): 1007-12-79, 1007-12-80, 1008-10-70

Federal ID(s): WISC 2020313, WISC 2020314, WISC 2020315

SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0670	675.0300 Install Mounted Controller Microwave Detector Assembly	8.000 EACH	_____.	_____.
0672	677.0150 Install Camera Pole 50-FT	1.000 EACH	_____.	_____.
0674	677.0200 Install Camera Assembly	1.000 EACH	_____.	_____.
0676	678.0012 Install Fiber Optic Cable Outdoor Plant 12-CT	3,296.000 LF	_____.	_____.
0678	678.0072 Install Fiber Optic Cable Outdoor Plant 72-CT	6,620.000 LF	_____.	_____.
0680	678.0200 Fiber Optic Splice Enclosure	4.000 EACH	_____.	_____.
0682	678.0300 Fiber Optic Splice	228.000 EACH	_____.	_____.
0684	678.0400 Fiber Optic Termination	48.000 EACH	_____.	_____.
0686	678.0500 Communication System Testing	LS	LUMP SUM	_____.
0688	678.0600 Install Ethernet Switches	6.000 EACH	_____.	_____.
0690	690.0150 Sawing Asphalt	3,100.000 LF	_____.	_____.
0692	690.0250 Sawing Concrete	41,944.000 LF	_____.	_____.
0694	715.0415 Incentive Strength Concrete Pavement	110,901.000 DOL	1.00000	110,901.00
0696	715.0502 Incentive Strength Concrete Structures	3,432.000 DOL	1.00000	3,432.00
0698	715.0603 Incentive Strength Concrete Barrier	24,600.000 DOL	1.00000	24,600.00
0700	715.0710 Optimized Aggregate Gradation Incentive	246,397.700 DOL	1.00000	246,397.70



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Federal ID(s): WISC 2020313, WISC 2020314, WISC 2020315

SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0702	740.0440 Incentive IRI Ride	21,000.000 DOL	1.00000	21,000.00
0704	SPV.0005 Special 500. Subsoiling	2.000 ACRE	_____.	_____.
0706	SPV.0005 Special 501. Pre-Planting Vegetation Treatment	53.600 ACRE	_____.	_____.
0708	SPV.0005 Special 502. Seed Bed Preparation	14.000 ACRE	_____.	_____.
0710	SPV.0035 Special 001. Roadway Embankment	63,313.000 CY	_____.	_____.
0712	SPV.0035 Special 501. Topsoil Special	1,405.000 CY	_____.	_____.
0714	SPV.0035 Special 700. High Performance Concrete (HPC) Masonry Structures	214.000 CY	_____.	_____.
0716	SPV.0035 Special 701. Rapid Set Deck Repair	12.000 CY	_____.	_____.
0718	SPV.0045 Special 001. Portable Speed Trailer	503.000 DAY	_____.	_____.
0720	SPV.0060 Special 001. Baseline CPM Progress Schedule	1.000 EACH	_____.	_____.
0722	SPV.0060 Special 002. CPM Progress Schedule Updates and Accepted Revisions	28.000 EACH	_____.	_____.
0724	SPV.0060 Special 003. Test Pits	12.000 EACH	_____.	_____.
0726	SPV.0060 Special 004. Roadway Cleanup	26.000 EACH	_____.	_____.
0728	SPV.0060 Special 005. Welded Inlet Covers	24.000 EACH	_____.	_____.
0730	SPV.0060 Special 006. Pipe Bollard	20.000 EACH	_____.	_____.
0732	SPV.0060 Special 007. Utility Line Opening (ULO)	2.000 EACH	_____.	_____.



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Proposal ID: 20200609001 Project(s): 1007-12-79, 1007-12-80, 1008-10-70

Federal ID(s): WISC 2020313, WISC 2020314, WISC 2020315

SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0734	SPV.0060 Special 008. Temporary Sediment Basin	8.000 EACH	_____.	_____.
0736	SPV.0060 Special 203. Repair State Owned Energy Absorbing Terminal (EAT)	4.000 EACH	_____.	_____.
0738	SPV.0060 Special 204. Emergency Response to Traffic Incident Involving Guardrail or EAT	4.000 EACH	_____.	_____.
0740	SPV.0060 Special 205. Emergency Response to Pavement Repairs	4.000 EACH	_____.	_____.
0742	SPV.0060 Special 206. Emergency Response to Traffic Incident Involving Concrete Barrier Temporary	10.000 EACH	_____.	_____.
0744	SPV.0060 Special 207. Emergency Response to Traffic Incident Involving Crash Cushion	4.000 EACH	_____.	_____.
0746	SPV.0060 Special 401. Remove Communication Vault	1.000 EACH	_____.	_____.
0748	SPV.0060 Special 402. Install Radio	1.000 EACH	_____.	_____.
0750	SPV.0060 Special 501. Native Seed Surveillance and Care Cycles	8.000 EACH	_____.	_____.
0752	SPV.0060 Special 502. Delineator Post Steel Modified	48.000 EACH	_____.	_____.
0754	SPV.0060 Special 701. Tension Anchor Rods	48.000 EACH	_____.	_____.
0756	SPV.0060 Special 702. Install ID Plaque	1.000 EACH	_____.	_____.
0758	SPV.0085 Special 501. Seeding Native Mix N2	674.000 LB	_____.	_____.
0760	SPV.0085 Special 502. Seeding Native Mix N3	30.000 LB	_____.	_____.



## Proposal Schedule of Items

Page 26 of 27

Proposal ID: 20200609001 Project(s): 1007-12-79, 1007-12-80, 1008-10-70

Federal ID(s): WISC 2020313, WISC 2020314, WISC 2020315

SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0762	SPV.0090 Special 001. Concrete Pavement Joint Sealing	12,140.000 LF	_____.	_____.
0764	SPV.0090 Special 002. Bore and Jack Storm Sewer Pipe Reinforced Concrete Class IV 24-INCH	141.000 LF	_____.	_____.
0766	SPV.0090 Special 003. Pipe Underdrain 6-inch with Geotextile Fabric and Aggregate	8,198.000 LF	_____.	_____.
0768	SPV.0090 Special 200. Repair State Owned Guardrail	800.000 LF	_____.	_____.
0770	SPV.0090 Special 201. Gawk Screen Furnished	42,050.000 LF	_____.	_____.
0772	SPV.0090 Special 202. Gawk Screen Installed	74,635.000 LF	_____.	_____.
0774	SPV.0090 Special 203. Concrete Barrier Temporary Precast Delivered, Department Owned	16,355.000 LF	_____.	_____.
0776	SPV.0090 Special 204. Removing Department Owned Concrete Barrier Precast	6,225.000 LF	_____.	_____.
0778	SPV.0105 Special 001. Concrete Pavement Joint Layout Project 1007-12-79	LS	LUMP SUM	_____.
0780	SPV.0105 Special 002. Concrete Pavement Joint Layout Project 1007-12-80	LS	LUMP SUM	_____.
0782	SPV.0105 Special 003. Concrete Pavement Joint Layout Project 1008-10-70	LS	LUMP SUM	_____.
0784	SPV.0105 Special 004. Survey Project 1007-12-79 with Optional AMG for Concrete Pavement and Base	LS	LUMP SUM	_____.
0786	SPV.0105 Special 005. Survey Project 1007-12-80 with Optional AMG for Concrete Pavement and Base	LS	LUMP SUM	_____.



## Proposal Schedule of Items

Page 27 of 27

Proposal ID: 20200609001 Project(s): 1007-12-79, 1007-12-80, 1008-10-70

Federal ID(s): WISC 2020313, WISC 2020314, WISC 2020315

SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0788	SPV.0105 Special 006. Survey Project 1008-10-70 with Optional AMG for Conc Pavt and Base Course	LS	LUMP SUM	_____.
0790	SPV.0105 Special 401. Salvage ITS Equipment CCTV-13-0014	LS	LUMP SUM	_____.
0792	SPV.0105 Special 402. Salvage ITS Equipment SDS-13-0091	LS	LUMP SUM	_____.
0794	SPV.0105 Special 403. Salvage ITS Equipment Dejope Cabinet	LS	LUMP SUM	_____.
0796	SPV.0105 Special 404. Salvage ITS Equipment SDS-13-0015	LS	LUMP SUM	_____.
0798	SPV.0105 Special 405. Relocate Solar Power Microwave Detector	LS	LUMP SUM	_____.
0800	SPV.0105 Special 406. Relocate Bluetooth Detector	LS	LUMP SUM	_____.
0802	SPV.0105 Special 701. Temporary Sand Bag Dike C-13-44	LS	LUMP SUM	_____.
0804	SPV.0165 Special 001. Insulation Board 4-inch	320.000 SF	_____.	_____.
0806	SPV.0165 Special 701. Wall Modular Block Mechanically Stabilized Earth R-13-335	1,800.000 SF	_____.	_____.
0808	SPV.0165 Special 702. Repair Galvanized Coating	300.000 SF	_____.	_____.
0810	SPV.0180 Special 501. Compost	530.000 SY	_____.	_____.
Section: 0001			Total:	_____.
Total Bid:				_____.

**PLEASE ATTACH SCHEDULE OF ITEMS HERE**





## Wisconsin Department of Transportation

June 2, 2020

### Division of Transportation Systems Development

Bureau of Project Development  
4822 Madison Yards Way, 4<sup>th</sup> Floor South  
Madison, WI 53705

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

### NOTICE TO ALL CONTRACTORS:

**Proposal 001: 1007-12-79, WISC 2020 313**  
**Illinois State Line - Madison**  
**USH 12/18 Intchg/Core SB**  
**IH 39**  
**Dane County**

**1007-12-80, WISC 2020 314**  
**Illinois State Line - Madison**  
**USH 12/18 Intchg/Core NB/Final Work**  
**IH 39**  
**Dane County**

**1008-10-70, WISC 2020 315**  
**Illinois State Line - Madison**  
**Safety Rest Area 22**  
**IH 39**  
**Rock County**

### Letting of June 09, 2020

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

#### Special Provisions:

Revised Special Provisions	
Article No.	Description
39	Base Aggregate Dense 1 ¼-Inch, Item 305.0120

Added Special Provisions	
Article No.	Description
116	Abandoning Sewer, Item 204.0291.S
117	Slope Paving Repair Crushed Aggregate, Item 604.9010.S

#### Schedule of Items:

Revised Bid Item Quantities					
Bid Item	Item Description	Unit	Old Quantity	Revised Quantity	Proposal Total
415.0120	Concrete Pavement 12-inch	SY	83,937	10,364	94,301
415.0125	Concrete Pavement 12.5-inch	SY	62,851	-10,004	52,847
628.7560	Tracking Pads	EACH	7	6	13
649.0760	Temporary Marking Raised Pavement Marker Type 1	EACH	810	2,000	2,810

<b>Added Bid Item Quantities</b>					
Bid Item	Item Description	Unit	Old Quantity	Revised Quantity	Proposal Total
204.0291.S	Abandoning Sewer	CY	0	11	11
604.9010.S	Slope Paving Repair Crushed Aggregate	CY	0	30	30
611.0535	Manhole Covers Type J Special	EACH	0	1	1
614.0805	Crash Cushion Permanent Low Maintenance	EACH	0	1	1

<b>Deleted Bid Item Quantities</b>					
Bid Item	Item Description	Unit	Old Quantity	Revised Quantity	Proposal Total
204.0270	Abandon Culvert Pipes	EACH	1	0	0
611.0530	Manhole Covers Type J	EACH	1	0	0
614.0800	Crash Cushion Permanent	EACH	1	0	1

### **Plan Sheets:**

<b>Revised Plan Sheets 1007-12-79</b>	
Plan Sheet	Plan Sheet Title (brief description of changes to sheet)
12	Typical Sections - Finished (updated typical to show the location for longitudinal saw cut)
25	Construction Details (updated the detail for Concrete Barrier Type S42A to show the joint location and to define the concrete pavement pay limits)
322	Miscellaneous Quantities (increased undistributed quantity for 649.0760 Temporary Marking Raised Pavement Marker Type I)
324	Miscellaneous Quantities (increased undistributed quantity for 628.7560 Tracking Pads, added new item 604.9010.S Slope Paving Repair Crushed Aggregate)

<b>Revised Plan Sheets 1007-12-80</b>	
Plan Sheet	Plan Sheet Title (brief description of changes to sheet)
37	Construction Details (updated the detail for Concrete Barrier Type S42A to show the joint location and to define the concrete pavement pay limits)
58	Removal Plan (revised note from Abandoning Culvert Pipe to Abandoning Sewer)
65	Plan Details (revised legend from Crash Cushions Permanent to Crash Cushions Permanent Low Maintenance)
83	Plan Details (revised legend from Crash Cushions Permanent to Crash Cushions Permanent Low Maintenance)
152	Storm Sewer (revised note for Manhole Covers Type J to Manhole Covers Type J Special)
202	Traffic Control (removed a unnecessary note about extending and removing a pipe)
305	Miscellaneous Quantities (deleted 204.0270 Abandoning Culvert Pipe, added new item 204.0291.S Abandoning Sewer)
308	Miscellaneous Quantities (revised quantities for 415.0120 Concrete Pavement 12-Inch and 415.0125 Concrete Pavement 12.5-Inch)
313	Miscellaneous Quantities (removed item 611.0530 Manhole Covers Type J, added new item 611.0535 Manhole Covers Type J Special)
315	Miscellaneous Quantities (removed item 614.0800 Crash Cushions Permanent, added new item 614.0805 Crash Cushions Permanent Low Maintenance)

321	Miscellaneous Quantities (increased undistributed quantity for 649.0760 Temporary Marking Raised Pavement Marker Type I)
323	Miscellaneous Quantities (increased undistributed quantity for 628.7560 Tracking Pads, added new item 604.9010.S Slope Paving Repair Crushed Aggregate)

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**

**1007-12-79**

**June 2, 2020**

**Special Provisions**

**39. Base Aggregate Dense 1 1/4-Inch, Item 305.0120**

*Replace paragraph one with the following:*

The contractor for Project 1007-12-78 may have used reclaimed asphalt as base aggregate material. In areas where reclaimed asphalt was used by the previous contractor, place: additional reclaimed asphalt; blended aggregate; or reprocessed base aggregate material approved by the engineer instead of base aggregate to establish final grade prior to paving.

