

HIGHWAY WORK PROPOSAL

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

Proposal Number: **022**

<u>COUNTY</u>	<u>STATE PROJECT</u>	<u>FEDERAL</u>	<u>PROJECT DESCRIPTION</u>	<u>HIGHWAY</u>
Waukesha	2751-00-70	N/A	Cth Q; Br Ovr Oconomowoc Rvr (B-67-0373)	CTH Q

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: \$40,000.00 Payable to: Wisconsin Department of Transportation	Attach Proposal Guaranty on back of this PAGE.
Bid Submittal Date: March 13, 2018 Time (Local Time): 9:00 am	Firm Name, Address, City, State, Zip Code
Contract Completion Time November 01, 2018	SAMPLE NOT FOR BIDDING PURPOSES
Assigned Disadvantaged Business Enterprise Goal 0%	This contract is exempt from federal oversight.

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

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

Subscribed and sworn to before me this date _____

(Signature, Notary Public, State of Wisconsin)

(Bidder Signature)

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

(Print or Type Bidder Name)

(Date Commission Expires)

(Bidder Title)

Notary Seal

Type of Work: Grade, Base, Concrete Pavement, Asphalt Pavement, Beam Guard, Signs, Marking, Structure B-67-0373	For Department Use Only
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:
<http://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 P.M. local time on the Thursday before the letting. Check the department's web site after 5:00 P.M. 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 P.M. local time on the Thursday before the letting to ensure that the latest schedule of items Expedite file (*.ebs or *.00x) is used to submit the final bid.

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

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

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

or by calling the department at (608) 266-1631. Addenda can ONLY be obtained from the departments web site listed above or by picking up the addenda at the Bureau of Highway Construction, Room 601, 4802 Sheboygan Avenue, 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 ExpressTM web site.
 2. Use ExpediteTM software to enter a unit price for every item in the schedule of items.
 3. Submit the bid according to the requirements of ExpediteTM software and the Bid ExpressTM 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 ExpressTM web site reflecting the latest addenda posted on the department's web site at:
<http://wisconsindot.gov/Pages/doing-bus/contractors/hcci/bid-let.aspx>
Use ExpediteTM 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 ExpressTM web site to assure that the schedule of items is prepared properly.
- (2) Staple an 8 1/2 by 11 inch printout of the ExpediteTM 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 ExpediteTM 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 ExpediteTM 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 ExpediteTM generated schedule of items is not the same on each page.
 2. The check code printed on the printout of the ExpediteTM 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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SPECIAL PROVISIONS

1. General.

Perform the work under this construction contract for Project 2751-00-70, CTH Q, Bridge over Oconomowoc River (B-67-0373), CTH Q, Waukesha, 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, 2018 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 (20170615)

2. Scope of Work.

The work under this contract shall consist of structure removal, bridge construction, grading, asphalt pavement, pavement marking, beam guard, permanent signing, restoration 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 ten calendar days after the engineer issues a written notice to do so.

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

Construction on CTH Q may not begin prior to Wednesday, August 15, 2018.

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

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).

If additional construction activities beyond what was originally specified are required to complete the work, approval from the engineer, following coordination with WisDOT REC, is required prior to initiating these activities.

Migratory Birds

Swallow and other migratory birds' nests have been observed on or under the existing bridge. 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.

Waukesha County will install netting, inspect and prevent any nesting activity from occurring prior to construction contract execution on project 2751-00-70. Once the construction contract is executed, the contractor shall continue the monitoring and nesting prevention. Include the cost for preventing nesting in the cost of Removing Old Structure Over Waterway With Minimal Debris.

4. Traffic.

General

CTH Q shall be closed to traffic and pedestrians during construction. The boat launch located along CTH Q with access to the Oconomowoc River shall be closed during construction. Detours shall be posted for vehicles throughout construction.

Local Vehicle Access

Close driveways only for the minimum time required to construct new access approaches. Prior to removal or closing of driveway access, provide 48 hours' notice to the occupant and owner of the premises.

Contact residences which have entrances within the project limits seven days prior to performing work which may affect the entrances.

All work and operations shall be completed according to the plans, WisDOT Standard Detailed Drawings, MUTCD, and as directed by the engineer.

5. **Holiday Work Restrictions.**

Do not perform work on, nor haul materials of any kind along or across any portion of the highway carrying CTH Q 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:

- From noon Friday, August 31, 2018 to 6:00 AM Tuesday, September 4, 2018 for Labor Day.

stp-107-005 (20050502)

6. **Utilities.**

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

stp-107-065 (20080501)

There are underground and overhead utility facilities located within the project limits and there are known utility adjustments required for this construction project. Coordinate construction activities with a call to Digger's Hotline or a direct call to the utilities which have facilities in the area as required per statutes. Use caution to ensure the integrity of underground facilities and maintain code clearance from overhead facilities at all times.

Bidders are advised to contact each utility company listed in the plans prior to preparing their bids, to obtain current information on the status of existing and any new utility relocation work.

If a conflict with discontinued utility facilities is encountered, contact the appropriate utility owner/representative for instructions on proper removal and disposal of said facility.

Charter Communications has overhead facilities on We Energies poles on the north side of CTH Q. No conflicts are anticipated as the We Energies Electric facilities are to remain in place.

The contact for Charter Communications is Steve Cramer at (414) 277-4045.

The **Town of Erin** maintains a dry hydrant on the north side of CTH Q that is in conflict with the proposed project. The dry hydrant will be reconstructed as part of this project and the work is included in the contract.

The contact for the Town of Erin is Brad Bautz at (262) 673-3682.

WE Energies Electric has overhead facilities in the project area. No conflicts are anticipated and the We Energies Electric facilities are to remain in place.

The existing primary electric line is a 24.9kv line, this allows the minimum OSHA clearance distance for crane operations to be reduced to 10'. Cranes will not be placed within this clearance of the electrical facilities along the project. There will be no need to de-energize or move the facility.

It is imperative that the highway contractor contact We Energies before removing any electrical facilities, to verify that they have been discontinued and carry no electrical current. The contractor must not assume that unmarked facilities have been discontinued. At no time is it acceptable to push, pull, cut or drill an unmarked facility without explicit consent from We Energies. Contractor must call the We Energies 24 hour Dispatch lines to arrange for this verification. We Energies Electric Dispatch, #1 (800) 662-4797.

The contact for We Energies Electric is Al Schmitt at (262) 338-7662.

WE Energies Gas has facilities located on both the north and south side of the road within the project area.

- There is an existing 8" steel, high pressure, 275 psi gas main located on the north side of the roadway.
- There is an existing 4", 60 psi Polyethylene line located on the south side of the roadway.

The following We Energies Gas work is planned in the project corridor prior to construction:

- The existing 8" steel, high pressure, 275 psi gas main will be relocated on the north side of the roadway. The main will be relocated from sta. 17+75 to 24+50. The new main will be relocated to 38' LT at 17+75 to 49' LT at 20+0 to 49' LT at 21+50 to 37' LT at 24+50. The new main will be approx. 3' South of North Right-of-Way line between 20+0 and 21+50. The existing main will be discontinued and left in place. The proposed cofferdam construction shall be no closer than 10' to the new high pressure main.
- There is an existing 4", 60 psi. Polyethylene line located on the south side of the roadway. The new main will be relocated to 27' RT at 17+75 to 47' RT at 20+0 to 47' at 21+25 to 19' at 24+50. The main will be approx. 1' North of the South Right-of-way line between 19+50 to 22+50. The existing main will be discontinued and left in place. The proposed cofferdam construction shall be no closer than 10' to the new distribution main.

This work is planned to take place prior to construction of the project. The work is planned to begin on February 5, 2018 and is estimated to take 30 working days for installation.

It is imperative that the highway contractor contact We Energies before removing any gas facilities, to verify that they have been discontinued and carry no natural gas. The contractor must not assume that unmarked facilities have been discontinued. At no time is it acceptable to push, pull, cut or drill an unmarked facility without explicit consent from We Energies. Contractor must call the We Energies 24 hour Dispatch lines to arrange for this verification. We Energies Gas Dispatch, #1 (800) 261-5325.

The contact for We Energies Gas is Eric Kickhaver at (414) 944-5917.

Windstream KDL, Inc. has overhead and underground facilities within the project limits. Windstream is located on We Energies poles on the north side of CTH Q over the river crossing for a span of approximately 600'. Outside of the crossing, Windstream is underground on the north side of the roadway. No conflicts are anticipated.

The construction field contact for Windstream KDL, Inc. is Mary Beth Fisher at (262) 792-7938.

7. 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 Kathy Kramer at (262) 548-8772.

stp-107-054 (20080901)

8. Environmental Protection, Aquatic Exotic Species Control.

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

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

Ensure that all equipment that has been in contact with waters of the state, or with infested or potentially infested waters, has been decontaminated for aquatic plant materials and zebra mussels prior to 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. Use the following inspection and removal procedures (guidelines from the Wisconsin Department of Natural Resources http://dnr.wi.gov/topic/fishing/documents/vhs/disinfection_protocols.pdf 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. 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 prior to leaving the area or invested waters; and
4. Disinfect your boat, equipment and gear by either:
 - a. Washing with ~212° F water (steam clean), or
 - b. Drying thoroughly for five days after cleaning with soap and water and/or high pressure water, or
 - c. 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.

stp-107-055 (20130615)

9. Construction Over or Adjacent to Navigable Waters.

Add the following to standard spec 107.19:

The Oconomowoc River is classified as a navigable waterway and is known to be used by non-motorized watercraft. The contractor shall exclude navigation by water craft from the working area by placing orange-and-white exclusion buoys (a diamond shape with a cross means boats are prohibited from the area) upstream and downstream of the work are in conformance to the U.S. Aids of Navigation System published by the U.S. Coast Guard. The buoys shall be considered incidental to the cofferdam item. The boat launch will be closed during construction.

A Waterway Marker Application Permit (WDNR Form 8700-058) is required and must be obtained by the contractor prior to the start of in-water work.

10. Erosion Control.

The contractor shall prepare and submit an erosion control implementation plan (ECIP) for the project including borrow sites, material disposal sites, dust control, and dewatering according to Chapter TRANS 401 requirements. The erosion control implementation plan shall supplement information shown on the plans and shall not reproduce it. The erosion control implementation plan will identify how the contractor intends to implement the project's erosion control plan.

Provide the ECIP fourteen (14) calendar days prior to the pre-construction conference. Provide one (1) copy of the ECIP to WisDOT and one copy of the ECIP to the WDNR Liaison, Craig Webster, at craig.webster@wisconsin.gov, 141 NW Barstow St, Room 180, Waukesha, WI 53188, (262) 574-2141. Pursue operations in a timely and diligent manner, continuing all

construction operations methodically from the initial removals and topsoil stripping operations through the subsequent grading, paving, and re-topsoiling to minimize the period of exposure to possible erosion. Do not implement the ECIP until it has been approved by the department.

