#### **HIGHWAY WORK PROPOSAL**

Proposal Number:

Wisconsin Department of Transportation DT1502 10/2010 s.66.29(7) Wis. Stats.

FEDERAL PROJECT ID STATE PROJECT ID PROJECT DESCRIPTION COUNTY **HIGHWAY** Park Falls-Springstead Price 9240-08-70 WISC 2016 418 STH 182 N Fork Flambeau Rvr Brdge B-50-0082 Price WISC 2016 419 Park Falls-Springstead STH 182 9240-08-71 STH 13 to Sanders Avenue

This proposal, submitted by the undersigned bidder to the Wisconsin Department of Transportation, is in accordance with the advertised request for proposals. The bidder is to furnish and deliver all materials, and to perform all work for the improvement of the designated project in the time specified, in accordance with the appended Proposal Requirements and Conditions.

Proposal Guaranty Required, \$ 75,000.00	Attach Proposal Guaranty on back of this PAGE.
Payable to: Wisconsin Department of Transportation	
Bid Submittal Due	Firm Name, Address, City, State, Zip Code
Date: November 8, 2016 Time (Local Time): 9:00 AM	SAMPLE
Contract Completion Time	NOT FOR BIDDING PURPOSES
October 27, 2017	NOT FOR DIDDING FOR COLO
Assigned Disadvantaged Business Enterprise Goal 7%	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)  Notary Seal	(Bidder Title)		

## For Department Use Only

Type of Work

Grading, base aggregate dense, concrete sidewalk, concrete curb and gutter, storm sewer, HMA pavement, street lighting, drilled shaft foundations 36-Inch, Structure B-50-0082.

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

- 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: <a href="http://wisconsindot.gov/Pages/doing-bus/contractors/hcci/bid-let.aspx">http://wisconsindot.gov/Pages/doing-bus/contractors/hcci/bid-let.aspx</a>

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<sup>TM</sup> on-line bidding exchange at <a href="http://www.bidx.com/after 5:00 P.M.">http://www.bidx.com/after 5:00 P.M.</a> 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<sup>TM</sup> 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:

  <a href="http://wisconsindot.gov/Pages/doing-bus/contractors/hcci/bid-let.aspx">http://wisconsindot.gov/Pages/doing-bus/contractors/hcci/bid-let.aspx</a>

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.

Addenda posted after 5:00 PM on the Thursday before the letting will be emailed to the eligible bidders for that proposal. All eligible bidders shall acknowledge receipt of the addenda whether they are bidding on the proposal or not. Not acknowledging receipt may jeopardize the awarding of the project.

#### **B Submitting Electronic Bids**

#### **B.1** On the Internet

- (1) Do the following before submitting the bid:
  - 1. Have a properly executed annual bid bond on file with the department.
  - 2. Have a digital ID on file with and enabled by Info Tech Inc. Using this digital ID will constitute the bidder's signature for proper execution of the bidding proposal.
- (2) In lieu of preparing, delivering, and submitting the proposal as specified in 102.6 and 102.9 of the standard specifications, submit the proposal on the internet as follows:
  - 1. Download the latest schedule of items reflecting all addenda from the Bid Express web site.
  - 2. Use Expedite<sup>TM</sup> software to enter a unit price for every item in the schedule of items.
  - 3. Submit the bid according to the requirements of Expedite<sup>TM</sup> software and the Bid Express<sup>TM</sup> web site. Do not submit a bid on a printout with accompanying diskette or CD ROM or a paper bid. If the bidder does submit a bid on a printout with accompanying diskette or a paper bid in addition to the internet submittal, the department will disregard the internet bid.
  - 4. Submit the bid before the hour and date the Notice to Contractors designates.
  - 5. Do not sign, notarize, and return the bidding proposal described in 102.2 of the standard specifications.
- (3) The department will not consider the bid accepted until the hour and date the Notice to Contractors designates.

#### B.2 On a Printout with Accompanying Diskette or CD ROM

(1) Download the latest schedule of items from the Wisconsin pages of the Bid Express<sup>TM</sup> 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 Expedite TM software to prepare and print the schedule of items. Provide a valid amount for all price fields. Follow instructions and review the help screens provided on the Bid Express Meb site to assure that the schedule of items is prepared properly.

(2) Staple an 8 1/2 by 11 inch printout of the Expedite<sup>TM</sup> generated schedule of items to the other proposal documents submitted to the department as a part of the bidder's sealed bid. As a separate submittal not in the sealed bid envelop but due at the same time and place as the sealed bid, also provide the Expedite<sup>TM</sup> generated schedule of items on a 3 1/2 inch computer diskette or CD ROM. Label each diskette or CD ROM with the bidder's name, the 4 character department-assigned bidder identification code from the top of the bidding proposal, and a list of the proposal numbers included on that diskette or CD ROM as indicated in the following example:

**Bidder** 

Name

**BN00** 

Proposals: 1, 12, 14, & 22

- (3) If bidding on more than one proposal in the letting, the bidder may include all proposals for that letting on one diskette or CD ROM. Include only submitted proposals with no incomplete or other files on the diskette or CD ROM.
- (4) The bidder-submitted printout of the Expedite<sup>TM</sup> generated schedule of items is the governing contract document and must conform to the requirements of section 102 of the standard specifications. If a printout needs to be altered, cross out the printed information with ink or typewriter and enter the new information and initial it in ink. If there is a discrepancy between the printout and the diskette or CD ROM, the department will analyze the bid using the printout information.

- (5) In addition to the reasons specified in section 102 of the standard specifications, proposals are irregular and the department may reject them for one or more of the following:
  - 1. The check code printed on the bottom of the printout of the Expedite<sup>TM</sup> generated schedule of items is not the same on each page.
  - 2. The check code printed on the printout of the Expedite<sup>TM</sup> 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 St		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 Corpor	ate Seal)		
(Signature and Title)			
(Company Name)			
(Signature and Title)			
(Company Name)			
(Signature and Title)		(Name of Surety) (Affix Seal)	
(Company Name)		(Signature of Attorney-in-Fact)	
(Signature and Title)			
NOTARY FO	OR PRINCIPAL	NOTARY FO	R SURETY
(I)	Date)	(Dat	te)
State of Wisconsin	)	State of Wisconsin	)
	) ss. County )		) ss. _County )
On the above date, this instrument named person(s).	was acknowledged before me by the	On the above date, this instrument w named person(s).	as acknowledged before me by the
(Signature, Notary Pu	ublic, State of Wisconsin)	(Signature, Notary Publ	ic, State of Wisconsin)
(Print or Type Name, Nota	ry Public, State of Wisconsin)	(Print or Type Name, Notary Public, State of Wisconsin)	
(Date Comn	nission Expires)	(Date Commis	sion Expires)

Notary Seal 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

(Date)

Time Period Valid (	From/To)
Name of Surety	
Name of Contracto	r
Certificate Holder	Wisconsin Department of Transportation
	y that an annual bid bond issued by the above-named Surety is currently on file with the partment of Transportation.
	is issued as a matter of information and conveys no rights upon the certificate holder mend, 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)

#### March 2010

### LIST OF SUBCONTRACTORS

Section 66.0901(7), Wisconsin Statutes, provides that as a part of the proposal, the bidder also shall submit a list of the subcontractors the bidder proposes to contract with and the class of work to be performed by each. In order to qualify for inclusion in the bidder's list a subcontractor shall first submit a bid in writing, to the general contractor at least 48 hours prior to the time of the bid closing. The list may not be added to or altered without the written consent of the municipality. A proposal of a bidder is not invalid if any subcontractor and the class of work to be performed by the subcontractor has been omitted from a proposal; the omission shall be considered inadvertent or the bidder will perform the work personally.

No subcontract, whether listed herein or later proposed, may be entered into without the written consent of the Engineer as provided in Subsection 108.1 of the Standard Specifications.

Name of Subcontractor	Class of Work	<b>Estimated Value</b>

#### **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 9240-08-70/71, Park Falls – Springstead, STH 13 to Saunders Avenue, N Fork Flambeau Rvr Brdge B-50-0082, STH 182, Price County, Wisconsin as the plans show and execute the work as specified in the State of Wisconsin, Department of Transportation, Standard Specifications for Highway and Structure Construction, 2016 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 (20151210)

# 2. Scope of Work.

The work under this contract shall consist of grading, base aggregate dense, concrete sidewalk, concrete curb and gutter, storm sewer, HMA Pavement, street lighting, drilled shaft foundations 36-Inch, Structure B-50-0082, 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.

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.

Prior to the closure of B-50-001, upgrade the existing informal pedestrian trail routed from the west bank of the North Fork Flambeau River south to the snowmobile bridge across the river and north along the east bank to the end of the asphalt trail near the parking lot across from Park Manor west of Lawrence Avenue.

Notify residents and businesses 48 hours in advance of closing their entrances into the buildings and driveways.

Contractor shall coordinate with railroad personnel for track work.

Do not store equipment, vehicles, or materials on adjacent streets beyond the project limits without the specific approval of the engineer.

Do not store equipment, vehicles, or materials within the temporary limited easement or private parking lots of any business parking or driving area without the written approval of the engineer.

## **Fish Spawning**

There shall be no instream disturbance of the North Fork Flambeau River as a result of construction activity under or for this contract, prior to June 15, or after September 15 in order to avoid adverse impacts upon the spawning of this warm water fishery.

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

### **Protected Mussel Species**

Contact Shawn Haseleu of DNR at phone number (715) 635-4228 to arrange DNR to survey and remove protected mussel species from the river prior to the work. Notify this person of the probable start date two months in advance, and again at three weeks prior to construction.

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

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

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

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

Submit a schedule and description of Clearing operations with the ECIP 14 days prior to any Clearing operations. The department will determine, based on schedule and scope of work, what additional erosion control measures shall be implemented prior to the start of Clearing operations, and list those additional measures in the ECIP.

## 4. Traffic.

Close STH 182 to through traffic during bridge construction, from Station 28+72 to Station 37+76. Post the project detour as shown in the plans.

Maintain local vehicular and pedestrian access at all times on STH 182 through the limits of project 9240-08-71. Mill and overlay STH 182 to maintain one lane flow of traffic. Complete curb and gutter removals and replacements in a similar manner. Utilize flaggers during this work, providing additional and sufficient flaggers at intersections when work approaches and commences through all intersections.

Maintain pedestrian access to the adjacent properties, including the Flambeau River Papers property, at all times. Maintain pedestrian access to/from the alternate access route per plan details at all times. Maintain pedestrian access across STH 182 at the intersection of Lawrence Avenue to allow for the continuation of pedestrian traffic from the paved path at Hines Park to the city park area southeast of the bridge. Maintain pedestrian access to the main mill building entrance located at Station 30+17, left, at all times. Coordinate with the adjacent mill personnel for periodic truck deliveries at the entrance located at Station 31+02, left.

Accommodate pedestrians and bicyclists during the repairs of the R-50-0003 railing and the repairs of the adjacent sidewalk. Construct a temporary pedestrian fence when the R-50-0003 railing removed to allow continued use of the sidewalk. When adjacent sidewalk occur along R-50-0003 (on the north side of STH 182 between Lawrence and Case Avenues) detour pedestrians onto the existing parking lanes using the WisDOT Standard Detail Drawings (SDDs) and according to the plans.

The sidewalks along STH 182 east and west of the reconstruction area will remain open during the duration of the project, however, short-term impacts are anticipated during the replacement of curb ramps. Close the ramp area using fence safety or similar to allow for curb ramp removal, placement of concrete, and curing. Ramp any drop-off as a result of curb ramp removal with existing material to allow for continued use by pedestrians. Route pedestrians on the street during closures. Impacted intersections along STH 182 that are outside of the reconstruction area from west to east include; 3rd Avenue, 2nd Avenue, Alley east of 2nd Avenue (including the railroad crossing), Lawrence Avenue, Case Avenue, Shery Avenue, Avery Avenue, and Paddock Avenue.

Accommodate pedestrians at all times at the railroad crossing between 3rd and 2nd Avenues. Route pedestrians around the railroad crossing work when existing accommodations are impacted.

Provide temporary pedestrian accommodations utilizing temporary paths, temporary surfaces, temporary curb ramps, temporary pedestrian safety fence, and other items as provided in the plans. Close sidewalks as needed only when repairs and replacements as shown in the plans warrant such closure. If a temporary closure to a sidewalk or alternate access is needed, seek approval by the engineer prior to closure.

Pave all surfaces of STH 182 with the final surface of HMA pavement within 7 calendar days of milling.

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

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

TABLE 108-1 CLOSURE TYPE AND REQUIRED MINIMUM ADVANCE NOTIFICATION

Closure type with height, weight, or width restrictions (available width, all lanes in one direction < 16')	MINIMUM NOTIFICATION
Lane and shoulder closures	7 calendar days
Full roadway closures	7 calendar days
Ramp closures	7 calendar days
Full ramp closures	7 calendar days
Detours	7 calendar days
Closure type without height, weight, or width restrictions (available width, all lanes in one direction >16')	MINIMUM NOTIFICATION
Lane and shoulder closures	3 business days
System and service ramp closures	3 business days
Modifying all closure types	3 business days

Discuss LCS completion dates and provide changes in the schedule to the engineer at weekly project meetings in order to manage closures nearing their completion date. 108-057 (20160607)

# 5. Holiday Work Restrictions.

Do not perform work on, nor haul materials of any kind along or across any portion of the highway carrying STH 182 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, May 26, 2017 to 6:00 AM Tuesday, May 30, 2017 for Memorial Day;
- From noon Friday, June 30, 2017 to 6:00 AM Wednesday, July 5, 2017 for Independence Day;
- From noon Friday, September 1, 2017 to 6:00 AM Tuesday, September 5, 2017 for Labor Day.

Bridge construction work contained within the roadway closure is exempt from holiday work restrictions. 107-005 (20050502)

### 6. Utilities.

This contract comes under the provision of Administrative Rule Trans 220. 107-065 (20080501)

## **CenturyLink (Buried Communications)**

CenturyLink has a buried fiber optic line on the south side of STH 182 and is suspended under B-50-001. This line will conflict with construction. CenturyLink will relocate their facility from the south side of STH 182 down the gravel path on the west side of the North Fork Flambeau River and cross near the snowmobile bridge downstream. The existing facility from the intersection of the gravel path to the east end of the bridge will be removed to the extent possible or will remain in place out of service prior to construction.

#### **Charter Communications (Buried/Overhead Communications)**

Charter Communications (Charter) has a fiber optic line on the south side of STH 182 that is buried to the west of the utility pole near 31+72, RT. At that pole, the line becomes overhead and crosses the North Fork Flambeau River to a utility pole near 35+41, RT. From that point, the line continues east underground along the south side of STH 182. This line will conflict with construction. Charter will relocate their facility off the bridge to a similar routing of the CenturyLink line prior to construction.

### Flambeau Hydro LLC /FKA Renewable World Energies (Buried Electric)

Renewable World Energies (RWE) has a buried 6-inch diameter PVC conduit carrying a high-voltage electric line crossing perpendicular to STH 182 near Station 31+95. The facility will be left in place. Coordinate with RWE representatives to allow RWE to adjust the location of the conduit during construction of the proposed storm sewer near the crossing. Per TRANS 220, give RWE a minimum of two weeks' notice and again three days prior to work near the buried line. It is anticipated that this work will take one working day working in conjunction with the WisDOT contractor.

#### Flambeau River Papers (Buried Electric)

Flambeau River Papers (FRP) has an underground concrete conduit crossing perpendicular to STH 182 near Station 31+65 that contains electric or communication facilities. This conduit is not anticipated to conflict with construction and will be left in place. Work around existing conduit during installation of proposed storm sewer at that location.

## Park Falls Municipal Water Utility (Buried Water)

Park Falls Municipal Water has a buried 12-inch HDPE water main under STH 182 to the right of the centerline running from the west. The alignment changes course at Station 31+05 where the main is bored under the river towards the southeast. The main then rejoins the previous alignment parallel to centerline near Station 38+25 and continues east. The water main will remain in place during construction. The estimated location shown on the plan was provided by the City of Park Falls. The depth of the water main is anticipated to be below the proposed west abutment, according to the city. Locate using bid item, Utility Line Opening (ULO) Water Main at Bridge, to ensure placement of bridge prebored piling do not impact existing water main. See west abutment detail sheet on the bridge plans to accommodate the water main after it is located.

An existing hydrant near Station 29+87, LT is in conflict with construction. The hydrant will be relocated during construction by the city. The contractor shall contact the City of Park Falls Department of Public Works at least 14 days in advance of construction in the area to coordinate hydrant relocation. It is anticipated that this work will take one working day working in conjunction with WisDOT contractor.

There is an older, no-longer used, 8-inch ductile water main running along the south side of the existing bridge parallel to STH 182. This line will be left in place and out of service.

### Park Falls Water & Sewer Dept. (Buried Sanitary Sewer)

Park Falls Water & Sewer has a buried sanitary line along the south side of STH 182 from Station 30+35, RT to Station 32+00, RT where the line turns to the south under the gravel road along the west bank of the North Fork Flambeau River.

An existing sanitary sewer manhole is located near Station 30+45, RT and is in conflict with construction. The manhole will be relocated during construction by the city. The contractor shall contact the City of Park Falls Department of Public Works at least 14 days in advance of construction in the area to coordinate manhole relocation. It is anticipated that this work will take one working day working in conjunction with WisDOT contractor.

An existing sanitary sewer manhole is located 8 feet west of B-50-001 where no impacts are anticipated. This facility will be left in place.

## **Price County Telephone Company (Buried Telephone)**

Price County Telephone Company (PCTC) has underground facilities throughout the project along the south side of STH 182 and is suspended under B-50-001. These facilities will conflict with construction. Prior to construction, PCTC will remove facilities from service between approximately Station 28+75, RT to Station 37+00, RT and be moved to a similar routing as the CenturyLink line. Existing facilities will be removed to the extent possible or will be left in place and out of service.

### **Xcel Energy – Transmission (Overhead Electric Transmission)**

Xcel Energy (Xcel) has two transmission lines that cross STH 182 perpendicularly near Station 36+60 and another transmission line that crosses diagonally near Station 26+65. There is another set of overhead lines crossing the Flambeau River diagonally downstream from the bridge, approximately 160 feet south of the existing west abutment and approximately 240 feet south of the existing east abutment. These lines will remain in place during construction. According to Xcel, the working clearances for the transmission lines for cranes and booms is 15 feet. Do not alter the proposed grade within a 10 foot radius of their facilities without contacting Xcel for an engineering review.

### **Xcel Energy – Electricity (Overhead Electric Distribution)**

Xcel Energy (Xcel) has an overhead line that runs along the north side of STH 182 from approximately Station 32+10, LT to Station 37+70, LT and is attached to the lights on B-50-001. These facilities will conflict with construction. Prior to construction, Xcel Energy will remove the lights and overhead line from the project area. The poles are installed as a part of the bridge and will be left in place to be taken down with bridge removal.

### **Xcel Energy – Gas (Buried Gas)**

Xcel Energy (Xcel) has a buried 6-inch steel gas main along the north side of STH 182 that is suspended under B-50-001. These facilities will conflict with construction. Prior to construction, Xcel Energy will remove the segment from service between approximately Station 31+70, LT and Station 37+60, LT. The existing line will be left in place and purged of gas. Coordinate with Xcel representatives for removal specifics during construction.

### 7. Railroad Insurance and Coordination.

### **A Description**

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

### A.1 Railroad Insurance Requirements

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

Notify evidence of the required coverage, and duration to Jackie Macewicz, Manager Public Works, 1625 Depot St., Stevens Point, WI, 54481; TELEPHONE (715) 345-2503; FAX (715) 345-2507; email <u>jackie.macewicz@cn.ca</u>. Include the following information on the insurance document:

Project: 9240-08-71

Route Name: STH 182, Price County Crossing ID: 699 580B and 699 581H

Railroad Subdivision: Ashland

Railroad Milepost: 699 580B, MP 375.84 and 699 581H, MP 375.87

#### A.2 Work by Railroad

The railroad will perform the work described in this section, except for work described in other special provisions and will be accomplished without cost to the contractor. WCL crews will reconstruct both crossing surfaces and replace the warning devices at the Flambeau Paper mill spur, crossing 699 581H.

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

Contact Jackie Macewicz, Manager Public Works, 1625 Depot St., Stevens Point, WI, 54481; TELEPHONE (715) 345-2503; FAX (715) 345-2507; email <u>jackie.macewicz@cn.ca</u> for consultation on railroad requirements during construction.

Contact Mary Ellen Carmody, Audit Officer, Administration Service Center, 24002 Vreeland Road, Flat Rock, MI, 48134; TELEPHONE (734) 783-4533 (no FAX number); email <a href="maryellen.carmody@cn.ca">maryellen.carmody@cn.ca</a> for flagging arrangements. Advise Ms. Carmody that the flagging services are to be billed at the rate for a public highway project.

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

#### A.4 Temporary Grade Crossing

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

#### A.5 Train Operation

Approximately four through freight trains operate daily through the construction site on the mainline track, crossing 690 580B. Through freight trains operate at up to 30 mph. In addition to the through trains there are two switching moves on the Flambeau Paper mill spur, crossing 699 581H. Switch trains operate at up to 10 mph.

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

Both the department and City of Park Falls personnel will inspect construction of sanitary sewer and water main under this contract. However, construction staking, testing, and acceptance of the sanitary sewer and water main construction will be by the City of Park Falls.

105-001 (20140630)

# 9. Public Convenience and Safety.

Revise standard spec 107.8(6) as follows:

Check for and comply with local ordinances governing the hours of operation of construction equipment. 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. 107-001 (20060512)

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

The department has obtained a US 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 region office by contacting Michael Grage at (715) 365-5705. Methods of operations, including preparatory work, staging, site clean-up or storing materials, causing impacts to other wetlands or waters were not included in the permit application.

If the contractor chooses a method of construction that is not covered by the department's 404 Permit, obtain the proper additional permits required from the US Army Corps of Engineers. It is the contractor's responsibility to determine if additional permits are required. Obtain the additional permits prior to beginning construction operations requiring the permits. No time extensions as discussed in standard spec 108.10 will be granted for the time required to apply for and obtain the additional permits. The contractor must be aware that the US Army Corps of Engineers may not grant the additional permits. (NCR 107.07-10152014)

The wetland impact area located off the southeast corner of the bridge, as shown on the plans, was included in the permit application for the purpose of contractor access to the river for barges, and/or staging a crane, if required. Additional work platforms in the river were not included in the permit application.

# 11. Environmental Protection - Dewatering.

Add the following to standard spec 107.18:

If dewatering is required, treat the water to remove suspended sediments by filtration, settlement or other appropriate best management practice prior to discharge. Submit the proposed means and methods of dewatering for each required location for approval as part of the Erosion Control Implementation Plan (ECIP). Include details of how the intake will be managed to not cause an increase in the background level turbidity prior to treatment and any additional measures necessary to prevent sediments from reaching the project limits or wetlands and waterways.