**116. Abandoning Sewer, Item 204.0291.S.**

**A Description**

This special provision describes abandoning existing sewer by filling it with cellular concrete as the plans show and conforming to standard spec 204 and standard spec 501 as modified in this special provision.

**B Materials**

Provide cellular concrete meeting the following specifications: 1 part cement, 1 part fly ash, 8 parts sand, or an approved equal, and water. Provide cement meeting the requirements of standard spec 501.2.1 for Type 1 Portland Cement. Provide sand meeting the requirements of standard spec 501.2.5.3 Provide water meeting the requirements of standard spec 501.2.4.

**C Construction**

Fill the abandoned sewer pipe with cellular concrete as the engineer directs. In the event that the sewer cannot be completely filled from existing manholes, tap the sewer where necessary and fill from these locations.

**D Measurement**

The department will measure Abandoning Sewer in volume by the cubic yard as specified in standard spec 109.1.3.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
204.0291.S	Abandoning Sewer	CY

Payment is full compensation for furnishing all materials and excavating and backfilling where necessary.  
stp-204-050 (20080902)

**117. Slope Paving Repair Crushed Aggregate, Item 604.9010.S.**

**A Description**

This special provision describes providing crushed aggregate slope paving where erosion has occurred. Conform to standard spec 604 as modified in this special provision.

**B Materials**

Furnish materials conforming to standard spec 604.2.

### **C Construction**

Replace paragraph (1) of standard spec 604.3.2 with the following:

- (1) Place the crushed aggregate on the prepared foundation in areas where erosion has occurred. Shape and consolidate it using mechanical or hand methods to provide a stable, even and uniform surface.

### **D Measurement**

The department will measure Slope Paving Repair Crushed Aggregate by the cubic 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
604.9010.S	Slope Paving Repair Crushed Aggregate	CY

Payment is full compensation for all excavating and backfilling required to prepare the foundation; disposing of surplus materials; providing, handling, placing, and consolidating the crushed aggregate; providing, handling, heating, and for applying the asphaltic material.

stp-604-010 (20100709)

### **Schedule of Items**

Attached, dated June 2, 2020 are the revised Schedule of Items Pages 1 – 27.

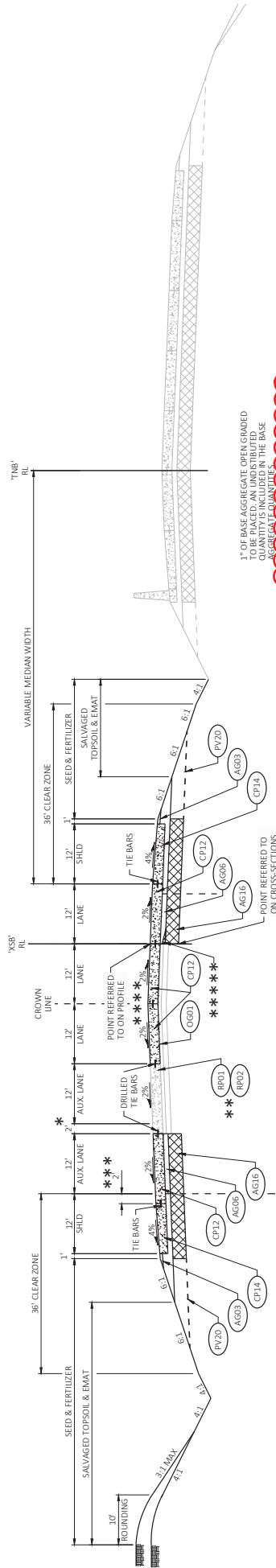
### **Plan Sheets**

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

Revised Sheets 1007-12-79: 12, 25, 322, and 324

Revised Sheets 1007-12-80: 37, 58, 65, 83, 152, 202, 305, 308, 313, 315, 321, and 323

END OF ADDENDUM



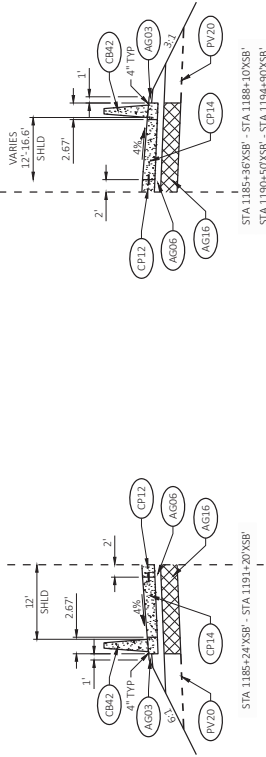
## LEGEND

- AG03 3" BASE AGGREGATE DENSE 3/4-INCH
- AG06 6" BASE AGGREGATE DENSE 1 1/4-INCH
- AG16 16" SELECT CRUSHED MATERIAL
- CB42 CONCRETE BARRIER TYPE 542
- CP12 CONCRETE PAVEMENT 12-INCH, DOWELED AND TINED
- CP14 TRAPEZOIDAL SHOULDER (PAD FOR AS CONCRETE PAVEMENT 12-INCH)
- MG5 MIDWEST GUARDRAIL SYSTEM
- OG01 1" BASE AGGREGATE OPEN GRADED (TYP)
- PV20 CONSTRUCT RELIEF TRENCHES AT DITCH SAG POINTS OR EVERY 250' (SEE CONSTRUCTION DETAIL)
- RP01 CONCRETE PAVEMENT REPAIR SHEETS
- RP02 CONCRETE PAVEMENT REPLACEMENT SHEETS

Addendum No. 01  
ID 1007-12-79  
Revised Sheet 12  
June 2, 2020

## TYPICAL FINISHED SECTION - IH 39

STA 1185+40XSB - STA 1194+90XSB



STA 1188+55XSB - STA 1189+55XSB

STA 1188+55XSB - STA 1189+55XSB

PROJECT NO: 1007-12-79

HWY: IH 39

COUNTY: DANE

TYPICAL SECTIONS - FINISHED

SHEET

12

E

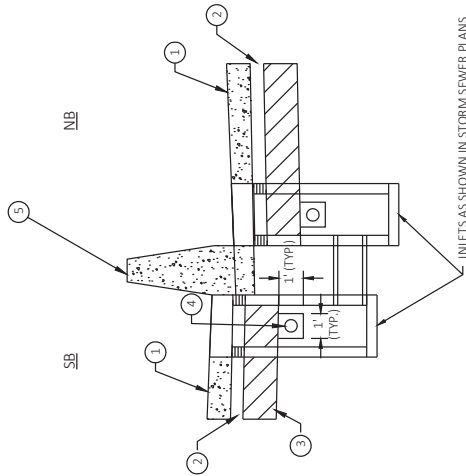
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LAYOUT NAME: -09

PLOT DATE: 5/28/2020 1:22 PM

PLOT BY: KYLE CORNELIUS

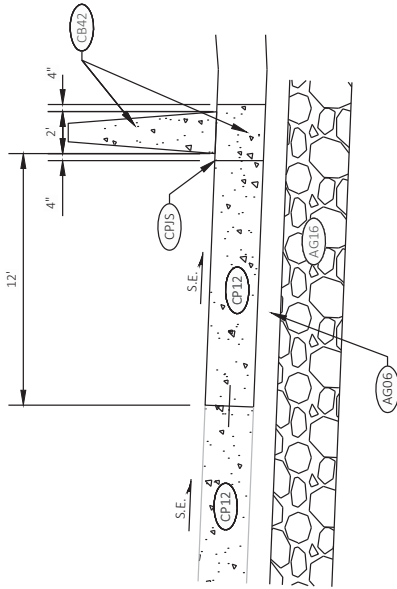
PLOT SCALE: 1 IN=20 FT

WISDOT/CAD05 SHEET 42

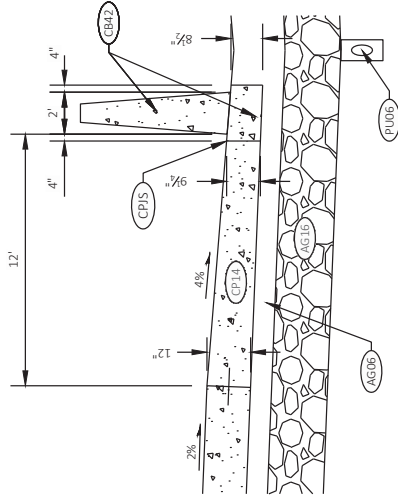


- 1 TRAPEZOIDAL SHOULDER (PAID SEPARATELY)
- 2 BASE AGGREGATE DENSE 1 1/4-INCH, 6-INCH (PAID SEPARATELY)
- 3 SELECT CRUSHED MATERIAL, 16-INCH (PAID SEPARATELY)
- 4 PIPE UNDERDRAIN 6-INCH WITH GEOTEXTILE FABRIC AND AGGREGATE
- 5 CONCRETE BARRIER TYPE S42A OR S42 (PAID SEPARATELY)

PIPE UNDERDRAIN 6-INCH

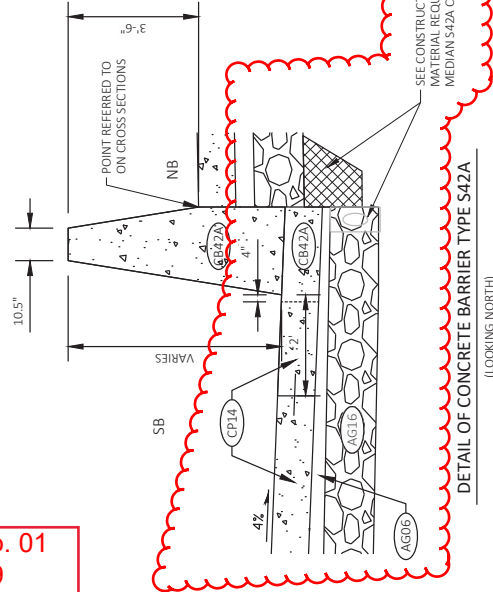


DETAIL OF SUPERELEVATED SHOULDER -  
CONCRETE BARRIER TYPE S42 IN MEDIAN



DETAIL OF TRAPEZOIDAL SHOULDER -  
CONCRETE BARRIER TYPE S42 IN MEDIAN

Addendum No. 01  
ID 1007-12-79  
Revised Sheet 25  
June 2, 2020



LEGEND

- AG06 6" BASE AGGREGATE DENSE 1 1/4-INCH
- AG16 16" SELECT CRUSHED MATERIAL
- CB42 CONCRETE BARRIER TYPE S42
- CB42A CONCRETE BARRIER TYPE S42A
- CP12 CONCRETE PAVEMENT 12-INCH
- CP14 CONCRETE PAVEMENT 14-INCH
- CP14A CONCRETE PAVEMENT 14-INCH, THE PAV. UNITS OF CONCRETE PAVEMENT ARE 4" SHORT OF THE INSIDE EDGE OF CB42A
- CP15 CONCRETE PAVEMENT JOINT SEALING
- PU06 PIPE UNDERDRAIN 6-INCH

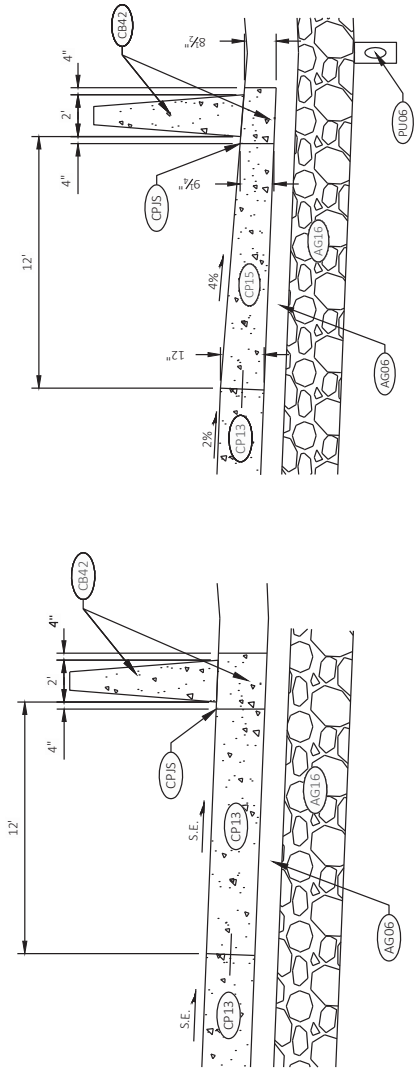
## TEMPORARY MARKING LINES

\*\* TEMPORARY EPOXY IS PLACED PRIOR TO FINAL GROOVED MARKING LINES BEING PLACED  
 \*\* ADDITIONAL QUANTITIES LISTED ELSEWHERE