Re-topsoil of graded areas, as designated by the engineer, immediately after grading is completed within those areas. Seed, fertilized, and erosion mat top-soiled areas, as designated by the engineer, within 5 calendar days after placement of topsoil. If graded areas are left exposed for more than 14 calendar days, seed those areas with temporary seed.

All disturbed areas within 200 feet of the Oconomowoc River shall be temporary or permanently seeded within one calendar one day of the ground disturbing activity. Temporary seed shall be placed on all surfaces outside of the pavement and prepared roadway base aggregate.

When performing roadway cleaning operations, the contractor shall use equipment having vacuum or water spray mechanism to eliminate the dispersion of dust. If vacuum equipment is employed, it shall have suitable self-contained particulate collectors to prevent discharge from the collection bin into the atmosphere.

Do not pump water from the construction site to a storm water conveyance without the water first passing through a sediment trap or filter bag. Areas near the Oconomowoc River shall use enhanced erosion control measures for dewatering consisting of a filter bag inside a sediment trap.

11. Erosion Control Structures.

Within seven calendar days after the commencement of work on the bridge superstructure, place all permanent erosion control devices, including riprap, erosion mat, ditch checks, seed, fertilizer, mulch, soil stabilizer, or any other item required by the contract or deemed necessary by the engineer. These devices shall be in place in the area under the bridge and on both sides of the roadway, from the waterway to a point 100-feet behind the backwall of the abutment. Within said limits, place these devices 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 directed by the engineer. Prior to initial construction operations, place turbidity barriers, silt screens, and other temporary erosion control measures as shown on the plans, and remove them after the permanent erosion control devices are in place unless directed otherwise by the engineer.

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 (20030820)

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

John Roelke, License Number AII-119523, inspected Structure P-67-0078 for asbestos on July 21, 2016. No regulated Asbestos Containing Material (RACM) was found on this structure. A copy of the inspection report is available from: Andrew Malsom at (262) 548-6705.
stp-107-127 (20120615)

13. Notice to Contractor – CTH VV Intersection with CTH E.

The intersection of CTH VV and CTH E (Project 2774-01-71) is located 3.0 miles south of CTH Q and will be closed for reconstruction in through the summer of the 2018 construction season. The detour for this closure will route traffic through the CTH VV intersection with CTH E. This project is scheduled to be opened to traffic on August 17, 2018. Contact Waukesha County Project Manager Gary Evans at (262) 548-7746 for intersection project details and schedule updates.

14. Public Convenience and Safety.

Revise standard spec 107.8(6) as follows:

Check for and comply with local ordinances for the Town of Erin and the Town of Merton governing the hours of operation of construction equipment. Do not operate motorized construction equipment from 7:00 PM until the following 7:00 AM, unless prior written approval is obtained from the engineer.
stp-107-001 (20060512)

15. Removing Old Structure Over Waterway With Minimal Debris Station 20+70.55, Item 203.0600.S.01.

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

203.3.6.2 Removing Old Structure Over Waterway with Minimal Debris

- (1) Remove the existing Structure P-67-0078 over the Oconomowoc River in large sections and conforming to the contractor's approved structure removal and clean-up plan. During superstructure removal, prevent all large pieces and minimize the number of small pieces from entering the waterway or wetland. Remove all reinforcing steel, all concrete, and all other debris that falls into the waterway or wetland. 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:
- Methods and schedule to remove the structure.
 - Methods to control potentially harmful environmental impacts.
 - Methods for superstructure removal that prevent all large pieces and minimize the number of small pieces from entering the waterway or wetlands.
 - Methods to control dust and contain slurry.
 - Methods for removing piers and abutments. If blasting in water, include restrictions that regulatory agencies and the contract require.
 - 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
203.0600.S.01	Removing Old Structure Over Waterway With Minimal Debris Station 20+70.55	LS

stp-203-020 (20170615)

16. Base Aggregate Dense 1¼-Inch & ¾-Inch.

Replace standard spec 305.1.1 with the following:

This section describes constructing a dense graded based using crushed limestone obtained from quarries.

Replace standard spec 305.2.2.1(2) with the following:

Use 1¼-inch base throughout the full base depth.

Use ¾-inch base in the top 3 inches of the unpaved portion of shoulders. Use ¾-inch base or 1¼-inch base elsewhere in shoulders.

17. QMP Base Aggregate.

A Description

A.1 General

- (1) This special provision describes contractor quality control (QC) sampling and testing for base aggregates, documenting those test results, and documenting related production and

placement process changes. This special provision also describes department quality verification (QV), independent assurance (IA), and dispute resolution.

- (2) Conform to standard spec 301, standard spec 305, and standard spec 310 as modified here in this special provision. Apply this special provision to material placed under all of the Base Aggregate Dense and Base Aggregate Open Graded bid items, except do not apply this special provision to material classified as reclaimed asphaltic pavement placed under the Base Aggregate Dense bid items.
- (3) Do not apply this special provision to material placed and paid for under the Aggregate Detours, Breaker Run, Select Crushed, Pit Run, Subbase, or Riprap bid items.
- (4) Provide and maintain a quality control program, defined as all activities related to and documentation of the following:
 1. Production and placement control and inspection.
 2. Material sampling and testing.
- (5) Chapter 8 of the department's construction and materials manual (CMM) provides additional detailed guidance for QMP work and describes required sampling and testing procedures. The contractor may obtain the CMM from the department's web site at:
<http://wisconsindot.gov/Pages/doing-bus/eng-consultants/cnslt-rsrces/rdwy/default.aspx>

A.2 Small Quantities

- (1) The department defines a small quantity, for each individual Base Aggregate bid item, as a contract quantity of 9000 tons or less of material as shown in the schedule of items under that bid item.
- (2) The requirements under this special provision apply equally to a small quantity for an individual bid item except as follows:

A.2.1 Quality Control Plan

- (1) Submit an abbreviated quality control plan consisting of the following:
 1. Organizational chart including names, telephone numbers, current certification(s) with HTCP number(s) and expiration date(s), and roles and responsibilities of all persons involved in the quality control program for material under affected bid items.

A.2.2 Contractor Testing

1.

Contract Quantity	Minimum Required Testing per source
≤ 6000 tons	One stockpile test prior to placement, and two production or one loadout test. ^{[1] [2]}
> 6000 tons and ≤ 9000 tons	One stockpile and Three placement tests ^[3] [4] [5]

^[1] Submit production test results to the engineer for review prior to incorporating the material into the work. Production test results are valid for a period of 3 years.

- [2] If the actual quantity overruns 6,000 tons, on the next day of placement perform one randomly selected placement test for each 3000 tons, or fraction of 3000 tons, of overrun.
 - [3] If the actual quantity overruns 9000 tons, on the next day of placement perform one randomly selected placement test for each 3000 tons, or fraction of 3000 tons, of overrun.
 - [4] For 3-inch material or lift thickness of 3-inch or less, obtain samples at load-out.
 - [5] Divide the aggregate into uniformly sized sublots for testing
2. Stockpile testing for concrete pavement recycled in place will be sampled on the first day of production.
 3. Until a four point running average is established, individual placement tests will be used for acceptance. Submit aggregate load-out and placement test results to the engineer within one business day of obtaining the sample. Assure that all properties are within the limits specified for each test.
 4. Material represented by a subplot with any property outside the specification limits is nonconforming. The department may reject material or otherwise determine the final disposition of nonconforming material as specified in standard spec 106.5.

A.2.3 Department Testing

- (1) The department will perform testing as specified in B.8 except as follows:
 - Department stockpile verification testing prior to placement is optional for contract quantities of 500 tons or less.

B Materials

B.1 Quality Control Plan

- (1) Submit a comprehensive written quality control plan to the engineer at or before the pre-construction meeting. Do not place base before the engineer reviews and comments on the plan. Construct the project as that plan provides.
- (2) Do not change the quality control plan without the engineer's review. Update the plan with changes as they become effective. Provide a current copy of the plan to the engineer and post in each of the contractor's laboratories 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 means that will be used, and action time frames.
 3. A list of source and processing locations, section and quarter descriptions, for all aggregate materials requiring QC testing.
 4. Test results for wear, sodium sulfate soundness, freeze/thaw soundness, and plasticity index of all aggregates requiring QC testing. Obtain this information from the region materials unit or from the engineer.
 5. Descriptions of stockpiling and hauling methods.

6. Locations of the QC laboratory, retained sample storage, and where control charts and other documentation is posted.
7. An outline for resolving a process control problem. Include responsible personnel, required documentation, and appropriate communication steps.

B.2 Personnel

- (1) Have personnel certified under the department's highway technician certification program (HTCP) perform sampling, testing, and documentation as follows:

Required Certification Level:	Sampling or Testing Roles:
Transportation Materials Sampling Technician (TMS) Aggregate Technician I (AGGTEC-I) Aggregate Assistant Certified Technician (ACT-AGG)	Aggregate Sampling ^[1]
Aggregate Technician I (AGGTEC-I) Aggregate Assistant Certified Technician (ACT-AGG)	Aggregate Gradation Testing, Aggregate Fractured Particle Testing, Aggregate Liquid Limit and Plasticity Index Testing

^[1] Plant personnel under the direct observation of an aggregate technician certified at level one or higher may operate equipment to obtain samples.

- (2) 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.

B.3 Laboratory

- (1) Perform QC testing at a department-qualified laboratory. Obtain information on the Wisconsin laboratory qualification program from:
Materials Management Section
3502 Kinsman Blvd.
Madison, WI 53704
Telephone: (608) 246-5388

<http://wisconsindot.gov/Pages/doing-bus/eng-consultants/cnslt-rsrcs/tools/appr-prod/qual-labs.aspx>

B.4 Quality Control Documentation

B.4.1 General

- (1) Submit base aggregate placement documentation to the engineer within 10 business days after completing base placement. Ensure that the submittal is complete, neatly organized, and includes applicable project records and control charts.

B.4.2 Records

- (1) Document all placement observations, inspection records, and control adjustments daily in a permanent field record. Also include all test results in the project records. Provide test results to the engineer within one business day after obtaining a sample. Post or

distribute tabulated results using a method mutually agreeable to the engineer and contractor.

B.4.3 Control Charts

- (1) Plot gradation and fracture on the appropriate control chart as soon as test results are available. Format control charts according to CMM 8.30. Include the project number on base placement control charts. Maintain separate control charts for each base aggregate size, source or classification, and type.
- (2) Provide control charts to the engineer within one business day after obtaining a sample. Post or distribute charts using a method mutually agreeable to the engineer and contractor. Update control charts daily to include the following:
 1. Contractor individual QC tests.
 2. Department QV tests.
 3. Department IA tests.
 4. Four-point running average of the QC tests.
- (3) Except as specified under B.8.2.1 for nonconforming QV placement tests, include only QC placement tests in the running average. The contractor may plot process control or informational tests on control charts, but do not include these tests, conforming QV tests, or IA tests in the running average.