Guidance on Dewatering can be found on the Wisconsin Department of Natural Resources website located in the Storm Water Construction Technical Standards, Dewatering Code #1061, "Dewatering". This document can be found at the WisDNR website: http://dnr.wi.gov/topic/stormwater/standards/const\_standards.html

Work includes furnishing all materials, excavation, maintenance, cleaning, disposal of surplus material and removal of the dewatering system and is incidental to contract work. (NCR 107.13-04012016)

# 12. 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 <a href="http://dnr.wi.gov/topic/fishing/documents/vhs/disinfection">http://dnr.wi.gov/topic/fishing/documents/vhs/disinfection</a> 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. 107-055 (20130615)

# 13. Construction Over or Adjacent to Navigable Waters.

Add the following to standard spec 107.19(3):

A waterway marker permit is required for placing advanced warning signs in North Fork Flambeau River as shown in the plans. Additional information on waterway markers can be found on the Wisconsin DNR website: <a href="http://dnr.wi.gov/topic/boat/ordinances.html">http://dnr.wi.gov/topic/boat/ordinances.html</a>. (NCR 107.01-10152014)

Keep the canoe take-out located off the northeast corner of the bridge open throughout construction, including accessibility to the Lawrence Street intersection pedestrian crossing.

### 14. Erosion Control.

*Add the following to standard spec 107.20:* 

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

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

(NCR 107.03-10152014)

#### 15. 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. 107-070 (20030820)

## 16. Public Convenience and Safety.

*Replace standard spec 107.8 (4) with the following:* 

Notify the following organizations and departments at least two business days before road closures, lane closures or detours are put into effect:

Price County Sheriff's Department Wisconsin State Patrol Town of Eisenstein City of Park Falls Chequamegon School District Park Falls Post Office

The Price County Sheriff's Department 911 dispatches all area police, fire and ambulance services, and will relay any notification given by the contractor. (NCR 107.05-10152014)

# 17. Notice to Contractor, Notification of Demolition and/or Renovation No Asbestos Found.

John Roelke, License Number AII-119523, inspected Structure B-50-001 for asbestos on May 4, 2012. No regulated Asbestos Containing Material (RACM) was found on this structure. A copy of the inspection report is available from: Michael Grage, (715) 365-5705.

According to NR447 and DHS159, ensure that DNR or DHS receives a completed Notification of Demolition and/or Renovation (DNR Form 4500-113 (R 4/11), or subsequent revision) via U.S. mail, hand-delivery, or using the online notification system at

least 10 working days prior to beginning any construction or demolition. Pay all associated fees. Provide a copy of the completed 4500-113 form to Michael Grage, WisDOT NC Region, 510 Hanson Lake Road, Rhinelander, WI 54501, (715) 365-5705 and DOT BTS-ESS attn: Hazardous Materials Specialist PO Box 7965, Madison, WI 53707-7965. In addition, comply with all local or municipal asbestos requirements.

Use the following information to complete WisDNR form 4500-113:

- Site Name: Structure B-50-001, STH 182 over the North Fork Flambeau River
- · Site Address: 0.2 miles east of STH 13, Park Falls, WI
- Ownership Information: WisDOT, 510 North Hanson Lake Road, Rhinelander, WI 54501.
- Contact: Michael Grage
- Phone: (715) 365-5705
- Age: 68 years old. This structure was constructed in 1948.
- · Area: 8965 SF of deck

Insert the following paragraph in Section 6.g.:

• If asbestos not previously identified is found or previously non-friable asbestos becomes crumbled, pulverized, or reduced to a powder, stop work immediately, notify the engineer, and the engineer will notify the department's Bureau of Technical Services at (608) 266-1476 for an emergency response according to standard spec 107.24. Keep material wet until it is abated or until it is determined to be non-asbestos containing material.

107-125 (20120615)

### 18. Coordination with Businesses and Residents.

The contractor shall arrange and conduct a meeting between the contractor, the department, affected residents, local officials and business people to discuss the project schedule of operations including vehicular and pedestrian access during construction operations. Hold the first meeting at least one week prior to the start of work under this contract and hold one meeting per month thereafter. The contractor shall arrange for a suitable location for the meeting(s) that provides reasonable accommodation for public involvement. The department will prepare and coordinate publication of the meeting notices and mailings for the meeting(s). The contractor shall schedule the meeting(s) with at least two weeks' prior notice to the engineer to allow for these notifications. 108-060 (20141107)

# 19. Removing Old Structure Over Waterway With Debris Capture System Station 33+55, 7' LT, Item 203.0700.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 203.3.6.3 Removing Old Structure Over Waterway with Debris Capture System

- (1) Remove the existing Structure B-50-001 over the North Fork Flambeau River in large sections and conforming to the contractor's approved structure removal plan. Due to the very sensitive nature of the North Fork Flambeau River, provide a debris capture and containment system for superstructure removal that prevents all large pieces and virtually all other debris, including fine particles and slurry, from entering the waterway or wetland. Blasting will not be allowed.
- (2) Submit a structure removal plan as part of the erosion control implementation plan required under standard spec 107.20. Do not start work under the structure removal plan without the department's written approval of the plan. Include the following information in the structure removal plan:
  - Methods and schedule to remove the structure.
  - Methods to control potentially harmful environmental impacts.
  - Methods to avoid or minimize the discharge of any pollutant to the waterway or wetland during superstructure removal.
  - Details of the debris capture and containment system for superstructure removal including contingency plans to deal with potential failures.
  - Methods to control dust and contain slurry. Include methods to control dust in the area of the adjacent mill building vents located on the north side of STH 182 near the edge of the bridge.
  - Methods for removing piers and abutments.
  - Methods to control the amount of vibrations due to the adjacent mill building housing a vibration-sensitive paper machine.
- (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 203.0700.S.01 Removing Old Structure Over Waterway With Debris LS Capture System Station 33+55, 7' LT.

# 20. Backfill Controlled Low Strength, Item 209.0200.S.

## A Description

This special provision describes furnishing and placing a controlled low strength material designed for use as backfill in trenches for culverts, sewers, utilities, or similar structures, as backfill behind bridges abutments, or as fill for the abandonment of culverts, pipes, or tanks.

#### **B** Materials

Provide controlled low strength backfill that consists of a designed cementitious mixture of natural or processed materials. Allowable materials include natural sand, natural gravel, produced sand, foundry sand, produced gravel, fly ash, Portland cement, and other broken or fragmented mineral materials. The designed mixture shall be self-leveling and shall be free of shrinkage after hardening. Design the mixture to reach a state of hardening such that it can support foot traffic in no more than 24 hours. Provide a mixture that also meets the following requirements.

Test	Method	Value
Flow (inch)	ASTM D-6103	9 min
Compressive	ASTM D-6024	20-40 @ 14 days
Strength (psi)		40-80 @ 28 days
		80-120 @ 90 days

Chemical admixtures to control air content and setting time are allowable. Ten days prior to placement, furnish the engineer with a design mix detailing all components and their proportions in the mix. Also, provide documentation from the supplier of the industrial byproducts that the foundry sand and fly ash used in the mixture meet the requirements for Industrial Byproducts Categories 1, 2, 3, or 4 in NR 538 of the Wisconsin Administrative Code for use as a confined geotechnical fill.

#### C Construction

Place controlled low strength backfill at the locations and to the lines and grades as shown on the plan. Proportion and mix materials to produce a product of consistent texture and flow characteristics. The engineer may reject any materials exhibiting a substantial change in properties, appearance, or composition.

If the official Weather Bureau forecast for the construction site predicts temperatures at or below freezing within the next 24 hours after placement of controlled low strength backfill, protect the placed materials from freezing during that time period. If the temperature is not forecast to rise above 40° F for 72 hours after placement, the engineer may require protection from freezing for up to 72 hours.

No controlled low strength backfill shall be allowed to enter any stream, lake, or sewer system. The contractor shall be responsible for any clean up or remediation costs resulting from such occurrences.

#### **D** Measurement

The department will measure Backfill Controlled Low Strength in volume by the cubic yard of material placed and accepted. Such volume shall be computed from actual measurements of the dimensions of the area to be backfilled. In irregular or inaccessible areas, the engineer may allow volume to be determined by other appropriate methods.

#### E Payment

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

ITEM NUMBERDESCRIPTIONUNIT209.0200.SBackfill Controlled Low StrengthCY

Payment is full compensation for designing the mix; supplying all materials; preparing the proportioned mix; hauling it to the construction site; placing the material; and protecting it from freezing.

209-010 (20090901)

## 21. 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 under the Aggregate Detours, Salvaged Asphaltic Pavement Base, 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** Contractor Testing for Small Quantities

- (1) The department defines a small quantity, for each individual Base Aggregate bid item, as a plan 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:

- 1. The contractor need not submit a full quality control plan but shall provide an organizational chart to the engineer including names, telephone numbers, and current certifications of all persons involved in the quality control program for material under affected bid items.
- 2. Divide the aggregate into uniformly sized sublots for testing as follows:

Plan Quantity	Minimum Required Testing
$\leq$ 1500 tons	One test from production, load-out, or
	placement at the contractor's option <sup>[1]</sup>
$> 1500$ tons and $\leq 6000$ tons	Two tests of the same type, either from
	production, load-out, or placement at the
	contractor's option <sup>[1]</sup>
$>$ 6000 tons and $\leq$ 9000 tons	Three placement tests <sup>[2][3]</sup>

- If using production tests for acceptance, submit 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] For 3-inch material, obtain samples at load-out.
- [3] If the actual quantity overruns 9000 tons, create overrun sublots to test at a rate of one additional placement test for each 3000 tons, or fraction of 3000 tons, of overrun.
- 3. No control charts are required. 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. Department verification testing is optional for quantities of 6000 tons or less.
- (3) Material represented by a sublot 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.

#### **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:
Aggregate Technician IPP	Aggregate Sampling <sup>[1]</sup>
Aggregate Sampling Technician	
Aggregate Assistant Certified Technician (ACT-AGG)	
Aggregate Technician IPP	Aggregate Gradation Testing,
Aggregate Assistant Certified Technician (ACT-AGG)	Aggregate Fractured Particle
	Testing, Aggregate Liquid
	Limit and Plasticity Index
	Testing

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

 $\underline{http://wisconsindot.gov/Pages/doing-bus/eng-consultants/cnslt-rsrces/tools/appr-prod/qual-\underline{labs.aspx}}$ 

## **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 6 hours after obtaining a sample. For 3-inch base, extend this 6-hour limit to 24 hours. 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.
- Provide control charts to the engineer within 6 hours after obtaining a sample. For 3-inch base, extend this 6-hour limit to 24 hours. 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 OV 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 tests, include only QC 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) Test gradation once per 3000 tons of material placed. 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 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.
- (3) Split each contractor QC sample and identify it according to CMM 8.30. Retain the split for 7 calendar days in a dry, protected location. If requested for department comparison testing, deliver the split to the engineer within one business day.
- (4) The engineer may require additional sampling and testing to evaluate suspect material or the technician's sampling and testing procedures.

- (5) 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.
- (6) 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 4 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 4 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. One non-random test on the first day of 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, the department will collect samples from the stockpile 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 by 10 percent of the contract price 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. 301-010 (20151210)

## **22.** Railing Steel Type C3 B-50-0082.

#### **A Description**

This special provision describes fabricating, galvanizing, coating and installing railing according to standard spec 506, 513 and 517 and the plan details, as directed by the engineer, and as hereinafter provided.

#### **B** Materials

All materials for railing shall be new stock, free from defects impairing strength, durability and appearance. Galvanize and coat railing assemblies with a two-coat system. Bubbles, blisters and flaking in the coating will be a basis for rejection.

#### **B.1** Coating System

#### **B.1.1 Galvanizing**

Fabricate railings to meet the requirements of ASTM A385. After fabrication, blast clean steel railing assemblies per SSPC-SP6 and galvanize according to ASTM A123. Drill vent holes in members as required to facilitate galvanizing and drainage. Show location and size of vent holes on the shop drawings. Remove all burrs at component edges, corners and at holes and chamfer sharp edges before galvanizing. Condition any thermal cut edges before blast cleaning by shallow grinding or other cleaning to remove any hardened surface layer. Remove all evident steel defects exposed according to AASHTO M 160 prior to blast cleaning. Lumps, projections, globules, or heavy deposits of galvanizing, which will provide surface conditions that when coated will produce unacceptable aesthetic and/or visual qualities, will not be permitted. Water quenching and chromate or other passivating treatments will not be permitted.

#### **B.1.2** Two Coat System

After galvanizing, coat all exterior surfaces of steel railing assemblies and inside of rail elements at field erection and expansion joints with a two coat system as hereinafter provided.

Clean all galvanized surfaces to be coated per SSPC-SP1 to remove chlorides, sulfates, zinc salts, oil, dirt, organic matter and other contaminants. Brush blast clean the cleaned surface per SSPC-SP16 to create a slight angular surface profile per manufacturer's recommendation (1 mil minimum, 1.5 mils maximum) for adhesion of the tie coat. Remove wet storage stains prior to blasting per SSPC-SP16. Perform brush blasting at an angle of 30 to 60 degrees to the surface using air pressure no greater than 50 psi, and a soft abrasive such as Garnet. Steel shot and angular iron blasting grit will not be permitted. Brush blast the surface to produce a matte silver appearance. When brush blasting do not fracture the galvanized finish or remove any dry film thickness. Prior to application of the tie-coat, remove visible deposits of oil, grease and other contaminates from the surface per SSPC-SP1, and clean the brush blasted surface of dust, dirt and loose residue according to standard spec 517.

After cleaning and within 8 hours of blasting, apply a tie coat from an approved coating system that is specifically intended to be used on a galvanized surface, per manufacturer's recommendations. The tie coat shall etch the galvanized rail and prepare the surface for the top coat. Apply a top coat per manufacturer's recommendations, matching the specified color shown on the plans. Use an approved top coat that is resistant to the effects of the sun and is suitable for a marine environment. The tie and top coats should be of contrasting colors, and come from the same manufacturer.

Ensure that the coating manufacturer reviews the process to be used for surface preparation and application of the coating system with the coating applier. The review shall include a visit to the facility performing the work if requested by the coating manufacturer. Provide written confirmation, from the coating manufacturer to the engineer, that the review has taken place and that issues raised have been addressed before beginning coating work under the contract.

Use one of the qualified coating manufacturers and products given below. An equivalent system may be used with the written approval of the engineer.

Coat	Products	Dry Film Minimum Thickness (mils)	Min. Time <sup>1</sup> Between Coats (hours)
Tie		2.0 to 4.0	6
	B67-5 Series / B67V5		
Top	Acrolon 218 HS	2.0 to 4.0	NA
•	Polyurethane, B65-650		
Tie	Rustbond Penetrating Sealer FC	1	36
	-		
Tie	Carboguard 60	4.0 to 6.0	10
Tie	Carboguard 635	4.0 to 6.0	1
Тор	Carbothane 133 LH(satin)	4	NA
Tie	MC-Ferrox B 100	3.0 to 5.0	8
Top	MC-Luster 100	2.0 to 4.0	NA
Tie	Amercoat 399	3.0 to 5.0	3
Top	Amercoat 450H	2.0 to 4.0	NA
_	Top  Tie Tie Top  Tie Top  Tie	Tie Recoatable Epoxy Primer B67-5 Series / B67V5  Top Acrolon 218 HS Polyurethane, B65-650  Tie Rustbond Penetrating Sealer FC  Tie Carboguard 60 Tie Carboguard 635  Top Carbothane 133 LH(satin)  Tie MC-Ferrox B 100  Top MC-Luster 100	Coat         Products         Minimum Thickness (mils)           Tie         Recoatable Epoxy Primer B67-5 Series / B67V5         2.0 to 4.0           Top         Acrolon 218 HS Polyurethane, B65-650         2.0 to 4.0           Tie         Rustbond Penetrating Sealer FC         1           Tie         Carboguard 60 Carboguard 635         4.0 to 6.0           Tie         Carbothane 133 LH(satin)         4           Tie         MC-Ferrox B 100         3.0 to 5.0           Top         MC-Luster 100         2.0 to 4.0           Tie         Amercoat 399         3.0 to 5.0

<sup>&</sup>lt;sup>1</sup> Time is dependent on temperature and humidity. Contact manufacturer for more specific information.

#### **B.2 Shop Drawings**

Submit shop drawings showing the details of railing construction. Show the railing height post spacing, rail location, weld sizes and locations and all dimensions necessary for the construction of the railing. Show location of shop rail splices, field erection joints and expansion joints. State the name of the coating manufacturer and the product name of the tie coat and top coat used along with the color. State the size and material type used for all components. Also show the size and location of any vent or drainage holes provided.

#### **C** Construction

#### C.1 Delivery, Storage and Handling

Deliver material to the site in an undamaged condition. Upon receipt at the job site, thoroughly inspect all materials to ensure that no damage occurred during shipping or handling and conditions of materials is in conformance with these specifications. Handle coated railing according to standard spec 517. If coating is damaged, repair or replace railing assemblies to the approval of the engineer at no additional cost to the owner. Carefully store the material off the ground to ensure proper ventilation and drainage. Exercise care so as not to damage the coated surface during railing installation. No field welding, field cutting or drilling will be permitted without the approval of the engineer.

## C.2 Touch-up and Repair

For minor damage caused by shipping, handling or installation to coated surfaces, touch-up the surface in conformance with the manufacturer's recommendations and conforming to ASTM A780. If damage is excessive, replace the railing assembly at no additional cost to the owner. Provide the engineer with a copy of the manufacturer's recommended repair procedure and materials before repairing damaged coatings.

## 23. Concrete Staining Multi-Color B-50-0082, Item 517.1015.S.01.

#### **A Description**

Furnish and apply a multi-color concrete stain to the exposed concrete surfaces of the structure, as detailed in the plans and as hereinafter provided.

#### **B** Materials

#### **B.1** Mortar

Use mortar for sack rubbing the concrete surfaces as given in standard spec 502.3.7.5 or use one of the following products:

Preblended, Packaged Type II Cement: Tri-Mix by TK Products

Thoroseal Pearl Gray by Thoro Products

The mortar shall contain one of the following acrylic bonding admixtures mixed and applied according to manufacturer's recommendations:

Acrylic Bonding Admixture: TK-225 by TK Products

Achro 60 by Thoro Products Achro Set by Master Builders

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

Use concrete stain manufactured for use on exterior concrete surfaces. Use the following products, or equal as approved by the department:

Tri-Sheen Concrete Surfacer, Smooth by TK Products
Tri-Sheen Acrylic by TK Products
TK-1450 Natural Look Urethane Anti-Graffiti Primers by TK Products
Safe-Cure & Seal EPX by Chem Masters
H&C Concrete Stain Solid Color Water Based by Sherwin-Williams

Provide a stain color to replicate multi-color appearance of existing Retaining Walls R-50-5, R-50-6, and R-50-7 located along STH 13 west of this project within the City of Park Falls. Those existing MSE Modular Block walls were constructed in 2012 matching or similar to Rockwood Retaining Walls color "Red-Black".

Obtain approval of the staining test sample panels from the City of Park Falls and the engineer prior to the start of forming concrete masonry on the bridge. Contact Scott Hilgart, (715) 762-2436, for City of Park Falls approval.

#### **C** Construction

#### C.1 General

Furnish, prepare, apply, cure, and store all materials according to the product manufacturer's specifications for the type and condition of application required.

Match or exceed the stain manufacturer's minimum recommended curing time of the concrete or 28 days, whichever is greater, prior to staining.

#### **C.2** Preparation of Concrete Surfaces

Provide a sack rubbed finish according to standard spec 502.3.7.5, using mortar as indicated above on concrete surfaces with open voids or honeycombing.

Following the sack rubbing, clean all concrete surfaces that are to be coated to ensure that the surface is free of all laitance, dirt, dust, grease, efflorescence, and any foreign material and that the surface will accept the coating material according to product requirements. As a minimum, clean the surface using a 3000-psi water blast. Hold the nozzle of the water blaster approximately 6 inches from the concrete surface and move it continuously in a sweeping motion. Give special attention to smooth concrete surfaces to produce an acceptable surface texture. Correct any surface problems resulting from the surface preparation methods. Grit blasting of the concrete surface is not allowed.

#### **C.3 Staining Concrete Surfaces**

Apply the concrete stain according to the manufacturer's recommendations.

Apply the concrete stain when the temperature of the concrete surface is 45° F or higher, or as given by the manufacturer.

The color of the staining shall produce a multi-color effect that consists of multiple colors replicating varying natural stone coloration. Stain the joints between stones produced by the form liner to create the appearance of grouted joints.

Do not begin staining the structure until earthwork operations are completed to a point where this work can begin without receiving damage. Where this work is adjacent to exposed soil or pavement areas, provide temporary covering protection from overspray or splatter.

#### C.4 Test Areas

Prior to applying stain to the structure, apply the stain to sample panels measuring a minimum of 48-inches x 48-inches and constructed to demonstrate workmanship in the use of the form liner specified on the structure if applicable. Match or exceed the stain manufacturer's minimum recommended curing time of the concrete or 28 days, whichever is greater, prior to staining. Submit color samples to the department prior to staining the sample panels. Prepare the concrete surfaces of the sample panels and apply stain using the same materials and in the same manner as proposed for the structure, including staining of the joints between stones produced by the form liner. Do not apply stain to the structure until the department approves the test panels.

#### C.5 Surfaces to be Coated.

Apply concrete stain to the surfaces according to the plan.

#### **D** Measurement

The department will measure Concrete Staining Multi-Color (Structure) in area by the square foot of surface, acceptably prepared and stained.

#### E Payment

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

ITEM NUMBER DESCRIPTION UNIT 517.1015.S.01 Concrete Staining Multi-Color B-50-0082 SF

Payment is full compensation for furnishing and applying the coloring system; for preparing the concrete surface; and for constructing and staining the sample panels.

## 24. Architectural Surface Treatment B-50-0082, Item 517.1050.S.01.

#### A Description

Construct a concrete masonry architectural surface treatment on the exposed concrete surfaces of the structure, as detailed in the plans and as hereinafter provided.

#### **B** Materials

Use form liners that attach easily to the forming system, and do not compress more than ¼-inch when poured at a rate of 10 vertical feet/hour.

Use a release agent that is compatible with the form liner and coloring materials.

Wall ties shall have set "break-backs" at a minimum of ¾-inches from the finished concrete surface

Provide a form liner with "Rectangular Cut Stone" pattern. Utilize 8-inch high courses. Provide a 2-inch maximum relief on all surfaces except the traffic faces of the parapets as shown on the plans.

Obtain approval of the form liner test sample panels from the City of Park Falls and the engineer prior to the start of forming concrete masonry on the bridge. Contact Scott Hilgart, (715) 762-2436, for City of Park Falls approval.

#### **C** Construction

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

Equipment and tools necessary for performing all parts of the work shall be satisfactory as to design, capacity, and mechanical condition for the purposes intended. Repair, improve, replace, or supplement all equipment that is not maintained in full working order, or which is proven inadequate to obtain the results prescribed.

#### **C.2** Form Liner Preparation

Clean the form liner prior to each pour and ensure that it is free of any build-up. Visually inspect each liner for blemishes or tears, and repair if necessary per manufacturer's recommendations.