PROJECT NO: 1007-12-79		HWY: IH 39		COUNTY: DANE		MISCELLANEOUS QUANTITIES		SHEET		E	
FILE NAME: P:\2019 PROJECTS\15010001 - BUCKINGHAM\PS&E\1007-12-79\METADATA\1007-12-79\SHEETS\PLAN\1007-12-79\0002_MQL.DWG		PLOT DATE: 5/29/2020 9:14 AM		PLOT BY: KYLE CORNELIUS		PLOT NAME:		322		WISDOT/CADD SHEET 42	

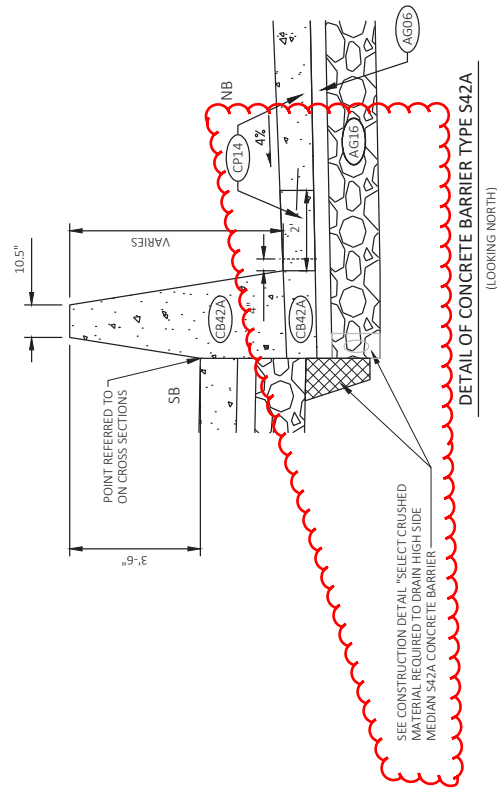
WISDOT/CADDs SHEET 42

[illegible]



DETAIL OF SUPERELEVATED SHOULDER -  
CONCRETE BARRIER TYPE S42 IN MEDIAN

DETAIL OF TRAPEZOIDAL SHOULDER -  
CONCRETE BARRIER TYPE S42 IN MEDIAN



SEE CONSTRUCTION DETAIL "SELECT CRUSHED  
MATERIAL REQUIRED TO DRAIN HIGH SIDE  
MEDIAN S42A CONCRETE BARRIER"

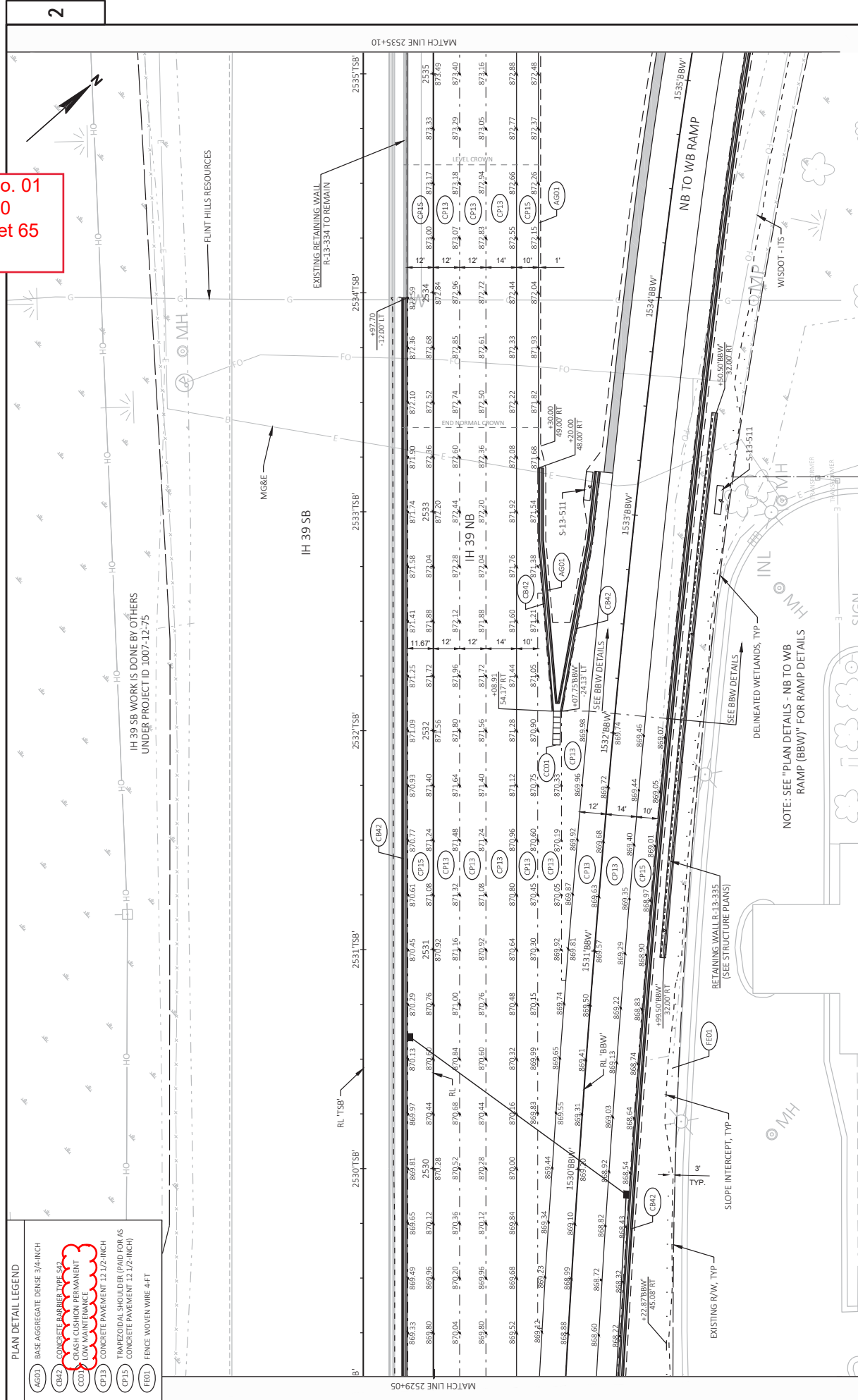
(LOOKING NORTH)

AG06	6" BASE AGGREGATE DENSE 1 1/4-INCH
AG16	16" SELECT CRUSHED MATERIAL
CB42	CONCRETE BARRIER TYPE #42
CB42A	CONCRETE BARRIER TYPE #42A
CP13	CONCRETE PAVEMENT 12 1/2-INCH, DOWELED AND TINED
CP15	TRAPEZOIDAL SHOULDER
CP14	TRAPEZOIDAL SHOULDER (MINIMUM SHOULDER 12-INCH, THE MAX PAVEMENT IS 4" SOUTH OF THE 1/2" EDGE DISE
CP95	CONCRETE PAVEMENT JOINT SEALING
PU06	PIPE UNDERDRAIN 6-INCH ENCLOSED IN OF COURSE BASE AGGREGATE SIZE NO. 10
AP95	IN GEOTEXTILE FABRIC, TYPE SCHEDULE HMA PAVEMENT 5-INCH SHOULDER

Addendum No. 01  
ID 1007-12-80  
Revised Sheet 37  
June 2, 2020



Addendum No. 01  
ID 1007-12-80  
Revised Sheet 65  
June 2, 2020



### PLAN DETAIL LEGEND

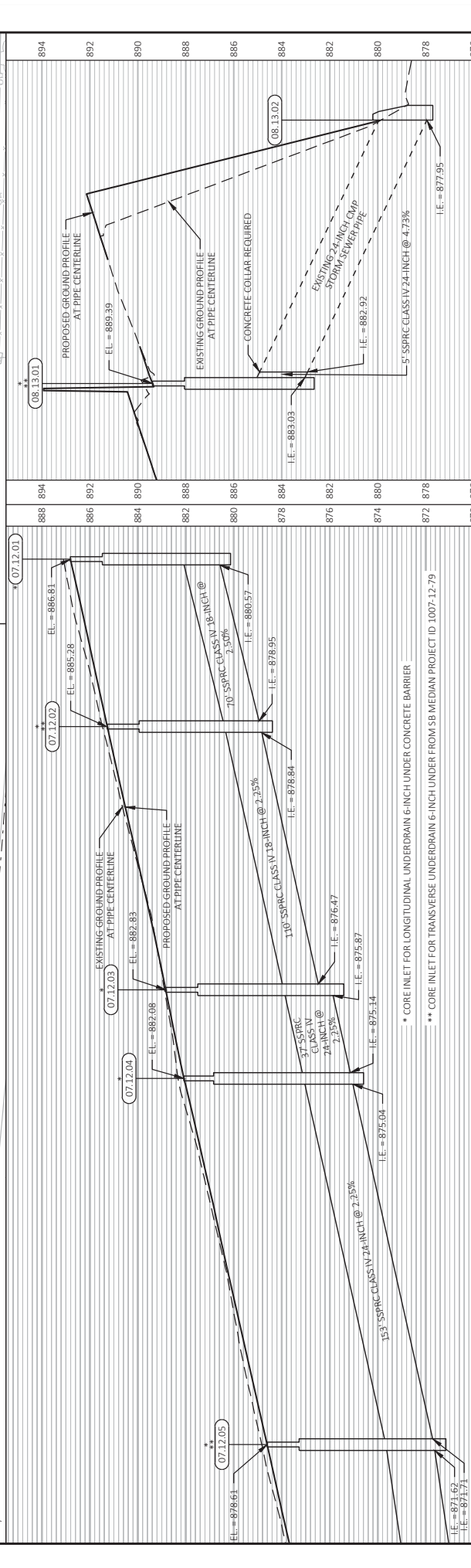
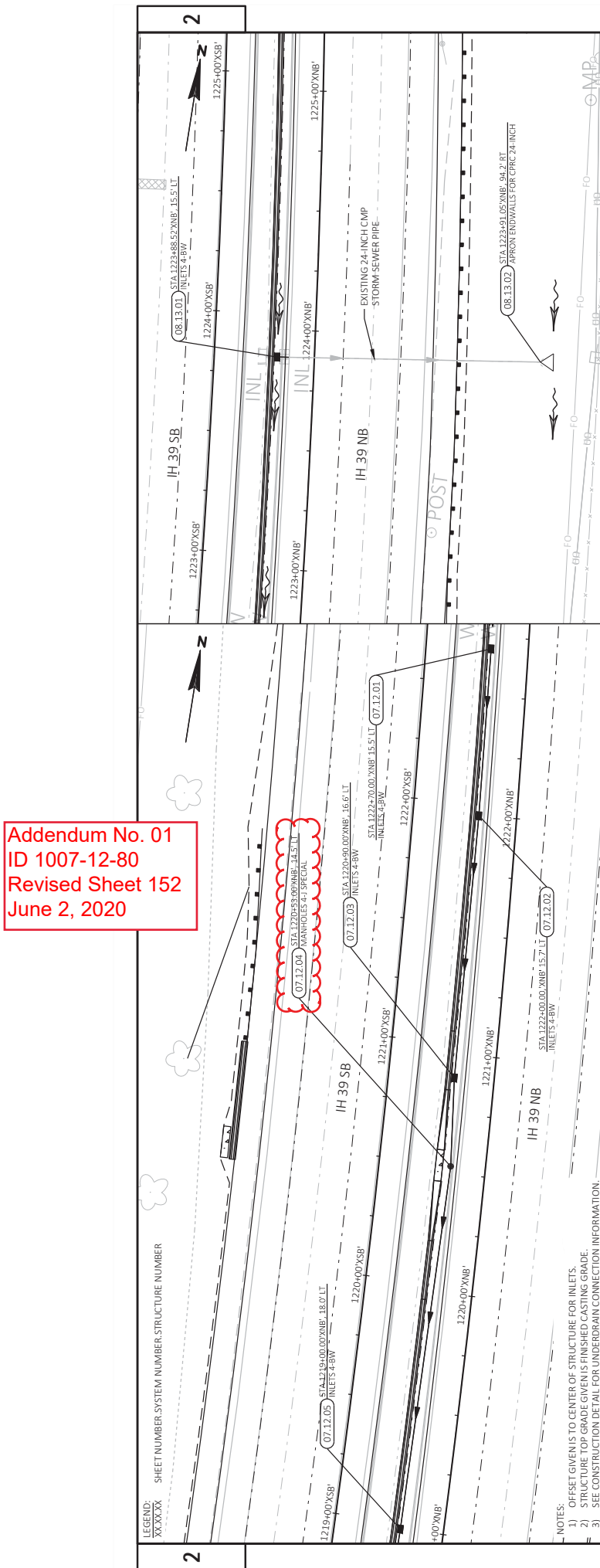
CB42 CONCRETE BARRIER TYPE S42  
 CC01 CRASH CUSHION PERMANENT / LOW MAINTENANCE  
 CP13 CONCRETE PAVEMENT 12 1/2-INCH  
 CP15 TRAPEZOIDAL SHOULDER (PAID FOR AS CONCRETE PAVEMENT 12 1/2-INCH)  
 FE01 FENCE WOVEN WIRE 4FT