B.5 Contractor Testing

- (1) Test gradation, fracture, liquid limit and plasticity index during placement for each base aggregate size, source or classification, and type.
- (2) Perform one stockpile test from each source prior to placement.
- (3) Test gradation once per 3000 tons of material placed or fraction thereof. Determine random sample locations and provide those sample locations to the engineer. Obtain samples after the material has been bladed, mixed, and shaped but before compacting; except collect 3-inch samples or lift thickness of 3-inch or less from the stockpile at load-out. Do not sample from material used to maintain local traffic or from areas of temporary base that will not have an overlying pavement. On days when placing only material used to maintain local traffic or only temporary base that will not have an overlying pavement, no placement testing is required.
- (4) Split each contractor QC sample and identify it according to CMM 8.30. Retain the split for seven calendar days in a dry, protected location. If requested for department comparison testing, deliver the split to the engineer within one business day.
- (5) The engineer may require additional sampling and testing to evaluate suspect material or the technician's sampling and testing procedures.

- (6) Test fracture for each gradation test until the fracture running average is above the lower warning limit. Subsequently, the contractor may reduce the frequency to one test per 10 gradation tests if the fracture running average remains above the warning limit.
- (7) Test the liquid limit and plasticity index for the first gradation test. Subsequently, test the liquid limit and plasticity index a minimum of once per 10 gradation tests.

B.6 Test Methods

B.6.1 Gradation

- (1) Test gradation using a washed analysis conforming to the following as modified in CMM 8.60:
 Gradation..... AASHTO T 27
 Material finer than the No. 200 sieve..... AASHTO T 11
- (2) For 3-inch base, if 3 consecutive running average points for the percent passing the No. 200 sieve are 8.5 percent or less, the contractor may use an unwashed analysis. Wash at least one sample out of 10. If a single running average for the percent passing the No. 200 sieve exceeds 8.5 percent, resume washed analyses until 3 consecutive running average points are again 8.5 percent passing or less.
- (3) Maintain a separate control chart for each sieve size specified in standard spec 305 or standard spec 310 for each base aggregate size, source or classification, and type. Set control and warning limits based on the standard specification gradation limits as follows:
 1. Control limits are at the upper and lower specification limits.
 2. There are no upper warning limits for sieves allowing 100 percent passing and no lower control limits for sieves allowing 0 percent passing.
 3. Dense graded warning limits, except for the No. 200 sieve, are 2 percent within the upper and lower control limits. Warning limits for the No. 200 sieve are set 0.5 percent within the upper and lower control limits.
 4. Open graded warning limits for the 1-inch, 3/8-inch, and No. 4 sieves are 2 percent within the upper and lower control limits. Upper warning limits for the No. 10, No. 40, and No. 200 sieves are 1 percent inside the upper control limit.

B.6.2 Fracture

- (1) Test fracture conforming to CMM 8.60. The engineer will waive fractured particle testing on quarried stone.
- (2) Maintain a separate fracture control chart for each base aggregate size, source or classification, and type. Set the lower control limit at the contract specification limit, either specified in another special provision or in table 301-2 of standard spec 301.2.4.5. Set the lower warning limit 2 percent above the lower control limit. There are no upper limits.

B.6.3 Liquid Limit and Plasticity

- (1) Test the liquid limit and plasticity according to AASHTO T 89 and T 90.
- (2) Ensure the material conforms to the limits specified in standard spec table 301-2.

B.7 Corrective Action

B.7.1 General

- (1) Consider corrective action when the running average trends toward a warning limit. Take corrective action if an individual test exceeds the contract specification limit. Document all corrective actions both in the project records and on the appropriate control chart.

B.7.2 Placement Corrective Action

- (1) Do not blend additional material on the roadbed to correct gradation problems.
- (2) Notify the engineer whenever the running average exceeds a warning limit. When two consecutive running averages exceed a warning limit, the engineer and contractor will discuss appropriate corrective action. Perform the engineer's recommended corrective action and increase the testing frequency as follows:
 1. For gradation, increase the QC testing frequency to at least one randomly sampled test per 1000 tons placed.
 2. For fracture, increase the QC testing frequency to at least one test per gradation test.
- (3) If corrective action improves the property in question such that the running average after four additional tests is within the warning limits, the contractor may return to the testing frequency specified in B.5.3. If corrective action does not improve the property in question such that the running average after four additional individual tests is still in the warning band, repeat the steps outlined above starting with engineer notification.
- (4) If the running average exceeds a control limit, material starting from the first running average exceeding the control limit and ending at the first subsequent running average inside the control limit is nonconforming and subject to pay reduction.
- (5) For individual test results significantly outside the control limits, notify the engineer, stop placing base, and suspend other activities that may affect the area in question. The engineer and contractor will jointly review data, data reduction, and data analysis; evaluate sampling and testing procedures; and perform additional testing as required to determine the extent of potentially unacceptable material. The engineer may direct the contractor to remove and replace that material. Individual test results are significantly outside the control limits if meeting one or more of the following criteria:
 1. A gradation control limit for the No. 200 sieve is exceeded by more than 3.0 percent.
 2. A gradation control limit for any sieve, except the No. 200, is exceeded by more than 5.0 percent.
 3. The fracture control limit is exceeded by more than 10.0 percent.

B.8 Department Testing

B.8.1 General

- (1) 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 two business days after the department obtains the sample.

B.8.2 Verification Testing

B.8.2.1 General

- (1) 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 B.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.
- (2) The department will conduct QV tests of each base aggregate size, source or classification, and type during placement conforming to the following:
 1. Perform one stockpile test from each source prior to placement.
 2. At least one random test per 30,000 tons, or fraction of 30,000 tons, placed.
- (3) The department will sample randomly, at locations independent of the contractor's QC work, collecting one sample at each QV location. The department will collect QV samples after the material has been bladed, mixed, and shaped but before compacting; except, for 3-inch aggregates or for a lift thickness of 3-inch or less, the department will collect samples at load-out. The department will split each sample, test half for QV, and retain half.
- (4) The department will conduct QV 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.
- (5) The department will assess QV results by comparing to the appropriate specification limits. 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.

B.8.3 Independent Assurance

- (1) Independence 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.
- (2) 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 B.9.

B.9 Dispute Resolution

- (1) 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 E 178 to evaluate potential statistically outlying data.
- (2) Production test results, and results from other process control testing, may be considered when resolving a dispute.
- (3) If the project personnel cannot resolve a dispute, and the dispute affects payment or could result in incorporating non-conforming product, 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 (Vacant)

D (Vacant)

E Payment

- (1) Costs for all sampling, testing, and documentation required under this special provision are incidental to this 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.
- (2) For material represented by a running average exceeding a control limit, the department will reduce pay according to CMM 8-10.5.2 for the affected Base Aggregate bid items listed in subsection A. The department will administer pay reduction under the Nonconforming QMP Base Aggregate Gradation or Nonconforming QMP Base

Aggregate Fracture Administrative items. The department will determine the quantity of nonconforming material as specified in B.7.2.
stp-301-010 (20170615)

18. Heavy Duty Silt Fence, Item SPV.0090.01.

A Description

This special provision describes the delivery, installation, maintenance and removal of Heavy Duty Silt Fence. Install fence as directed by the engineer. Do not remove fence until directed by the engineer. If so directed by the engineer, remove silt at no additional costs. Silt shall be removed before the removal of the fence.

B Materials

Provide Heavy Duty Silt Fence consisting of a composite of woven wire fence fabric, posts, geotextile, sand bags and fasteners to be assembled by the contractor. Woven wire fence fabric shall be a standard field fence type a minimum of 4 feet high, a maximum mesh spacing of 6-inches and minimum 14-¹/₂ gauge wire.

Provide “studded tee” or “U” type metal posts with a minimum length of 8 feet –3 inches and a minimum weight of 1.3 lb/ft.

Provide geotextile fabric meeting the following requirements

Property	Unit	Test Method	Minimum Average Roll Value
Grab Tensile Strength	LB.	ASTM D4632	380
Grab Tensile Elongation	%	ASTM D4632	50
Puncture Strength	LB.	ASTM D4833	240
Trapezoid Tear Strength	LB.	ASTM D4533	145
Apparent Opening Size	U.S. Standard Sieve	ASTM D4751	170 (0.09 mm)
Permittivity	sec ⁻¹	ASTM D4491	0.7
Water Flow Rate	Gal/min/ft ²	ASTM D4491	50
UV Resistance after 500 hours	% strength retained	ASTM D4355	70

Furnish a manufacturer's Certified Report of Test or Analysis that the geotextile fabric delivered for use in the work meets the above requirements to the engineer at least 15 days prior to use in the work. Provide geotextile fabric bearing markings to clearly identify it with the applicable test report furnished to the engineer.

Supply material in 15'9" wide rolls and cut in half.

C Construction

Install the Heavy Duty Silt Fence as directed by the engineer. Space ties and anchors to adequately resist wave action.

D Measurement

The department will measure Heavy Duty Silt Fence by the linear foot along the fence.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.01	Heavy Duty Silt Fence	LF

Payment is full compensation for all furnishing, assembling, erecting, maintaining, and removing the silt fence.

19. Prestressed Girders Box Type 17 - Inch, Item SPV.0090.02.

A Description

This special provision describes fabricating, furnishing, transporting, erecting, and grouting box type prestressed girders, according to standard spec 501 and standard spec 503, as directed by the engineer, and as hereinafter provided.

B Materials

B.1 Concrete for Prestressed Concrete Box Girders

Modify standard spec 503.2 as hereinafter provided.

Modify standard spec 503.2.2(2) to read:

Ensure concrete attains a minimum 28-day compressive strength of 6000 psi for prestressed box girders. Base tests on 6-inch by 12-inch cylinders, or 4-inch by 8-inch cylinders, provided the engineer develops and approves a correlation factor. Mold concrete cylinders in steel or plastic molds. Cure concrete cylinders according to AASHTO T23, except cure the cylinders with the member until release strength is obtained, then cure the cylinders according to AASHTO T23. Maintain laboratory facilities and equipment according to AASHTO M201. Make 3 cylinders for each line of prestressed members poured and test each cylinder according to AASHTO T22. Calibrate cylinder-testing equipment at least annually according to AASHTO T67. Average the strengths of the 2 cylinders with the highest test results for each line and use the average to determine compliance with the 28-day

strength requirement. Ensure that neither of the 2 cylinders with the highest test results has a strength less than 10 percent below the required strength.

Modify the standard spec 503.2.2(5) to read:

Furnish prestressed concrete members cast from air-entrained concrete. Use type I, IL, IS, IP, IT, II, or III cement. The contractor shall replace 20-30 percent of type I, IL, II, or III cement with an equal weight of fly ash, slag, or a combination of fly ash and slag. Ensure that fly ash conforms to standard spec 501.2.6 and slag conforms to standard spec 501.2.7. Use only one source and replacement rate for work under a single bid item. Use a department-approved air-entraining admixture conforming to standard spec 501.2.2 for air-entrained concrete. Use only size No. 1 coarse aggregate conforming to standard spec 501.2.5.4.