Apply form release per manufacturer's recommendations.

#### **C.3 Form Liner Attachment**

Place adjacent liners less than ¼-inch from each other, attach liner securely to forms according to the manufacturer's recommendations, and coordinate wall ties with form liner and form manufacturer, e.g., diameter, size, and frequency.

#### **C.4** Surface Finishing

Ensure that the textured surface is free of laitance; sandblasting is not permitted.

Grind or fill pouring blemishes.

#### **D** Measurement

The department will measure Architectural Surface Treatment (Structure) in area by the square foot of architectural surface, 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 517.1050.S.01 Architectural Surface Treatment B-50-0082 SF

Payment is full compensation for producing the proposed architectural surface treatment including: preparing the foundation; finishing and protecting the surface treatment; and for properly disposing of surplus material.

## 25. Architectural Surface Treatment Traffic Face B-50-0082, Item 517.1050.S.02.

#### **A** Description

Construct concrete masonry architectural surface treatments on the exposed concrete surfaces of the structure, as detailed in the plans and as hereinafter provided.

#### **B** Materials

Use form liners that attach easily to the forming system, and do not compress more than \(^1\)4-inch when poured at a rate of 10 vertical feet/hour.

Use a release agent that is compatible with the form liner and coloring materials.

Wall ties shall have set "break-backs" at a minimum of ¾-inches from the finished concrete surface

Provide a form liner with "Rectangular Cut Stone" pattern. Utilize 8-inch high courses. Provide a ½-inch maximum relief on the traffic faces of the parapets as shown on the plans.

Obtain approval of the form liner test sample panels from the City of Park Falls and the engineer prior to the start of forming concrete masonry on the bridge. Contact Scott Hilgart, (715) 762-2436, for City of Park Falls approval.

#### **C** Construction

#### C.1 Equipment

Equipment and tools necessary for performing all parts of the work shall be satisfactory as to design, capacity, and mechanical condition for the purposes intended. Repair, improve, replace, or supplement all equipment that is not maintained in full working order, or which is proven inadequate to obtain the results prescribed.

#### **C.2 Form Liner Preparation**

Clean the form liner prior to each pour and ensure that it is free of any build-up. Visually inspect each liner for blemishes or tears, and repair if necessary per manufacturer's recommendations.

Apply form release per manufacturer's recommendations.

#### **C.3 Form Liner Attachment**

Place adjacent liners less than ¼-inch from each other, attach liner securely to forms according to the manufacturer's recommendations, and coordinate wall ties with form liner and form manufacturer, e.g., diameter, size, and frequency.

#### **C.4 Surface Finishing**

Ensure that the textured surface is free of laitance; sandblasting is not permitted.

Grind or fill pouring blemishes.

#### **D** Measurement

The department will measure Architectural Surface Treatment Traffic Face B-50-0082 in area by the square foot of architectural surface, 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 517.1050.S.02 Architectural Surface Treatment Traffic Face B-50-0082 SF

Payment is full compensation for producing the proposed architectural surface treatment including: preparing the foundation; finishing and protecting the surface treatment; and for properly disposing of surplus material.

## 26. Concrete Steps.

Add the following to standard spec 602.3.4:

With the exception of a 24-hour period immediately after the placement of new concrete steps, provide access meeting the approval of the engineer while step reconstruction is taking place. (NCR 602.02-10152014)

## 27. Adjusting Manhole Covers.

This work shall be according to the pertinent provisions of standard spec 611, as shown on the plans, and as hereinafter provided.

Adjust manhole covers located in pavement areas in two separate operations. Initially, remove designated manhole covers along with sufficient pavement to permit installation of temporary cover plate over the opening. Fill the excavated area with asphaltic pavement mixture, which shall remain in place until contract milling and paving operations permit setting the manhole frames to grade. During the second phase, remove the asphaltic pavement mixture surrounding the manhole plus the temporary cover plate, and set the manhole cover to final grade. The department will measure and pay for the items of asphaltic pavement mixture, temporary cover plate, milling, and paving separately.

*Revise standard spec 611.3.7 by deleting the last paragraph.* 

Set the manhole frames so that they comply with the surface requirements of standard spec 450.3.2.9. At the completion of the paving, a 6-foot straightedge shall be placed over the centerline of each manhole frame parallel to the direction of traffic. A measurement shall be made at each side of the frame. The two measurements shall be averaged. If this average is

greater than 5/8 inches, reset the manhole frame to the correct plane and elevation. If this average is 5/8 inches or less but greater than 3/8 inches, the manhole frame shall be allowed to remain in place but shall be paid for at 50 percent of the contract unit price.

If the manhole frame is higher than the adjacent pavement, the two measurements shall be made at each end of the straightedge. These two measurements shall be averaged. The same criteria for acceptance and payment as above, shall apply. 611-005 (20030820)

## 28. Cover Plates Temporary, Item 611.8120.S.

#### **A Description**

This special provision describes furnishing, installing and removing a steel plate to cover and support asphaltic pavement and traffic loading at manholes, inlets and similar structures during milling and paving operations.

#### **B** Materials

Provide a 0.25-inch minimum thickness steel plate that extends to the outside edge of the existing masonry.

#### C (Vacant)

#### **D** Measurement

The department will measure Cover Plates Temporary as each individual unit, acceptably completed.

#### E Payment

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

ITEM NUMBERDESCRIPTIONUNIT611.8120.SCover Plates TemporaryEach

Payment is full compensation for furnishing, installing, and removing the cover plates.

The steel plates shall become the property of the contractor when no longer needed in the contract work.

611-006 (20151210)

## 29. Fence Safety, Item 616.0700.S.

#### A Description

This special provision describes furnishing and installing a plastic fence at locations shown on the plans and as hereinafter provided.

#### **B** Materials

Furnish notched conventional metal "T" or "U" shaped fence posts.

Furnish fence fabric meeting the following requirements.

Color: International orange (UV stabilized)

Roll Height: 4 feet

Mesh Opening: 1 inch min to 3 inch max

Resin/Construction: High density polyethylene mesh Service Temperature: -60° F to 200° (ASTM D648)

Tensile Yield: Avg. 2000 lb per 4 ft. width (ASTM D638) Ultimate Tensile Strength: Avg. 3000 lb per 4 ft. width (ASTM D638)

Elongation at Break (%): Greater than 100% (ASTM D638) Chemical Resistance: Inert to most chemicals and acids

#### **C** Construction

Drive posts into the ground 12 to 18 inches. Space posts at 7 feet.

Use a minimum of three wire ties to secure the fence at each post. Weave tension wire through the top row of strands to provide a top stringer that prevents sagging.

Overlap two rolls at a post and secure with wire ties.

#### **D** Measurement

The department will measure Fence Safety by the linear foot along the base of the fence, center-to-center of posts, acceptably completed.

#### E Payment

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

ITEM NUMBER DESCRIPTION UNIT 616.0700.S Fence Safety LF

Payment is full compensation for furnishing and installing fence and posts; maintaining the fence and posts in satisfactory condition; and for removing and disposing of fence and posts at project completion.
616-030 (20070510)

## 30. Seeding.

*Replace standard spec 630.3.3(1) with the following:* 

Sow seeds by method A only. (NCR 630.03-10152014)

## 31. Sod Water, Item 631.0300.

*Replace standard spec 631.3.5(1) with the following:* 

Under the Sod Water bid item, furnish and apply water to sodded or seeded areas.

Moisten sodded or seeded areas thoroughly after staking and cleanup.

Keep all sodded or seeded areas thoroughly moist by applying a minimum of 1 inch of water per week, minus applicable rainfall, for a minimum of 30 consecutive days. Do not leave un-watered for more than 3 days unless rainfall is sufficient and the engineer determines it does not require watering. Apply water in a manner to preclude washing or erosion. (NCR 631.01-12152015)

# 32. Temporary Pedestrian Surface Asphalt, Item 644.1410.S; Temporary Pedestrian Surface Plywood, Item 644.1420.S; Temporary Pedestrian Surface Plate, Item 644.1430.S

#### **A Description**

This special provision describes providing, maintaining, and removing temporary pedestrian surface.

#### **B** Materials

Furnish 1 1/4-inch dense graded aggregate conforming to standard spec 305.2. Furnish:

- · Asphaltic surface conforming to standard spec 465.2.
- Pressure treated 2x4 framing lumber, pressure treated 3/4-inch plywood with skid resistant surface coating, and weather resistant deck screws 3-1/2-inch minimum for framing and 1-5/8-inch minimum for plywood.
- 1/4 inch minimum steel plate or commercially available prefabricated plates with skid resistant surface coating conforming to Americans with Disabilities Act Accessibility Guidelines. If placed in the roadway, must be able to handle a vehicle weight of 88,000 lbs.

#### **C** Construction

Place, compact, and level a dense graded aggregate foundation before placing the surface.

Provide a firm, stable, and slip-resistant surface layer with vertical joints no higher than ½ inch and horizontal joints no wider than 1/2 inch. Sheet materials up to 1 inch thick may be lapped if the edge is beveled at 45 degrees or flatter. Asphalt may also be used to ramp up to materials up to 1 inch thick. Construct conforming to the following:

- Asphalt surface a minimum of 2 inches thick compacted with compactors, tampers, or rollers.
- Framed plywood panels 4 feet wide with a skid resistant surface coating.
- Steel or prefabricated plate with a skid resistant surface coating.

Align parallel to the existing roadway grade or, if outside of a street or highway right-of-way, do not exceed 5 percent longitudinal slope. Provide cross slope of 1 to 2 percent unless the engineer approves a steeper cross slope in writing.

Maintain the surface with a 4-foot minimum clear width and the specified joint and slope requirements. Repair or reconstruct installations disturbed during construction operations. Remove and dispose of as specified in standard spec 203.3.4 when no longer required.

#### **D** Measurement

The department will measure temporary pedestrian surface by the square foot, acceptably completed.

#### E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
644.1410.S	Temporary Pedestrian Surface Asphalt	SF
644.1420.S	Temporary Pedestrian Surface Plywood	SF
644.1430.S	Temporary Pedestrian Surface Plate	SF

Payment is full compensation for providing, maintaining, and removing temporary pedestrian surface. 644-010 (20150630)

## 33. Temporary Curb Ramp, Item 644.1601.S.

#### A Description

This special provision describes providing, maintaining, and removing temporary curb ramps.

#### **B** Materials

Furnish materials as follows:

- Asphaltic surface conforming to standard spec 465.2.
- Engineer-approved ready mixed concrete or ancillary concrete conforming to standard spec 602.2 except no QMP is required.
- Commercially available prefabricated curb ramps conforming to Americans with Disabilities Act Accessibility Guidelines.

Furnish yellow detectable warning fields conforming to Americans with Disabilities Act Accessibility Guidelines. Use either an engineer-approved surface-applied type or cast iron from the department's approved products list.

#### **C** Construction

Provide and maintain temporary curb ramps, including detectable warning fields, throughout the project duration. Place and compact a dense graded aggregate foundation before placing the curb ramp, unless the curb ramp is to be placed on existing roadway surface.

Remove and dispose temporary curb ramps and associated detectable warning fields when no longer required.

#### **D** Measurement

The department will measure temporary curb ramps by each individual ramp, acceptably completed.

#### E Payment

The department will pay for measured quantities at the contract unit price under the

following bid item:

ITEM NUMBERDESCRIPTIONUNIT644.1601.STemporary Curb RampEach

Payment is full compensation for providing, maintaining, and removing temporary curb ramps.

644-020 (20150630)

## 34. Temporary Pedestrian Safety Fence, Item 644.1616.S.

#### **A Description**

This special provision describes providing, maintaining, and removing the temporary pedestrian safety fence.

#### **B** Materials

Furnish notched metal "T" or "U" shaped fence posts weighing 1 1/3 pounds per foot or more.

Furnish select 2x4 dimensional lumber.

Furnish fence fabric meeting the following requirements.

Color: International orange (UV stabilized)

Roll Height: 4 feet

Mesh Opening: 1-inch min to 3-inch max

Resin/Construction: High density polyethylene mesh

Tensile Yield: Avg. 2000 lb per 4-ft. width (ASTM D638) Ultimate Tensile Strength: Avg. 3000 lb per 4-ft. width (ASTM D638)

Elongation at Break (%): Greater than 100% (ASTM D638) Chemical Resistance: Inert to most chemicals and acids

The engineer may allow prefabricated fencing systems conforming to Americans with Disabilities Act Accessibility Guidelines.

#### **C** Construction

Provide a continuous safety fence with the top edge free of sharp or rough edges.

Repair or reconstruct installations disturbed during construction operations. Remove and dispose of as specified in standard spec 204.3 when no longer required.

#### **D** Measurement

The department will measure Temporary Pedestrian Safety Fence 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 644.1616.S Temporary Pedestrian Safety Fence LF

Payment is full compensation for providing, maintaining, and removing the temporary pedestrian safety fence. 644-025 (20150630)

## 35. Install Conduit Into Existing Item, Item 652.0700.S.

#### **A Description**

This special provision describes installing proposed conduit into an existing manhole, pull box, junction box, communication vault, or other structure.

#### **B** Materials

Use Nonmetallic Conduit or Conduit Special, as provided and paid for under other items in this contract. Furnish backfill material, topsoil, fertilizer, seed, and mulch conforming to the requirements of pertinent provisions of the standard specifications.

#### **C** Construction

Expose the outside of the existing structure without disturbing existing conduits or cabling. Drill the appropriate sized hole for the entering conduit(s) at a location within the structure without disturbing the existing cabling and without hindering the installation of new cabling within the installed conduit. Fill void area between the drilled hole and conduit with an engineer-approved filling material to protect against conduit movement and entry of fill material into the structure. Tamp backfill into place.

#### **D** Measurement

The department will measure Install Conduit Into Existing System by the unit, acceptably installed. Up to five conduits entering a structure per entry point into the existing structure will be considered a single unit. Conduits in excess of five, or conduits entering at significantly different entry points into the existing pull box, manhole, or junction box will constitute multiple units of payment.

#### E Payment

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

ITEM NUMBERDESCRIPTIONUNIT652.0700.SInstall Conduit Into Existing ItemEach

Payment is full compensation for excavating, drilling holes; furnishing and installing all materials, including bricks, coarse aggregate, sand, bedding, and backfill; for excavating and backfilling; and for furnishing and placing topsoil, fertilizer, seed, and mulch in disturbed areas; for properly disposing of surplus materials; and for making inspections. 652-070 (20100709)

## 36. Anchor Assemblies Light Poles on Structures, Item 657.6005.S.

## **A Description**

This special provision describes furnishing and installing anchor bolt assemblies for light poles as shown on the plans, and as hereinafter provided.

#### **B** Materials

Furnish anchors of the size and spacing as given on the plans, and that conform to ASTM A449 or AASHTO M314 GR 55. The upper 8 inches of the bolts, nuts, and washers shall be hot-dipped galvanized according to ASTM A153, Class C. Provide enlarged threads on nuts for proper fit after galvanizing.

#### **C** Construction

Provide two nuts and two washers per anchor bolt, and install per light standard manufacturer's recommendations.

#### **D** Measurement

The department will measure Anchor Assemblies Light Poles on Structures as a unit for each individual anchor bolt assembly, acceptably completed.

#### **E** Payment

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

ITEM NUMBER DESCRIPTION UNIT 657.6005.S Anchor Assemblies Light Poles on Structures Each

Payment is full compensation for furnishing and installing the anchorages. 657-060 (20100709)

## 37. Crack and Damage Survey, Item 999.1500.S.

#### **A** Description

This special provision describes conducting a crack and damage survey of the residences and business located at Project 9240-08-70, Park Falls – Springstead, N. Fork Flambeau River Bridge B-50-001, STH 182, Price County, Wisconsin.

This Crack and Damage Survey shall consist of two parts. The first part, performed prior to construction activities, shall include a visual inspection, photographs, and a written report describing the existing defects in the building(s) being inspected. The second part, performed after the construction activities, shall also include a visual inspection, photographs, and written report describing any change in the building's condition.

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

#### **C** Construction

Prior to any construction activities, thoroughly inspect the building structures for existing defects, including interior and exterior walls. Submit a written report of the inspector's name, date of inspection, descriptions and locations of defects, and photographs. The intent of the written report and photographs is to procure a record of the general physical condition of the building's interior and exterior walls and foundation. The report shall be typed on bond paper and be in text form.

The photographs shall be taken by a professional photographer capable of producing sharp, grain free, high-contrast colored pictures with good shadow details. The photographs shall be  $3\frac{1}{2}$  inch by 5 inch color prints, glossy, and mounted in protective storage pages with clear slip-in pockets and clear background. Each sheet shall hold four prints. The back of each photograph shall contain the following information:

ID	
Building Location _	
View looking	
Date	
Photographer	

Prior to the start of any construction activities pertinent to this survey, submit a copy of the written report and photographs to the engineer.

After the construction activities are complete, conduct another survey in the same manner, take photographs, and submit another written report to the engineer.

In lieu of photographs, a professional videographer may be hired to use a video camera capable of producing a video with the clarity required to perform this work.

#### **D** Measurement

The department will measure Crack and Damage Survey as single complete unit of work.

#### E Payment

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

ITEM NUMBER DESCRIPTION UNIT 999.1500.S Crack and Damage Survey LS

Payment is full compensation for providing the before and after written reports, and for photographs or video. 999-010 (20130615)

## 38. Fertilizer for Lawn Type Turf, Item SPV.0030.01.

#### A Description

This special provision describes furnishing and incorporating fertilizing material in the soil on areas of seeding or sod.

#### **B** Materials

Use fertilizers that are standard, commercial, packaged or bulk products, in granular or liquid form conforming to Wisconsin Statutes and the Wisconsin Administrative Code Chapter ATCP 40. Ensure that each container of packaged fertilizer is plainly marked with the analysis of the contents showing minimum percentages of total nitrogen, available phosphoric acid, and soluble potash. If furnishing the fertilizer in bulk, include an invoice with each shipment indicating the minimum percentages of total nitrogen, available phosphoric acid, and soluble potash in the contents.

The total of nitrogen, phosphoric acid, and potash shall equal at least 41 percent. At least 80% of the nitrogen shall be water insoluble.

If using fertilizer with a nitrogen, phosphoric acid, and potash total greater than 41 percent, maintain a ratio of 4-1-2 (N-P-K) and apply at a rate that provides the equivalent amount of nitrogen, phosphoric acid, and potash that is provided by a fertilizer with a 41 percent total.

Provide a slow release type fertilizer with a 14-week residual effect after activation into the soil conforming to the following minimum requirements:

Nitrogen,	not less than 22%
Phosphoric Acid,	not less than 5%
Potash,	not less than 10%

#### C Construction

Uniformly apply the fertilizer to the seeding areas, and incorporate it into the soil by light discing or harrowing. If applying granular fertilizer, ensure it is well pulverized and free from lumps.

If incorporating fertilizer into topsoiled areas, apply it just before, and in conjunction with, final discing or harrowing, or if hand manipulating the topsoil, apply it just before final raking and leveling.

If fertilizing areas to receive sod, spread the fertilizer at the rate specified below uniformly over the soil before placing sod, and then work the fertilizer into the soil while preparing the earth bed as specified in standard spec 631.3.1.

Apply fertilizer containing 41 percent total of nitrogen, phosphoric acid, and potash at 7 pounds per 1000 square feet of area, unless the contract specifies otherwise. For Fertilizer for Lawn Type Turf that contains a different percentage of components, determine the application rate by multiplying the specified rate by a dimensionless factor determined as follows:

Conversion Factor = 41 / New Percentage of Components

#### **D** Measurement

The department will measure Fertilizer for Lawn Type Turf by the hundred pounds (CWT) acceptably completed, and it will be measured based on an application rate of 7 pounds per 1000 square feet. The department will not measure fertilizer used for the bid items under standard spec 632. The measured quantity equals the number of hundred-weight (CWT) of material determined by multiplying the actual number of CWT. of material incorporated by the ratio of the actual percentage of fertilizer components used to 41 percent for Fertilizer for Lawn Type Turf.

#### E Payment

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

ITEM NUMBERDESCRIPTIONUNITSPV.0030.01Fertilizer for Lawn Type TurfCWT

Payment is full compensation for providing, hauling, placing, and incorporating the fertilizer into the soil.

(NCR 629.01-10152014)

## 39. Adjusting Water Valve Boxes, Item SPV.0060.01.

#### **A Description**

This special provision describes locating, exposing and protecting existing water valve boxes after the pavement is removed, and adjusting the water valve boxes to the finished elevation.

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

#### **C** Construction

Notify Scott Hilgart, Park Falls Department of Public Works, at (715) 492-0564 to inspect the water valve boxes after the initial removal of pavement. The Park Falls Department of Public Works will make necessary repairs including replacements or extensions to the existing water valve boxes as necessary.

Clean out the water valve boxes as necessary to assure the valve wrench will fit completely over the valve bolt. Protect the water valve boxes during construction. Adjust the water valve boxes to the required finished elevation.

#### **D** Measurement

The department will measure Adjusting Water Valve Boxes by each unit, acceptably completed.

#### E Payment

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

ITEM NUMBERDESCRIPTIONUNITSPV.0060.01Adjusting Water Valve BoxesEACH

Payment is full compensation for locating, exposing, and protecting the water valve boxes; notifying the local municipality; cleaning out the water valve boxes if necessary, adjusting water valve boxes to the finished elevation. The contractor shall replace water valve boxes, which are damaged by the contractor's operations, in kind, at the contractor's expense. (NCR 611.02-05202013)

## 40. Utility Line Opening (ULO), Item SPV.0060.02.

#### **A Description**

This special provision describes performing the necessary excavation to uncover utilities for the purpose of determining elevation and potential conflicts with proposed construction, as shown on the plans or as directed by the engineer.

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

#### C Construction

Perform the excavation in such a manner that the utility in question is not damaged and the safety of the workers is not compromised.

Perform the utility line opening at least 5 days in advance of proposed construction to allow any conflicts to be resolved with minimal disruption. A single utility line opening will be considered full payment to locate the utility at multiple points. Utility line opening does not need to be a trench but, as long as utility is braced adequately to prevent movement, may be 10 feet long as measured at the trench bottom, and of any depth required to locate.

Obtain prior approval for the utility line opening from the engineer and coordinate the ULO with the engineer. Notify the owner of the utility, or their agents of this work a minimum of three days prior to the work so they may be present when the work is completed.

#### **D** Measurement

The department will measure Utility Line Opening (ULO) by each unit, acceptably completed.

Utility line openings include a trench up to 10 feet long as measured at the trench bottom, and of any depth required to locate the intended utility. Where utilities are within 6 feet of each other at a potential conflict location, only one utility line opening will be measured.

#### E Payment

The department will pay for measured quantities at the contract unit price under the

following bid item:

ITEM NUMBERDESCRIPTIONUNITSPV.0060.02Utility Line Opening (ULO)Each

Payment is full compensation for the excavation required to expose the utility line; backfilling with existing material removed from the excavation; compacting the backfill material; restoring the site; cleanup; and for furnishing all labor, tools, equipment, transportation, and incidentals to perform the work.