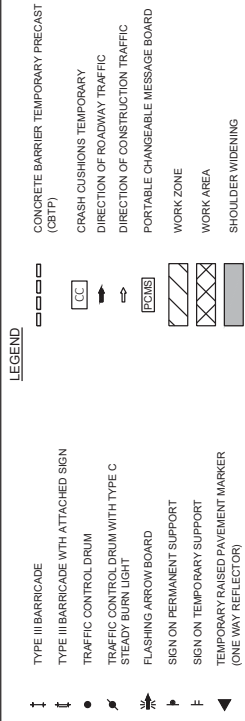
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PLOT SCALE:	1 IN=40 FT								
WSDOT/CADDIS SHEET 42									65

FILE NAME:	P:\2019 PROJECTS\5015001 - BIC\CW\DWG\SHEET\SPAWN\071128\010212_PD.DWG	PLOT BY:	QES, LLC	PLOT NAME:	1 IN/40 FT
		PLOT DATE:	5/29/2020 3:24 PM		PLOT SCALE:



Addendum No. 01  
ID 1007-12-80  
Revised Sheet 152  
June 2, 2020





Addendum No. 01  
ID 1007-12-80  
Revised Sheet 305  
June 2, 2020

PROJECT NO: 1007-12-80		HWY: IH 39	COUNTY: DANE	MISCELLANEOUS QUANTITIES	E	308
FILE NAME : P:\2019 PROJECTS\02\050001 - BIC\01\BUILD\01\SHETSKA\10071280_02_1AQ.DWG PLOT DATE: 5/27/2020 10:18 AM PLOT BY: KYLE CORNELIUS PLOT NAME:						

\*ADDITIONAL QUANTITIES ELSEWHERE

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FILE NAME:	P:\2009 PROJECTS\0310001 - BLDG\WLD SHEETSP\DW\1007128010302_MCDWG					
			PLOT DATE:	5/28/2020 11:05 AM	PLOT BY:	KITE CORNELIUS
					PLOT NAME:	

### STORM SEWER STRUCTURE SCHEDULE

[illegible]

NOTES:  
1) STATIONS AND OFFSETS ARE TO THE CENTER OF THE STRUCTURE OR TO THE END OF PIPE WHERE APPLICABLE.  
2) TOP OF STRUCTURE ELEVATION = RIM ELEVATION - CASTING HEIGHT - ADJUSTING RINGS HEIGHT.  
3) DEPTH OF STRUCTURE = TOP OF STRUCTURE ELEVATION - BOTTOM OF STRUCTURE ELEVATION.

PROJECT NO:	1007-12-80	HWY: IH 39	COUNTY: DANE	MISCELLANEOUS QUANTITIES	SHEET	313
FILE NAME:	P:\2009 PROJECTS\0310001 - BLDG\WLD SHEETSP\DW\1007128010302_MCDWG					
			PLOT DATE:	5/28/2020 11:05 AM	PLOT BY:	KITE CORNELIUS
					PLOT NAME:	

## PULL BOXES

## FENCE SAFETY

## MOBILIZATION

## MAINTENANCE AND REPAIR OF HAUL ROADS

PROJECT NO:	1007-12-80	Hwy: IH 39
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CONTINUED FROM PREVIOUS SHEET

TEMPORARY MARKING LINES

LOCATION	STA	TO	STA	646.9010*** 646.9110		649.0105		649.0205		649.0120 ****		649.0220 ****		649.0760
				MARKING REMOVAL LINE 4-INCH	8-INCH	TEMPORARY MARKING LINE PAINT 4-INCH	WHITE (DASH)	WHITE (DASH)	WHITE (DASH)	TEMPORARY MARKING LINE EPOXY 4-INCH	WHITE (DASH)	TEMPORARY MARKING LINE EPOXY 8-INCH	WHITE (DASH)	TEMPORARY MARKING RAISED PAVEMENT MARKER TYPE I EACH
STAGE 2B				LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	
EB TO NB RAMP	1562+00	'BCN'	1568+00	'BCN'	--	--	100	--	--	600	600	150	--	--
EB TO NB RAMP	1568+00	'BCN'	1573+00	'BCN'	--	500	500	130	--	--	--	--	--	--
EB TO NB RAMP	1573+00	'BCN'	1593+67	'BCN'	--	2,070	2,070	520	--	--	--	--	--	24
IH 39 NB	1183+69	'XNB'	1204+50	'XNB'	--	2,080	--	--	--	--	--	--	--	--
IH 39 NB	1193+14	'XNB'	1204+50	'XNB'	--	1,140	280	--	--	--	--	--	--	--
IH 39 NB	1204+50	'XNB'	1216+55	'XNB'	--	1,210	300	2,410	--	--	--	--	--	--
IH 39 NB	1216+55	'XNB'	1221+00	'XNB'	--	450	110	--	--	--	--	--	--	--
IH 39 NB	1221+00	'XNB'	1227+00	'XNB'	--	600	--	--	--	--	--	--	--	--
STAGE 2B SUBTOTALS				--	--	3,710	8,150	1,210	130	600	600	150	--	24
STAGE 2C														
IH 39 NB	1166+03	'XNB'	1179+38	'XNB'	--	1,340	330	--	--	--	--	--	--	--
EB TO NB RAMP	1580+00	'BCN'	1585+00	'BCN'	--	500	--	1,000	--	--	--	--	--	24
EB TO NB RAMP	1585+00	'BCN'	1592+00	'BCN'	--	700	--	350	--	--	--	--	--	--
IH 39 NB	1191+40	'XNB'	1203+13	'XNB'	--	1,170	--	--	--	--	--	--	--	--
IH 39 NB	1203+13	'XNB'	1230+43	'XNB'	--	2,730	2,730	1,370	--	--	--	--	--	--
IH 39 NB	1230+43	'XNB'	1236+90	'XNB'	--	650	1,940	--	--	--	--	--	--	26
IH 39 NB	1236+90	'XNB'	1239+80	'XNB'	--	290	150	--	--	--	--	--	--	--
STAGE 2C SUBTOTALS				--	--	7,380	6,300	2,920	1,000	--	--	--	--	50
STAGE 3A														
IH 39 NB	2509+94	'NB'	2519+50	'NB'	--	960	1,910	--	--	--	--	--	--	38
IH 39 NB	2519+50	'NB'	2523+55	'NB'	--	410	100	--	--	--	--	--	--	--
IH 39 NB	2523+55	'NB'	2531+83	'NB'	--	830	830	210	210	--	--	--	--	--
IH 39 NB	2531+83	'NB'	2534+00	'NB'	--	220	220	330	--	--	--	--	--	--
IH 39 NB	2534+00	'NB'	2540+00	'NB'	--	600	1,200	--	--	--	--	--	--	24
NB TO US 12 RAMPS	1135+58	'XNB'	1164+33	'XNB'	--	2,880	2,880	--	--	--	--	--	--	--
NB TO WB RAMP	1567+70	'BBW'	1579+11	'BBW'	--	1,640	1,640	--	--	--	--	--	--	--
US 12 EB	103+40	'XEB'	108+50	'XEB'	130	--	--	790	--	--	--	--	--	--
US 12 EB	105+80	'XEB'	127+00	'XEB'	--	2,120	--	--	--	--	--	--	--	--
EB TO NB RAMP	1573+50	'BCN'	1588+00	'BCN'	--	--	--	--	--	1,450	1,450	730	--	--
EB TO NB RAMP	2588+00	'TNB'	2599+00	'TNB'	--	--	--	--	--	1,100	1,100	830	1,500	--
IH 39 NB	2599+00	'TNB'	2603+50	'TNB'	--	--	--	--	--	450	450	450	--	--
IH 39 NB	1203+00	'XNB'	1223+50	'XNB'	--	--	--	--	--	2,050	2,050	1,540	--	--
IH 39 NB	1223+50	'XNB'	1240+00	'XNB'	--	--	--	--	--	1,650	1,650	830	--	--
STAGE 3A SUBTOTALS				130	--	7,540	11,210	310	1,120	210	6,700	4,380	1,500	62
STAGE 3B														
IH 39 NB	2513+00	'NB'	2515+00	'NB'	--	--	200	--	--	--	--	--	--	--
IH 39 NB	2515+00	'NB'	2519+50	'NB'	--	--	450	--	110	--	--	--	--	--
IH 39 NB	2519+50	'NB'	2524+60	'NB'	--	--	510	--	1,020	--	--	--	--	--
IH 39 NB	2524+60	'NB'	2533+33	'NB'	--	--	870	--	--	--	--	--	--	--
IH 39 NB	2533+33	'NB'	2540+00	'NB'	--	670	1,330	--	--	--	--	--	--	10
NB TO US 12 RAMPS	1524+60	'BBW'	1547+00	'BBW'	--	2,240	2,240	--	--	--	--	--	--	--
NB TO US 12 RAMPS	1547+00	'BBW'	1552+00	'BBW'	--	500	300	200	200	950	950	300	500	--
EB TO NB RAMP	1564+00	'BCN'	1573+50	'BCN'	--	950	750	--	--	300	300	300	500	--
STAGE 3B SUBTOTALS				--	--	4,360	6,650	--	1,420	110	950	300	500	10
STAGE 3C														
IH 39 NB	2517+40	'NB'	2525+00	'NB'	--	--	--	--	--	760	760	760	--	--
IH 39 NB	2525+00	'NB'	2531+00	'NB'	--	--	--	--	--	600	600	450	1,200	--
IH 39 NB	2531+00	'NB'	2540+00	'NB'	--	--	--	--	--	900	900	450	--	--
NB TO US 12 RAMPS	1531+00	'BBW'	1546+00	'BBW'	--	--	--	200	--	1,500	1,500	380	--	--
NB TO WB RAMP	1546+00	'BBW'	1580+52	'BBW'	--	3,450	3,450	--	--	--	--	--	--	32
STAGE 3C SUBTOTALS				--	--	3,450	3,450	200	--	3,760	3,760	2,040	1,200	32
UNDISTRIBUTED IH 39 TANGENT SECTIONS														1,092
CATEGORY 1000 PROJECT TOTALS	23,420	1,170	38,660	49,930	8,570	7,720	530	8,250	12,010	12,010	6,870	3,200		1,310

\* STATIONING STARTS ALONG RAMP ALIGNMENT (BCN) AND CONTINUES ALONG NB IH 39 ALIGNMENT (XNB)

\*\* AFTER 27 DAY CLOSURE OF WB TO NB RAMP, REVISE MARKING LINES

\*\*\* ADDITIONAL QUANTITIES ELSEWHERE

\*\*\*\* TEMPORARY EPOXY IS PLACED PRIOR TO FINAL GROOVED MARKING LINES BEING PLACED

PROJECT NO: 1007-12-80

HWY: IH 39

COUNTY: DANE

MISCELLANEOUS QUANTITIES

PLOT NAME:

PLOT DATE: 5/29/2020 9:24 AM

PLOT BY: KYLE CORNELIUS

SHEET

321

E

FILE NAME: P:\2019 PROJECTS\1007-12-80\1007-12-80-302\_MQ.DWG

LAYOUT NAME: 080738.dwg

WISDOT/CADDS SHEET 42

## EROSION CONTROL

628.1104	628.1504	628.1520	628.1920	628.6005	628.7005	628.7010	628.7504	628.7555	628.7560	628.7570	SPV.0060.008
EROSION BALES	SILT FENCE	SILT FENCE MAINTENANCE	CLEANING BASINS	TURBIDITY BARRIERS	INLET PROTECTION	TEMPORARY DITCH	CHECKS	CULVERT PIPE	TRACKING PADS	ROCK BAGS	TEMPORARY SEDIMENT BASIN
EACH	LF	LF	CY	SY	TYPE A EACH	TYPE B EACH	LF	CHECKS	EACH	EACH	EACH
2524+64 - 2558+79	RT (NB)	RT (NB)	8	--	--	8	--	--	--	--	--
2524+64 - 2558+79	RT (NB)	RT (NB)	8	--	--	2	28	--	--	--	--
1524+60 - 1556+58	RT BBW	1470	12	--	--	8	42	--	--	60	--
1541+00 - 1556+58	LT BBW	1630	--	--	--	1	--	--	--	60	--
546+00 - 551+50	RT BBE	553	--	--	--	--	--	--	--	20	--
1558+00 - 1566+50	LT BBW	425	--	--	--	1	--	--	--	20	--
1558+00 - 1568+50	RT BBW	441	40	--	--	1	137	--	--	20	--
2560+65 - 2563+73	LT (NB)	--	--	--	--	1	--	--	--	--	--
2565+60 - 2571+62	LT (NB)	--	--	--	--	2	--	--	--	--	--
1561+50 - 1584+75	LT BCN	1280	--	--	1	1	--	--	--	40	--
1571+16 - 1581+76	RT BCN	496	8	--	--	--	28	--	--	--	--
1583+25 - 1584+75	RT BCN	149	--	--	--	--	--	--	--	--	--
2583+51 - 2587+75	LT TNB	--	8	--	--	--	28	4	--	--	--
2594+00 - 1212+87	LT/RT TNB	410	36	--	--	5	126	--	--	10	--
1213+00 - 1233+80	LT/RT XNB	1337	20	--	--	20	70	--	--	50	--
PENNITO CREEK STRUCTURE	1213+00 RT XNB	100	--	44	--	--	--	--	--	--	--
UNDISTRIBUTED	819	819	13	--	1	5	46	6	6	28	3
CATEGORY 1000 PROJECT TOTAL	9110	9110	145	44	2	55	505	10	6	308	3