Add the following to standard spec 503.2.2(6):

Air content

Prestressed box girders.....6.5 – 9.5 percent

B.2 Grout between Prestressed Concrete Box Girders (Shear Keys)

Provide a cement based, pre-packaged, non-metallic, non-shrink grout product to meet the requirements of Table 1, as well as the requirements of ASTM C1107. Alternate products may be submitted to the engineer for approval, by providing laboratory test results obtained from an independent testing lab on the properties in Table 1.

The addition of aggregate to the pre-packaged product is not permitted. As such, the grout product provided must be listed for use, without aggregate extension, for both the minimum and maximum grout thickness anticipated, as provided in Table 1.

Provide non-shrink grout that is formulated for exterior use, and is freeze-thaw resistant. The grout provided shall have sufficient working time to accommodate the contractor's proposed grouting procedures.

Table 1. Cementitious grout properties, requirements and test methods

Property		Requirement	Test Method
Strength	3 days	≥ 5000 psi	ASTM C1090/C1107
	7 days	> 6000 psi	
Slump/flow		Pourable/flowable	Demonstrate using procedure described below, or provide plastic consistency
Early age expansion at final set		Min: 0% Max: 4%	ASTM C827/C1107
Expansion of hardened grout		Min: 0.02% Max: 1%	ASTM C1090/C1107
Shrinkage		0% from max. expansion	ASTM C1090/C1107

Property	Requirement	Test Method
Neat grout depth/thickness limit*	Min: 1.50 in. Max: 2.75 in.	Provide grout that can be placed "neat" in the minimum and maximum anticipated keyway openings.
Air content	8% +/- 1.5%	ASTM C173

* Grout depth/thickness refers to the dimension measured perpendicular to the centerline of the box girders. This does not refer to the box girder erection spacing or tolerance, which is shown on the plans.

Slump/flow of the non-shrink grout shall be demonstrated as follows: The grout shall be thoroughly mixed and immediately poured into a container with the approximate shape of a standard shear key. To be considered pourable, the grout shall completely fill the container without excess air entrapment.

The contractor shall furnish required curing materials according to the non-shrink grout manufacturer requirements and standard spec 501.2.9.

B.3 Grout in the Post-Tensioned Ducts

Use a grout composition of 94 pounds of Type 1 cement, 5 gallons of water and 1 pound of approved plasticizer or a pre-mixed packaged non-shrink grout that is approved by the engineer.

B.4 Grout in the Stress Pockets

Proportion by weight the cement, fine aggregate, and non-shrink admixture for the grout in the stress pockets, as indicated in the following table. Use Type 1 cement. Add water as necessary to obtain a 3-inch maximum slump. Furnish a metallic aggregate non-shrink admixture.

Cement	Fine Aggregate	Non-Shrink Admixture
188 lbs	300 lbs	100 lbs

The following non-chloride, pre-mixed commercial non-shrink grouts, placed according to the manufacturer's instructions, may be used in the stress pockets in lieu of the cement grout above. Provide minimum water to achieve a plastic or flowable/pourable grout, per manufacturer instructions. Do not use grout with a fluid consistency.

Product	Source
SikaGrout 328, Lyndhurst, NJ	Sika Corporation
Masterflow 928, Shakopee, MN	BASF / Master Builders
Five Star 400 Grout, Old Greenwich, CT	U.S. Grout Corporation
Sure-Grip Grout, Oregon, IL	Dayton-Superior

B.5 Polystyrene Forms

Not applicable.

B.6 Post -Tensioning Reinforcement

Use reinforcement conforming to standard spec 503.2.3. Other post-tensioning systems, may be provided with engineer approval.

C Construction

Construct according to the applicable methods specified in standard spec 501 and 503.

C.1 Prestressed Concrete Box Girder Forming

Not applicable.

C.2 Prestressed Concrete Box Girder Surface Finish

Shot blast box girder keyway surfaces at the precast plant, within 3 days of shipment, to provide an exposed aggregate surface finish, with an average surface amplitude of $\frac{1}{4}$ ". The exposed aggregate finish may be provided by alternate means, including the use of surface retarders during curing, provided that a shot blast finish is also provided at the precast plant within 3 days of shipment to clean the surface of cement paste and other deleterious materials.

The top surface of the box girders shall be rough floated and broom finished with an average surface amplitude of $\frac{1}{4}$ ".

Finish exposed exterior surfaces of the box girders according to standard spec 503.3.2.4.

C.3. Prestressed Concrete Box Girder Erection

Erect box girders according to standard spec 503.3.3 as well as the following requirements.

The contractor shall inspect the erect beams to verify they are completely seated on the beam seats. Any beams that are found to wobble, should be shimmed to provide full bearing contact, and to the satisfaction of the engineer.

Use hardwood wedges, or a suitable alternative, to maintain a uniform spacing between the box girders while they are being erected and grouted.

C.3.1 Tolerances

Add the following to standard spec 503.3.2.1.1(1):

Cast prestressed concrete members to plan dimensions within the following applicable tolerances:

PRESTRESSED CONCRETE BOX GIRDERS

Depth of top slab.....	+/- 1/2"
Depth of bottom slab	+/- 1/2"
Depth overall	+/- 1/4"
Width of web	+/- 3/8"
Width overall	+/- 1/4"
Length	the greater of +/-1/8" per 10' or +/- 3/4"
Square ends, deviation from square	+/- 1/2"
Skew ends, deviation from designated skew.....	+/- 1/4"
Beam seat bearing area, variation from plane surface when tested with a straightedge Through middle half of member	+/- 1/16"

Horizontal alignment, deviation from a straight line parallel to beam center, "sweep"	
Lengths to 40 feet	max of 1/4"
Lengths 40 feet to 60 feet	max of 3/8"
Lengths over 60 feet	max of 1/2"
Dowel tubes, spacing between centers and from centers to member ends and sides.....	+/- 1/2"
Tie rod tubes, spacing between centers and from centers to member ends	+/- 1/2"
Tie rod tubes and dowel tubes, spacing from centers to beam bottoms	+/- 3/8"
Total width of deck	theoretical width +1/2" per joint
Camber, differential between adjacent units	max of 1/2"
Camber, differential between high and low members in the same span	max of 1"
Stirrup bars, projection above top of beam.....	Refer to 503.3.2.1.1 (1)
Stirrup bars, longitudinal spacing.....	Refer to 503.3.2.1.1 (1)
End of stirrup bars from end of beam.....	Refer to 503.3.2.1.1 (1)
Position of Tendons.....	Refer to 503.3.2.1.1 (1)
Position of handling devices.....	Refer to 503.3.2.1.1 (1)

C.4 Prestressed Concrete Box Girder Erection and Post-Tensioning Sequence

- 1) Erect girders.
- 2) Shim bearing pads as required to minimize rocking of girders.
- 3) Install transverse post-tensioning tendons, and verify position of hardwood spacing wedges.
- 4) Apply 5,000 pound post-tension force to each set of tendons to remove sag and seat the chuck.
- 5) Grout shear keys between girders.
- 6) Remove hardwood spacing wedges.
- 7) Apply full post-tension force to each set of tendons after grout has cured according to the requirements of section C.8 of this specification.
- 8) Pressure grout post-tensioning ducts.
- 9) Fill stress pockets with non-shrink grout.
- 10) Drill holes and install pier dowels, per plan details.
- 11) Place composite deck or non-composite concrete overlay and abutment backwalls after keyway grout has reached a compressive strength of at least 5,000 psi.

C.5 Placement of Grout for Shear Keys

Prior to placement of grout, clean shear keys to remove all dirt, grease, oil and other foreign materials using a high pressure wash or oil-free air blast. Wet all shear key surfaces for a minimum of 24 hours to achieve a saturated surface dry (SSD) condition at the time of grout placement. Remove all excess water immediately prior to placement of grout.

Install a closed cell backer rod as the formwork at the bottom of each shear key, or suitable alternative. Ensure the seal is watertight. Remove the backer rod after the grout has cured for at least 24 hours.

Mix grout according to the manufacturer's instructions. Use the precise amount of water required to produce a flowable/pourable mix, and do not add additional water. Do not extend grout by adding aggregate. Mix grout in a mortar mixing drum with moving blades. Maintain a temperature range during the grouting and curing period that meets the manufacturer

specified limits. Follow manufacturer instructions for temperatures outside these limits. In no case should the temperature of the grout be less than 40°F during the first 48 hours of curing.

Place grout, immediately after mixing, according to all manufacturer instructions. Take care to not over-work the grout and to avoid entrapping air. Consolidate grout by rodding to ensure that the voids are completely filled to form a solid, tight shear key. Do not vibrate grout unless recommended by grout manufacturer.

Do not place grout during a rainfall, or if rain is anticipated prior to grout achieving final set.

Provide a trowel finish to the exposed surface of grout. If a differential camber exists between the beams at the shear key joint, the grout shall be finished to the level of the highest beam and sloped at a 4 to 1 slope to the lower beam.

Place and consolidate grout continuously for any one section of grout, without interruption. Vibration from nearby construction equipment should be eliminated during placement of the grout, and for the first 24 hours of the curing period.

C.6 Curing of Grout for Shear Keys

Exposed surfaces of grout must be cured. Cure grout for a minimum of three days using a continuous wet cure or impervious curing compound, as recommended by the grout manufacturer, and as provided in standard spec 502.3.8.1.1.

During the curing period, no vehicular traffic, including the contractor's equipment will be permitted on the beams.

C.7 Grouting of Transverse Pier Joints

Not applicable.

C.8 Post-Tensioning

Post-tension tendons to attain the specified force at each location.

Do not apply post-tensioning force until the shear key grout has cured for at least 48 hours, and has attained a compressive strength of at least 3,000 psi.

Pressure grout the post-tensioned ducts from one grout pipe until all entrapped air is expelled and grout begins to flow from the open grout pipe. Close the open grout pipe and maintain a pressure of 50-psi for 15 seconds.

No traffic or heavy equipment will be allowed on the bridge until the tendons have been fully tensioned to the load specified on the plans.

D Measurement

The department will measure Prestressed Girders Box 17-inch 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.0090.02	Prestressed Girders Box Type 17 - Inch	LF

Payment is full compensation for providing and installing the post-tensioning system, grouting the longitudinal and transverse joints, as well as all items specified in standard spec 503.5.

20. Dry Fire Hydrant, Item SPV.0105.01.**A Description**

Conform to standard spec 612 and as hereinafter provided.

B Materials

Provide an outlet head with a 6-inch female American National Fire Hose Thread (NHT) adapter. Provide a cap of hard plastic or of the same material as the adapter. Attach the cap to the dry hydrant by the use of a steel cable or chain.