Existing pavement, concrete curb, gutter, and sidewalk removals necessary to facilitate utility line openings shall not be considered part of or paid for under Utility Line Openings, but are considered separate and measured and paid for separately as removal items. Replacement pavement, concrete curb, gutter, and sidewalk items shall also be considered separate from Utility Line Openings and will be measured and paid for separately.

## 41. Removal and Salvage of Light Pole Assemblies, Item SPV.0060.03.

#### A Description

This special provision describes the removal and salvaging of light pole assemblies in accordance the pertinent provisions of standard spec 204 and as hereinafter provided.

#### B (Vacant)

#### **C** Construction

This work shall be performed per each Removal and Salvage of Light Pole Assembly Special Provision bid item per the directives in the plans notes. The contractor shall be responsible for any lost, damaged or stolen materials up to the point of delivery to the City of Park Falls taking signed ownership of their pole assembly materials. Existing concrete pole bases, underground conduit and associated pull boxes shall remain for re-use per the plans.

Contact the City of Park Falls at least five working days prior to the delivery of the light pole assemblies. At least one week in advance, notify the City of Park Falls and contact the local utility company to arrange for that company to de-energize. Contact Scott Hilgart, DPW at (715) 492-0564.

Complete the removal work within 3 consecutive working days following the shutdown of this equipment.

Remove poles from the concrete bases and disassemble out of traffic.

Remove all wiring inside of the light pole assemblies and dispose of offsite.

#### **D** Measurement

The department will measure Removal and Salvage of Light Pole Assemblies as each individual lighting unit, acceptably completed.

#### E Payment

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

ITEM NUMBER DESCRIPTION UNIT SPV.0060.03 Removal and Salvage of Light Pole Assemblies Each

Payment for Removal and Salvage of Light Pole Assemblies is full compensation for removing and salvaging the light pole assembly, wiring removals, transporting materials off site.

## 42. Lighting Assemblies Decorative, Item SPV.0060.04.

#### A Description

This special provision describes furnishing and installing a decorative light pole with transformer base, decorative luminaire arm, decorative LED luminaire, and festoon as shown in the plans and as hereinafter provided.

#### **B** Materials

Luminaire arms shall withstand the maximum loading related to wind pressure based on wind load of the Park Falls area.

The pole shall be based on the standard WisDOT Type 5 pole and modified as necessary to include and accommodate the equipment and attachments as shown in the plan details. The pole shaft shall have an anchor bolt pattern and dimensions that accommodate the WisDOT Aluminum Breakaway Transformer Base (657.0255). Verify that the bolt circle dimension works with the existing concrete base prior to placing order. The pole shaft shall also be equipped with a pole-top tenon and a side mounting hole located and sized to accommodate the selected decorative luminaire arm support. The pole shaft and all attachments shall be factory powder coated Moss Green (RAL 6005).

The luminaires shall be "UL" listed and equipped with an internal 240-volt LED driver. The luminaire shall have IES cutoff optics. All threaded equipment mounting hardware shall be stainless steel. The luminaire and luminaire components shall be factory powder coated Moss Green (RAL 6005). The acceptable luminaire is as follows to match existing City of Park Falls decorative fixture types (Note: Confirm color, voltage, and globe configuration with the City of Park Falls prior to placing order):

Lumec

RN30-135W80LED4K-R-GL-LE3R-240-CLO-SMA-HS-RCD-SP2-PH9-RAL6005 (Moss Green)

The luminaire arms shall be complete with a decorative truss support and accommodate the teardrop luminaire by the same manufacturer. All threaded equipment mounting hardware shall be stainless steel. The luminaire arm and associated components shall be factory powder coated Moss Green (RAL 6005). The acceptable luminaire arm is as follows to match existing City of Park Falls arm type:

Lumec VR6-1A-RAL6005

Furnish shop drawings as specified in standard spec 506.3.2, except submit five copies with the materials list. Ensure the drawings contain sufficient detail to allow satisfactory review and show the dimensions of all equipment shown in the plans.

All threaded equipment mounting hardware shall be stainless steel.

Ensure that all castings are clean, smooth and that all details are well-defined and true to pattern.

#### C Construction

Furnish and install pole, arm, luminaire, and all necessary miscellaneous accessories and hardware to complete the installation as shown in the plan details.

Each luminaire and receptacle shall be protected by one 5-amp fuse for each.

Install poles on existing concrete bases at locations specified in the plan.

All threaded stainless steel hardware and dissimilar metal, threaded hardware shall be coated with an approved zinc-based anti-seize compound by the contractor prior to assembly.

Follow manufacturer's instructions regarding luminaire and arm installation and the application of pipe thread sealer for the luminaire to arm fitter coupling.

#### **D** Measurement

The department will measure Lighting Assemblies Decorative as each individual lighting unit, acceptably completed.

#### E Payment

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

ITEM NUMBERDESCRIPTIONUNITSPV.0060.04Lighting Assemblies DecorativeEach

Payment is full compensation for furnishing and installing all materials, including poles, transformer bases, luminaires, arms, lamps, festoons, mounting brackets, and all pole accessories, hardware and fittings necessary to install the pole, luminaire, and arm in workable first class condition.

## 43. Remove Flashing Beacon, Item SPV.0060.05.

#### **A Description**

This special provision describes the removal of existing flashing beacon assemblies as shown on the plans.

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

#### **C** Construction

Contact the City of Park Falls at least seven days prior to removing any flashing beacons. Identify all items to be salvaged or disposed and identify existing feed-point locations and circuit breaks. When removing existing flashing beacons, carefully remove and stockpile all equipment at a location approved by the engineer. Properly dispose of any equipment that is not salvaged. Remove conduit and wire from beacon to the nearest pull-box or feed-point location and properly dispose the discarded material.

#### **D** Measurement

The department will measure Remove Beacon as each individual unit, acceptably completed.

#### E Payment

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

ITEM NUMBERDESCRIPTIONUNITSPV.0060.05Remove Flashing BeaconEach

Payment is full compensation for the salvage and removal of all existing flashing beacon assemblies including all hardware, conduit, wiring acceptably removed to the nearest pullbox or feed-point location.

## 44. Moving Bike Rack, Item SPV.0060.06.

#### A Description

This special provision describes the moving of the existing bike rack, as shown on the plans.

## **B** (Vacant)

#### C Construction

Contact mill personnel from Flambeau River Papers at least seven days prior to moving. Coordinate the removal and proper relocation with mill staff. Carefully relocate the existing bike rack and provide it to the mill personnel prior to construction.

#### **D** Measurement

The department will measure Moving Bike Rack as each individual unit, acceptably completed.

#### E Payment

The department will pay for measured quantities at the contract unit price under the

following bid item:

ITEM NUMBER DESCRIPTION UNIT SPV.0060.06 Moving Bike Rack Each

Payment is full compensation for removing and relocation of the existing bike rack.

## 45. Tree Trimming, Item SPV.0060.07.

#### **A Description**

This special provision describes the tree trimming of existing trees overhanging the WisDOT right-of-way.

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

#### **C** Construction

Maintain according to standard spec 201. In addition, trim low hanging branches within the WisDOT right-of-way up to an approximate elevation of 20 feet above existing grade for the designated trees in the plans.

#### **D** Measurement

The department will measure Tree Trimming as each individual unit for each tree that is trimmed, acceptably completed.

#### E Payment

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

ITEM NUMBERDESCRIPTIONUNITSPV.0060.07Tree TrimmingEach

Payment is full compensation for furnishing all tree trimming required under this section and performed within the trees designated on the plans; handling, hauling, piling, trimming, chipping, wound treatment, re-handling, and disposing of waste and debris at an off-site location

## 46. Drilled Shaft Foundation 36-Inch, Item SPV.0090.01.

#### A Description

Install drilled shafts for bridge foundations, as shown on the plans, as directed by the engineer, and as hereinafter provided.

#### **A.1 Qualifications of the Contractor**

The contractor performing the work described in these special provisions must have drilled shaft projects successfully completed within the last 5 years. The contractor must submit a list outlining their experience on at least five projects where they have successfully completed drilled shaft construction, including one project completed within the last 5 years.

The project experience must include at least one project completed in soil and groundwater conditions similar to those anticipated for this project. The project experience must include advancing the drilled shafts to a depth of at least 30 feet below the original ground surface. At least one project must show evidence of permanence with a 5-year minimum age. The project experience documentation for each project must include a brief project description; detail the size of the shafts, construction methods used during installation, methods used for wall stabilization, local soil conditions, actual construction time and contact information consisting of an individual's name and current phone number. Contacts must be capable of verifying project participation.

The contractor must submit staff experience records of the engineer, drill operators, and onsite supervisors and crew chiefs who will be assigned to the project. The staff records must contain a summary of each individual's experience and it must be complete enough for the engineer to determine whether each individual has satisfied the following qualifications.

The contractor must assign an engineer to supervise the work who has at least eight years of drilled shaft experience and who has completed at least one drilled shaft project. The assigned engineer's project experience must include at least one project completed in soil and groundwater conditions similar to those anticipated for this project. The contractor may not use consultants or manufacturer's representatives in order to meet the requirements of this section. Drill operators, and onsite supervisors and crew chiefs must have a minimum of one-year experience installing drilled shafts with the contractor's organization.

Submit the contractor's qualifications and staff experience records at the preconstruction meeting or 14 calendar days prior to the start of drilled shaft construction, whichever date is earlier. The engineer will accept or reject the contractor's qualifications and staff experience records within 14 calendar days after receipt of the submission. Do not start work on any drilled shaft piers until acceptance of the contractor's qualifications, staff experience, and drilled shaft installation plan is given by the engineer. The engineer may suspend the drilled shaft work if the contractor substitutes unqualified personnel for accepted personnel during construction. If work is suspended due to the substitution of unqualified personnel, the adjustment in contract time resulting from the suspension of work will not be allowed.

#### **B** Materials

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

Concrete, drilling fluid, reinforcement and formwork shall be according to the requirements of QMP Drilled Shafts, the standard specifications, as shown on the plans, and as hereinafter provided.

In the event that the provisions of other specification clauses cause ambiguity or conflict with the requirement of these special provisions, these special provisions shall take precedence unless otherwise accepted by the engineer.

#### **B.2** Equipment

Equipment used for excavation, drilling, and cleaning operations shall have adequate capacity including power, torque, and down thrust to excavate a hole to a depth equal to the maximum depth of the drilled shafts shown in the plans plus 15 feet, or plus 20 percent of their maximum depth, whichever is greater. Anticipate and make available at the job site all equipment necessary and essential to penetrate soft and hard soils, as well as obstructions, during the construction of the drilled shafts.

When hard soils, or other material encountered cannot be drilled using conventional earth augers with soil or rock teeth, drilling buckets, and/or over reaming tools, provide drilling equipment including, but not limited to, rock core barrels, rock tools, air tools, or any other equipment necessary to construct the drilled shaft excavation to the depth and size as shown on the plans.

When applicable, or required by the engineer, provide equipment that produces a stable slurry suspension, mechanical agitation, and a pipeline or other safe methods of transporting the slurry to the drilled shaft.

#### **B.3** Casing

Permanent casing shall be steel; rigid, smooth, clean, watertight, and of ample strength to withstand both handling and driving stresses and the pressure of both concrete and the surrounding earth materials. The outside diameter of casing shall not be less than the specified size of the drilled shaft. All casing diameters shown on the plans refer to outside diameter, O.D. dimensions. The dimensions of casings are subjected to American Pipe Institute tolerances applicable to regular steel pipe.

#### **B.4 Reinforcing Steel and Spacers**

Deformed reinforcing bars shall comply with the size, dimension, spacing, and details shown on the plans. In addition, they shall conform to AASHTO M31, Grade 60, and all the pertinent requirements of standard spec 505. Non-corrosive wheel type spacers and boots shall be used to properly position the reinforcing steel. All reinforcing steel shall be 100% wire tied between the vertical reinforcement and ties.

#### **B.5** Crosshole Sonic Logging Tubes

Drilled shafts shall be equipped with access tubes for Crosshole Sonic Logging (CSL) test at the locations and distribution shown in the plans and as herein modified. Access tubes for CSL testing shall be 2-inches I.D. schedule 40 steel pipe conforming to ASTM A53, Grade A or B, Type E, F, or S. Pipes shall have a round, regular internal diameter, free of defects or obstructions; including any defect at the pipe joints, so to permit the free unobstructed passage of source and receiver probes. Each tube or steel pipe shall be fitted with a watertight shoe onto the bottom and a removable cap at the top. Both, shoe and cap shall be watertight and free from corrosion, and the internal and external faces of the tubes clean to ensure passage of the probes and good bond with the concrete.

#### **C** Construction

#### C.1 Drilled Shaft Installation Plan

#### C.1.1 General

Prepare a Drilled Shaft Installation Plan and submit it at the preconstruction meeting or at least 14 calendar days prior to beginning drilled shaft foundation construction, whichever date is earlier. Submit the Drilled Shaft Installation Plan to the engineer for review; do not start any drilled shaft installation until the engineer accepts the Drilled Shaft Installation Plan. Acceptance of the installation plan does not relieve the contractor of responsibility for successful completion of the drilled shafts.

#### C.1.2 Submittals

The submitted Drilled Shaft Installation Plan shall include the following:

- a. **Job Site Visit**. The contractor shall acknowledge that the job site was visited to verify the site conditions with regard to entrance, access, overhead lines, subsurface features, clearing and grubbing, permitting, and collecting all information necessary to plan and execute the installation of the drilled shafts.
- b. **Plan to Protect Existing Structures**. Outline the steps to be taken during drilled shaft installation to protect adjacent or nearby structures.
- c. **Details of Environmental Control Procedures**. Provide plan to prevent loss of slurry or concrete into waterways, project areas, or protected areas. Detail method to ensure the compliance with state and federal environmental regulations during drilled shaft construction.
- d. List of Proposed Equipment. Include details of proposed templates; number and sizes of cranes; number and sizes of drills, include rotary torque, crowd force drills, and maximum drilling depth; diameter, length, and reach of augers, bailing buckets, guide walls, templates, and roller bits; cleaning equipment including cleaning buckets, submersible pumps, or air-lifted pumps; size of de-sanding equipment and slurry pumps; soil/rock-coring sampling equipment; inspecting drilled shaft apparatus; length and diameter of tremies or size of concrete pumps; size, length, and thickness of casings; over reaming equipment; and all relevant equipment necessary to complete the drilled shaft installation. Acceptance of the installation plan by the department does not relieve the contractor responsibility to provide other equipment, if necessary, to achieve satisfactory shaft installations meeting the requirements of this special provision.
- e. **Details of Sequence of Drilled Shaft Installation and Time for Construction Operations**. Include a layout of the drilled shaft installation sequence and setting template(s). Include time for installing casings, sealing casing, excavation and/or drilling time, drilled shaft cleaning, rock coring, drilled shaft inspection, concrete placement. The contractor should consider the effect of construction operations of one drilled shaft onto the adjacent drilled shaft(s) and avoid construction conflicts that will affect the quality or integrity of the completed work. Indicate when and what construction sequence modifications shall be performed under atypical situations, i.e., weekend or holiday shutdowns, or unanticipated shutdowns due to equipment issues.

- f. **Proposed Drilled Shaft Installation Method(s)**. Details of the proposed method of installation, including drilling rock or obstructions or steep sloping surfaces, when required, and meeting the minimum installation requirements set forth in subsection C.3. Method for identification of the competent or bearing material before finalizing the excavation. Method for monitoring verticality of the drilled shaft walls during excavation, and details of proposed corrective measures to be implemented for shafts out of tolerance. Details of the means and methods of preventing displacement of the casing and/or drilled shaft during installation.
- g. **Details of Slurry Operations.** Include slurry type, methods to mix, circulation, desanding, and test the slurry to comply with these special provisions. Submit proposed laboratories for testing and documenting test results.
- h. **Inspection and Cleaning**. Methods to clean and inspect the drilled shaft excavation prior to reinforcement placement.
- i. Crosshole Sonic Logging (CSL). Method to install and secure the crosshole sonic logging (CSL) pipes to the reinforcing cage along with the proposed selection of pipe and size.
- j. **Details of Steel Reinforcement Placement During Construction**. Include methods to ensure cage centering and cover; cage integrity while lifted during placement, number of cranes, number of lift points, and number of spreader bars; number and location of bottom and side spacers; cage support; and tie downs during concrete placement.
- k. Concrete Placement Plan. The purpose of the Concrete Placement Plan is to ensure that sufficient concrete is at the job site or in transit to the job site so that the entire pour can be done without delay. Include location of the concrete plant, number of trucks, estimated delivery times, estimated time between trucks, and number of trucks at the site before placement begins. Indicate the use of tremie or concrete pump lines and details of the seal to be used at the bottom end of the tremie or concrete pump line. Breakdowns of concrete plants, trucks, or traffic problems shall be considered under this Concrete Placement Plan. Contractor must be aware of batch, travel, and concrete placement times. Include an estimate of the concrete placement and over pouring time per drilled shaft. When applicable, detail excavation to grade and finishing of the drilled shafts.
- l. **Casing Removal**. Include the details and means by which the contractor intends to remove surface casings and provide information about staged temporary casing removal when applicable.
- m. Methods of Handling and Disposal of Spoil Excavation, Waste Slurry, Waste Concrete, and Drilled Shaft Cutoffs. Present sufficient details to the engineer to evaluate the adequacy and compliance of the contractor's methods of disposal with the standard specifications, including all related environmental permits and local regulations.
- n. **Other Information** requested on the plans or by the engineer.

#### C.1.3 Acceptance

The department will evaluate the Drilled Shaft Installation Plan for conformance with the requirements of these special provisions. Within 14 calendar days after receipt of the Drilled Shaft Installation Plan, the engineer will notify the contractor of the acceptance of the plan, or of additional information and/or changes required. Any unacceptable part of the Drilled Shaft Installation Plan will require resubmission. The contractor shall resubmit the necessary

changes or additional information of the Drilled Shaft Installation Plan for evaluation and review. The engineer will provide a written notice of acceptance or rejection of contractor's resubmitted Drilled Shaft Installation Plan within 14 calendar days after its receipt. The accepted contractor's Drilled Shaft Installation Plan will be subjected to trial and satisfactory performance in the field, and the engineer will grant final acceptance of the plan after its satisfactory field performance.

After assessment or reassessment of the Drilled Shaft Installation Plan has been made and the engineer has granted its acceptance, do not make any changes to the plan without written consent of the engineer.

#### **C.2 Drilled Shaft Installation**

#### C.2.1 General

Construct drilled shaft foundations according to the accepted Drilled Shaft Installation Plan. The resulting installation plan shall include length of permanent casing, grouting or other methods to stop loss of drilling fluid or concrete or collapse of soil, details of the constituent materials of any drilling fluid used for stabilization, the method of inspection, details of the concrete design mix, concreting method, the minimum time between the completion of one shaft and the commencement of the next, and the pattern of construction.

Ensure that damage does not occur to the completed shafts through their working methods. Submit to the engineer a drilled shaft installation sequence. The proposed sequence and timing of shaft installation shall be such that the installation work shall not cause any damage to adjacent shafts. The shaft installation shall not commence until acceptance of the engineer has been obtained.

#### **C.2.2 Ground Conditions**

Neither the department nor the engineer will accept responsibility for any opinions or conclusions given in any factual or interpretative site investigation reports. Report immediately to the engineer any circumstance, which indicates that in the contractor's opinion the ground conditions differ from those reported in or which could have been inferred from the ground investigation reports or test results.

#### **C.2.3** Sequence of Shaft Installation

The engineer reserves the right and the contractor shall recognize such right to direct the installation of working shafts in any sequence the engineer deems necessary for the satisfactory completion of the work. Unless directed otherwise at each pier construct first the shafts that are farthest from the adjacent buildings on the north. Coordinate installation work with vibration monitoring at the building and ensure construction does not cause excessive vibration to the buildings or the paper mill manufacturing systems inside.

#### C.2.4 Templates

The contractor may elect the use of templates, which will be used in the installations of the shafts to meet the tolerances specified in these special provisions.

#### **C.2.5 Temporary Working Surface**

The contractor should use a temporary working surface to provide a level surface at the top of shafts for drilling where needed.

#### C.2.5.1 Forcible Correction

Where shafts have not been positioned within the specified limits no method of forcible correction will be permitted.

#### C.2.6 Records

Keep a record of all shafts installed. Give a copy of the record of the work done each day to the engineer within 24 hours of that day's work being completed. The engineer shall accept the record form before drilled shaft work commences. Incorporate any comment by the engineer into the record form. Note all unexpected drilling or installation conditions in the records.

#### **C.2.7 Drilled Shaft Installation**

#### **C.2.7.1** General

The dry method or wet method can be used as necessary to produce a sound and durable structure foundation free of defects. When a particular installation method is required in the special provisions, only that method of construction shall be used. If no particular method is specified for use, select and use one of the methods of construction cited above as determined by the site conditions and needed to properly accomplish the work. Submit to the engineer for acceptance the selected method of construction in the Drilled Shaft Installation Plan described in these special provisions.

Where soil and groundwater conditions vary along the site, a single method of construction may be not appropriate for the entire job site, and one, two, or a combination of methods may be used.

Consider using temporary casing at all sites where the use of the slurry installation method is not possible and where the use of casing, other than surface casing, is necessary to keep the shaft excavation stable.

In other cases, where drilling through materials having a tendency to squeeze or cave and caving or squeezing cannot be controlled by the drilling fluid, advance permanent casing through the unstable condition(s) and to the projected depth by twisting, drilling, or vibrating. Obtain prior approval from the engineer for vibrating the casing. After the casing is in place, excavate inside the casing to the projected shaft tip elevation using the dry or wet excavation techniques described below. Clean the bottom of the excavation; test the drilling fluid for compliance with these special provisions, if applicable. Before withdrawing the temporary casing, ensure that the level of fresh concrete inside the casing is at such level that the pressure of its hydrostatic head displaces up and out the fluid trapped between the annular space between the casing and the drilled shaft wall. The engineer may require the contractor to overream the outside diameter of the drilled shaft before placing the permanent casing.

#### C.2.7.2 Dry Method

The dry method of drilled shaft installation shall be considered only in conjunction with permanent casing.

The dry installation method consists of drilling the shaft excavation, removing, and cleaning all accumulated loose material from within the cased excavation, placing the reinforcement cage, and pouring the concrete in the dry excavation. This method may be used below the water table when 1½-inches or less of seepage accumulates at the bottom of the drilled shaft excavation over a 1-hour period, and when the sides and bottom of the shaft remain stable without detrimental caving, sloughing, or swelling for a minimum of a 4-hour period. Seepage is defined as the cumulative inflow of groundwater through the voids of the saturated soil mass into the drilled shaft excavation. Measurement of the seepage quantity (depth at bottom of hole) shall be done without any seepage water being pumped out of the shaft excavation by a pump or similar device. Should seepage water accumulate and be present inside the excavation to a depth of greater than 3 inches at any time prior to concreting, then free fall concrete cannot be placed; instead, employ the tremie or pump procedures to direct the concrete into the excavation.