## EROSION MAT

628.2002	628.2008	628.2023
CLASS I	EROSION MAT URBAN CLASS I	CLASS II
TYPE A	TYPE A	TYPE B
SY	SY	SY
UNDISTRIBUTED STAGE 1A	839	--
UNDISTRIBUTED STAGE 1B	5575	--
UNDISTRIBUTED STAGE 2A	172	--
1524+60 - 1556+58	RT BBW	4276
1533+00 - 1556+58	LT BBW	506
545+75 - 551+50	RT BBE	527
1558+11 - 1559+25	LT BBW	149
1562+75 - 1568+50	RT BBW	1628
1562+75 - 1566+50	LT BBW	399
1566+50 - 1578+00	LT BBW	1023
1568+50 - 1574+75	RT BBW	556
2533+25 - 2537+00	RT NB	524
117+25 - 126+00	RT XEB	949
1561+50 - 1581+75	LT BCN	4590
1571+75 - 1581+50	RT BCN	1927
1583+32 - 1593+00	RT BCN	1655
2583+50 - 2592+00	LT TNB	1756
2593+00 - 1212+92	RT TNB	3956
1212+92 - 1233+60	RT XNB	5755
7+93 - 24+79	LT XG	1499
10+50 - 23+30	RT XG	1138
PENNITO CREEK STRUCTURE	1213+00 RT XNB	1111
UNDISTRIBUTED	2341	1079
CATEGORY 1000 PROJECT TOTAL	36085	11872
CATEGORY 1000 PROJECT TOTAL	36085	3088

## EROSION CONTROL MOBILIZATION

628.1905	628.1910
MOBILIZATION	EMERGENCY
EROSION CONTROL	MOBILIZATION
EACH	EACH
PROJECT 1007-12-80 IH 39	12
CATEGORY 1000 PROJECT TOTAL	12

## SLOPE PAVING REPAIR CRUSHED AGGREGATE

604.9010.5
CY
STRUCTURE
B-13-463 SOUTH SLOPE
B-13-463 NORTH SLOPE
CATEGORY 1000 PROJECT TOTAL
18

## RIPRAP

606.0200	645.0120
RIPRAP	GEOTEXTILE
MEDIUM	TYPE HR
ALIGN	CY
STA	OFFSET
1526+12.70	RT XNB
1527+90	RT BBW
1537+25.84	RT BBW
1556+29.22	RT BBW
1556+29.22	LT BBW
1563+00.66	RT BBW
1563+03.61	LT BBW
1583+48.37	RT BCN
2583+63.53	LT TNB
2584+50	RT TNB
1209+49.73	RT XNB
1216+25	RT XNB
1223+91.05	RT XNB
1225+50	RT XNB
1230+00	RT XNB
UNDISTRIBUTED	14
CATEGORY 1000 PROJECT TOTAL	90
CATEGORY 1000 PROJECT TOTAL	180

Addendum No. 01  
ID 1007-12-80  
Revised Sheet 323  
June 2, 2020

PROJECT NO: 1007-12-80

HWY: IH 39

COUNTY: DANE

MISCELLANEOUS QUANTITIES

SHEET

323

E

FILE NAME: P:\2019 PROJECTS\5019001 - BICCM\13\3DSHEET\PLAN\10071280\302\_MQ.DWG

LAYOUT NAME: 080220\_mq

PLOT DATE: 5/28/2020 6:18 PM

PLOT BY: KYLE CORNELIUS

PLOT NAME:

WISDOT/CADDS SHEET 42



## Proposal Schedule of Items

Page 1 of 27

Proposal ID: 20200609001 Project(s): 1007-12-79, 1007-12-80, 1008-10-70

Federal ID(s): WISC 2020313, WISC 2020314, WISC 2020315

SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0002	201.0105 Clearing	50.000 STA	_____.	_____.
0004	201.0120 Clearing	88.000 ID	_____.	_____.
0006	201.0205 Grubbing	50.000 STA	_____.	_____.
0008	201.0220 Grubbing	88.000 ID	_____.	_____.
0010	203.0200 Removing Old Structure (station) 700. 1184 'XSB'+52	LS	LUMP SUM	_____.
0012	203.0200 Removing Old Structure (station) 701. 1582 'BCN'+52	LS	LUMP SUM	_____.
0014	203.0500.S Removing Old Structure Over Waterway (station) 800. 1212+84 'XSB'	LS	LUMP SUM	_____.
0016	203.0500.S Removing Old Structure Over Waterway (station) 801. 1213+00 'XNB'	LS	LUMP SUM	_____.
0018	204.0100 Removing Concrete Pavement	82,120.000 SY	_____.	_____.
0020	204.0105 Removing Pavement Butt Joints	126.000 SY	_____.	_____.
0022	204.0110 Removing Asphaltic Surface	18,715.000 SY	_____.	_____.
0024	204.0120 Removing Asphaltic Surface Milling	6,130.000 SY	_____.	_____.
0026	204.0150 Removing Curb & Gutter	2,162.000 LF	_____.	_____.
0028	204.0155 Removing Concrete Sidewalk	535.000 SY	_____.	_____.
0030	204.0157 Removing Concrete Barrier	8,984.000 LF	_____.	_____.
0032	204.0165 Removing Guardrail	7,089.000 LF	_____.	_____.



## Proposal Schedule of Items

Page 2 of 27

Proposal ID: 20200609001 Project(s): 1007-12-79, 1007-12-80, 1008-10-70

Federal ID(s): WISC 2020313, WISC 2020314, WISC 2020315

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	204.0170 Removing Fence	10,561.000 LF	_____.	_____.
0036	204.0180 Removing Delineators and Markers	32.000 EACH	_____.	_____.
0038	204.0195 Removing Concrete Bases	5.000 EACH	_____.	_____.
0040	204.0220 Removing Inlets	39.000 EACH	_____.	_____.
0042	204.0230 Removing Building (station) 001. STA.110+50'NN'	LS	LUMP SUM	_____.
0044	204.0230 Removing Building (station) 002. STA.110+61'NN'	LS	LUMP SUM	_____.
0046	204.0245 Removing Storm Sewer (size) 01. 12-Inch	846.000 LF	_____.	_____.
0048	204.0245 Removing Storm Sewer (size) 02. 18-Inch	425.000 LF	_____.	_____.
0050	204.0245 Removing Storm Sewer (size) 03. 24-Inch	20.000 LF	_____.	_____.
0052	204.0245 Removing Storm Sewer (size) 04. 30-Inch	69.000 LF	_____.	_____.
0054	204.0245 Removing Storm Sewer (size) 05. 24-Inch	108.000 LF	_____.	_____.
0058	204.9060.S Removing (item description) 01. Apron Endwall	10.000 EACH	_____.	_____.
0060	204.9060.S Removing (item description) 02. Business Sign	2.000 EACH	_____.	_____.
0062	204.9060.S Removing (item description) 03. Removing Type 1 Sign Covers	6.000 EACH	_____.	_____.



## Proposal Schedule of Items

Page 3 of 27

Proposal ID: 20200609001 Project(s): 1007-12-79, 1007-12-80, 1008-10-70

Federal ID(s): WISC 2020313, WISC 2020314, WISC 2020315

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	204.9060.S Removing (item description) 04. Removing Temporary Sign Support	2.000 EACH	_____.	_____.
0066	205.0100 Excavation Common	216,450.000 CY	_____.	_____.
0068	206.1000 Excavation for Structures Bridges (structure) 700. B-13-462	LS	LUMP SUM	_____.
0070	206.1000 Excavation for Structures Bridges (structure) 701. B-13-463	LS	LUMP SUM	_____.
0072	206.2000 Excavation for Structures Culverts (structure) 702. C-13-44	LS	LUMP SUM	_____.
0074	208.1100 Select Borrow	8,019.000 CY	_____.	_____.
0076	210.1500 Backfill Structure Type A	280.000 TON	_____.	_____.
0078	210.2500 Backfill Structure Type B	1,870.000 TON	_____.	_____.
0080	211.0200 Prepare Foundation for Concrete Pavement (project) 01. 1008-10-70	LS	LUMP SUM	_____.
0082	213.0100 Finishing Roadway (project) 01. 1007- 12-79	1.000 EACH	_____.	_____.
0084	213.0100 Finishing Roadway (project) 02. 1007- 12-80	1.000 EACH	_____.	_____.
0086	213.0100 Finishing Roadway (project) 03. 1008- 10-70	1.000 EACH	_____.	_____.
0088	214.0100 Obliterating Old Road	12.000 STA	_____.	_____.
0090	305.0110 Base Aggregate Dense 3/4-Inch	6,259.000 TON	_____.	_____.
0092	305.0120 Base Aggregate Dense 1 1/4-Inch	124,373.000 TON	_____.	_____.



## Proposal Schedule of Items

Page 4 of 27

Proposal ID: 20200609001 Project(s): 1007-12-79, 1007-12-80, 1008-10-70

Federal ID(s): WISC 2020313, WISC 2020314, WISC 2020315

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	305.0130 Base Aggregate Dense 3-Inch	1,315.000 TON	_____.	_____.
0096	310.0110 Base Aggregate Open-Graded	1,888.000 TON	_____.	_____.
0098	312.0110 Select Crushed Material	102,395.000 TON	_____.	_____.
0100	415.0090 Concrete Pavement 9-Inch	2,996.000 SY	_____.	_____.
0102	415.0100 Concrete Pavement 10-Inch	10,705.000 SY	_____.	_____.
0104	415.0110 Concrete Pavement 11-Inch	22,026.000 SY	_____.	_____.
0106	415.0120 Concrete Pavement 12-Inch	94,301.000 SY	_____.	_____.
0108	415.0125 Concrete Pavement 12 1/2-Inch	52,487.000 SY	_____.	_____.
0110	415.0410 Concrete Pavement Approach Slab	1,024.000 SY	_____.	_____.
0112	415.1120 Concrete Pavement HES 12-Inch	2,320.000 SY	_____.	_____.
0114	415.1410 Concrete Pavement Approach Slab HES	611.000 SY	_____.	_____.
0116	415.4100 Concrete Pavement Joint Filling	29,983.000 SY	_____.	_____.
0118	415.6000.S Rout and Seal	28,127.000 LF	_____.	_____.
0120	416.0610 Drilled Tie Bars	8,414.000 EACH	_____.	_____.
0122	416.0620 Drilled Dowel Bars	5,487.000 EACH	_____.	_____.
0124	416.1010 Concrete Surface Drains	5.000 CY	_____.	_____.
0126	416.1110 Concrete Shoulder Rumble Strips	39,122.000 LF	_____.	_____.



## Proposal Schedule of Items

Page 5 of 27

Proposal ID: 20200609001 Project(s): 1007-12-79, 1007-12-80, 1008-10-70

Federal ID(s): WISC 2020313, WISC 2020314, WISC 2020315

SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0128	416.1710 Concrete Pavement Repair	365.000 SY	_____.	_____.
0130	416.1715 Concrete Pavement Repair SHES	2,196.000 SY	_____.	_____.
0132	416.1720 Concrete Pavement Replacement	50.000 SY	_____.	_____.
0134	416.1725 Concrete Pavement Replacement SHES	330.000 SY	_____.	_____.
0136	455.0605 Tack Coat	3,295.000 GAL	_____.	_____.
0138	460.2000 Incentive Density HMA Pavement	12,260.000 DOL	1.00000	12,260.00
0140	460.7222 HMA Pavement 2 HT 58-28 S	11,840.000 TON	_____.	_____.
0142	460.7424 HMA Pavement 4 HT 58-28 H	5,225.000 TON	_____.	_____.
0144	460.7624 HMA Pavement 4 HT 58-28 V	2,510.000 TON	_____.	_____.
0146	465.0105 Asphaltic Surface	110.000 TON	_____.	_____.
0148	465.0110 Asphaltic Surface Patching	120.000 TON	_____.	_____.
0150	465.0315 Asphaltic Flumes	278.000 SY	_____.	_____.
0152	465.0400 Asphaltic Shoulder Rumble Strips	13,920.000 LF	_____.	_____.
0154	501.1000.S Ice Hot Weather Concreting	3,125.000 LB	_____.	_____.
0156	502.0100 Concrete Masonry Bridges	202.000 CY	_____.	_____.
0158	502.3210 Pigmented Surface Sealer	175.000 SY	_____.	_____.
0160	502.4204 Adhesive Anchors No. 4 Bar	530.000 EACH	_____.	_____.