Provide ductile iron pipe, bends and reducer with an internal diameter as shown on the plans for the riser segment of the dry hydrant. The ductile iron pipes and fitting shall adhere to ASTM A536 with manufacturing standards conforming ANSI/AWWA C110.

Provide unperforated schedule 80 or heavier Polyvinyl Chloride (PVC) drainage pipe with an internal diameter of as shown on the plans adhering to ASTM D-1785 with fittings adhering to ASTM D-2466.

Provide a perforated 10" PVC inlet point with 1" diameter holes wrapped with 1/4" mesh.

Provide an outlet head with a 6-inch female American National Fire Hose Thread (NHT) adapter. Provide a cap of hard plastic or of the same material as the adapter. Attach the cap to the dry hydrant by the use of a steel cable or chain.

C Construction

All ductile iron pipe fittings and accessories shall be installed and tested according to the latest revision of ANSI/AWWA C600.

For PVC segments, solvent-cement joints or gasketed joints may be used. Assure the final assembly is free from air leak that would reduce the flow capacity of the system.

Place the inlet as near to the middle of the river as possible to reduce the chances of clogging due to silt deposits. Place light riprap on the stream bottom 4 feet in width to a depth of 12 inches from the bank to 2 feet beyond the end of the perforated inlet pip.

Place the outlet, or dry hydrant head, in line with the guardrail post, 1.1 feet above and 5 feet behind the guardrail.

Confirm dry hydrant location with Town of Erin Fire Department prior to construction. Town of Erin Emergency Services Manager shown in plans.

D Measurement

The department will measure Dry Fire Hydrant as a single lump sum, 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.0105.01	Dry Fire Hydrant	LS

Payment is full compensation for furnishing all tools, materials, including pipe, fittings, No. 2 coarse aggregate, light riprap, equipment and incidentals necessary to complete the work.

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 PROVISION 6

ASP 6 - Modifications to the standard specifications

Make the following revisions to the standard specifications:

104.10.1 General

Replace paragraph one with the following effective with the December 2017 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.

104.10.4.2 Payment for the CRI Work

Replace paragraph one with the following effective with the December 2017 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.^[1]

CRW = The cost of the revised work, computed at contract bid prices if applicable.^[1]

CC = The contractor's cost of developing the CRI proposal.

DC = The department's cost for investigating, evaluating, and implementing the CRI proposal.

^[1] The department may adjust contract bid prices that, in the engineer's judgement, do not represent the fair value of the work deleted or proposed.

108.11 Liquidated Damages

Replace paragraphs two and three with the following effective with the December 2017 letting:

- (2) This deducted sum is not a penalty but is a fixed, agreed, liquidated damage due the department from the contractor for the added cost of engineering and supervision resulting from the contractor's failure to complete the work within the contract time.
- (3) Unless enhanced in the special provisions, the department will assess the following daily liquidated damages

LIQUIDATED DAMAGES			
ORIGINAL CONTRACT AMOUNT		DAILY CHARGE	
FROM MORE THAN	TO AND INCLUDING	CALENDAR DAY	WORKING DAY
\$0	\$250,000	\$850	\$1700
\$250,000	\$500,000	\$815	\$1630
\$500,000	\$1,000,000	\$1250	\$2500
\$1,000,000	\$2,000,000	\$1540	\$3080
\$2,000,000	—	\$2070	\$4140

203.3.2.2 Removal Operations

Replace the entire text with the following effective with the December 2017 letting:

203.3.2.2.1 General

- (1) Except as specified below for closing culverts, remove the entire top slab of box culverts and the entire superstructure of other culverts and bridges designated for removal. Completely remove existing piles, cribs, or other timber construction within the limits of new embankments, or remove these structures to an elevation at least 2 feet below finished ground line. Remove sidewalls or substructure units in water to an elevation no higher than the elevation of the natural stream or lake bed, or, if grading the channel is required under the contract or the plans, to the proposed finished grade of the stream or lake bed. Remove sidewalls or substructure units not in water down to at least 2 feet below natural or finished ground line.
- (2) If extending or incorporating existing culverts and bridges in the new work, remove only those parts of the existing structure as necessary to provide a proper connection to the new work. Saw, chip, or trim the connecting edges to the required lines and grades without weakening or damaging the remaining part of the structure. During concrete removal, do not damage reinforcing bars left in place as dowels or ties incorporated into the new work.
- (3) Remove pipe culverts designated for salvage in a way that prevents damage to the culverts.
- (4) Dismantle steel structures or parts of steel structures designated for salvage in a way that avoids damage to the members. If the contract specifies removing the structure in a way that leaves it in a condition suitable for re-erection, matchmark members with durable white paint before dismantling. Mark pins, bolts, nuts, loose plates, etc., similarly to indicate their proper location. Paint pins, bolts, pinholes, and machined surfaces with a department-approved rust preventative. Securely wire loose parts to adjacent members, or label and pack them in boxes.
- (5) Remove timber structures or parts of timber structures designated for salvage in a way that prevents damage to the members.
- (6) If the engineer approves, the contractor may temporarily use materials designated for salvage in falsework used to construct new work. Do not damage or reduce the value of those materials through temporary use.

203.3.2.2.2 Deck Removal

- (1) Protect the work as specified in 107.14 during deck removal. Minimize debris falling onto water surfaces and wetlands as the contract specifies in 107.18 or in the special provisions. Also, minimize debris falling on the ground and roadway.
- (2) Do not damage existing bar steel reinforcement, girders, or other components that will be incorporated in new work. Remove decks on prestressed concrete girders using a hydraulic shear or other engineer-approved equipment. Thoroughly clean, realign, and retie reinforcement as necessary.
- (3) After deck removal is complete, notify the engineer to request a damage survey. Point out damage to the engineer. Allow one business day for the engineer to complete the damage survey. If damage is identified, the department will determine if repairs or girder restoration will be allowed.
- (4) If the department allows girder restoration, have a professional engineer registered in the State of Wisconsin analyze the effect of the damage to the bridge, make recommendations, and prepare signed and sealed computations and structural details required to restore girders to their previous structural capacity. Submit the restoration proposal, including analysis and structural details, to the department and design engineer of record. The department will accept or reject the restoration proposal within 3 business days. Do not begin restoration work until the department allows in writing.
- (5) The engineer will not extend contract time to assess or remediate contractor caused damage.

203.5.1 General

Replace paragraph two with the following effective with the December 2017 letting:

- (2) Payment is full compensation for breaking down and removing; costs associated with contractor-caused damage; required salvaging, storing, and disposing of materials; and, unless the contract specifies granular backfill, for backfilling.

415.2.3 Expansion Joint Filler

Replace paragraph one with the following effective with the December 2017 letting:

- (1) Furnish expansion joint filler conforming to AASHTO M153, AASHTO M213, or ASTM D8139 in lengths equal to the pavement lane width and of the thickness and height the plans show. Where dowel bars are required, use filler with factory-punched holes at the dowel bar locations and with a diameter not greater than 1/8 inch larger than the nominal dowel bar diameter.
-

415.3.20 Filling Joints

Replace paragraph two with the following effective with the December 2017 letting:

- (2) Clean joints of laitance, curing compound, and other contaminants before filling. Saw construction joints at least 3/4 inches deep before filling. Sawing is not required for tooled joints in curb and gutter. Sandblast or waterblast exposed joint faces using multiple passes as required to clean joint surfaces of material that might prevent bonding. Blow clean and dry with oil-free compressed air immediately before filling.
-

415.5.1 General

Replace paragraph six with the following effective with the December 2017 letting:

- (6) Payment for Concrete Pavement Joint Filling is full compensation for filling concrete pavement joints; filling adjacent curb and gutter joints; and for sawing.
-

440.3.4.2 Contractor Testing

Replace paragraph two with the following effective with the December 2017 letting:

- (2) Coordinate with the engineer at least 24 hours before making profile runs for acceptance unless the engineer approves otherwise. The department may require testing to accommodate staged construction or if corrective action is required.
-

455.5.3 Tack Coat

Replace paragraph two with the following effective with the December 2017 letting:

- (2) The department will adjust pay for Tack Coat, under the Nonconforming Tack Coat administrative item, for nonconforming material the engineer allows to remain in place at a maximum of 75 percent of the contract unit price.

460.2.7 HMA Mixture Design

Replace paragraph one with the following effective with the December 2017 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. 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
ESALs x 10 ⁶ (20 yr design life)	<2.0	2 - <8	>8	—
LA Wear (AASHTO T96)				
100 revolutions(max % loss)	13	13	13	13
500 revolutions(max % loss)	50	45	45	40
Soundness (AASHTO T104) (sodium sulfate, max % loss)	12	12	12	12
Freeze/Thaw (AASHTO T103) (specified counties, max % loss)	18	18	18	18
Fractured Faces (ASTM D5821) (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	43	45	45
Sand Equivalency (AASHTO T176, min)	40	40	45	50
Gyratory Compaction				
Gyrations for N _{ini}	6	7	8	8
Gyrations for N _{des}	40	75	100	65
Gyrations for N _{max}	60	115	160	160
Air Voids, %V _a (%G _{mm} N _{des})	4.0 (96.0)	4.0 (96.0)	4.0 (96.0)	4.0 (96.0)
% G _{mm} N _{ini}	<= 91.5 ^[1]	<= 89.0 ^[1]	<= 89.0	—
% G _{mm} N _{max}	<= 98.0	<= 98.0	<= 98.0	—
Dust to Binder Ratio ^[2] (% passing 0.075/P _{be})	0.6 - 1.2	0.6 - 1.2	0.6 - 1.2	1.2 - 2.0
Voids filled with Binder (VFB or VFA, %)	68 - 80 ^[4] [5]	65 - 75 ^[3] [5]	65 - 75 ^[3] [5]	70 - 80
Tensile Strength Ratio (TSR) (AASHTO T283) ^[6] [7]				
no antistripping additive	0.75 min	0.75 min	0.75 min	0.75 min
with antistripping additive	0.80 min	0.80 min	0.80 min	0.80 min
Draindown (AASHTO T305) (%)	—	—	—	0.30

^[1] The percent maximum density at initial compaction is only a guideline.

^[2] 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.

^[3] For No. 5 (9.5mm) and No. 4 (12.5 mm) nominal maximum size mixtures, the specified VFB range is 70 - 76 percent.

^[4] For No. 2 (25.0mm) nominal maximum size mixes, the specified VFB lower limit is 67 percent.

^[5] For No. 1 (37.5mm) nominal maximum size mixes, the specified VFB lower limit is 67 percent.

^[6] WisDOT eliminates freeze-thaw conditioning cycles from the TSR test procedure.

^[7] Run TSR at asphalt content corresponding to 3.0% air void regressed design using distilled water for testing.