#### C.2.7.3 Wet Method

Use the wet installation method, or the casing installation method, for drilled shafts that do not meet the requirements of the dry installation. The wet installation method shall be considered also at all sites where it is impractical to provide a dry excavation for drilling and placing concrete in the drilled shaft. Use the wet method for excavations above or below the water table and with or without casings, depending upon soil type and groundwater conditions. When using the wet method below the groundwater table, all drilled shaft operations shall be accomplished while maintaining a positive head of fluid above the water table. A temporary surface casing may be provided to aid in positioning and aligning the drilled shaft and to prevent sloughing of the superficial material.

When using the wet installation method, follow the following steps:

- a. Drill the excavation and keep the drilled shaft always filled with fluid such as water, natural slurry, or slurry.
- b. During excavation, test the properties of the fluid for compliance with these specifications, clean or desand the fluid as applicable.
- c. Clean the bottom of the excavation with a bailing bucket, an airlift, a submersible pump, or other devices after the excavation is completed.
- d. Before lowering the reinforcing cage, test the fluid for compliance with the specifications.
- e. Pour the concrete with a tremie pipe or a pump line extending to bottom of the excavated shaft to displace the fluid up and out of the shaft.

#### C.2.8 Excavations

#### C.2.8.1 General

Excavations required for the drilled shafts shall be performed through whatever materials encountered, of the dimensions, and to the elevations shown in the plans, or as directed by the engineer. The excavation and installation method shall be suitable for the intended results and materials encountered. Blasting is not permitted.

Maintain a construction log during the drilled shaft excavation. Include on the construction log information such as ground elevation, groundwater elevation, sequence number, method of installation, machines and tools employed, drilling fluids employed, drilling times, excavated materials and their particular elevations, soil/rock-cores samples and their particular elevations, rock sockets and their elevation, bells plus their size and elevations, and all other information relevant to the excavation process that will assist the engineer in evaluating the foundation. Information shall also include proposed methods for disposal of excavated material and slurry according to state and local environmental regulations, codes and ordinances, the standard specifications, or as directed by the engineer.

Sidewall overreaming shall be required when the sidewall of a drilled shaft as determined by the engineer have either softened due to, but not limited to, excavation methods, swelled due to delays in concreting, or degradation because of slurry cake buildup. The engineer shall direct the thickness and extent of sidewall overreaming. However, overreaming thickness shall be 1/2-inch minimum and 3-inches maximum. The contractor shall bear all the costs associated with sidewall overreaming and concrete required to fill the additional overreaming volume of excavation.

#### C.2.8.2 Templates

Templates will be required for the installation of drilled shaft foundations if the contractor cannot demonstrate and consistently achieve during construction, proper position and alignment of the installed drilled shaft foundations within specified tolerances without templates.

#### **C.2.8.3 Protection of Existing Structures**

Take all reasonable precautions to prevent damage to existing structures and utilities. These measures shall include, but are not limited to, vibration monitoring or subsidence control during driving of casings, sheets, or drilling.

#### C.2.8.4 Overburden Drilled Shaft Excavation

Provide the necessary equipment to remove and dispose of all materials encountered in forming the drilled shaft excavation to the dimension and elevation as shown on the plans, or as directed by the engineer. Contractor's equipment may include, but are not limited to, augers and rotary drills. Unless otherwise shown on the plans, the drilled shaft excavations in overburden materials shall be vertical bored holes extending from the ground surface down to design tip elevation or the competent soil material, whichever is greater, where competent soil material is defined as the soil that will provide support and satisfactory performance to the structure.

In case of groundwater or severe seepage condition, with the flow of water very difficult to control, take appropriate measures including excavation with drilling fluid or excavation through a casing as indicated in the Drilled Shaft Installation Plan.

#### C.2.8.5 Obstructions

Remove obstructions at drilled shaft locations. Obstructions may include man-made materials, such as old reinforced steel concrete foundations or natural materials such as boulders. Boulders are defined as stones greater than 12 inches. Special tools and/or procedures shall be used when the contractor cannot advance the hole more than one foot in thirty minutes using conventional rock augers fitted with teeth, drilling buckets, or underreaming tools operating at maximum power, torque, and down thrust. Special procedures/tools may be required but are not limited to chisels, boulder breakers, core barrels, air hammer tools, and hand excavation. Other methods for obstruction removal such as temporary casing or hole diameter increase can be employed to aid in the removal. Blasting shall not be permitted.

#### C.2.8.6 Lost Tools

Drilling tools that are lost in the excavation shall not be considered obstructions and shall be promptly removed. All costs due to removal of lost tools shall be borne by the contractor including costs associated with hole degradation during removal operations or time while the hole remains open.

#### C.2.8.7 Inspections and Cleanliness of Excavation

Provide the details of drilled shaft inspection and cleanliness within the Drilled Shaft Installation Plan, required by subsection C.1.2 of this specification. Provide equipment and tools for checking the dimensions and alignment of each drilled shaft excavation, and coordinate schedules for inspection of the excavation with the engineer. Determine dimensions, alignment, and final depth of the drilled shafts after final cleaning. When applicable, provide safe access and egress to the engineer for inspection of the walls and bottom of the drilled shaft excavation prior to placement of the rebar cage and concrete. After the drilled shaft excavation has been prepared for inspection, notify the engineer. The cleanliness and the bearing surface of the drilled shafts will be evaluated and accepted by the engineer. Unless the engineer specifies otherwise, the contractor's cleaning operation shall be considered sufficient when no more that 50 percent of the bottom area of each shaft has less than ½-inch of sediment or debris at the time of hole acceptance prior to steel positioning and concrete placement. The maximum depth of sediment or any debris at any location on the bottom of the shaft shall not exceed 1½-inches.

#### **C.2.8.8 Safety**

Do not permit any worker to enter the drilled shaft excavation for any reason unless a suitable casing has been installed, the water level has been lowered and stabilized below the level to be occupied, and an adequate safety equipment and procedures have been provided to the personnel entering the excavation, which includes OSHA certification for confined-entry-space.

#### C.2.8.9 Test Core

At each drilled shaft, once the excavation is completed to the required minimum shaft embedment, the drilled shaft shall be cleaned of any mud, loose soils and rock. The shaft bottom should be level and contain no protuberance of rock into the limits of the shaft. Collect a test core of the rock (beginning of the drilled shaft base level) with a core diameter of not less than 2.125-inches (NQ core) and core length of not less than 10 feet and according to ASTM D2113

The department will verify that this rock core has a recovery of at least 50 percent throughout the length cored. If the core does not meet the above requirements, the core shall be extended as directed by the engineer. Subsequently, drilled shaft embedment shall be extended to the engineer directed level. Rock core drilling may be performed prior to excavation of the drilled shaft provided it is extended to the necessary depths and meets the recovery requirements outlined above or as directed by the engineer.

After the shaft bearing level is established by the engineer, immediately grout the test core hole.

#### C.2.8.10 Record Information

Provide the department with all of the drilled shaft excavation records and report any unusual observation to the engineer within eight hours of discovery. Submit a draft of this form for each completed drilled shaft within 24 hours of shaft completion, and submit the final form within two weeks. Submit relevant information on a daily basis, or more frequently when variation occurs, or as otherwise required by the engineer.

Report the drilled shaft construction progress according to "Inspection and Reporting Forms," Drilled Shafts: Publication No. FHWA – NHI-10-016 (FHWA GEC 10), Appendix F, pages F-5 through F- 12.

#### C.2.9 Placement of Reinforcing Steel Cage

Prior to placement of the reinforcing steel and concrete, if slurry fluid was employed during the installation of the drilled shaft, test the slurry for compliance with this specification as described in the QMP, Drilled Shafts special provision. Perform Slurry Tests along the shaft and a minimum of once at the bottom of the shaft. Correct the slurry as necessary to meet the specifications. Prior to placement of the reinforcement steel and concrete, ensure that C.2.8.7 cleanliness requirements are met.

Use concrete spacers or non-corrosive spacers at sufficient intervals not exceeding 10 feet along the reinforcement cage. Space a minimum of three spacers evenly around the circumference of any shaft with a maximum space along the shaft circumference of 30 inches between any spacer, i.e., at any given level then a 5-foot diameter shaft shall have 5 spacers. Place the first spacers 1.5 feet from the bottom of the shaft with successive spacer intervals every 10 feet, maximum along the shaft. Spacers shall be of an appropriate diameter wheel to eliminate gaps between the shaft excavation walls and the steel reinforcement.

#### **C.2.10 Concrete Placement**

#### **C.2.10.1** General

Test the concrete delivered to the job site for compliance with the QMP Drilled Shafts special provision, the Standard Specifications and these special provisions. Maintain the same concrete placement operation from the beginning to the ending of the concrete placement for each shaft.

#### **C.2.10.2** Concrete Placement Time

Place concrete within 48 hours of completing the drilling operation for each shaft. Any variance greater than this completion time requires approval from the Bureau of Technical Services Foundations and Pavement Unit Supervisor, or his designee. Place concrete within three hours after the hole is approved by the engineer, unless otherwise directed by the engineer. If the concrete is not placed within this time frame, the hole will have to be re-inspected and accepted by the engineer prior to concrete placement.

# C.2.10.3 Concrete Placement by Free Fall

The contractor can place concrete by the free fall method, where the installation of drilled shafts is done by the dry method or the cased method if the seepage criteria is met. Allow concrete to fall a maximum of 60 feet. Do not allow under any circumstance the concrete to strike the rebar cage, steel core, or the sides of the excavation. Direct the concrete to the center of the cage or guide walls using a drop chute or similar device.

# **C.2.10.4** Concrete Placement by Tremie Pipes

Use tremie pipes to place the concrete inside the excavation under the following conditions:

- a. Where the excavation is filled with a drilling fluid such as water or slurry;
- b. Where the drilled shaft is installed on a batter; or
- c. Where a dry excavation may collapse under the shock of the waves of the free falling concrete.

Always keep the discharge end of the tremie a minimum of 7 feet below the level of the fresh concrete already placed inside the excavation to maintain a seal. The concrete should flow into position by pressure through a tremie with a minimum diameter of ten inches. Seal the bottom of the tremie before lowering it into the wet excavation. If water/slurry enters the tremie pipe after concrete pouring has started, withdraw the tremie and clean, reseal, and restart the pouring. Seal the bottom of the tremie to prevent flow into the tremie. If for some reason, the tremie is raised out of the fluid concrete or the concrete inside the drilled shaft drops down contaminating the tremie, then completely remove and clean the tremie, then replace the seal at the bottom of the tremie, and lower the tremie back as far below as possible into the already placed concrete.

#### **C.2.10.5** Concrete Placement by Concrete Pumps

Concrete pumps and concrete lines can be used to place concrete in drilled shafts rapidly. Concrete pumps are used to place concrete in shaft excavations filled with water or slurry, to pour large or deep-drilled shafts, or to deliver the concrete from a distant location.

All pump lines and connections shall be watertight and shall guide the concrete to the discharge point at the center of the rebar cage or steel core and drilled shaft excavation. The pump line can be flexible; however, its portion at the end of the line and inside the excavation must be made of rigid and heavy steel so that it will stay straight during concreting. Keep the bottom of the pump line or discharge orifice 7 feet below the surface of fluid concrete already placed to avoid sudden jumping of the pump line out of the excavation. Continue placing concrete until over pouring is evident at the top of the drilled shaft and until dark gray concrete (acceptable concrete) can be distinguished from the drilling fluid.

# C.2.10.6 Casting Level

Pour concrete not less than 1-foot above the cut-off level ('overcast') to ensure that all concrete at and below cut-off level is homogeneous and free of laitance and deleterious matter.

#### C.2.10.7 Water Retention

Repair any cracks, joints, defects of shaft where on exposure of the structure foundation, visible running water leaks are found that would result in leakage of the foundation.

# C.2.11 Construction Tolerances for Individual Shafts

Completed drilled foundation shafts constructed out of the tolerance are unacceptable. The contractor is responsible for correcting to the satisfaction of the engineer all unacceptable work. Materials, construction, work, engineering analysis, and redesign necessary to complete corrections to out-of-tolerance excavations or completed drilled shafts shall be furnished to the department without either cost or time extension for the project. Comply with the following construction tolerances:

- a. The final, as constructed position of the center of the drilled shaft shall be within a maximum of 2 inches in any direction from the theoretical position shown on the plans, unless otherwise permitted by the engineer prior to construction.
- b. The vertical alignment of the drilled shaft excavation shall not vary from the vertical alignment of the drilled shaft more than 1 in 200.
- c. When a permanent casing is used, the diameter of the installed drilled shaft shall not be less than the diameter of the drilled shaft shown on the plans. Any conflicts due to a casing that is greater in diameter than the plan-shaft diameter shall be remedied by the contractor. No additional compensation or schedule time shall be granted to the contractor for resolving any conflicts due to oversized casings.
- d. Employ equipment and methods of excavation to complete the drilled shaft excavation to a planar bottom; the cutting edges of the equipment used during the excavation shall be normal to equipment's vertical axis within a tolerance of 3/8-inch per foot of diameter. The bottom of the drilled shaft excavation shall be normal to the axis of the drilled shaft within 3/4-inch per foot of drilled shaft diameter.

- e. Tolerances outlined in sections a to d herein shall be checked and finally met by the contractor prior to placement of the reinforced rebar cage inside the shaft hole.
- f. After the concrete is poured, the top elevation of the built drilled foundation shaft shall be within 1 inch of the top elevation of the corresponding drilled foundation shaft on the plans, and the top of the reinforcing steel cage shall be no more than 6 inches above or no more than 3 inches below the location of the cage shown on the plans. The center of the reinforcing cage shall also be the center of the drilled shaft.

# C.2.12 Non-Destructive Testing Program C.2.12.1 Shaft Integrity Test (PIT)

The Pile Integrity Tester performs low strain integrity testing, alternatively called Sonic Testing, Pulse Echo, or Transient Response. The PIT can detect the presence and location of potentially dangerous defects such as cracks, necking, soil inclusions or voids and can determine shaft length. The equipment and technique are well established, corresponding to ASTM D5882

Prior to beginning the PIT test, assure that the concrete top is accessible and cleaned. The engineer will perform the test(s). The engineer will evaluate and analyze the PIT test results within 5 business days and provide the contractor with a response regarding the acceptability of the drilled shaft tested. The test will be conducted on shafts that are at least five days old so that the concrete has attained minimum compressive strength necessary to perform the test.

# C.2.12.2 Crosshole Sonic Logging Test C.2.12.2.1 General

Crosshole Sonic Logging, (CSL), is a nondestructive testing (NDT) method that measures the time for an ultrasonic pulse to travel from a signal source inside an access tube to a receiver inside another access tube and evaluates the integrity of drilled shafts.

Install access tubes intended for Crosshole Sonic Logging CSL testing. The engineer will perform the test(s). All CSL testing must be completed within thirty calendar days of concrete placement.

Prior to beginning the CSL test, the contractor shall ensure that the test probes can pass through and down the tubes to the bottom of every installed tube. If a tube is obstructed, at no additional cost to the department, core a hole within the drilled shaft and near the obstructed tube to the depth as directed by the engineer. The core shall be large enough to accommodate the probe through its full length.

The engineer will evaluate and analyze the CSL test results within five business days of their receipt and provide, within five business days, the contractor with a response regarding the acceptability of the drilled shaft tested. The test will be performed according to ASTM D6760.

### C.2.12.2.2 Installation Requirements

Drilled shafts must be fitted with CSL test tubes to evaluate their integrity as shown on the plans or as designated by the engineer.

Install the access tubes or pipes as nearly parallel and far as possible from the longitudinal bars. The number of tubes to be installed per each drilled shaft diameter is as indicated in the table below:

Drilled Shaft Diameter Number of CSL Tubes Tube Spacing (a) 4 minimum 90 degrees

(a) Spacing based on a central angle in degrees.

Securely attach the tubes to the interior of the reinforcement cage with a minimum concrete cover of three inches, and they shall be wire-tied to the reinforcing cage every five feet so to secure the tubes in position during placement of the reinforcing steel cage. The tubes may be attached to exterior of the cage when accepted by the engineer in which case the minimum cover requirement of three inches over the tubes shall be maintained. In all cases, the tubes shall be as near to vertical and parallel as possible.

The tubes shall extend from the bottom of the drilled shaft to at least 3 feet above the top of the drilled shaft, or 2 feet above the ground surface for shafts with cut-off below the ground surface. The tubes must be watertight and capped to prevent concrete or debris from entering during manipulation of the cage and concreting. Exercise care during lifting and lowering the steel reinforcement so as not to damage the tubes. Fill the CSL tubes with potable water prior to concrete placement. For production shafts and upon completion of the CSL tests, remove all the water from the access tubes or drilled holes and fill them up with an approved grout.

# C.2.13 Acceptance for Constructed Drilled Foundation Shafts C.2.13.1 General

The engineer will reject any drilled foundation shafts that are not constructed and installed according to these special provisions. Rejected shafts shall be replaced or rectified by the contractor and subject to the acceptance of the engineer. This includes the removal and reinstallation of shafts and construction of additional compensation shafts, at no additional cost to the department.

# **C.2.13.2 Based on Specifications**

The department will only accept drilled shafts for structure foundations that conform to these special provisions. Drilled shafts and related work construction disregarding any specified requirement will not be accepted including:

- a. Drilled shaft excavations constructed out-of-tolerance, as specified in this specification. When repair to an out-of-tolerance shaft is possible, as determined by the engineer, fix the drilled shaft to meet the tolerances before proceeding further with any drilled shaft construction. All repairs must be acceptable to the engineer before the drilled shaft work is resumed.
- b. Excavation of a drilled shaft with slurry not conforming to the QMP, Drilled Shafts special provision.
- c. Drilled shafts exhibiting cuttings from slurry at the drilled shaft bottom showing soft, incomplete, or unclean bottoms, or presenting side sloughing and sedimentation at the bottom.
- d. Shafts with honeycomb intrusions or concrete in which the fines have been washed out or water channels in concrete are present.
- e. Horizontal discontinuity or severe necking in the drilled shaft concrete.
- f. Quarter-moon-shaped soil intrusions on the sides of a drilled shaft.
- g. Folded-in debris inside the drilled shaft.
- h. Drilled shafts for which the mix design has been altered without the acceptance of the engineer, including adding of unauthorized water to a mix design to bring it to certain slump.
- i. Drilled shafts constructed in a manner where concrete placement has failed to meet the required time and tolerances, or the methods of installation did not have the engineer's acceptance.
- j. Drilled shafts constructed with concrete not meeting the minimum 56-day compressive strength (3500-psi) requirement.

# C.2.13.3 Based on the PIT or (CSL) Test

CSL and PIT test results will be evaluated by the engineer. If the engineer determines that CSL or the PIT testing indicates significant anomalies or defects, the engineer will direct the contractor to core the shaft(s) at the location(s) of the defect or anomaly. The coring shall be a minimum of NX-sized double tube core barrel. The engineer will determine the number of cores, length(s), location(s), and testing methodology. If the coring or core sample testing results confirm the presence of significant anomalies or defects, the drilled shaft will be determined to be unacceptable and rejected by the engineer. Upon rejection of the shaft(s), submit a remedial action plan to the engineer for correcting the rejected work. The remedial action plan shall include detailed shaft repair or replacement procedures if necessary and will be subject to acceptance by the engineer. Any modifications to the drilled shaft, load transfer mechanisms, and elements affected by the proposed remedial actions will require calculations and working drawings, and shall be made and stamped by a professional engineer, registered in the State of Wisconsin.

In the event that the engineer directs the contractor to core through the concrete and the coring and associated core sample tests confirm the presence of anomalies or defects, the cost of coring, hole closure, core sample tests, and all labor and materials to perform the accepted remedial actions shall be provided at no additional cost to the department and with no extension of the contract time originally granted.

In the event that the engineer directs the contractor to core through the concrete and the core or core sample tests do not confirm the presence of anomalies or defects, the cost of the coring, hole closure and associated testing shall be borne by the department.

Frequent defects as determined by the engineer will result in a re-evaluation of the contractor's installation procedure and, depending on the frequency and type of defect, may direct the contractor to change or modify his procedure.

#### **D** Measurement

The number of linear feet of Drilled Shaft Foundations (Diameter) of individual shafts, acceptably completed will be based on the plan quantity (length) without measurement. Longer shaft diameters, additional excavation, and additional concrete placed beyond the limits of the plan dimensions will not be measured for payment unless authorized and agreed to in advance of placement by the engineer.

# E Payment

The department will pay for the plan quantity or revised plan quantity, if agreed to in advance of placement by the engineer, at the contract unit price under the following bid item:

ITEM NUMBERDESCRIPTIONUNITSPV.0090.01Drilled Shaft Foundation 36-InchLF

Payment is full compensation for test core/boring including logs, permanent casing, and guide walls; placing and removing temporary working surfaces and/or templates; furnishing and using drilling fluids; furnishing documentation; removing all obstructions; removing concrete due to oversizing, blowouts or protrusions from the face of the shafts; drilling the shafts, handling and disposing of the excavated, augered and cored soils, and any drilling fluids; positioning steel, wheel type spacers and boots; providing and placing the concrete for the drilled shafts to the dimensions and elevations as shown on the plans; and for installing and closing the crosshole logging tubes.

Reinforcement bars are measured and paid under the bid item Bar Steel Reinforcement HS Structures.

# 47. QMP Drilled Shafts.

# A General

Perform this work according to the requirements of standard specifications standard spec 501, standard spec 502, standard spec 701, standard spec 710 and standard spec 715 (conform to QMP Concrete Structures) except as deleted or additionally stipulated herein. This specification applies to all drilled shaft concrete placed under the following bid item:

SPV.0090.01 Drilled Shaft Foundation 36-Inch

#### **B** Materials

# **B.1 Concrete Mix Physical Requirements**

For drilled shaft construction, use high compressive strength concrete, and relatively high cement content in the concrete mix with 590 to 675 pounds of cement per cubic yard. Additives or admixtures, when they are used, shall be clearly indicated. The concrete shall be a flowable, non-segregating concrete mix that does not exhibit rapid slump loss.

Unit Weight of Concrete, AASHTO T 121: Weight must be between 140 to 160 lb/ft<sup>3</sup>.

Fine and course aggregate shall conform to the requirements of standard spec 501.2.5 except as modified herein.

Fine aggregate shall conform to the following gradation requirements:

	Percent Passing
Sieve Size	(by weight)
3/8"	100
No. 4	90 - 100
No. 16	45 - 85
No. 50	5 - 30
No. 100	0 - 10
No. 200	0 - 3.5

Coarse aggregates shall conform to the following gradation requirements:

	Percent Passing
Sieve Size	(by weight)
1/2"	100
3/8"	85 - 100
No. 4	10 - 30
No. 8	0 - 10
No. 16	0 - 5
No. 200	0 - 1.5

Any chemical admixture(s) to be used, other than air-entraining agents or water reducers from the department approved list, must be approved in advance by the engineer and meet the requirements of AASHTO M 194, as documented by independent laboratory test reports.