## Proposal Schedule of Items

Page 6 of 27

Proposal ID: 20200609001 Project(s): 1007-12-79, 1007-12-80, 1008-10-70

Federal ID(s): WISC 2020313, WISC 2020314, WISC 2020315

SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0162	502.4205 Adhesive Anchors No. 5 Bar	549.000 EACH	_____.	_____.
0164	502.4206 Adhesive Anchors No. 6 Bar	96.000 EACH	_____.	_____.
0166	503.0136 Prestressed Girder Type I 36-Inch	735.000 LF	_____.	_____.
0168	504.0100 Concrete Masonry Culverts	154.000 CY	_____.	_____.
0170	504.0500 Concrete Masonry Retaining Walls	2.000 CY	_____.	_____.
0172	505.0400 Bar Steel Reinforcement HS Structures	21,440.000 LB	_____.	_____.
0174	505.0600 Bar Steel Reinforcement HS Coated Structures	67,050.000 LB	_____.	_____.
0176	506.2605 Bearing Pads Elastomeric Non-Laminated	30.000 EACH	_____.	_____.
0178	506.4000 Steel Diaphragms (structure) 700. B-13-462	6.000 EACH	_____.	_____.
0180	506.4000 Steel Diaphragms (structure) 701. B-13-463	9.000 EACH	_____.	_____.
0182	509.0301 Preparation Decks Type 1	35.000 SY	_____.	_____.
0184	509.0302 Preparation Decks Type 2	6.000 SY	_____.	_____.
0186	509.0310.S Sawing Pavement Deck Preparation Areas	420.000 LF	_____.	_____.
0188	509.1500 Concrete Surface Repair	300.000 SF	_____.	_____.
0190	509.2000 Full-Depth Deck Repair	6.000 SY	_____.	_____.



## Proposal Schedule of Items

Page 7 of 27

Proposal ID: 20200609001 Project(s): 1007-12-79, 1007-12-80, 1008-10-70

Federal ID(s): WISC 2020313, WISC 2020314, WISC 2020315

SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0192	509.2100.S Concrete Masonry Deck Repair	2.000 CY	_____.	_____.
0194	509.5100.S Polymer Overlay	8,880.000 SY	_____.	_____.
0196	509.9050.S Cleaning Parapets	345.000 LF	_____.	_____.
0198	511.1200 Temporary Shoring (structure) 700. B-13-462	670.000 SF	_____.	_____.
0200	511.1200 Temporary Shoring (structure) 701. B-13-463	710.000 SF	_____.	_____.
0202	516.0500 Rubberized Membrane Waterproofing	83.000 SY	_____.	_____.
0204	517.1010.S Concrete Staining (structure) 700. B-13-462	1,660.000 SF	_____.	_____.
0206	517.1010.S Concrete Staining (structure) 701. B-13-463	1,655.000 SF	_____.	_____.
0208	517.1010.S Concrete Staining (structure) 702. S-13-509	775.000 SF	_____.	_____.
0210	517.1010.S Concrete Staining (structure) 703. S-13-510	715.000 SF	_____.	_____.
0212	520.2084 Culvert Pipe Temporary 84-Inch	150.000 LF	_____.	_____.
0214	520.8000 Concrete Collars for Pipe	14.000 EACH	_____.	_____.
0216	521.1012 Apron Endwalls for Culvert Pipe Steel 12-Inch	11.000 EACH	_____.	_____.
0218	521.1524 Apron Endwalls for Culvert Pipe Sloped Side Drains Steel 24-Inch 6 to 1	2.000 EACH	_____.	_____.



## Proposal Schedule of Items

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Proposal ID: 20200609001 Project(s): 1007-12-79, 1007-12-80, 1008-10-70

Federal ID(s): WISC 2020313, WISC 2020314, WISC 2020315

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	522.0118 Culvert Pipe Reinforced Concrete Class III 18-Inch	40.000 LF	_____.	_____.
0222	522.0124 Culvert Pipe Reinforced Concrete Class III 24-Inch	234.000 LF	_____.	_____.
0224	522.1018 Apron Endwalls for Culvert Pipe Reinforced Concrete 18-Inch	11.000 EACH	_____.	_____.
0226	522.1021 Apron Endwalls for Culvert Pipe Reinforced Concrete 21-Inch	1.000 EACH	_____.	_____.
0228	522.1024 Apron Endwalls for Culvert Pipe Reinforced Concrete 24-Inch	11.000 EACH	_____.	_____.
0230	522.1030 Apron Endwalls for Culvert Pipe Reinforced Concrete 30-Inch	2.000 EACH	_____.	_____.
0232	550.1100 Piling Steel HP 10-Inch X 42 Lb	1,375.000 LF	_____.	_____.
0234	601.0409 Concrete Curb & Gutter 30-Inch Type A	4,886.000 LF	_____.	_____.
0236	601.0555 Concrete Curb & Gutter 6-Inch Sloped 36-Inch Type A	477.000 LF	_____.	_____.
0238	601.0600 Concrete Curb Pedestrian	22.000 LF	_____.	_____.
0240	602.0410 Concrete Sidewalk 5-Inch	5,240.000 SF	_____.	_____.
0242	602.0505 Curb Ramp Detectable Warning Field Yellow	180.000 SF	_____.	_____.
0244	603.1142 Concrete Barrier Type S42	8,044.000 LF	_____.	_____.
0246	603.1242 Concrete Barrier Type S42A	4,096.000 LF	_____.	_____.



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Proposal ID: 20200609001 Project(s): 1007-12-79, 1007-12-80, 1008-10-70

Federal ID(s): WISC 2020313, WISC 2020314, WISC 2020315

SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0248	603.8000 Concrete Barrier Temporary Precast Delivered	26,440.000 LF	_____.	_____.
0250	603.8125 Concrete Barrier Temporary Precast Installed	77,550.000 LF	_____.	_____.
0252	604.0500 Slope Paving Crushed Aggregate	1,303.000 SY	_____.	_____.
0254	604.9015.S Reseal Crushed Aggregate Slope Paving	1,245.000 SY	_____.	_____.
0256	606.0200 Riprap Medium	188.000 CY	_____.	_____.
0258	606.0300 Riprap Heavy	65.000 CY	_____.	_____.
0260	608.0412 Storm Sewer Pipe Reinforced Concrete Class IV 12-Inch	228.000 LF	_____.	_____.
0262	608.0418 Storm Sewer Pipe Reinforced Concrete Class IV 18-Inch	1,499.000 LF	_____.	_____.
0264	608.0421 Storm Sewer Pipe Reinforced Concrete Class IV 21-Inch	27.000 LF	_____.	_____.
0266	608.0424 Storm Sewer Pipe Reinforced Concrete Class IV 24-Inch	1,104.000 LF	_____.	_____.
0268	608.0430 Storm Sewer Pipe Reinforced Concrete Class IV 30-Inch	56.000 LF	_____.	_____.
0272	611.0606 Inlet Covers Type B	1.000 EACH	_____.	_____.
0274	611.0610 Inlet Covers Type BW	51.000 EACH	_____.	_____.
0276	611.0624 Inlet Covers Type H	4.000 EACH	_____.	_____.
0278	611.0642 Inlet Covers Type MS	2.000 EACH	_____.	_____.



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Proposal ID: 20200609001 Project(s): 1007-12-79, 1007-12-80, 1008-10-70

Federal ID(s): WISC 2020313, WISC 2020314, WISC 2020315

SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0280	611.0654 Inlet Covers Type V	16.000 EACH	_____.	_____.
0282	611.2004 Manholes 4-FT Diameter	1.000 EACH	_____.	_____.
0284	611.2005 Manholes 5-FT Diameter	3.000 EACH	_____.	_____.
0286	611.3004 Inlets 4-FT Diameter	26.000 EACH	_____.	_____.
0288	611.3220 Inlets 2x2-FT	11.000 EACH	_____.	_____.
0290	611.3225 Inlets 2x2.5-FT	20.000 EACH	_____.	_____.
0292	611.3230 Inlets 2x3-FT	4.000 EACH	_____.	_____.
0294	611.3902 Inlets Median 2 Grate	1.000 EACH	_____.	_____.
0296	611.8115 Adjusting Inlet Covers	2.000 EACH	_____.	_____.
0298	612.0106 Pipe Underdrain 6-Inch	2,830.000 LF	_____.	_____.
0300	612.0206 Pipe Underdrain Unperforated 6-Inch	859.000 LF	_____.	_____.
0302	612.0212 Pipe Underdrain Unperforated 12-Inch	576.000 LF	_____.	_____.
0304	612.0406 Pipe Underdrain Wrapped 6-Inch	430.000 LF	_____.	_____.
0306	612.0806 Apron Endwalls for Underdrain Reinforced Concrete 6-Inch	18.000 EACH	_____.	_____.
0308	614.0150 Anchor Assemblies for Steel Plate Beam Guard	4.000 EACH	_____.	_____.
0312	614.0905 Crash Cushions Temporary	16.000 EACH	_____.	_____.



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Proposal ID: 20200609001 Project(s): 1007-12-79, 1007-12-80, 1008-10-70

Federal ID(s): WISC 2020313, WISC 2020314, WISC 2020315

SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0314	614.2300 MGS Guardrail 3	4,368.000 LF	_____.	_____.
0316	614.2500 MGS Thrie Beam Transition	1,064.000 LF	_____.	_____.
0318	614.2610 MGS Guardrail Terminal EAT	16.000 EACH	_____.	_____.
0320	614.2620 MGS Guardrail Terminal Type 2	2.000 EACH	_____.	_____.
0322	616.0100 Fence Woven Wire (height) 01. 4-FT	10,130.000 LF	_____.	_____.
0324	616.0700.S Fence Safety	4,820.000 LF	_____.	_____.
0326	618.0100 Maintenance And Repair of Haul Roads (project) 01. 1007-12-79	1.000 EACH	_____.	_____.
0328	618.0100 Maintenance And Repair of Haul Roads (project) 02. 1007-12-80	1.000 EACH	_____.	_____.
0330	619.1000 Mobilization	1.000 EACH	_____.	_____.
0332	624.0100 Water	1,272.000 MGAL	_____.	_____.
0334	625.0500 Salvaged Topsoil	138,529.000 SY	_____.	_____.
0336	627.0200 Mulching	77,357.000 SY	_____.	_____.
0338	628.1104 Erosion Bales	495.000 EACH	_____.	_____.
0340	628.1504 Silt Fence	13,456.000 LF	_____.	_____.
0342	628.1520 Silt Fence Maintenance	13,456.000 LF	_____.	_____.
0344	628.1905 Mobilizations Erosion Control	37.000 EACH	_____.	_____.



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Proposal ID: 20200609001 Project(s): 1007-12-79, 1007-12-80, 1008-10-70

Federal ID(s): WISC 2020313, WISC 2020314, WISC 2020315

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	628.1910 Mobilizations Emergency Erosion Control	27.000 EACH	_____.	_____.
0348	628.1920 Cleaning Sediment Basins	295.000 CY	_____.	_____.
0350	628.2002 Erosion Mat Class I Type A	63,548.000 SY	_____.	_____.
0352	628.2008 Erosion Mat Urban Class I Type B	25,232.000 SY	_____.	_____.
0354	628.2023 Erosion Mat Class II Type B	5,060.000 SY	_____.	_____.
0356	628.6005 Turbidity Barriers	419.000 SY	_____.	_____.
0358	628.6505 Soil Stabilizer Type A	10.000 ACRE	_____.	_____.
0360	628.6510 Soil Stabilizer Type B	10.000 ACRE	_____.	_____.
0362	628.7005 Inlet Protection Type A	6.000 EACH	_____.	_____.
0364	628.7010 Inlet Protection Type B	98.000 EACH	_____.	_____.
0366	628.7020 Inlet Protection Type D	2.000 EACH	_____.	_____.
0368	628.7504 Temporary Ditch Checks	1,154.000 LF	_____.	_____.
0370	628.7555 Culvert Pipe Checks	27.000 EACH	_____.	_____.
0372	628.7560 Tracking Pads	13.000 EACH	_____.	_____.
0374	628.7570 Rock Bags	385.000 EACH	_____.	_____.
0376	629.0205 Fertilizer Type A	106.700 CWT	_____.	_____.
0378	630.0110 Seeding Mixture No. 10	1,249.000 LB	_____.	_____.