460.2.8.2.1.3.1 Contracts with 5000 Tons of Mixture or Greater

Replace paragraph six with the following:

- (6) Conduct TSR tests during mixture production according to CMM 8-36.6.14. Test each full 50,000 ton production increment, or fraction of an increment, after the first 5000 tons of production. Perform required increment testing in the first week of production of that increment. If production TSR values are below the limit specified in CMM 8-36.6.14, notify the engineer. The engineer and contractor will jointly determine a corrective action.
-

502.2.7 Preformed Joint Filler

Replace paragraph one with the following effective with the December 2017 letting:

- (1) Use preformed joint filler conforming to AASHTO M153, AASHTO M213, or ASTM D8139.
-

502.3.7.8 Floors

Replace paragraph fourteen with the following effective with the December 2017 letting:

- (14) Unless specified otherwise, 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.
-

505.2.6 Dowel Bars and Tie Bars

Replace the entire text with the following effective with the March 2018 letting:

505.2.6.1 General

- (1) Furnish bars coated in a plant certified by the Concrete Reinforcing Steel Institute. 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.
- (2) The contractor need not coat or patch sawed ends, sheared ends, cut ends, ends left bare during the coating process, or ends with damaged coating.
- (3) The contractor need not repair circumferential coating damage from shipping, handling, or installation, if the following conditions are met:
 1. The damaged area is 1/4 inch square or smaller.
 2. The total damaged area in any one-foot length does not exceed 2 percent of the circumferential area in that length.
- (4) Repair areas of damaged circumferential coating larger than 1/4 inch square. Reject bars with total damage greater than 2 percent of the bar's circumferential area.

505.2.6.2 Dowel Bars**505.2.6.2.1 General**

- (1) Ensure that the bars are straight, round, smooth, and free from burrs or other deformations detrimental to the free movement of the bar in the concrete.
- (2) Saw bars to the required length. For solid bars, the department will allow shearing if no damage occurs to the coating and shearing distortions do not exceed the following:
 1. No distorted diameter is more than 0.04 inches greater than the true diameter.
 2. No distortion extends more than 0.40 inches from the sheared end.
- (3) Apply a surface treatment to loose dowels, or furnish manufacturer-treated bars in dowel bar baskets, capable of preventing bond between the epoxy-coated bars and the concrete. Apply field surface treatments when loading bars in the dowel bar magazine.

505.2.6.2.2 Solid Dowel Bars

- (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 with a thermosetting epoxy conforming to AASHTO M254, type B.

505.2.6.2.3 Tubular Dowel Bars

- (1) Furnish welded steel tubular bars conforming to ASTM A513 fabricated from plain carbon steel with a minimum tensile yield strength of 60 ksi and sized as follows:

SOLID BAR SPECIFIED DIAMETER	MINIMUM REQUIRED OUTSIDE DIAMETER	MINIMUM BASE METAL WALL THICKNESS
1 1/4-inch	1 5/16 inches	0.120 inch
1 1/2-inch	1 5/8 inches	0.120 inch

- (2) Cap bar ends to prevent intrusion of concrete or other materials. Ensure that tubing is galvanized on the exterior and interior according to ASTM A653 with a G40 zinc coating and apply 7-13 mils of epoxy to the galvanized exterior according to AASHTO M254, Type B.

505.2.6.2.4 High Performance Dowel Bars

- (1) As an alternate the contractor may furnish high performance dowel bars from the department's APL.

505.2.6.3 Tie Bars

- (1) Furnish coated bars conforming to AASHTO M31 grade 40 or 60. Coat tie bars as specified in 505.2.4 for coated high-strength steel reinforcement. Ensure that the tie bars are the shape the plans show.
- (2) Repair, with compatible coating material, the bend location of field-straightened coated tie bars.

614.2.1 General

Add the following as paragraph ten effective with the December 2017 letting:

- (10) Furnish guardrail reflectors from the department's APL.

614.3.2.1 Installing Posts

Add the following as paragraph five effective with the December 2017 letting:

- (5) Provide post-mounted reflectors every 100 feet with one at the beginning and end of each run and a minimum of three reflectors per run.

614.5 Payment

Replace paragraph four with the following effective with the December 2017 letting:

- (4) Payment for the Steel Thrie Beam, Steel Plate Beam Guard, Guardrail Stiffened, MGS Guardrail, Short Radius, and various transition bid items is full compensation for providing guardrail and transitions including post-mounted reflectors; for repairing damaged zinc coatings; and for excavating, backfilling, and disposing of surplus material.

641.2.9 Overhead Sign Supports

Replace paragraph three with the following effective with the December 2017 letting:

- (3) Provide steel pole shafts, mast arms or trusses, and luminaire arms zinc coated according to ASTM A123. The contractor may provide either straight or tapered pole and arm shafts unless the plans specify otherwise. Provide bolts and other hardware conforming to 641.2.2.

642.2.2.1 General

Replace the entire text with the following effective with the December 2017 letting:

- (1) Provide each field office with two rooms, separated by an interior door with a padlock. Ensure that each room has a separate exterior door and its own air conditioner. Locate the office where a quality internet connection can be achieved.
- (2) Provide long distance telephone service via a land line for exclusive department use that has the following:
 - Two programmable touch-tone phones, one of which is cordless. Ensure that phone operations will not interfere with other telecommunications equipment.
 - Voice mail service or an answering machine.
- (3) Provide high-speed internet service for exclusive department use via cable or DSL connection with a modem/router and capable of supporting cloud enabled file sharing, voice over internet protocol (VoIP), video conferencing, and web based applications. Ensure that system meets the following:
 - Includes a wireless network for the field office.
 - Can accommodate IPSec based VPN products.
 - Has a bandwidth range as follows:
 - Field office with 1-5 staff: A minimum connection speed of 5 Mbps download and 1 Mbps upload. If a cable or DSL option is not available the contractor may provide a personal hotspot using cell phone tethering or other device able to achieve the specified minimum speeds inside the field office.
 - Field office with 6 or more staff: A minimum connection speed of 10 Mbps + 1/2 Mbps per user download and 5 Mbps upload.
 - Projects over 500 million dollars: A minimum connection speed of 20 Mbps + 1/2 Mbps per user download and 10 Mbps upload. Coordinate network setup at the leased office with the WisDOT network team.
- (4) Provide and maintain a Windows 7 and Windows 10 compliant multi-function device with copy, print, and scan capabilities that can accommodate both 8 1/2" x 11" and 11" x 17" paper. Replenish paper, toner cartridges, and other supplies before fully expended. Ensure that department staff can connect to the device either directly or through the field office wireless network.
- (5) Equip with a drafting table with a drafter's stool. Except as specified in 642.2.2.4, provide 2 ergonomically correct office chairs in working condition with, at a minimum, the following:
 1. Five-legged base with casters.
 2. Seat adjustable from 15 to 22 inches from the floor with a seamless waterfall, rounded, front edge.
 3. High backrest with no arms or adjustable arms.

643.3.1 General

Replace paragraph one with the following effective with the December 2017 letting:

- (1) Provide and maintain traffic control devices located where the plans show or engineer directs to maintain a safe work zone throughout the contract duration. Relocate as required to accommodate changing work operations. When not in use, place devices away from traffic outside of paved and gravel shoulder surfaces. Where there is barrier on the shoulder, the contractor may place devices not in use on the shoulder as close as possible to the barrier and delineated with drums. Lay signs and supports flat on the grade with uprights oriented parallel to and downstream from traffic. Do not stack devices or equipment. Promptly remove temporary devices from within the project limits as follows:
 - That will not be used within 14 consecutive calendar days.
 - Within 5 business days of substantial completion unless the engineer allows otherwise.

645.2.2.2 Geotextile, Type SAS (Subgrade Aggregate Separation)

Replace paragraph one with the following effective with the December 2017 letting:

- (1) Furnish fabric conforming to the following physical properties:

TEST	METHOD	VALUE ^[1]
Minimum grab tensile strength	ASTM D4632	170 lb
Minimum puncture strength	ASTM D6241	350 lb
Maximum apparent opening size	ASTM D4751	No. 70
Minimum permittivity	ASTM D4491	0.35 s ⁻¹

^[1] All numerical values represent minimum/maximum average roll values. Average test results from all rolls in a lot must conform to the tabulated values.

645.2.2.4 Geotextile, Type DF (Drainage Filtration)

Replace paragraph one with the following effective with the December 2017 letting:

- (1) Furnish fabric conforming with the physical requirements of either schedule A, schedule B, or schedule C as the contract specifies.

SCHEDULE A TEST	METHOD	VALUE ^[1]
Minimum grab tensile strength	ASTM D4632	110 lb
Minimum puncture strength	ASTM D6241	200 lb
Minimum apparent breaking elongation	ASTM D4632	30%
Maximum apparent opening size	ASTM D4751	300 µm
Minimum permittivity	ASTM D4491	0.70 s ⁻¹

SCHEDULE B TEST	METHOD	VALUE ^[1]
Minimum grab tensile strength	ASTM D4632	180 lb
Minimum puncture strength	ASTM D6241	350 lb
Minimum apparent breaking elongation	ASTM D4632	30%
Maximum apparent opening size	ASTM D4751	300 µm
Minimum permittivity	ASTM D4491	1.35 s ⁻¹

SCHEDULE C TEST	METHOD	VALUE ^[1]
Minimum grab tensile strength	ASTM D4632	180 lb
Minimum puncture strength	ASTM D6241	350 lb
Minimum apparent breaking elongation	ASTM D4632	15%
Maximum apparent opening size	ASTM D4751	600 µm
Minimum permittivity	ASTM D4491	1.00 s ⁻¹

^[1] All numerical values represent minimum/maximum average roll values. Average test results from all rolls in a lot must conform to the tabulated values.

645.2.2.6 Geotextile, Type R (Riprap)

Replace paragraph one with the following effective with the December 2017 letting:

- (1) Use fabric conforming to the following physical properties:

TEST	METHOD	VALUE ^[1]
Minimum grab tensile strength	ASTM D4632	205 lb
Minimum puncture strength	ASTM D6241	400 lb
Minimum apparent breaking elongation	ASTM D4632	15%
Maximum apparent opening size	ASTM D4751	No. 30
Minimum permittivity	ASTM D4491	0.12 s ⁻¹

^[1] All numerical values represent minimum/maximum average roll values. Average test results from all rolls in a lot must conform to the tabulated values.

645.2.2.7 Geotextile, Type HR (Heavy Riprap)

Replace paragraph one with the following effective with the December 2017 letting:

- (1) Use fabric conforming to the following physical properties:

TEST	METHOD	VALUE ^[1]
Minimum grab tensile strength, lb	ASTM D4632	305 lb
Minimum puncture strength, lb	ASTM D6241	500 lb
Minimum apparent breaking elongation, %	ASTM D4632	15%
Maximum apparent opening size	ASTM D4751	No. 30
Minimum permittivity	ASTM D4491	0.40, s ⁻¹

^[1] All numerical values represent minimum/maximum average roll values. Average test results from all rolls in a lot must conform to the tabulated values.