The adjustment of dosage rates of concrete admixtures will be permitted without requiring a new mix design.

#### **B.2 Slump**

The trial mix design for drilled shaft concrete shall include a Slump Loss Graph, or Slump versus Time after Batching. The Slump Loss Graph of a proposed drilled shaft mix design shall illustrate the slump reducing slowly and still exceeding a 5-inch slump two hours after batching. Careful attention to concrete mix designs made with retarders must be exercised.

Monitor slump to assure that all concrete placement is completed before any mix begins setting. Operations may need to be adjusted to reduce the number of shafts that are completed during a single pour event.

Adding water to a ready-mix truck is prohibited. In cases in which part of the water of the concrete mix is added at the batch plant and the remaining water is added at the job site, the amount of water to be added at the job site shall be stated on the mix design sheet carried by the ready-mix truck driver. Testing of concrete will then be conducted on the resulting mix, and further water cannot be added at any time to increase the mix slump or to bring the mix to a specific slump. If after all the water permitted in the mix design has been added and the slump is still out of these specifications, the contractor must reject the mix. Repair or replace drilled shafts of questionable concrete design mixes at no additional cost to the department.

The following table presents the ranges for the slump.

	Slump Range in Inches		
	Concrete	Concrete	Concrete
	Placed by	Placed by	Placed by
	Free Falling	Tremie	Pump
Dry Installation Method			
Uncased or Cased Excavations	7 to 9	8 to 9 <sup>1</sup>	$\frac{1}{2}$ 7 to $9\frac{1}{2}$
Wet Installation Method			
Uncased or Cased Excavations	N/A	8 to 9 <sup>1</sup>	$\frac{1}{2}$ 7 to $9\frac{1}{2}$

# **B.3 Slurry B.3.1** General

Slurry shall be a stable suspension of mineral in potable water or polymer slurry. Maintain a stable suspension at all times. Bentonite slurry shall be mineral slurry of powdered Wyoming or Dakota bentonite, with density, viscosity, and pH as specified in the table below:

Property at 68°F	At the Time of Slurry	Before Concrete	Test Method
Units	Introduction into the	Placement in the	
	Drilled Shaft	Drilled Shaft	
Density in Fresh	64 to 69	64 to 75	Density Balance
Water (lb/ft <sup>3</sup> ) (a)			
Viscosity	28 to 45	28 to 45	Marsh Funnel
(seconds per quart)			
pН	7 to 11	7 to 11	pH paper or meter
Sand Content (%) (b)	4 maximum	10 maximum	200 Sieve Retain

(a) At time of concreting, sand content shall not exceed 10 percent (by volume) at any point in the drilled shaft excavation; test for sand content as determined by the American Petroleum Institute.

(b) Bentonite slurry shall be disposed of offsite in an approved manner as accepted by the WDNR.

The contractor may adjust the range of slurry properties when field trials and field tests show that modifications are necessary to bring the slurry to specifications.

Polymer slurry shall be a suspension of powdered polyacrylamide or vinyl polymer with the following characteristics:

Property at 68°F	At the Time of Slurry	Before Concrete	Test Method
Units	Introduction into the	Placement in the	
	Drilled Shaft	Drilled Shaft	
Density in Fresh	63 or less	63 or less	Density Balance
Water (lb/ft <sup>3</sup> ) (a)			
Viscosity	50 minimum	50 minimum	Marsh Funnel
(seconds per quart)			
рН	8 to 11	8 to 11	pH paper or meter
Sand Content (%)	2 maximum	10 maximum	200 Sieve Retain

(a) At time of concreting, sand content shall not exceed 10 percent (by volume) at any point in the drilled shaft excavation; test for sand content as determined by the American Petroleum Institute

Obtain slurry samples from the midpoint and bottom of each drilled shaft prior to the placement of the reinforcing steel. Correct the slurry as necessary to meet the specification requirements.

#### **B.3.2** Tests

To ensure that the results are within the ranges stated in the table above, perform the following tests on the mineral slurry supplied to the drilled shaft excavation at different depths within the drilled shaft using a slurry sampler.

# **B.3.2.1** Wisconsin Method of Test for Density of Slurry (Mud Weight)

Density shall be measured at 68°F. This test is identical to ASTM D 4380 except that the mineral slurry to be tested shall consist of processed attapulgite or bentonite clays, and the temperature of the slurry (using a 0-105°C thermometer) shall be measured and recorded on the drilling Mud Report form.

#### **B.3.2.2** Wisconsin Method of Test for Viscosity of Slurry

The viscosity shall be measured at 68°F or a constant temperature with the Marsh Cone Method.

#### **B.3.2.2.1** Scope

The Marsh Funnel or Marsh Cone is used to measure viscosity of drilling fluids. This test method has been adapted from Section 2 of the American Petroleum Institute (API)

Recommended Practice FM8-RP13B-1: Standard Procedure for Field Testing Water-Based Drilling Fluids (FM 8-RP13B-1). Use of a direct-reading viscometer has been eliminated.

# **B.3.2.2.2 Equipment**

Marsh Funnel: A Marsh Funnel is calibrated to out-flow 946 mL (one quart) of fresh water at a temperature of  $21 \pm 3$ °C ( $70 \pm 5$ °F) in  $26 \pm 0.5$  seconds. A graduated cup is used as a receiver

# Specifications:

Funnel Cone Length 305 mm (12.0 in.) Diameter 152 mm (6.0 in.)

Capacity to bottom of screen 1500 mL

Orifice Length 50.8 mm (2.0 in.) Inside Diameter 4.7mm (3/16 in.)

Screen 12 mesh

Has 1.6 mm (1/16 in.) openings and is fixed at a level 19.0 mm (3/4 in.)

# **B.3.2.3** Wisconsin Method of Test for Sand Content of Slurry **B.3.2.3.1** Scope

The sand content of mud is the volume percent of particles larger than 74 microns. It is measured by a sand-screen set. This test method has been adapted from Section 5 of the American Petroleum Institute (API) Recommended Practice 13B-1: standard Procedure for Field Testing Water-Based Drilling Fluids (RP13B-1).

# **B.3.2.3.2 Equipment**

200-mesh sieve, 63.5 mm (2.5 in.) in diameter.

Funnel to fit sieve.

Glass measuring tube marked for the volume of mud to be added. The tube is graduated from 0 to 20 percent in order to read directly the percentage of sand.

#### **B.3.2.3.3** Procedure

Fill the glass measuring tube with mud to the "mud" mark. Add water to the next mark. Close the mouth of the tube and shake vigorously. Pour the mixture onto the clean, wet screen. Discard the liquid passing though the screen. Add more water to the tube, shake, and again pour onto the screen. Repeat until the tube is clean. Wash the sand retained on the screen to free it of any remaining mud.

Put the funnel upside down over the top of the sieve invert. Slowly tip the assembly and insert the tip of the funnel into the mouth of the glass tube. Wash the sand into the tube by playing a fine spray of water through the screen. Allow the sand to settle. From the graduations on the tube, read the volume percent of the sand.

Report the sand content of the mud by percent volume. Report the source of the mud sample, i.e. above shaker, suction pit, etc. Coarse solids other than sand will be retained on the screen (e.g., lost circulation material) and the presence of such solids should be noted.

### B.3.2.4 Wisconsin Method of Test for pH of Slurry

pH shall be measured by the Electric pH meter or pH indicator paper strips.

## **B.3.2.4.1** Scope

Field measurement of drilling fluid (or filtrate) pH and adjustments to the pH are fundamental to drilling fluid control. This test method has been adapted from Section 7 of the American Petroleum Institute (API) Recommended Practice 13B-1: Standard Procedure for Field Testing Water-Based Drilling Fluids (RP 13B-1).

The recommended method for pH measurement of drilling fluid is with a glass electrode pH meter. This method is accurate and gives reliable pH values, being free of interference if a high quality electrode system is used with a properly designed instrument. Rugged pH instruments are available that automatically temperature compensate the slope and are preferred over the manually adjusted instruments.

NOTE: Color matching pH paper and sticks are used for field pH measurements, but are not the methods recommended. These methods are reliable only in very simple water muds. Mud solids, dissolved salts and chemicals, and dark-colored liquids cause serious errors in pH paper values. Readability is normally about 0.5 pH unit.

# **B.3.2.4.2 Equipment**

pH meter: millivolt range potentiometer calibrated to show pH units for measuring the potential between a glass-membrane electrode and a standard "reference" electrode. The instrument is (preferred) to be water, shock, and corrosion-resistant and portable.

# Specifications are:

pH range: 0 to 14.

Electronics type: solid state (preferred). Power source: batteries (preferred).

Operating temperature range: 0-66°C (32-150°F).

Readout: digital (preferred). Resolution: 0.1 pH unit. Accuracy: ±0.1 pH unit. Repeatability: 0.1 pH unit.

# Adjustments.

"Temperature" compensation of electrode system.

"Slope" of electrode system (preferred).

"Calibration" setting of readout. (Instrument with the above internal temperature compensation is preferred.)

Electrode system: A combination system of a glass electrode for sensing H<sup>+</sup> ions and a standard voltage reference electrode, constructed as a single electrode (preferred). Body of this probe should be constructed of durable material. A flat-end probe is preferred for better protection and easier cleaning of the electrode. Waterproof connection to the meter is recommended.

Specifications are:

Glass pH electrode response range: 0 to 14 pH unit.

Electrodes: a glass electrode and a silver/silver chloride electrode in combination, having a ceramic or a plastic single or double junction.

Electrolyte in reference electrode: KCl gel.

Glass composition: suitable for low sodium ion error.

Sodium ion error: at pH = 13 or at 0.1 mole  $Na^+$  ion, an error less than 0.1 pH unit. Buffer solutions: three solutions to calibrate and set slope of pH meter prior to sample measurement.

pH = 4.0: potassium hydrogen phthalate at 0.05 molar in water. Gives 4.01 pH at 24°C (75°F).

pH = 7.0: potassium dihydrogen phosphate at 0.02066 molar and disodium hydrogen phosphate at 0.02934 molar in water. Gives 7.00 pH at 24°C (75°F).

pH = 10.0: sodium carbonate at 0.025 molar and sodium bicarbonate at 0.025 molar in water. Gives 10.01 pH at 24°C (75°F).

NOTE: Buffers may be obtained from supply houses as pre-made solution, dry-powder packages, or a given formula, but must duplicate National Bureau of Standards primary or secondary buffers. Shelf life of all buffers not to exceed six months. Date of preparation of buffer should be shown on bottles used in the field. Bottles should be kept tightly stoppered.

Distilled or deionized water: in spray bottle.

Soft tissues: to blot electrodes.

Thermometer: glass, 0-150°C (32-220°F).

Accessory equipment: Soft-bristle test tube brush: to clean electrode.

Mild liquid detergent: Ivory, or equivalent. Electrode storage vial: to keep electrode moist.

Sodium hydroxide: 0.1 molar (approximately); to recondition electrode. Hydrochloric acid: 0.1 molar (approximately); to recondition electrode.

Ammonium bifluoride: 10% solution (approximately); to recondition electrode.

CAUTION: This is a strong and toxic acid. Hydrofluoric acid: ACS reagent grade. CAUTION: This is a strong acid.

# **B.3.2.4.3 Procedure – pH Measurement**

Obtain sample of fluid to be tested. Allow it to reach 24±3°C (75±5°F). Allow buffer solution to also reach the same temperature as the fluid to be tested.

NOTE: For accurate pH measurement; the test fluid, buffer solution, and reference electrode must all be at the sample temperature. The pH of the buffer solution indicated on the container label is the correct pH only at 24°C (75°F). If attempting to calibrate at another temperature, the actual pH of the buffer at this temperature must be used. Tables of buffer pH values at various temperatures are available from the suppliers and should be used in the calibration procedure.

Clean electrodes by washing with distilled water and blot dry. Place probe into pH 7.0 buffer. Turn on meter; wait 60 seconds for reading to stabilize. Measure temperature of pH 7 buffer solution. Set this temperature on "temperature" knob. Set meter reading to "7.0" using "calibration" knob. Rinse probe with distilled water and blot dry.

Repeat operations using either pH 4.0 or pH 10.0 buffer. Use pH 4.0 if "acidic" sample, or pH 10.0 if "alkaline" sample is to be tested. Set meter to number "4.0" or "10.0" respectively, using "slope" adjustment knob. (If no "slope" knob exists, use the "temperature" knob to set "4.0" or "10.0" on meter). Check the meter with pH 7 buffer again. If it has changed, reset to "7.0" with "calibration" knob. Repeat procedures to ensure equipment is properly calibrated.

NOTE: Discard and do not reuse the sample of buffer solutions used in calibration. Meter should be fully calibrated every day using two buffers. Check with pH 7 buffer every three hours. If meter calibrates properly, rinse electrode with distilled water and blot dry. Place electrode in sample to be tested and stir gently. Allow 60 to 90 seconds for reading to stabilize.

Record sample pH to nearest 0.1 pH unit and the temperature of sample tested. Carefully clean the electrode in preparation for next usage. Store in vial of pH 4 buffer. NEVER let the probe tip become dry. Turn meter off and close cover to protect instrument. Avoid storing instrument at extreme temperatures (below 0°C (32°F) or above 49°C (120°F)).

Care of Electrode: Cleaning the electrode will be necessary periodically, especially if oil or clay particles coat the face of the glass electrode or the porous frit of the reference electrode. Clean electrode with a soft-bristle brush and a mild detergent. Reconditioning the electrode may be necessary if plugging becomes severe, as indicated by slow response, drifting of readings, or if "slope" and "calibration" cannot be mutually set. Recondition by soaking electrode for 10 minutes in 0.1 M HCl followed by rinsing in water and soaking for 10 minutes in 0.1 M NaOH and rinsing again. Check electrode for response by performing calibration. If electrode continues to perform poorly, soak electrode for two minutes only in 10% NH<sub>4</sub>F · HF solution. (CAUTION: This is strong and toxic acid). Replace electrode system if above steps fail to recondition it.

C (Vacant)

D (Vacant)

#### E Payment

# **E.1 OMP Drilled Shafts**

Costs for all sampling, testing, and documentation required under this special provision and all other associated work are incidental to the work. If the contractor fails to perform the work required under this special provision, the department may reduce the contractor's pay.

# 48. Railing Pedestrian Steel, Item SPV.0090.02.

## **A Description**

This special provision describes fabricating, galvanizing, painting and installing railing according to standard spec 506, 513 and 517 and the plan details, as directed by the engineer, and as hereinafter provided.

#### **B** Materials

All materials for railing shall be new stock, free from defects impairing strength, durability and appearance. Railing assemblies shall be galvanized and receive a two-coat paint system. Bubbles, blisters and flaking in the coating will be a basis for rejection.

# **B.1** Coating System

# **B.1.1 Galvanizing**

After fabrication, blast clean steel railing assemblies per SSPC-SP6 and galvanize according to ASTM A123. Vent holes shall be drilled in members as required to facilitate galvanizing and drainage. Location and size of vent holes are to be shown on the shop drawings. All burrs at component edges, corners and at holes shall be removed and sharp edges chamfered before galvanizing. Condition any thermal cut edges before blast cleaning by shallow grinding or other cleaning to remove any hardened surface layer. Remove all evident steel defects exposed according to AASHTO M 160 prior to blast cleaning. Lumps, projections, globules, or heavy deposits of galvanizing, which will provide surface conditions that when painted, will produce unacceptable aesthetic and/or visual qualities, will not be permitted.

# **B.1.2 Two-Coat Paint System**

After galvanizing, paint all exterior surfaces of steel railing assemblies and inside of rail elements at field erection and expansion joints as hereinafter provided. All galvanized surfaces to be painted shall be cleaned per SSPC-SP1 to remove chlorides, sulfates, zinc salts, oil, dirt, organic matter and other contaminants. The cleaned surface shall then be brush blast cleaned per SSPC-SP16 to create a slight angular surface profile per manufacturer's recommendation for adhesion of the tie coat. Blasting shall not fracture the galvanized finish or remove any dry film thickness. After cleaning, apply a tie coat from an approved coating system that is specifically intended to be used on a galvanized surface, per manufacturer's recommendations. The tie coat shall etch the galvanized rail and prepare the surface for the top coat. Apply a top coat per manufacturer's recommendations, matching the specified color shown on the plans. Use a preapproved top coat that is resistant to the effects of the sun and is suitable for a marine environment. The tie and top coats should be of contrasting colors, and come from the same manufacturer.

Ensure that the paint manufacturer reviews the process to be used for surface preparation and application of the paint coating system with the paint applier. The review shall include a visit to the facility performing the work if requested by the paint manufacturer. Provide written confirmation, from the paint manufacturer to the engineer, that the review has taken place and that issues raised have been addressed before beginning coating work under the contract.

Use one of the qualified paint manufacturers and products given below. An equivalent system may be used with the written approval of the engineer.

			Dry Film Minimum Thickness	Min. Time <sup>1</sup> Between Coats
Manufacturer	Coat	Products	(mils)	(hours)
Sherwin Williams 1051 Perimeter Drive Suite 710	Tie	Recoatable Epoxy Primer B67-5 Series / B67V5	2.0 to 4.0	6
Schaumburg, IL 60173 847.330.1562	Тор	Acrolon 218 HS Polyurethane, B65-650	2.0 to 4.0	NA
<u>Carboline</u>	Tie	Rustbond Penetrating Sealer FC	1	36
350 Hanley Industrial	Tie	Carboguard 60	4.0 to 6.0	10
St. Louis, MO 63144	Tie	Carboguard 635	4.0 to 6.0	1
314.644.1000	Тор	Carbothane 133 LH(satin)	4	NA
Wasser Corporation 4118 B Place NW	Tie	MC-Ferrox B 100	3.0 to 5.0	8
Suite B Auburn, WA 98001 253.850.2967	Тор	MC-Luster 100	2.0 to 4.0	NA

<sup>&</sup>lt;sup>1</sup> Time is dependent on temperature and humidity. Contact manufacturer for more specific information

# **B.2 Shop Drawings**

Submit shop drawings showing the details of railing construction. Show the railing height post spacing, rail location, weld sizes and locations and all dimensions necessary for the construction of the railing. Show location of shop rail splices, field erection joints and expansion joints. State the name of the paint manufacturer and the product name of the tie coat and top coat used along with the color. State the size and material type used for all components. Also show the size and location of any vent or drainage holes provided.

#### **C** Construction

# C.1 Delivery, Storage and Handling

Deliver material to the site in an undamaged condition. Upon receipt at the job site, all materials shall be thoroughly inspected to ensure that no damage occurred during shipping

or handling and conditions of materials is in conformance with these specifications. If the coating is damaged, repair or replace railing assemblies to the approval of the engineer at no additional cost. Carefully store the material off the ground to ensure proper ventilation and drainage. Exercise care so as not to damage the coated surface during railing installation. No field welding, field cutting or drilling will be permitted without the approval of the engineer.

# C.2 Touch-up and Repair

For minor damage caused by shipping, handling or installation to coated surfaces, touch-up the surface in conformance with the manufacturer's recommendations. If damage is excessive, the railing assembly shall be replaced at no additional cost. Provide the engineer with a copy of the manufacturer's recommended repair procedure and materials before repairing damaged coatings.

#### **D** Measurement

The department will measure Railing Pedestrian Steel 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(s):

ITEM NUMBERDESCRIPTIONUNITSPV.0090.02Railing Pedestrian SteelLF

Payment is full compensation for excavation, backfilling, concrete, reinforcement, anchors, connections, steel railing, fabricating, galvanizing, painting, transporting.

# 49. Preparing Trail for Surfacing, Item SPV.0090.03.

# **A** Description

This special provision describes the preparing of the multi-use pedestrian trail to limits indicated on the plans. Activities necessary to prepare trail segment for surfacing include clearing, grubbing, removal of topsoil, grading, fill, shaping, and finishing the subgrade area for the multi-use pedestrian trail according to applicable provisions of the standard specifications and as hereinafter provided.

# **B** Materials

Furnish material conforming to standard spec 201, 205, and 208.

#### **C** Construction

Construct 10-foot sub-grade surface area to accommodate the 8-foot wide trail within the current undeveloped area.

#### **D** Measurement

The department will measure Preparing Trail for Surfacing in length by the linear foot measured along the centerline of trail, 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.0090.03 Preparing Trail for Surfacing LF

Payment is full compensation for furnishing all clearing, grubbing, excavation, topsoil removal, grading shaping, placing fill, compacting, and salvaged topsoil.

#### **50.** Move Precast Concrete Barrier, Item SPV.0090.04.

# **A Description**

This special provision describes the moving of existing precast concrete barrier off of WisDOT right-of-way as noted on the plans.

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

# C (Vacant)

#### **D** Measurement

The department will measure Move Precast Concrete Barrier 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 LF SPV.0090.04 Move Precast Concrete Barrier

Payment is full compensation for moving existing precast concrete barrier off of the WisDOT right-of-way.

#### 51. Remove Railing, Item SPV.0090.05.

#### A Description

This special provision describes removing existing railing at the Flambeau River Papers building entrance along the south side of STH 182 as shown on the plans.

#### B (Vacant)

#### C (Vacant)

#### **D** Measurement

The department will measure Remove Railing 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 NUMBERDESCRIPTIONUNITSPV.0090.05Remove RailingLF

Payment is full compensation for removal and disposal of existing railing, including all hardware

# 52. Remove and Repaint Railing, R-50-3, Item SPV.0105.01.

# **A** Description

This special provision describes removing, repainting, and reinstalling the existing approximate 180 foot long decorative steel railing on wall Structure R-50-3 as shown in the plans and as hereinafter provided.

#### **B** Materials

Furnish epoxy paint materials conforming to standard spec standard spec 517.2.4.

#### **C** Construction

Remove the existing railing with tools that will not damage existing railing components or anchorages. Replace any stripped nuts with equivalent material per standard spec 513.2 as directed by the engineer.

Blast clean the railing according to standard spec 517.3.1.3.3. Cleaning of the railing must be done off site.

Paint the railing with a black finish (federal color 27038) according to standard spec 517.3.1.5.2.

Reinstall the railing, providing shims as needed per standard spec 513.3.1 (5).

#### D Measurement

The department will measure Remove and Repaint Railing, R-50-3 as a single lump sum unit of work, acceptably completed.

#### E Payment

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

ITEM NUMBER DESCRIPTION UNIT SPV.0105.01 Remove and Repaint Railing, R-50-3 LS

Payment is full compensation for removing the railing, transportation to and from the project site for cleaning and painting, blast cleaning and painting of the railing, reinstallation, for shims and bolts as needed.

# 53. Removal of Conduit and Wire, Item SPV.0105.02.

# **A Description**

This special provision describes the removal of underground conduit, underground lighting and festoon receptacle wire between the existing lighting control cabinet heading east to existing light pole (scheduled for removal under separate Special Provision). This also includes removal of existing overhead lighting wire suspended between bridge lighting and its source utility pole (4 separate spans) to be coordinated with local electrical utility company in accordance the pertinent provisions of standard spec 204 and as hereinafter provided.