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Proposal ID: 20200609001 Project(s): 1007-12-79, 1007-12-80, 1008-10-70

Federal ID(s): WISC 2020313, WISC 2020314, WISC 2020315

SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0380	630.0130 Seeding Mixture No. 30	1,198.000 LB	_____.	_____.
0382	630.0140 Seeding Mixture No. 40	235.000 LB	_____.	_____.
0384	630.0200 Seeding Temporary	4,237.000 LB	_____.	_____.
0386	630.0300 Seeding Borrow Pit	1,000.000 LB	_____.	_____.
0388	630.0500 Seed Water	3,743.200 MGAL	_____.	_____.
0390	632.0101 Trees (species) (size) (root) 001. Oak, Bur, B&B, 2-Inch Cal.	5.000 EACH	_____.	_____.
0392	632.0101 Trees (species) (size) (root) 002. Oak, Chinkapin, B&B, 2-Inch Cal.	5.000 EACH	_____.	_____.
0394	632.0101 Trees (species) (size) (root) 003. Oak, Swamp White, B&B, 2-Inch Cal.	28.000 EACH	_____.	_____.
0396	632.0101 Trees (species) (size) (root) 004. Oak, Regal Prince, B&B, 2-Inch Cal.	14.000 EACH	_____.	_____.
0398	632.0101 Trees (species) (size) (root) 005. Maple, Sugar, B&B, 2-Inch Cal.	9.000 EACH	_____.	_____.
0400	632.0101 Trees (species) (size) (root) 006. Hickory, Shagbark, B&B, 2-Inch Cal.	10.000 EACH	_____.	_____.
0402	632.0101 Trees (species) (size) (root) 007. Exclamation, Planetree, B&B, 2-Inch Cal.	5.000 EACH	_____.	_____.
0404	632.0101 Trees (species) (size) (root) 008. Cedar, Eastern Red, B&B, 8-Foot HT.	36.000 EACH	_____.	_____.
0406	632.0101 Trees (species) (size) (root) 009. Baldcypress, Shawnee Brave, B&B, 2- Inch Cal.	47.000 EACH	_____.	_____.



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Proposal ID: 20200609001 Project(s): 1007-12-79, 1007-12-80, 1008-10-70

Federal ID(s): WISC 2020313, WISC 2020314, WISC 2020315

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	632.0101 Trees (species) (size) (root) 010. Hemlock, Canadian, B&B, 6-Foot HT.	19.000 EACH	_____.	_____.
0410	632.0101 Trees (species) (size) (root) 012. Pine, Vanderwolf's Pyramid, B&B, 8-Foot HT.	37.000 EACH	_____.	_____.
0412	632.0101 Trees (species) (size) (root) 013. Birch, Whitespire, B&B, 6-Foot HT.	72.000 EACH	_____.	_____.
0414	632.0101 Trees (species) (size) (root) 014. Hawthorn, Thornless Cockspur, B&B, 6-Foot HT.	3.000 EACH	_____.	_____.
0416	632.0201 Shrubs (species) (size) (root) 001. Pine, Enci Mugo, Container, 30-Inch HT/24" W, #5	133.000 EACH	_____.	_____.
0418	632.0201 Shrubs (species) (size) (root) 002. Juniper, Oldfield Common, Container, 30-inch HT #5	38.000 EACH	_____.	_____.
0420	632.0201 Shrubs (species) (size) (root) 003. Chokecherry, Brilliant Red, Container, 30-Inch HT. #3	60.000 EACH	_____.	_____.
0422	632.0201 Shrubs (species) (size) (root) 004. Bayberry, Northern, Container, 30-Inch HT, #3	22.000 EACH	_____.	_____.
0424	632.0201 Shrubs (species) (size) (root) 005. Dogwood, Redtwig, Container, 30-Inch HT, #3	257.000 EACH	_____.	_____.
0426	632.0201 Shrubs (species) (size) (root) 007. Sumac, Smooth, Container, 30-Inch HT. #3	152.000 EACH	_____.	_____.
0428	632.9101 Landscape Planting Surveillance and Care Cycles	13.000 EACH	_____.	_____.
0430	633.0100 Delineator Posts Steel	110.000 EACH	_____.	_____.



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Proposal ID: 20200609001 Project(s): 1007-12-79, 1007-12-80, 1008-10-70

Federal ID(s): WISC 2020313, WISC 2020314, WISC 2020315

SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0432	633.0500 Delineator Reflectors	168.000 EACH	_____.	_____.
0434	633.1000 Delineators Barrier Wall	80.000 EACH	_____.	_____.
0436	633.5200 Markers Culvert End	26.000 EACH	_____.	_____.
0438	634.0414 Posts Wood 4x4-Inch X 14-FT	1.000 EACH	_____.	_____.
0440	634.0612 Posts Wood 4x6-Inch X 12-FT	65.000 EACH	_____.	_____.
0442	634.0614 Posts Wood 4x6-Inch X 14-FT	14.000 EACH	_____.	_____.
0444	634.0616 Posts Wood 4x6-Inch X 16-FT	24.000 EACH	_____.	_____.
0446	634.0618 Posts Wood 4x6-Inch X 18-FT	45.000 EACH	_____.	_____.
0448	634.0620 Posts Wood 4x6-Inch X 20-FT	20.000 EACH	_____.	_____.
0450	635.0200 Sign Supports Structural Steel HS	2,328.000 LB	_____.	_____.
0452	636.0100 Sign Supports Concrete Masonry	199.600 CY	_____.	_____.
0454	636.0500 Sign Supports Steel Reinforcement	540.000 LB	_____.	_____.
0456	636.1500 Sign Supports Steel Coated Reinforcement HS	32,440.000 LB	_____.	_____.
0458	637.1220 Signs Type I Reflective SH	3,977.000 SF	_____.	_____.
0460	637.1230 Signs Type I Reflective F	584.000 SF	_____.	_____.
0462	637.2210 Signs Type II Reflective H	854.430 SF	_____.	_____.



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Proposal ID: 20200609001 Project(s): 1007-12-79, 1007-12-80, 1008-10-70

Federal ID(s): WISC 2020313, WISC 2020314, WISC 2020315

SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0464	637.2230 Signs Type II Reflective F	1,285.000 SF	_____.	_____.
0466	638.2101 Moving Signs Type I	12.000 EACH	_____.	_____.
0468	638.2102 Moving Signs Type II	34.000 EACH	_____.	_____.
0470	638.2601 Removing Signs Type I	29.000 EACH	_____.	_____.
0472	638.2602 Removing Signs Type II	138.000 EACH	_____.	_____.
0474	638.3000 Removing Small Sign Supports	123.000 EACH	_____.	_____.
0476	638.3100 Removing Structural Steel Sign Supports	4.000 EACH	_____.	_____.
0478	638.3150 Removing Overhead Sign Supports Cantilever (structure) 01. S-13-135	1.000 EACH	_____.	_____.
0480	638.3155 Removing Overhead Sign Supports Full Span (structure) 01. S-13-134	1.000 EACH	_____.	_____.
0482	638.3155 Removing Overhead Sign Supports Full Span (structure) 02. S-13-138	1.000 EACH	_____.	_____.
0484	638.3155 Removing Overhead Sign Supports Full Span (structure) 03. S-13-139	1.000 EACH	_____.	_____.
0486	641.1200 Sign Bridge Cantilevered (structure) 700. S-13-507	LS	LUMP SUM	_____.
0488	641.6600 Sign Bridge (structure) 700. S-13-508	LS	LUMP SUM	_____.
0490	641.6600 Sign Bridge (structure) 701. S-13-511	LS	LUMP SUM	_____.
0492	641.6600 Sign Bridge (structure) 702. S-13-509	LS	LUMP SUM	_____.



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Proposal ID: 20200609001 Project(s): 1007-12-79, 1007-12-80, 1008-10-70

Federal ID(s): WISC 2020313, WISC 2020314, WISC 2020315

SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0494	641.6600 Sign Bridge (structure) 703. S-13-510	LS	LUMP SUM	_____.
0496	641.6600 Sign Bridge (structure) 704. S-13-512	LS	LUMP SUM	_____.
0498	641.8100 Overhead Sign Support (structure) 700. S-13-506	LS	LUMP SUM	_____.
0500	641.8100 Overhead Sign Support (structure) 701. S-13-513	LS	LUMP SUM	_____.
0502	642.5201 Field Office Type C	1.000 EACH	_____.	_____.
0504	642.5401 Field Office Type D	1.000 EACH	_____.	_____.
0506	643.0300 Traffic Control Drums	106,002.000 DAY	_____.	_____.
0508	643.0420 Traffic Control Barricades Type III	3,390.000 DAY	_____.	_____.
0510	643.0500 Traffic Control Flexible Tubular Marker Posts	400.000 EACH	_____.	_____.
0512	643.0600 Traffic Control Flexible Tubular Marker Bases	400.000 EACH	_____.	_____.
0514	643.0705 Traffic Control Warning Lights Type A	6,262.000 DAY	_____.	_____.
0516	643.0715 Traffic Control Warning Lights Type C	10,246.000 DAY	_____.	_____.
0518	643.0800 Traffic Control Arrow Boards	776.000 DAY	_____.	_____.
0520	643.0900 Traffic Control Signs	45,630.000 DAY	_____.	_____.
0522	643.0910 Traffic Control Covering Signs Type I	36.000 EACH	_____.	_____.
0524	643.0920 Traffic Control Covering Signs Type II	15.000 EACH	_____.	_____.



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Federal ID(s): WISC 2020313, WISC 2020314, WISC 2020315

SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0526	643.1000 Traffic Control Signs Fixed Message	592.750 SF	_____.	_____.
0528	643.1050 Traffic Control Signs PCMS	858.000 DAY	_____.	_____.
0530	643.1055.S Truck or Trailer Mounted Attenuator	100.000 DAY	_____.	_____.
0532	643.1205.S Basic Traffic Queue Warning System	382.000 DAY	_____.	_____.
0534	643.5000 Traffic Control	1.000 EACH	_____.	_____.
0536	645.0105 Geotextile Type C	285.000 SY	_____.	_____.
0538	645.0111 Geotextile Type DF Schedule A	1,670.000 SY	_____.	_____.
0540	645.0120 Geotextile Type HR	572.000 SY	_____.	_____.
0542	645.0220 Geogrid Type SR	6,000.000 SY	_____.	_____.
0544	646.1020 Marking Line Epoxy 4-Inch	11,167.000 LF	_____.	_____.
0546	646.1040 Marking Line Grooved Wet Ref Epoxy 4-Inch	118,393.000 LF	_____.	_____.
0548	646.1555 Marking Line Grooved Contrast Permanent Tape 4-Inch	20,645.000 LF	_____.	_____.
0550	646.3020 Marking Line Epoxy 8-Inch	703.000 LF	_____.	_____.
0552	646.3555 Marking Line Grooved Contrast Permanent Tape 8-Inch	15,950.000 LF	_____.	_____.
0554	646.5020 Marking Arrow Epoxy	7.000 EACH	_____.	_____.
0556	646.5220 Marking Symbol Epoxy	8.000 EACH	_____.	_____.



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Federal ID(s): WISC 2020313, WISC 2020314, WISC 2020315

SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0558	646.5520 Marking Outfall Epoxy	7.000 EACH	_____.	_____.
0560	646.6120 Marking Stop Line Epoxy 18-Inch	16.000 LF	_____.	_____.
0562	646.6464 Cold Weather Marking Epoxy 4-Inch	17,530.000 LF	_____.	_____.
0564	646.6468 Cold Weather Marking Epoxy 8-Inch	3,378.000 LF	_____.	_____.
0566	646.7020 Marking Diagonal Epoxy 6-Inch	1,080.000 LF	_____.	_____.
0568	646.7220 Marking Chevron Epoxy 24-Inch	1,132.000 LF	_____.	_____.
0570	646.7420 Marking Crosswalk Epoxy Transverse Line 6-Inch	490.000 LF	_____.	_____.
0572	646.8320 Marking Parking Stall Epoxy	9,992.000 LF	_____.	_____.
0574	646.9010 Marking Removal Line Water Blasting 4-Inch	58,100.000 LF	_____.	_____.
0576	646.9110 Marking Removal Line Water Blasting 8-Inch	4,880.000 LF	_____.	_____.
0578	646.9210 Marking Removal Line Water Blasting Wide	500.000 LF	_____.	_____.
0580	646.9310 Marking Removal Special Marking Water Blasting	3.000 EACH	_____.	_____.
0582	649.0105 Temporary Marking Line Paint 4-Inch	181,640.000 LF	_____.	_____.
0584	649.0120 Temporary Marking Line Epoxy 4-Inch	71,025.000 LF	_____.	_____.
0586	649.0150 Temporary Marking Line Removable Tape 4-Inch	300.000 LF	_____.	_____.



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Proposal ID: 20200609001 Project(s): 1007-12-79, 1007-12-80, 1008-10-70

Federal ID(s): WISC 2020313, WISC 2020314, WISC 2020315

SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0588	649.0205 Temporary Marking Line Paint 8-Inch	14,540.000 LF	_____.	_____.
0590	649.0220 Temporary Marking Line Epoxy 8-Inch	14,165.000 LF	_____.	_____.
0592	649.0760 Temporary Marking Raised Pavement Marker Type I	2,810.000 EACH	_____.	_____.
0594	652.0125 Conduit Rigid Metallic 2-Inch	48.000 LF	_____.	_____.
0596	652.0225 Conduit Rigid Nonmetallic Schedule 40 2-Inch	2,169.000 LF	_____.	_____.
0598	652.0235 Conduit Rigid Nonmetallic Schedule 40 3-Inch	308.000 LF	_____.	_____.
0600	652.0615 Conduit Special 3-Inch	50.000 LF	_____.	_____.
0602	653.0164 Pull Boxes Non-Conductive 24x42-Inch	17.000 EACH	_____.	_____.
0604	653.0222 Junction Boxes 18x12x6-Inch	4.000 EACH	_____.	_____.
0606	653.0905 Removing Pull Boxes	3.000 EACH	_____.	_____.
0608	654.0105 Concrete Bases Type 5	3.000 EACH	_____.	_____.
0610	654.0106 Concrete Bases Type 6	9.000 EACH	_____.	_____.
0612	654.0111 Concrete Bases Type 11	1.000 EACH	_____.	_____.
0614	654.0230 Concrete Control Cabinet Bases Type L30	1.000 EACH	_____.	_____.
0616	654.1150 Concrete Bases Camera Pole 50-FT	1.000 EACH	_____.	_____.
0618	655.0515 Electrical Wire Traffic Signals 10 AWG	6,003.000 LF	_____.	_____.