645.2.2.8 Geotextile, Type C (Modified SAS)

Replace paragraph one with the following effective with the December 2017 letting:

- (1) Use fabric conforming to the following physical properties:

TEST	METHOD	VALUE ^[1]
Grab tensile strength, lb	ASTM D4632	205 lb
Puncture strength, lb	ASTM D6241	350 lb
Maximum apparent opening size	ASTM D4751	No. 50
Minimum permittivity	ASTM D4491	0.12 s ⁻¹

^[1] All numerical values represent minimum/maximum average roll values. Average test results from all rolls in a lot must conform to the tabulated values.

646.3.1.1 General Marking

Replace paragraph one with the following effective with the December 2017 letting:

- (1) Prepare the surface and apply marking as the manufacturer specifies. Provide manufacturer specifications as the engineer requests. Do not mark over a marking product with less adherence or over chipped or peeled marking. Do not remove polymer overlay materials in areas receiving pavement marking. Use only epoxy pavement marking where the contract requires marking placed on polymer overlays.

Replace paragraph five with the following effective with the December 2017 letting:

- (5) After the marking can sustain exposure to traffic, re-apply clear protective surface treatment conforming to 502.2.11 where removed from structures during marking surface preparation. Seal exposed concrete including grooves for tape. Cover marking during resealing with a system that will not degrade the marking's retroreflectivity when removed. Uncover marking before opening to traffic.

701.3 Contractor Testing

Replace paragraph one with the following effective with the December 2017 letting:

- (1) Perform contract required QC tests for samples randomly located according to CMM 8-30. Also perform other tests as necessary to control production and construction processes, and additional testing enumerated in the contractor's quality control plan or that the engineer directs. Use test methods as follows:

TABLE 701-2 TESTING STANDARDS

TEST	TEST STANDARD
Washed P 200 analysis	AASHTO T11 ^[1]
Sieve analysis of fine and coarse aggregate	AASHTO T27 ^[1]
Aggregate moisture	AASHTO T255 ^[1]
Sampling freshly mixed concrete	AASHTO R60
Air content of fresh concrete	AASHTO T152 ^[2]
Air void system of fresh concrete	AASHTO Provisional Standard TP118
Concrete slump	AASHTO T119 ^[2]
Concrete temperature	ASTM C1064
Concrete compressive strength	AASHTO T22
Making and curing concrete cylinders	AASHTO T23
Standard moist curing for concrete cylinders	AASHTO M201

^[1] As modified in CMM 8-60.

^[2] As modified in CMM 8-70.

715.2.3.1 Pavements

Add the following as paragraph six effective with the December 2017 letting:

- (6) For new lab-qualified mixes, test the air void system of the proposed concrete mix conforming to AASHTO provisional standard TP 118. Include the SAM number as a part of the mix design submittal.

715.3.1.1 General

Replace paragraph one with the following effective with the December 2017 letting:

- (1) Provide slump, air content, concrete temperature and compressive 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 three cylinders for strength evaluation. For pavement concrete, also test the air void system conforming to AASHTO provisional standard TP118 at least once per lot and enter the SAM number in the MRS for information only.

715.3.1.3 Department Verification Testing

Replace paragraph one with the following effective with the December 2017 letting:

- (1) The department will perform verification testing as specified in 701.4.2 with additional testing as required to obtain at least 1 verification test per lot for air content, slump, temperature, and compressive strength.

Errata

Make the following corrections to the standard specifications:

106.3.3.1 General

Correct errata by changing "acceptance" to "approval".

- (1) For manufactured products or assemblies, the department may base approval on a product certification or require both a product certification and production plant certification.
-

205.3.1 General

Correct errata by replacing paragraphs three and four with the following to reflect current practice to incorporate suitable materials.

- (3) Replace unsuitable material with satisfactory material. Trim and finish the roadway. Maintain the work done under 205 in a finished condition until acceptance.
-

305.1 Description

Correct errata to clarify that the contractor may use more than one material under a single contract.

- (1) This section describes constructing a dense graded base using one or more of the following aggregates at the contractor's option:

Crushed stone	Reclaimed asphalt
Crushed gravel	Reprocessed material
Crushed concrete	Blended material

521.2 Materials

Correct errata by deleting bullet three and including aluminum coated pipe in bullet one.

- (1) Furnish corrugated steel pipe and steel apron end walls as follows:
 - Corrugated steel culvert pipe, steel apron endwalls, aluminum coated corrugated steel culvert pipe, and other components conforming to AASHTO M36.
 - Polymer coated corrugated steel culvert pipe and pipe arch fabricated from zinc coated sheet steel conforming to AASHTO M218. Before fabrication, coat the sheets on both sides with polymer protective coating grade 250/250 according to AASHTO M246. Fabricate the pipe according to AASHTO M245.
-

614.3.2.2 Installing Rail

Correct errata for splice location and allow punching or drilling holes and slots.

- (1) Install rail with lap splices in the direction of traffic. Ensure that the number and dimensions of holes and bolts conforms to the plan details for new splices. Place the round head of bolts on the traffic side.
 - (2) Cut rails to length by shearing or sawing; do not use cutting torches. Drill or punch bolt holes and slots; ensure that they are burr free. After installation, cut anchor bolts that project more than one inch from the nut to 1/2 inch from the nut; deburr the threaded end of cut bolts.
-

618.1 Description

Correct errata by deleting designated detours from the scope of Maintenance and Repair of Haul Roads.

- (1) This section describes maintaining, repairing, and restoring all public roads, streets, drainage facilities, and other components used for hauling by contractor, subcontractor, or supplier to support work for a department contract to its pre-haul condition. Public roads and streets shall be limited to those not a part of the State Trunk Highway System and from now on called haul roads.

643.3.5.2 Cellular Communication

Correct errata by changing State Traffic Operations Center to Traffic Management Center.

- (2) A minimum of 14 days before deployment, demonstrate to the department that the cellular modem is capable of communications with the Traffic Management Center. If remote communications are interrupted or temporarily unavailable, the department will notify the contractor to change messages manually. Update messages within 2 hours of receiving notification.

646.3.1.2 Liquid Marking

Correct errata by changing "epoxy overlays" to "polymer overlays".

- (5) Apply liquid marking and glass beads across the line at or exceeding the following:

LIQUID MARKING		PAVEMENT TYPE	THICKNESS (mils)	BEAD APPLICATION (pounds per gallon)
Paint		all	16	8-10
Epoxy	SMA, seal coats, and polymer overlays		25	25
Epoxy		all other	20	22.5

654.5 Payment

Correct errata to clarify that contractor-provided anchor rods and associated hardware are incidental.

- (2) Payment for the Bases bid items is full compensation for providing concrete bases; for embedded conduit and electrical components; for anchor rods, nuts, and washers; for bar steel reinforcement; and for excavating, backfilling, and disposing of surplus materials.

ADDITIONAL SPECIAL PROVISION 7

- A. Reporting 1st Tier and DBE Payments During Construction
1. Comply with reporting requirements specified in the department's Civil Rights Compliance, Contractor's User Manual, Sublets and Payments.
 2. Report payments to all DBE firms within 10 calendar days of receipt of a progress payment by the department or a contractor for work performed, materials furnished, or materials stockpiled by a DBE firm. Report the payment as specified in A(1) for all work satisfactorily performed and for all materials furnished or stockpiled.
 3. Report payments to all first tier subcontractor relationships within 10 calendar days of receipt of a progress payment by the department for work performed. Report the payment as specified in A(1) for all work satisfactorily performed.
 4. All tiers shall report payments as necessary to comply with the DBE payment requirement as specified in A(2).
 5. Require all first tier relationships, DBE firms and all other tier relationships necessary to comply with the DBE payment requirement in receipt of a progress payment by contractor to acknowledge receipt of payment as specified in A(1), (2), (3) and (4).
 6. All agreements made by a contractor shall include the provisions in A(1), (2), (3), (4) and (5), and shall be binding on all first tier subcontractor relationships and all contractors and subcontractors utilizing DBE firms on the project.
- B. Costs for conforming to this special provision are incidental to the contract.

NOTE: CRCS Prime Contractor payment is currently not automated and will need to be manually loaded into the Civil Rights Compliance System. Copies of prime contractor payments received (check or ACH) will have to be forwarded to paul.ndon@dot.wi.gov within 5 days of payment receipt to be logged manually.

***Additionally, for information on Subcontractor Sublet assignments, Subcontractor Payments and Payment Tracking, please refer to the CRCS Payment and Sublets manual at:

<http://wisconsindot.gov/Documents/doing-bus/civil-rights/labornwage/crcs-payments-sublets-manual.pdf>

ADDITIONAL SPECIAL PROVISION 9-S
Electronic Labor Data Submittal for
State Funded Only Projects

(1) Use the Workforce Utilization Report Microsoft Excel spread sheet, or other compatible spread sheet (i.e., Google Spread Sheet), to report required labor data. Details and the Excel spreadsheet are available online through the department's highway construction contract information (HCCI) site on the Labor, Wages, and EEO Information page at:

<http://wisconsindot.gov/Pages/doing-bus/civil-rights/labornwage/default.aspx>

(2) Ensure that all tiers of subcontractors, including all trucking firms, submit their labor data electronically via the Excel spread sheet to the prime contractor within 14 calendar days of the end of each quarter (quarters are defined as January-March, April-June, July-September, and October-December). The prime contractor shall coordinate collection of their subcontractors' spread sheets and forward them to the Regional Labor Compliance Specialist within 21 calendar days of the end of each quarter. Every company or contractor providing physical labor towards completing the project is a subcontractor under this special provision.

(3) Upon receipt of contract execution, promptly make all affected companies or contractors aware of the requirements under this special provision and arrange for them to receive an Excel spreadsheet as part of their subcontract documents.

(4) The department will reject all paper submittals of information required under this special provision. All costs for conforming to this special provision are incidental to the contract.

Non-discrimination Provisions

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees as follows:

1. Compliance with Regulations: The contractor (hereinafter includes consultants) will comply with the Acts and the Regulations relative to Non-discrimination in Federally-assisted programs of the U.S. Department of Transportation, Federal Highway Administration, as they may be amended from time to time, which are herein incorporated by reference and made a part of this contract.

2. Non-discrimination: The contractor, with regard to the work performed by it during the contract, will not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The contractor will not participate directly or indirectly in the discrimination prohibited by the Acts and the Regulations, including employment practices when the contract covers any activity, project, or program set forth in Appendix B of 49 CFR Part 21.

3. Solicitations for Subcontracts, Including Procurements of Materials and Equipment: In all solicitations, either by competitive bidding, or negotiation made by the contractor for work to be performed under a subcontract, including procurements of materials, or leases of equipment, each potential subcontractor or supplier will be notified by the contractor of the contractor's obligations under this contract and the Acts and the Regulations relative to Non-discrimination on the grounds of race, color, or national origin.