# **B** (Vacant)

#### **C** Construction

The contractor shall be responsible for any lost, damaged or stolen scrap wire materials up to the point of delivery to the City of Park Falls taking signed ownership of their scrap wire materials. Appropriately dispose of scrap conduit off site.

Contact the City of Park Falls at least 5 working days prior to the delivery of scrap wire materials. At least one week in advance, notify the City of Park Falls and contact the local utility company to arrange for that company to de-energize. Contact Scott Hilgart, DPW at (715) 492-0564.

Complete the removal work within three consecutive working days following the shutdown of this equipment.

#### **D** Measurement

The department will measure Removal of Conduit and Wire as a lump sum unit of work, acceptably completed.

## E Payment

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

ITEM NUMBERDESCRIPTIONUNITSPV.0105.02Removal of Conduit and WireLS

Payment for Removal of Conduit and Wire is full compensation for furnishing all conduit and wiring removals, transporting materials off site.

# 54. Seismograph/Vibration Monitoring, Item SPV.0105.03.

#### **A Description**

This special provision describes furnishing a seismograph(s) and employing trained operators to monitor construction-induced vibrations on buildings and structures (including paper-making equipment), and submittal of all required documentation.

Whenever there is a potential for vibration damage to adjacent buildings and structures, monitor the vibration source with an approved seismograph, located in a direct line between the vibration source and the closest building or structure subject to vibration damage, and as close as practical to the subject building or structure. Peak Particle Velocities that exceed the allowable vibration limits shall cause implementation of an approved contingency plan. Vibrations shall be monitored during all times that vibration-inducing activities are occurring.

#### **B** Materials

Use seismographs that are according to Wisconsin Department of Safety and Professional Services (SPS) 307.43, Wisconsin Administrative Code, and are continuous data recorders supplied with all the accessories necessary for making vibration monitoring observations.

#### **C** Construction

All vibration-inducing activities and monitoring shall be performed in compliance with plans as described in this special provision and approved by the engineer, unless otherwise noted in the plan documents.

# 1. Vibration-Inducing Activity Plan Submittal

Not less than two weeks prior to commencing potential vibration-inducing activities, submit a Vibration-Inducing Activity Plan to the engineer for review. The Vibration-Inducing Activity Plan shall contain the following information:

- 1. Listing and description of potential vibration-inducing equipment and tools.
- 2. Description of potential vibration-inducing activity methods and operations.
- 3. Description of proposed methods to control vibration levels.

The plan submittal is for quality control and record-keeping purposes. Review of this plan by the engineer shall not relieve the contractor of its responsibility for the accuracy and adequacy of the plan when implemented in the field.

#### 2. Condition Surveys

Conduct and document pre-construction and post-construction condition surveys of buildings and structures within 100 feet of potential vibration-inducing activities. The engineer may require condition surveys of facilities not within 100 feet and not identified by the contractor. The contractor shall make right-of-entry arrangements with the property owners for all condition surveys. Prior to commencing any removal\construction work, the pre-condition survey records shall be made available to the engineer for review. Within two weeks after completion of the removal\construction operations, make the post-condition survey records available to the engineer for review.

These condition surveys shall consist of visually inspecting and recording all existing defects in the buildings and structures before and after vibration-inducing activities. Photographs and/or videotape may be used to assist in documentation. Submit a written report to the department detailing the visual and photographic investigation of potentially-

affected structures. The report shall include copies of the condition surveys and discuss any discrepancies and findings of these surveys.

# 3. Safety

The engineer will, at all times, have the authority to prohibit or halt the contractor's operations or other vibration-inducing activities, if it is apparent that through the methods being employed, the safety and convenience of the traveling public is being jeopardized or that vibration levels are excessive or above allowable levels.

# 4. Vibration Monitoring

Not less than two weeks prior to commencing potential vibration-inducing activities, submit a Vibration Monitoring Plan to the engineer for review. The Vibration Monitoring Plan shall contain the following information:

- 1. A description of the proposed vibration monitoring equipment.
- 2. Vibration monitoring procedures, including:
  - a. Monitoring duration for baseline and daily vibration monitoring.
  - b. Proposed locations for vibration monitors for each phase of work.
  - c. An alert system and contingency plan if allowable vibration limits are exceeded.
- 3. Allowable vibration limits.
- 4. A description of how seismograph readings will be presented.
- 5. A description of when and how reports will be generated.
- 6. Names and qualifications of the vibration monitoring personnel.

Vibration monitoring shall be performed by a qualified vibration specialist, subject to the engineer's approval, according to the approved Vibration Monitoring Plan. The vibration specialist shall monitor vibration levels for at least one work day prior to and for every work day, vibration-inducing activities are occurring. The vibration monitoring shall be for the daily time period that any construction activity is occurring. The qualified vibration specialist shall interpret the seismograph records to ensure that the seismograph data is effectively utilized in the control of vibration-inducing activities with respect to the existing buildings and structures.

The maximum allowable vibration limits shall be established after consulting with the engineer. In no case shall allowable vibration limits exceed the values presented in Wisconsin Administrative Code SPS 307, Figure 7.44, without contingency plan implementation.

During construction, place the seismograph(s) to monitor all vibration-inducing activities at locations described in the Vibration Monitoring Plan, or as directed by the engineer. At a minimum, utilize one seismograph. Additional seismographs may be requested by the engineer. If more than one major construction activity per day is taking place, multiple seismographs may be required. Place each seismograph on a stable surface.

Weekly data reports shall be provided to the engineer. Each weekly report shall provide a summary of the highest recorded vibration data for each day. If a vibration event occurs that exceeds an allowable vibration limit, that event data shall be furnished in an event-specific report to the engineer as soon as is practicable. All data reports (event-specific and weekly) shall include the following:

- 1. Identification of vibration monitoring instrument used.
- 2. Description of equipment used by the contractor.
- 3. Name of qualified observer and interpreter.
- 4. Distance and direction of recording station from the vibration area.
- 5. Type of ground at recording station and material on which the instrument is sitting.
- 6. Peak Particle Velocity and principal frequency in each component.
- 7. A dated and signed copy of records of seismograph readings.
- 8. A comparison of measured seismograph readings to maximum allowable readings as specified in this special provision.

If construction activities generate ground vibration in excess of an allowable vibration limit, the engineer shall be notified as soon as is practicable and the contingency plan implemented immediately.

#### **D** Measurement

The department will measure Seismograph/Vibration Monitoring as a weekly lump sum unit of work acceptably completed.

# E Payment

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

ITEM NUMBERDESCRIPTIONUNITSPV.0105.03Seismograph/Vibration MonitoringLS

Payment is full compensation for developing and furnishing the work plans; conducting and providing the pre/post construction surveys; furnishing and operating a seismograph(s), any operator(s), and producing documentation reports.

# 55. Utility Line Opening (ULO) Water Main at Bridge, Item SPV.0105.04.

#### **A Description**

This special provision describes performing the necessary excavation to uncover water main utility for the purpose of determining location and potential conflicts with proposed steel piling and preboring piling for the Structure B-50-0082 West Abutment, as shown on the plans or as directed by the engineer.

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

#### **C** Construction

Perform the excavation in such a manner that the utility in question is not damaged and the safety of the workers is not compromised.

Perform the utility line opening at least 14 days in advance of proposed West Abutment construction to allow any conflicts to be resolved with minimal disruption. The utility line opening for water main at bridge shall provide for horizontal location at the proposed west abutment location using careful excavation methods, possible dewatering, or methods involving appropriate technology. If required, make additional excavations west of the abutment in multiple locations to ascertain water main alignment at the west abutment. Transfer location of the abutment piling and preboring into the plans based on the excavated location or the extrapolated line developed from the multiple water main ULO findings. Utility line opening for water main does not need to be a trench but, as long as the water main and other adjacent utilities are braced adequately to prevent movement, may be 10 feet long as measured at the trench bottom, and of any depth required to locate the intended utility.

Obtain prior approval for the utility line opening water main at bridge from the engineer and coordinate the ULO for water main at bridge with the engineer. Notify the City of Park Falls director of public works, or their agents of this work a minimum of three days prior to the work so they may be present when the work is completed. Verify the need for performing the ULO as shown on the plans to verify the water main utility has not been or will be relocated prior to the start of construction.

#### **D** Measurement

The department will measure Utility Line Opening Water Main at Bridge by the 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.0105.04 Utility Line Opening Water Main at LS Bridge (ULO-WM BR)

Payment is full compensation for the excavation required to expose the utility line in one or more excavations, dewatering, or using appropriate technology to ascertain alignment and locations; bracing of the water main or adjacent utilities during excavations; backfilling with existing material removed from the excavation; compacting the backfill material; restoring the site; and cleanup.

Existing pavement, concrete curb, gutter, and sidewalk removals necessary to facilitate utility line openings shall not be considered part of or paid for under Utility Line Openings, but are considered separate and measured and paid for separately as removal items. Replacement pavement, concrete curb, gutter, and sidewalk items shall also be considered separate from Utility Line Openings and will be measured and paid for separately.

# 56. Cut-Stone Boulders, Item SPV.0165.01.

# **A Description**

This special provision describes work consisting of furnishing and placing cut-stone boulders according to the requirements of the plans and these specifications.

#### **B** Materials

Provide stone for cut-stone boulders of durable quarry limestone of approved quality that are sound, hard, dense, resistant to the action of air and water, and free from seams, cracks or other structural defects. Alternate materials made of regionally quarried, similarly durable stone may be used if approved by the engineer.

Provide stone pieces for cut-stone boulders that are rectangular in shape and approved by the engineer with dimensions as shown on the plans.

#### **C** Construction

Properly trim and shape the bed for the cut-stone boulders in a stair-step configuration as shown on the plans.

Place cut-stone boulders by any mechanical means that will produce a completed job within reasonable tolerances of the typical section shown on the plans. Firmly set each cut stone boulder with no rocking or tipping providing a firm foundation for subsequent layers. Unless otherwise provided on the plans, provide cut-stone boulders not less than 8 inches thick. Limit hand work to the amount necessary to fill large voids or to correct segregated areas. Conform to the requirements of standard spec 645.3.7 for the placement of cut-stone boulders over geotextile fabric Type HR. Do not place cut-stone boulders against or in contact with any concrete masonry surface prior to the expiration of the curing and protection period for the concrete.

#### **D** Measurement

The department will measure Cut-Stone Boulders by the square foot in place of the completed work, and the quantity thereof to be paid for will be the summation of the square foot projections onto a vertical plane of the surface areas of such cut-stone boulders incorporated in the work according to the contract. Only accepted work will be measured for payment and the computation of the quantity thereof will be based on the area within the limiting dimensions designated on the plans, in the contract or established by the engineer.

#### E Payment

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

ITEM NUMBERDESCRIPTIONUNITSPV.0165.01Cut-Stone BouldersSF

Payment is full compensation for excavation and preparation of the bed, including backfilling and disposal of surplus material; for furnishing and placing cut-stone boulders; and for restoring the site of the work.

# 57. Coarse Aggregate Stone Mulch, Item SPV.0165.02.

# **A Description**

This special provision describes the furnishing and installation of coarse aggregate stone mulch over weed barrier adjacent to planting beds for landscaping purposes, according to the applicable provisions of standard spec 305, as detailed in the plans, and as hereinafter provided.

#### **B** Materials

The aggregate shall be clean and fall within the range of 3/4"-2" diameter. Provide material source and stone sample for acceptance prior to ordering material. Geotextile fabric shall be nonwoven polypropylene Geotextile, Type DF Schedule A as described in standard spec 645 2 4

#### **C** Construction

Install geotextile Type DF as indicated in the plans. Any overlap of geotextile fabric shall be a minimum of 3 inches.

Spread coarse aggregate stone mulch to the depth shown on the plans, to cover geotextile fabric and to meet adjacent finish grade materials.

#### **D** Measurement

The department will measure Coarse Aggregate Stone Mulch by the square foot, acceptably completed.

#### **E Payment**

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

ITEM NUMBERDESCRIPTIONUNITSPV.0165.02Coarse Aggregate Stone MulchSF

Payment is full compensation for excavating, furnishing, placement and preparation for installation of the Coarse Aggregate Stone Mulch. The department will measure and pay for the Geotextile Type DF separately.

# 58. Trail Surfacing, Item SPV.0180.01.

### **A Description**

This special provision describes providing and placing a trail surface as shown in the plans or as directed by the engineer.

#### **B** Materials

Furnish materials conforming to one of the following options:

1. Traffic bond limestone screenings conforming to the following gradation requirements:

SIEVE SIZE	PERCENT PASSING
3/8 inch	100
No. 4	80-95
No. 40	65-86
No. 100	25-40
No. 200	8-25

The gradation requirements for the No. 4, No. 40, and No. 100 sieves may be altered as approved by the engineer to provide a product that will be more cost effective and or better suited for the intended surface

2. Michigan DOT specification 23A modified surface. 23A Modified is an aggregate surface course that modifies the 23A gradation to one that is ADA compliant and defined below. Conform to the following gradation requirements for all material placed under this option:

SIEVE SIZE	PERCENT PASSING
1/2 inch	100
3/8 inch	60-85
No. 8	23-60
No. 200	9-16

This gradation may be altered as approved by the engineer to provide a product that will be more cost effective and or better suited for the intended surface.

3. Trail Bond Surface, consisting of crusher fines or 100% crushed aggregate surface product utilizing granite dust as mineral filler. Conform to the following gradation requirements for all material placed under this option:

SIEVE SIZE	PERCENT PASSING
5/8 inch	100
1/2 inch	100
No. 30	35-50
No. 200	18-25

In addition the aggregate properties shall comply with the following:

Sodium Sulfate Soundness <=12% Freeze/Thaw Soundness <=18%

Plasticity: Not Plastic

Fracture: Minimum 95% of all faces Wear AASHTO T-96: <= 40% Aggregate Absorption: <= 1.0%

#### C Construction

Prepare the foundation for the trail surfacing by excavating to the depths and widths as shown in the plans needed for placement of the surfacing. Remove any rocks, clods, brush, small trees, or sod clumps as needed to place a 3-inch thick surfacing.

Use excavated material as needed to wedge the existing surface to elevations required to match the existing pedestrian bridge. Dispose of all surplus material.

Place the surfacing using equipment that can provide a final surface finish that is uniform and free of imperfections. Roll the surfacing with a non-vibratory roller as need to help compact and set the material. Use water as needed or directed to help compaction and provide a uniform and solid trail surface.

#### **D** Measurement

The department will measure Trail Surfacing by the cubic yard of acceptably placed material.

#### E Payment

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

ITEM NUMBERDESCRIPTIONUNITSPV.0180.01Trail SurfacingCY

Payment is full compensation for preparing the foundation, including excavating, reuse (where needed for wedging) and disposal of all excess material; for providing the surfacing material including placement and finishing of the material; and for water as needed for compaction.

# 59. Preparing Topsoil for Lawn Type Turf, Item SPV.0180.02.

# **A Description**

This special provision describes preparing the bed of topsoil or salvaged topsoil, for seeding or placing sod.

# **B** (Vacant)

#### **C** Construction

Prepare and finish the subgrade so that rocks, concrete debris, or wood larger than 3 inches in diameter are not present within 1 foot of the finished surface of the topsoil.

Remove or break down all clods and lumps in the topsoil by using harrows or discs, screening, or other appropriate methods to provide a uniformly textured soil, in which 100 percent of the topsoil passes a 1-inch sieve and at least 90 percent passes a No. 10 sieve.

Remove rocks, twigs, clods, and other foreign material that will not break down, and dress the entire surface to present a uniform appearance.

Shape the topsoil so that the horizontal or sloped surface between any two points 10 feet apart does not vary by more than 1 inch. Roll with a turf type roller to a uniform minimum compacted depth of 4 inches.

Shape and compact the topsoil adjacent to pavements, sidewalks and curbs to 1 inch below the top of the abutting surface. Before seeding, correct locations that vary by more than ½-inch.

#### **D** Measurement

The department will measure Preparing Topsoil for Lawn Type Turf, acceptably completed in area by the square yard.

### **E** Payment

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

ITEM NUMBERDESCRIPTIONUNITSPV.0180.02Preparing Topsoil for Lawn Type TurfSY

Payment is full compensation for preparing the subgrade and topsoil bed for sod or seed as described above.

(NCR 625.01-04302015)

# 60. Excavation, Hauling, and Disposal of Contaminated Sediment and Dewatering of Contaminated Sediment, Item SPV.0195.01.

# A Description

# A.1 General

This special provision describes excavating, dewatering, loading, hauling, and disposing of contaminated sediment at a WDNR-licensed landfill facility; and management of water generated during pier removal, pier and abutment construction, and excavated sediment dewatering. The closest WDNR-licensed landfill facility is:

Waste Management Timberline Trail Landfill N4581 Hutchinson Road Weyerhaeuser, WI 54895 (715) 868-7000 Ext. 103

Perform this work according to standard spec 205, and with pertinent parts of Chapters NR 700-754 of the Wisconsin Administrative Code, as supplemented herein. Per NR 718.07, a solid waste collection and transportation service-operating license is required under NR 502.06 for each vehicle used to transport contaminated sediment.

#### A.2 Notice to the Contractor – Contaminated Sediment Location

The department and others completed testing for sediment contamination for locations within this project where excavation is required. Testing indicated that sediment contaminated with low-level PCBs and metals are present at the following location where excavation is required, as shown on the plans:

• STH 182 (Bridge over North Fork of Flambeau River) from Station 32+10 to 35+20, from the project limits left to the project limits right, from the sediment surface to the maximum depth of excavation. Sediment contains PCBs and metals and must be managed. Approximately 85 cubic yards (approximately 170 tons assuming a conversion factor of 2.0 tons per cubic yard) of sediment will be excavated from this location. Dewatering will be required to facilitate bridge construction as discussed further below.

Dewater dredged material prior to loading for disposal. Contractor shall be responsible for obtaining the necessary approvals and coordinating disposal of water via sanitary sewer discharge with the City of Park Falls wastewater treatment facility, and/or for obtaining the necessary WDNR approvals and coordinating discharge of water to Flambeau River.

Directly load dewatered sediment into trucks that will transport the sediment to a WDNR-licensed landfill facility for disposal.

Manage all sediment excavated from this project according to this special provision.

The excavation and dewatering management plan for this project has been designed to minimize the offsite treatment or disposal of contaminated material. The excavation and dewatering management plan, including these special provisions, has been developed in cooperation with the WDNR. The WDNR concurrence letter is on file at the Wisconsin Department of Transportation. For further information regarding previous investigation and remediation activities near this project contact:

Name: Ms. Janet Smith

Address: 1681 Second Avenue South, Wisconsin Rapids, WI 54495

Phone: (715) 421-8089 Fax: (715) 423-0334

E-mail: Janet.Smith@dot.wi.gov

#### A.3 Coordination

Coordinate work under this contract with the environmental consultant:

Consultant: Natural Resource Technology (NRT)

Address: 234 W. Florida Street, Fifth Floor, Milwaukee, WI 53204

Contact: Mr. Ken Yass, PE, CHMM

Phone: (414) 837-3637 Fax: (414) 837-3608 E-mail: kyass@naturalrt.com

The role of the environmental consultant will be limited to:

- 1. Determining the location and limits of contaminated sediment to be excavated based on sediment analytical results from previous investigations, visual observations, and field screening of sediment that is excavated;
- 2. Identifying contaminated sediments to be hauled to the landfill facility;
- 3. Documenting that activities associated with management of contaminated sediment are in conformance with the contaminated sediment management methods for this project as specified herein;
- 4. Obtaining the necessary approvals for disposal of contaminated sediment from the landfill facility; and,
- 5. Providing contractor with sediment sampling results to facilitate contractor's coordination of approvals with the City of Park Falls and/or WDNR for water management as discussed further below.

Provide at least a 14-calendar day notice of the preconstruction conference date to the environmental consultant. At the preconstruction conference, provide a schedule for all excavation and dewatering activities in the areas of contamination to the environmental consultant. Also notify the environmental consultant at least three calendar days prior to commencement of excavation or dewatering activities in the contaminated area.

Coordinate with the environmental consultant to ensure that the environmental consultant is present during excavation and dewatering activities in the contaminated areas. Perform excavation and dewatering work in each of the contaminated areas on a continuous basis until excavation work is completed.

Identify the WDNR-licensed landfill facility that will be used for disposal of contaminated sediments, and provide this information to the environmental consultant no later than at the preconstruction conference. The environmental consultant will be responsible for obtaining the necessary approvals from the landfill facility for bioremediation and/or disposal of contaminated sediments. Do not transport contaminated sediment offsite without sufficient dewatering (*e.g.*, so that trucks do not leak water during transit) and prior approval from the environmental consultant.

Contractor shall be responsible for obtaining the necessary approvals and coordinating disposal of water via sanitary sewer discharge with the City of Park Falls wastewater treatment facility, and/or for obtaining the necessary WDNR approvals and coordinating discharge of water to Flambeau River.

# A.4 Health and Safety Requirements

Supplement standard spec 107.1 with the following:

During excavation and dewatering activities, expect to encounter sediment and water contaminated with relatively low-level PCBs and metals. Site workers taking part in activities that will result in the reasonable probability of exposure to safety and health hazards associated with hazardous materials shall have completed health and safety training that meets the Occupational Safety and Health Administration (OSHA) requirements for Hazardous Waste Operations and Emergency Response (HAZWOPER), as provided in 29 CFR 1910 120

Prepare a site-specific Health and Safety Plan, and develop, delineate and enforce the health and safety exclusion zones for each contaminated site location as required by 29 CFR 1910.120. Submit the site-specific health and safety plan and written documentation of upto-date OSHA training to the engineer prior to the start of work.

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

#### **C** Construction

Supplement standard spec 205.3 with the following:

Control operations in the contaminated areas to minimize the quantity of contaminated sediment excavated and contaminated water pumped.

The environmental consultant will periodically monitor sediment excavated and water pumped from the contaminated areas. The environmental consultant will evaluate excavated sediment and pumped water based on field screening results, visual observations, and analytical results from previous environmental investigations. Assist the environmental consultant in collecting sediment samples for evaluation using excavation equipment. The sediment sampling frequency shall be a maximum of one sample for every 15 cubic yards excavated.

Directly load and haul sediments designated by the environmental consultant for offsite disposal to the WDNR-licensed landfill facility. Use loading and hauling practices that are appropriate to prevent any spills or releases of contaminated sediments or residues. Prior to transport, sufficiently dewater sediments designated for off-site disposal so as not to contain free liquids.

If sediments must be temporarily stored prior to loading and hauling, directly load excavated sediments into temporary storage containers (*e.g.* roll-offs). Ensure that containers are in good condition and leak-proof. Do not stockpile excavated material outside of containers.

During periods when containers are not being actively loaded or emptied, cover containers with an impermeable material (e.g. plastic).

Equip trucks used for hauling excavated sediment with watertight seals and tarps. Equip truck bed gates with locking mechanisms to prevent accidental discharge of excavated sediment.