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Proposal ID: 20200609001 Project(s): 1007-12-79, 1007-12-80, 1008-10-70

Federal ID(s): WISC 2020313, WISC 2020314, WISC 2020315

SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0620	655.0610 Electrical Wire Lighting 12 AWG	1,860.000 LF	_____.	_____.
0622	655.0620 Electrical Wire Lighting 8 AWG	6,748.000 LF	_____.	_____.
0624	655.0625 Electrical Wire Lighting 6 AWG	798.000 LF	_____.	_____.
0626	656.0200 Electrical Service Meter Breaker Pedestal (location) 01. Rest Area #22	LS	LUMP SUM	_____.
0628	656.0200 Electrical Service Meter Breaker Pedestal (location) 401. SDS-13-0135	LS	LUMP SUM	_____.
0630	656.0500 Electrical Service Breaker Disconnect Box (location) 401. CCTV-13-0014	LS	LUMP SUM	_____.
0632	656.0500 Electrical Service Breaker Disconnect Box (location) 402. SDS-13-0135	LS	LUMP SUM	_____.
0634	657.0255 Transformer Bases Breakaway 11 1/2-Inch Bolt Circle	12.000 EACH	_____.	_____.
0636	657.0322 Poles Type 5-Aluminum	2.000 EACH	_____.	_____.
0638	657.0327 Poles Type 6-Aluminum	9.000 EACH	_____.	_____.
0640	657.0715 Luminaire Arms Truss Type 4 1/2-Inch Clamp 15-FT	11.000 EACH	_____.	_____.
0642	659.0700 Lighting Units Walkway	1.000 EACH	_____.	_____.
0644	659.1125 Luminaires Utility LED C	11.000 EACH	_____.	_____.
0646	659.2130 Lighting Control Cabinets 120/240 30-Inch	1.000 EACH	_____.	_____.
0648	670.0100 Field System Integrator	LS	LUMP SUM	_____.



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Proposal ID: 20200609001 Project(s): 1007-12-79, 1007-12-80, 1008-10-70

Federal ID(s): WISC 2020313, WISC 2020314, WISC 2020315

SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0650	670.0200 ITS Documentation	LS	LUMP SUM	_____.
0652	671.0112 Conduit HDPE 1-Duct 2-Inch	1,105.000 LF	_____.	_____.
0654	671.0132 Conduit HDPE 3-Duct 2-Inch	3,436.000 LF	_____.	_____.
0656	671.0212 Conduit HDPE Directional Bore 1-Duct 2-Inch	323.000 LF	_____.	_____.
0658	671.0232 Conduit HDPE Directional Bore 3-Duct 2-Inch	371.000 LF	_____.	_____.
0660	673.0110 Communication Vault Type Round	2.000 EACH	_____.	_____.
0662	673.0200 Tracer Wire Marker Posts	2.000 EACH	_____.	_____.
0664	673.0225.S Install Pole Mounted Cabinet	2.000 EACH	_____.	_____.
0666	674.0200 Cable Microwave Detector	3,106.000 LF	_____.	_____.
0668	674.0300 Remove Cable	5,612.000 LF	_____.	_____.
0670	675.0300 Install Mounted Controller Microwave Detector Assembly	8.000 EACH	_____.	_____.
0672	677.0150 Install Camera Pole 50-FT	1.000 EACH	_____.	_____.
0674	677.0200 Install Camera Assembly	1.000 EACH	_____.	_____.
0676	678.0012 Install Fiber Optic Cable Outdoor Plant 12-CT	3,296.000 LF	_____.	_____.
0678	678.0072 Install Fiber Optic Cable Outdoor Plant 72-CT	6,620.000 LF	_____.	_____.



## Proposal Schedule of Items

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Proposal ID: 20200609001 Project(s): 1007-12-79, 1007-12-80, 1008-10-70

Federal ID(s): WISC 2020313, WISC 2020314, WISC 2020315

SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0680	678.0200 Fiber Optic Splice Enclosure	4.000 EACH	_____.	_____.
0682	678.0300 Fiber Optic Splice	228.000 EACH	_____.	_____.
0684	678.0400 Fiber Optic Termination	48.000 EACH	_____.	_____.
0686	678.0500 Communication System Testing	LS	LUMP SUM	_____.
0688	678.0600 Install Ethernet Switches	6.000 EACH	_____.	_____.
0690	690.0150 Sawing Asphalt	3,100.000 LF	_____.	_____.
0692	690.0250 Sawing Concrete	41,944.000 LF	_____.	_____.
0694	715.0415 Incentive Strength Concrete Pavement	110,901.000 DOL	1.00000	110,901.00
0696	715.0502 Incentive Strength Concrete Structures	3,432.000 DOL	1.00000	3,432.00
0698	715.0603 Incentive Strength Concrete Barrier	24,600.000 DOL	1.00000	24,600.00
0700	715.0710 Optimized Aggregate Gradation Incentive	246,397.700 DOL	1.00000	246,397.70
0702	740.0440 Incentive IRI Ride	21,000.000 DOL	1.00000	21,000.00
0704	SPV.0005 Special 500. Subsoiling	2.000 ACRE	_____.	_____.
0706	SPV.0005 Special 501. Pre-Planting Vegetation Treatment	53.600 ACRE	_____.	_____.
0708	SPV.0005 Special 502. Seed Bed Preparation	14.000 ACRE	_____.	_____.
0710	SPV.0035 Special 001. Roadway Embankment	63,313.000 CY	_____.	_____.



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Federal ID(s): WISC 2020313, WISC 2020314, WISC 2020315

SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0712	SPV.0035 Special 501. Topsoil Special	1,405.000 CY	_____.	_____.
0714	SPV.0035 Special 700. High Performance Concrete (HPC) Masonry Structures	214.000 CY	_____.	_____.
0716	SPV.0035 Special 701. Rapid Set Deck Repair	12.000 CY	_____.	_____.
0718	SPV.0045 Special 001. Portable Speed Trailer	503.000 DAY	_____.	_____.
0720	SPV.0060 Special 001. Baseline CPM Progress Schedule	1.000 EACH	_____.	_____.
0722	SPV.0060 Special 002. CPM Progress Schedule Updates and Accepted Revisions	28.000 EACH	_____.	_____.
0724	SPV.0060 Special 003. Test Pits	12.000 EACH	_____.	_____.
0726	SPV.0060 Special 004. Roadway Cleanup	26.000 EACH	_____.	_____.
0728	SPV.0060 Special 005. Welded Inlet Covers	24.000 EACH	_____.	_____.
0730	SPV.0060 Special 006. Pipe Bollard	20.000 EACH	_____.	_____.
0732	SPV.0060 Special 007. Utility Line Opening (ULO)	2.000 EACH	_____.	_____.
0734	SPV.0060 Special 008. Temporary Sediment Basin	8.000 EACH	_____.	_____.
0736	SPV.0060 Special 203. Repair State Owned Energy Absorbing Terminal (EAT)	4.000 EACH	_____.	_____.
0738	SPV.0060 Special 204. Emergency Response to Traffic Incident Involving Guardrail or EAT	4.000 EACH	_____.	_____.
0740	SPV.0060 Special 205. Emergency Response to Pavement Repairs	4.000 EACH	_____.	_____.



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Proposal ID: 20200609001 Project(s): 1007-12-79, 1007-12-80, 1008-10-70

Federal ID(s): WISC 2020313, WISC 2020314, WISC 2020315

SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0742	SPV.0060 Special 206. Emergency Response to Traffic Incident Involving Concrete Barrier Temporary	10.000 EACH	_____.	_____.
0744	SPV.0060 Special 207. Emergency Response to Traffic Incident Involving Crash Cushion	4.000 EACH	_____.	_____.
0746	SPV.0060 Special 401. Remove Communication Vault	1.000 EACH	_____.	_____.
0748	SPV.0060 Special 402. Install Radio	1.000 EACH	_____.	_____.
0750	SPV.0060 Special 501. Native Seed Surveillance and Care Cycles	8.000 EACH	_____.	_____.
0752	SPV.0060 Special 502. Delineator Post Steel Modified	48.000 EACH	_____.	_____.
0754	SPV.0060 Special 701. Tension Anchor Rods	48.000 EACH	_____.	_____.
0756	SPV.0060 Special 702. Install ID Plaque	1.000 EACH	_____.	_____.
0758	SPV.0085 Special 501. Seeding Native Mix N2	674.000 LB	_____.	_____.
0760	SPV.0085 Special 502. Seeding Native Mix N3	30.000 LB	_____.	_____.
0762	SPV.0090 Special 001. Concrete Pavement Joint Sealing	12,140.000 LF	_____.	_____.
0764	SPV.0090 Special 002. Bore and Jack Storm Sewer Pipe Reinforced Concrete Class IV 24-INCH	141.000 LF	_____.	_____.
0766	SPV.0090 Special 003. Pipe Underdrain 6-inch with Geotextile Fabric and Aggregate	8,198.000 LF	_____.	_____.
0768	SPV.0090 Special 200. Repair State Owned Guardrail	800.000 LF	_____.	_____.



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Proposal ID: 20200609001 Project(s): 1007-12-79, 1007-12-80, 1008-10-70

Federal ID(s): WISC 2020313, WISC 2020314, WISC 2020315

SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0770	SPV.0090 Special 201. Gawk Screen Furnished	42,050.000 LF	_____.	_____.
0772	SPV.0090 Special 202. Gawk Screen Installed	74,635.000 LF	_____.	_____.
0774	SPV.0090 Special 203. Concrete Barrier Temporary Precast Delivered, Department Owned	16,355.000 LF	_____.	_____.
0776	SPV.0090 Special 204. Removing Department Owned Concrete Barrier Precast	6,225.000 LF	_____.	_____.
0778	SPV.0105 Special 001. Concrete Pavement Joint Layout Project 1007-12-79	LS	LUMP SUM	_____.
0780	SPV.0105 Special 002. Concrete Pavement Joint Layout Project 1007-12-80	LS	LUMP SUM	_____.
0782	SPV.0105 Special 003. Concrete Pavement Joint Layout Project 1008-10-70	LS	LUMP SUM	_____.
0784	SPV.0105 Special 004. Survey Project 1007-12-79 with Optional AMG for Concrete Pavement and Base	LS	LUMP SUM	_____.
0786	SPV.0105 Special 005. Survey Project 1007-12-80 with Optional AMG for Concrete Pavement and Base	LS	LUMP SUM	_____.
0788	SPV.0105 Special 006. Survey Project 1008-10-70 with Optional AMG for Conc Pavt and Base Course	LS	LUMP SUM	_____.
0790	SPV.0105 Special 401. Salvage ITS Equipment CCTV-13-0014	LS	LUMP SUM	_____.
0792	SPV.0105 Special 402. Salvage ITS Equipment SDS-13-0091	LS	LUMP SUM	_____.
0794	SPV.0105 Special 403. Salvage ITS Equipment Dejope Cabinet	LS	LUMP SUM	_____.



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Federal ID(s): WISC 2020313, WISC 2020314, WISC 2020315

SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0796	SPV.0105 Special 404. Salvage ITS Equipment SDS-13-0015	LS	LUMP SUM	_____.
0798	SPV.0105 Special 405. Relocate Solar Power Microwave Detector	LS	LUMP SUM	_____.
0800	SPV.0105 Special 406. Relocate Bluetooth Detector	LS	LUMP SUM	_____.
0802	SPV.0105 Special 701. Temporary Sand Bag Dike C-13-44	LS	LUMP SUM	_____.
0804	SPV.0165 Special 001. Insulation Board 4-inch	320.000 SF	_____.	_____.
0806	SPV.0165 Special 701. Wall Modular Block Mechanically Stabilized Earth R-13-335	1,800.000 SF	_____.	_____.
0808	SPV.0165 Special 702. Repair Galvanized Coating	300.000 SF	_____.	_____.
0810	SPV.0180 Special 501. Compost	530.000 SY	_____.	_____.
0812	204.0291.S Abandoning Sewer	11.000 CY	_____.	_____.
0814	604.9010.S Slope Paving Repair Crushed Aggregate	30.000 CY	_____.	_____.
0816	611.0535 Manhole Covers Type J-Special	1.000 EACH	_____.	_____.
0818	614.0805 Crash Cushions Permanent Low Maintenance	1.000 EACH	_____.	_____.
Section: 0001			Total:	_____.
			Total Bid:	_____.