4. Information and Reports: The contractor will provide all information and reports required by the Acts, the Regulations, and directives issued pursuant thereto and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Recipient or the Federal Highway Administration to be pertinent to ascertain compliance with such Acts, Regulations, and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish the information, the contractor will so certify to the Recipient or the Federal Highway Administration, as appropriate, and will set forth what efforts it has made to obtain the information.

5. Sanctions for Noncompliance: In the event of a contractor's noncompliance with the Non-discrimination provisions of this contract, the Recipient will impose such contract sanctions as it or the Federal Highway Administration may determine to be appropriate, including, but not limited to:

- a. Withholding payments to the contractor under the contract until the contractor complies; and/or
- b. Cancelling, terminating, or suspending a contract, in whole or in part.

6. Incorporation of Provisions: The contractor will include the provisions of paragraphs one through six in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts, the Regulations and directives issued pursuant thereto. The contractor will take action with respect to any subcontract or procurement as the Recipient or the Federal Highway Administration may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if the contractor becomes involved in, or is threatened with litigation by a subcontractor, or supplier because of such direction, the contractor may request the Recipient to enter into any litigation to protect the interests of the Recipient. In addition, the contractor may request the United States to enter into the litigation to protect the interests of the United States.

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees to comply with the following non-discrimination statutes and authorities; including but not limited to:

Pertinent Non-Discrimination Authorities:

- Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d et seq., 78 stat. 252), (prohibits discrimination on the basis of race, color, national origin); and 49 CFR Part 21.
- The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 U.S.C. § 4601), (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);
- Federal-Aid Highway Act of 1973, (23 U.S.C. § 324 et seq.), (prohibits discrimination on the basis of sex);
- Section 504 of the Rehabilitation Act of 1973, (29 U.S.C. § 794 et seq.), as amended, (prohibits discrimination on the basis of disability); and 49 CFR Part 27;
- The Age Discrimination Act of 1975, as amended, (42 U.S.C. § 6101 et seq.), (prohibits discrimination on the basis of age);
- Airport and Airway Improvement Act of 1982, (49 USC § 471, Section 47123), as amended, (prohibits discrimination based on race, creed, color, national origin, or sex);
- The Civil Rights Restoration Act of 1987, (PL 100-209), (Broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, The Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms "programs or activities" to include all of the programs or activities of the Federal-aid recipients, sub-recipients and contractors, whether such programs or activities are Federally funded or not);
- Titles II and III of the Americans with Disabilities Act, which prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities (42 U.S.C. §§ 12131-12189) as implemented by Department of Transportation regulations at 49 C.F.R. parts 37 and 38;
- The Federal Aviation Administration's Non-discrimination statute (49 U.S.C. § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex);

- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, which ensures Non-discrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations;
- Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of Limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs (70 Fed. Reg. at 74087 to 74100);
- Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 U.S.C. 1681 et seq).

Effective 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.

<http://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:

<http://wisconsindot.gov/hcciDocs/contracting-info/ws4567.doc>

March 2017

**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.



Proposal Schedule of Items

Page 1 of 5

Proposal ID: 20180313022 Project(s): 2751-00-70

Federal ID(s): N/A

SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0002	201.0105 Clearing	2.000 STA	_____.	_____.
0004	201.0205 Grubbing	2.000 STA	_____.	_____.
0006	203.0600.S Removing Old Structure Over Waterway With Minimal Debris (station) 01. 20+70.55	LS	LUMP SUM	_____.
0008	204.0165 Removing Guardrail	239.000 LF	_____.	_____.
0010	205.0100 Excavation Common	749.000 CY	_____.	_____.
0012	205.0400 Excavation Marsh	790.000 CY	_____.	_____.
0014	206.1000 Excavation for Structures Bridges (structure) 01. B-67-0373	LS	LUMP SUM	_____.
0016	206.5000 Cofferdams (structure) 01. B-67-0373	LS	LUMP SUM	_____.
0018	208.0100 Borrow	235.000 CY	_____.	_____.
0020	210.1500 Backfill Structure Type A	586.000 TON	_____.	_____.
0022	213.0100 Finishing Roadway (project) 01. 2751- 00-70	1.000 EACH	_____.	_____.
0024	305.0110 Base Aggregate Dense 3/4-Inch	207.000 TON	_____.	_____.
0026	305.0120 Base Aggregate Dense 1 1/4-Inch	1,713.000 TON	_____.	_____.
0028	311.0110 Breaker Run	755.000 TON	_____.	_____.
0030	415.0410 Concrete Pavement Approach Slab	147.000 SY	_____.	_____.



Proposal Schedule of Items

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Proposal ID: 20180313022 Project(s): 2751-00-70

Federal ID(s): N/A

SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0032	450.4000 HMA Cold Weather Paving	691.000 TON	_____.	_____.
0034	455.0605 Tack Coat	199.000 GAL	_____.	_____.
0036	460.2000 Incentive Density HMA Pavement	450.000 DOL		_____.
0038	460.6222 HMA Pavement 2 MT 58-28 S	461.000 TON	_____.	_____.
0040	460.6224 HMA Pavement 4 MT 58-28 S	230.000 TON	_____.	_____.
0042	502.0100 Concrete Masonry Bridges	168.000 CY	_____.	_____.
0044	502.3200 Protective Surface Treatment	187.000 SY	_____.	_____.
0046	502.3210 Pigmented Surface Sealer	51.000 SY	_____.	_____.
0048	505.0600 Bar Steel Reinforcement HS Coated Structures	17,660.000 LB	_____.	_____.
0050	506.2605 Bearing Pads Elastomeric Non-Laminated	24.000 EACH	_____.	_____.
0052	516.0500 Rubberized Membrane Waterproofing	22.000 SY	_____.	_____.
0054	550.1100 Piling Steel HP 10-Inch X 42 Lb	560.000 LF	_____.	_____.
0056	606.0300 Riprap Heavy	122.000 CY	_____.	_____.
0058	612.0406 Pipe Underdrain Wrapped 6-Inch	210.000 LF	_____.	_____.
0060	614.0150 Anchor Assemblies for Steel Plate Beam Guard	4.000 EACH	_____.	_____.
0062	614.2330 MGS Guardrail 3 K	100.000 LF	_____.	_____.



Proposal Schedule of Items

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Proposal ID: 20180313022 Project(s): 2751-00-70

Federal ID(s): N/A

SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0064	614.2500 MGS Thrie Beam Transition	158.000 LF	_____.	_____.
0066	614.2610 MGS Guardrail Terminal EAT	4.000 EACH	_____.	_____.
0068	618.0100 Maintenance And Repair of Haul Roads (project) 01. 2751-00-70	1.000 EACH	_____.	_____.
0070	619.1000 Mobilization	1.000 EACH	_____.	_____.
0072	624.0100 Water	22.000 MGAL	_____.	_____.
0074	625.0100 Topsoil	500.000 SY	_____.	_____.
0076	625.0500 Salvaged Topsoil	2,275.000 SY	_____.	_____.
0078	627.0200 Mulching	2,308.000 SY	_____.	_____.
0080	628.1104 Erosion Bales	250.000 EACH	_____.	_____.
0082	628.1520 Silt Fence Maintenance	971.000 LF	_____.	_____.
0084	628.1905 Mobilizations Erosion Control	2.000 EACH	_____.	_____.
0086	628.1910 Mobilizations Emergency Erosion Control	4.000 EACH	_____.	_____.
0088	628.2004 Erosion Mat Class I Type B	2,308.000 SY	_____.	_____.
0090	628.6005 Turbidity Barriers	367.000 SY	_____.	_____.
0092	628.7555 Culvert Pipe Checks	5.000 EACH	_____.	_____.
0094	628.7560 Tracking Pads	2.000 EACH	_____.	_____.



Proposal Schedule of Items

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Proposal ID: 20180313022 Project(s): 2751-00-70

Federal ID(s): N/A

SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0096	628.7570 Rock Bags	275.000 EACH	_____.	_____.
0098	629.0210 Fertilizer Type B	2.000 CWT	_____.	_____.
0100	630.0130 Seeding Mixture No. 30	51.000 LB	_____.	_____.
0102	630.0200 Seeding Temporary	38.000 LB	_____.	_____.
0104	634.0816 Posts Tubular Steel 2x2-Inch X 16-FT	8.000 EACH	_____.	_____.
0106	637.2210 Signs Type II Reflective H	15.000 SF	_____.	_____.
0108	637.2230 Signs Type II Reflective F	12.000 SF	_____.	_____.
0110	638.2602 Removing Signs Type II	9.000 EACH	_____.	_____.
0112	638.3000 Removing Small Sign Supports	9.000 EACH	_____.	_____.
0114	642.5001 Field Office Type B	1.000 EACH	_____.	_____.
0116	643.0420 Traffic Control Barricades Type III	1,232.000 DAY	_____.	_____.
0118	643.0705 Traffic Control Warning Lights Type A	2,464.000 DAY	_____.	_____.
0120	643.0900 Traffic Control Signs	14,432.000 DAY	_____.	_____.
0122	643.0920 Traffic Control Covering Signs Type II	7.000 EACH	_____.	_____.
0124	643.1000 Traffic Control Signs Fixed Message	30.000 SF	_____.	_____.
0126	643.1050 Traffic Control Signs PCMS	14.000 DAY	_____.	_____.
0128	643.5000 Traffic Control	1.000 EACH	_____.	_____.



Proposal Schedule of Items

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Proposal ID: 20180313022 Project(s): 2751-00-70

Federal ID(s): N/A

SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0130	645.0111 Geotextile Type DF Schedule A	118.000 SY	_____.	_____.
0132	645.0120 Geotextile Type HR	457.000 SY	_____.	_____.
0134	645.0140 Geotextile Type SAS	1,258.000 SY	_____.	_____.
0136	646.1020 Marking Line Epoxy 4-Inch	1,544.000 LF	_____.	_____.
0138	650.4500 Construction Staking Subgrade	438.000 LF	_____.	_____.
0140	650.5000 Construction Staking Base	438.000 LF	_____.	_____.
0142	650.6500 Construction Staking Structure Layout (structure) 01. B-67-0373	LS	LUMP SUM	_____.
0144	650.9910 Construction Staking Supplemental Control (project) 01. 2751-00-70	LS	LUMP SUM	_____.
0146	650.9920 Construction Staking Slope Stakes	438.000 LF	_____.	_____.
0148	690.0150 Sawing Asphalt	48.000 LF	_____.	_____.
0150	715.0502 Incentive Strength Concrete Structures	990.000 DOL		_____.
0152	SPV.0090 Special 01. Heavy Duty Silt Fence	971.000 LF	_____.	_____.
0154	SPV.0090 Special 02. Prestressed Girder Box Type 17-Inch	428.000 LF	_____.	_____.
0156	SPV.0105 Special 01. Dry Fire Hydrant	LS	LUMP SUM	_____.
Section: 0001			Total:	_____.
			Total Bid:	_____.

PLEASE ATTACH SCHEDULE OF ITEMS HERE