Dewatering of surface water from the North Fork of Flambeau River will be required to facilitate bridge construction. Water generated during construction, including excavated sediment dewatering, will require proper handling and disposal. Water is anticipated to be permitted to discharge to the City of Park Falls sanitary sewer for treatment by the City of Park Falls. WDNR may also permit water to be discharged back to the North Fork of Flambeau River. Contractor shall perform all necessary monitoring to document compliance with the requirements of Park Falls and/or WDNR. Furnish install, operate, maintain, disassemble, and remove treatment equipment necessary to comply with the requirements of Park Falls and/or WDNR.

Grit (such as sand, sediment, detritus, etc.) will be removed from water prior to direct discharge to the City of Park Falls sanitary sewer and/or direct discharge to the North Fork of Flambeau River

Provide, operate, and maintain adequate pumping and water storage equipment. Notify the engineer of any discharge activities, and obtain any permits necessary to discharge water. Provide copies of such permits to the engineer. Meet any requirements and pay any costs for obtaining and complying with such permit use. Follow all applicable legislative statutes, judiciary decisions, and regulations of the State of Wisconsin.

The environmental consultant may periodically evaluate water pumped during construction activities. Assist the environmental consultant in collecting water samples.

If necessary, water generated during construction can be pumped into temporary, leak-proof holding tanks provided by the contractor in order to complete construction. The contractor shall coordinate holding tank mobilizations and transportation/disposal of contaminated water if necessary. The cost for holding tank mobilization, transportation, and contaminated water disposal will be paid by the contractor.

Sediment associated with dewatering activities shall be disposed at a WDNR-licensed landfill facility as described above.

# **D** Measurement

The department will measure Excavation, Hauling, and Disposal of Contaminated Sediment and Dewatering of Contaminated Sediment in tons of contaminated sediment accepted by the WDNR-licensed landfill facility as documented by weight tickets generated by the landfill facility. Management and disposal/treatment of contaminated water is considered incidental to the contract.

# E Payment

The department will pay for measured quantities at the contract unit price under the

following bid item:

ITEM NUMBER DESCRIPTION UNIT SPV.0195.01 Excavation, Hauling, and Disposal of Contaminated Ton

Sediment and Dewatering of Contaminated Sediment

Payment is full compensation for excavating, segregating, loading, hauling, and disposal of contaminated sediment; obtaining solid waste collection and transportation service operating licenses; assisting in the collection of sediment samples for field evaluation; and dewatering of sediments prior to transport, if necessary. Management and disposal/treatment of contaminated water is considered incidental to other bid items in the contract. The department will not pay directly for management and disposal/treatment of contaminated water.

# ADDITIONAL SPECIAL PROVISION 1 (ASP 1) FOR TRANSPORTATION ALLIANCE FOR NEW SOLUTIONS (TrANS) PROGRAM EMPLOYMENT PLACEMENTS AND APPRENTICESHIPS

The Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), Section 5204(e) – Surface Transportation Workforce Development Training and Education, provides for 100 percent Federal funding if the core program funds are used for training, education, or workforce development purposes, including "pipeline" activities. The core programs includes: Congestion Mitigation and Air Quality Improvement (CMAQ) Program, Highway Bridge Program (HBP), Interstate Maintenance (IM), National Highway System (NHS), and Surface Transportation Program (STP). These workforce development activities cover surface transportation workers, including OJT/SS programs for women and minorities as authorized in 23 U.S.C. §140(b).

*TrANS* is an employment program originally established in 1995 in Southeastern Wisconsin. Currently TrANS has expanded to include TrANS program locations to serve contractors in Southeast (Milwaukee and surrounding counties), Southcentral (Dane County and surrounding counties including Rock County), and most Northeastern Wisconsin counties from locations in Keshena, Rhinelander and surrounding far Northern areas. TrANS attempts to meet contractor's needs in other geographic locations as possible. It is an industry driven plan of services to address the outreach, preparation, placement and retention of women, minorities and non-minorities as laborers and apprentices in the highway skilled trades. These candidate preparation and contractor coordination services are provided by community based organizations. For a list of the TrANS Coordinators contact the Disadvantaged Business Enterprise Office at (414) 438-4583 in Milwaukee or (608) 266-6961 in Madison. These services are provided to you at no cost.

#### I. BASIC CONCEPTS

Training reimbursements to employing contractors for new placements, rehires or promotions to apprentice of TrANS Program graduates will be made as follows:

- 1) On-the-Job Training, Item ASP.1T0G, ASP 1 Graduate. At the rate of \$5.00 per hour on federal aid projects when TrANS graduates are initially hired, or seasonally rehired, as unskilled laborers or the equivalent.
  - <u>Eligibility and Duration:</u> To the employing contractor, for up to 2000 hours from the point of initial hire as a TrANS program placement.
  - <u>Contract Goal:</u> To maintain the intent of the Equal Employment Opportunity program, it is a goal that <u>4</u> (number) TrANS Graduate(s) be utilized on this contract.
- 2) On-the-Job Training, Item ASP.1T0A, ASP 1 Apprentice. At the rate of \$5.00 per hour on federal aid projects at the point when an employee who came out of the TrANS Program is subsequently entered into an apprenticeship contract in an underutilized skilled trade (this will include the Skilled Laborer Apprenticeship when that standard is implemented).

<u>Eligibility and Duration:</u> To the employing contractor, for the length of time the TrANS graduate is in apprentice status.

<u>Contract Goal:</u> To maintain the intent of the Equal Employment Opportunity program, it is a goal that <u>2</u> (*number*) TrANS Apprentice(s) be utilized on this contract.

- The maximum duration of reimbursement is two years as a TrANS graduate plus time in apprentice status.
- 4) If a TrANS program is not available in the contractor's area and another training program is utilized, payment of On-the-Job Training hours may be approved by the Wisconsin Department of Transportation (WisDOT) if the training program meets the established acceptance criteria. Only On-the-Job Training Hours accumulated after WisDOT approval will be reimbursed as specified under Items ASP.1T0G and ASP.1T0A. For more information, contact the Disadvantaged Business Enterprise Office at the phone numbers listed above.
- 5) WisDOT reserves the right to deny payments under items ASP.1T0G and ASP.1T0A if the contractor either fails to provide training or there is evidence of a lack of good faith in meeting the requirements of this training special provision.

#### I. RATIONALE AND SPECIAL NOTE

The \$5.00 per hour now being paid for TrANS placements is intended to cover the duration of two years to allow for reaching entry-level laborer status. An additional incentive, the \$5.00 rate, would promote movement into the underutilized skilled trades' apprenticeships and applies until the individual completes their apprenticeship. These incentives benefit TrANS candidates by giving them a better opportunity to enter a skilled trade; benefits contractors who will be assisted in meeting their EEO profiles and goals; and benefits the public who will see the program reinforce larger public-private employment reform in Wisconsin. The pool of TrANS graduates was created for the purpose of addressing underutilization in the skilled trades, an objective that is further reinforced by a parallel retention pilot program, known as the Companywide Reporting. Whether or not reimbursement is involved, the WisDOT reassures contractors who are in the Companywide Program that TrANS placements still contribute toward fulfilling the new hire goal of 50% women and minorities. Based on data administered by United States Department of Labor (US DOL), the highway skilled trades remain underutilized for women statewide (less than 6.9%); and for minorities in all counties (% varies by county).

<u>NOTE</u>: Unless using other advancement strategies, contractors are encouraged to use some or all of this monetary incentive to offset the cut in hourly wages an individual may incur when entering an apprenticeship if the full general laborer hourly rate has been previously paid. No special accounting measures are required.

#### II. IMPLEMENTATION

The implementation of ASP 1 is intended to cover only the amount of time it takes for underutilization to be resolved across the trades. This will be measured annually at the county and/or state levels using data administered by WisDWD in relation to goals set by the USDOL-

OFCCP. With appropriate state and federal approvals, we may also do some measurement at the company level.

It is the contractor's responsibility to note on their Certified Payrolls if their employee is a TrANS graduate or a TrANS apprentice. The District EEO Coordinators utilize the information on the Certified Payrolls to track the hours accumulated by TrANS Graduates and TrANS apprentices on WisDOT contracts. Payment under this ASP 1 is made based on the hours recorded off of the Certified Payrolls. Tracking may eventually include improved linkages with the WisDWD apprentice database, information from company and committee level sources.

TrANS is nondiscriminatory by regulation, and is a tool for optional use by contractors to address the underutilization of women and minorities as laborers and apprentices in our industry's skilled trades.

#### IV. TRANS TRAINING

As part of the contractor's equal employment opportunity affirmative action program, training shall be provided to employees enrolled in apprenticeship and on-the-job training programs as follows:

The contractor shall provide on-the-job training aimed at developing full journey workers in the type of trade or job classifications involved. In the event the contractor subcontracts a portion of the contract work, the contractor shall determine how many, if any, of the trainees are to be trained by the subcontractor provided, however, that the contractor shall retain the primary responsibility for meeting the training requirements imposed by this special provision. The contractor shall also insure that this training special provision is made applicable to such subcontract.

Training and upgrading of minorities and women toward journey workers status is a primary objective of this training special provision. Accordingly, the contractor shall make every effort to enroll minority trainees and women (e.g., by conducting systematic and direct recruitment through public and private sources likely to yield minority trainees and women trainees); to the extent such persons are available within a reasonable area of recruitment. The contractor will be given an opportunity and will be responsible for demonstrating the steps that they have taken in pursuance thereof, prior to determination as to whether the contractor is in compliance with this training special provision. This training commitment is not intended, and shall not be used, to discriminate against any applicant for training, whether a member of a minority group or not.

No employee shall be employed as a trainee in any classification in which they have successfully completed a training course leading to journey workers status or in which they have been employed as a journey worker. The contractor should satisfy this requirement by including appropriate questions in the employee application or by other suitable means. Regardless of the method used, the contractor's records should document the findings in each case.

#### V. APPRENTICESHIP TRAINING

The Federal Highway Administration's (FHWA) policy is to require full use of all available training and skill improvement opportunities to assure increased participation of minority groups, disadvantaged persons and women in all phases of the highway construction industry. The FHWA On-the-Job Training (OJT) Program requires the State transportation agencies (STAs) to establish apprenticeships and training programs targeted to move women, minorities, and disadvantaged individuals into journey-level positions to ensure that a competent workforce is available to meet highway construction hiring needs, and to address the historical underrepresentation of members of these groups in highway construction skilled crafts.

The OJT Supportive Services (OJT/SS) Program was established in Title 23 Code of Federal Regulations (CFR), Part 230) to supplement the OJT program and support STA training programs by providing services to highway construction contractors and assistance to highway construction apprentices and trainees. The primary objectives of OJT/SS are:

- (1) To increase the overall effectiveness of the State highway agencies' approved training programs.
- (2) To seek other ways to increase the training opportunities for women, minorities, and disadvantaged individuals.

The STAs are responsible for establishing procedures, subject to the availability of Surface Transportation and Bridge Funds under 23 U.S.C. §140(b) (Nondiscrimination), for the provision of supportive services with respect to training programs approved under 23 CFR, Part 230(a) (Equal Employment Opportunity on Federal and Federal-aid Construction Contracts – including Supportive Services).

The contractor and subcontractor shall maintain records to demonstrate compliance with these apprenticeship requirements. Reasonable exemptions and modifications to and from any or all of these requirements will be determined by the Wisconsin Department of Transportation-Civil Rights Office. A request for an exemption or modification, with justification, shall be made in writing, addressed to WisDOT Civil Rights Office, 4802 Sheboygan Avenue, P.O. Box 7965, Rm. 451, Madison, WI 53707.

### ADDITIONAL SPECIAL PROVISION 3 DISADVANTAGED BUSINESS ENTERPRISE PROGRAM

#### 1. Description

#### General

- a. The disadvantaged business enterprise (DBE) requirements of 49 CFR Part 26 apply to this contract. The department's DBE goal is shown on the cover of the bidding proposal. The contractor can meet the specified contract DBE goal by procuring services or materials from a DBE or by subcontracting work to a DBE. The department calculates the DBE participation as the dollar value of DBE participation included in the bid expressed as a percentage of the total contract bid amount.
- b. Under the contract, the contractor agrees to provide the assistance to participating DBE's in the following areas:
  - i. Produce accurate and complete quotes.
  - ii. Understand highway plans applicable to their work.
  - iii. Understand specifications and contract requirements applicable to their work.
  - iv. Understand contracting reporting requirements.
- c. The department encourages the contractor to assist and develop DBE firms to become fully knowledgeable contractors to successfully perform on its contracts.
- d. For information on the disadvantaged business program, visit the department's Civil Rights and Compliance Section website at:

http://wisconsindot.gov/Pages/doing-bus/civil-rights/dbe/default.aspx

#### 2. Definitions

- a. Interpret these terms, used throughout this additional special provision, as follows:
  - i. Bid Percentage: The DBE percentage indicated in the bidding proposal at the time of bid.
  - ii. **DBE**: A disadvantaged business enterprise (DBE) certified as a DBE by the department and included on the department's list of certified DBE's who are determined to be ready, willing and able.
  - iii. **DBE goal:** The amount of DBE participation expected in the contract as shown on the cover of the Highway Work Proposal.
  - iv. **Discretionary Goal:** A contractor assigned DBE goal, typically abbreviated as "Disc" on the cover of the Highway Work Proposal, which is enforced as committed.
  - v. **Manufacturer:** A firm that operates or maintains a factory or establishment that produces, on the premises, the materials, supplies, articles, or equipment required under the contract.
  - vi. **Supplier:** A firm that owns, operates, or maintains a store, warehouse, or other establishment in which the materials, supplies, articles or equipment required under the contract are bought, kept in stock, and regularly sold or leased to the public.
  - vii. **Voluntary Achievement:** The amount of DBE participation achieved and reported in the contract in excess of the assigned goal.

#### 3. DBE Percentage Required at Bid Submission

Indicate the bid percentage (i.e. 0% through 100%) of DBE participation on the completed bidding proposal, including projects with discretionary goals. For electronic submittals, show the percentage in the miscellaneous data folder, Item 3, DBE Percent. For paper submittals, show the percentage on the sheet included after the schedule of items. By submission of the bid, the bidder contractually

commits to DBE participation at or above the bid percentage, or certifies that they have utilized comprehensive good faith efforts to solicit and utilize DBE firms to meet the DBE participation requirements of this contract proposal, and that the bid percentage is reflective of these good faith efforts. If the bidder does not indicate the bid percentage of DBE participation on the completed bidding proposal, the department will consider the bid irregular and may reject the bid.

#### 4. Department's DBE Evaluation Process

#### a. Documentation Submittal

Within 10 business days after the notification of contract award, the contractor is to identify, by name, the DBE firms whose utilization is intended to satisfy this provision, the items of work of the DBE subcontract or supply agreement and the dollar value of those items of work by completing the Commitment to Subcontract to DBE Form [DT1506] and all necessary attachment A forms, as well as, Good Faith Waiver Form [DT1202] and supporting documentation as necessary. If the contractor fails to furnish the required forms within the specified time, the department may cancel the award. Delay in fulfilling this requirement is not a cause for extension of the contract time and shall not be used as a tool to delay execution.

#### i. Bidder Meets DBE Goal

If the bidder indicates that the contract DBE goal is met, after award and before execution, the department will evaluate the Commitment to Subcontract to DBE Form DT1506 and attachment A(s) to verify the actual DBE percentage achieved. If the DBE commitment is verified, the contract is eligible for execution with respect to the DBE commitment.

#### ii. Bidder Does Not Meet DBE Goal

- (1) If the bidder indicates a bid percentage on the Commitment to Subcontract to DBE Form [DT1506] that does not meet the contract DBE goal, the bidder must submit a Good Faith Waiver Form [DT1202] and supporting documentation. After award and before execution, the department will evaluate the bidder's DBE commitment and consider the bidder's good faith waiver request.
- (2) The department will review the bidder's good faith waiver request and notify the bidder of one of the following:
  - a. If the department grants a good faith waiver, the bid is eligible for contract execution with respect to DBE commitment.
  - b. If the department rejects the good faith waiver request, the department may declare the bid ineligible for execution. The department will provide a written explanation of why the good faith waiver request was rejected. The bidder may appeal the department's rejection as allowed under 7 a. & b.

#### 5. Department's Criteria for Good Faith Effort

The Code of Federal Regulations {CFR}, 49 CFR Part 26-Appendix A, is the guiding regulation concerning good faith efforts. However, the federal regulations do not define "good faith" but states that bidder must actively and aggressively attempt to meet the goal. The federal regulations are general and do not include every factor or effort that can be considered. As a result, each state must establish its own processes and consider the factors established in its own process when making a determination of good faith.

a. The department will only grant a good faith waiver if the bidder has made the effort, given the relevant circumstances under the contract that a bidder actively and aggressively seeking to meet the goal would make. The department will evaluate the bidder's good faith effort to determine whether a good faith waiver will be granted. The bidder must demonstrate, on the DT1202 that they

- have aggressively solicited DBE participation in an attempt to meet the contract DBE goal and attaining the stated DBE goal is not feasible.
- b. The department, in conjunction with industry stakeholders, has developed the following guidance for contractor good faith effort. The guidance and the attached appendices provide a framework for the actions required by all parties in the processing and evaluation of bidder's total efforts to achieve the project specific DBE goal prior to the bid letting date.
- c. Prime Contractors should:
  - i. <u>Document</u> all efforts and decisions made toward achieving the DBE goal on the contract. The bidder should use the Civil Rights & Compliance System [CRCS] and related WisDOTapproved DBE outreach tools, including the Bid Express Small Business Network, to foster DBE participation on all applicable contracts.
  - ii. Request quotes by identifying potential items to subcontract and solicit. Prime contractors are strongly encouraged to include in their initial contacts a single page including a detailed list of items for which they are accepting quotes, by project, within a letting. See attached sample entitled "Sample Contractor Solicitation Letter" in Appendix A. Prime contractors should also indicate a willingness to accept quotes in areas they are planning to perform themselves, as required by federal rules. In some cases, it might be appropriate to use DBE's to do work in a prime contractor's area of specialization.
    - (1) Solicit quotes through all reasonable and available means from certified DBE firms who match 'possible items to subcontract' and send copies to DBESS office, highlighting areas in which you are seeking quotes. Email is acceptable.
    - (2) SBN is the preferred outreach tool. <a href="https://www.bidx.com/wi/main">https://www.bidx.com/wi/main</a> Other acceptable means include postal mail, email, fax, phone call.
      - a. Primes must ask DBE firms for a response in their solicitations. See *Sample Contractors Solicitation Letter* in Appendix. This letter can be included as an attachment to the SBN sub-quote request.
      - b. Solicit quotes at least 10 calendar days prior to the letting date {ideally two Fridays before the letting} to allow DBE firms sufficient time to respond. Prime contractors should contact DBE firms early, asking them if they need help in putting together a quote, or helping to arrange for equipment needs, or solve other problems.
    - (3) Second solicitation should take place within 5 days
      - a. An email solicitation is highly recommended for this second solicitation
    - (4) Upon request, provide interested DBE firms with adequate information about plans, specifications and the requirements of the contract by letter, information session, email, phone call and/or referral.
    - (5) When potential exists, advise interested DBE firms on how to obtain bonding, line of credit or insurance as may be requested.
    - (6) Document DBE firm's interest in quoting by taking appropriate steps to follow up initial solicitation with:
      - a. Email to all prospective DBE firms in relevant work areas
      - b. Phone call log to DBE firms who express interest via written response or call.
      - c. Fax/letter confirmation
      - d. Copy of the DBE quotes
      - e. Signed copy of Bid Express SBN Record of Subcontractor Outreach Effort.

- d. <u>Evaluate DBE quotes</u> as documentation is critical if the prime does not utilize the DBE firm's quote for any reason.
  - i. Evaluate DBE firm's capability to perform 'possible items to subcontract' using legitimate reasons, including but not limited to, a discussion with the DBE firm regarding its capabilities prior to the bid letting. If lack of capacity is your reason for not utilizing the DBE quote, you are required to contact the DBE directly regarding their ability to perform the work indicated in the UCP directory as their work area [NAICS code]; only the work area and/or NAICS code listed in the UCP directory will be counted for DBE credit. Documentation of the conversation is required.
  - ii. In striving to meet a DBE conscious contract goal, prime contractors are expected to use DBE quotes that are responsive and reasonable. This includes DBE quotes that are not the low quote.
  - iii. **Special Circumstance:** Evaluation of DBE quotes with <u>tied bid items.</u> "Tied quotes are the condition in which a subcontractor submits quotes including multiple areas of expertise across multiple work areas noting that the items and price are tied. Typically this type of quoting represents a cost saving to the prime but is not clearly stated as a discount; tied quotes are usually presented as 'all or none' quote to the prime." When non-DBE subcontractors submit tied bid items in their quotes to the prime, the DBE firms' quote may seem not competitive. In such a case, the following steps are taken in comparing the relevant quotes. These are qualitative examples.
    - (1) Compare bid items common to both quotes, noting the reasonableness in the price comparison.
    - (2) Review quotes from other firms for the bid items not quoted by the DBE firm to see if combining both can provide the same competitive advantage that the tied bid items offered.
- e. After notification of contract award, submit **'Commitment to Subcontract'** form within the time period specified in the contract.
  - i. Provide the following information along with department form DT1202:
    - (1) The names, addresses, e-mail addresses, telephone numbers of DBE's contacted. The dates of both initial and follow-up contact. A printed copy of SBN solicitation is acceptable.
    - (2) A description of information provided to the DBE's regarding the plans, specifications, and estimated quantities for portions of the work to be performed by that DBE.
    - (3) Photocopies or electronic copies of all written solicitations to DBE's.
    - (4) Documentation of each quote received from a DBE and, if rejected, the reason for that rejection.
    - (5) Bidder attendance at any pre-solicitation or pre-bid meetings the department held to inform DBE's of participation opportunities available on the project.
- f. The department's DBE Support Services Office is available by phone, email or in writing to request assistance in meeting the DBE goal:

DBE Support Services Office 6150 Fond du Lac Ave. Milwaukee, WI 53218

Phone: 414-438-4583 / 608-266-6961

Fax: 414-438-5392

E-mail: DOTDBESupportServices@dot.wi.gov

#### 6. Bidder's Appeal Process

- a. A bidder can appeal the department's decision to deny the bidder's good faith waiver request. The bidder must provide written documentation refuting the specific reasons for rejection as stated in the department's rejection notice. The bidder may meet in person with the department if so requested. Failure to appeal within 7 calendar days after receiving the department's written notice of rejection of a good faith waiver request under constitutes a forfeiture of the bidder's right of appeal. If the bidder does not appeal, the department may declare the bid ineligible for execution.
- b. The department will appoint a representative, who did not participate in the original determination, to assess the bidder's appeal. The department will issue a written decision within 7 calendar days after the bidder presents all written and oral testimony. In that written decision, the department will explain the basis for finding that the bidder did or did not meet the contract DBE goal or make an adequate good faith effort to meet the contract DBE goal. The department's decision is final. If the department finds that the bidder did not meet the contract DBE goal or did not make adequate efforts to meet the DBE goal, the department may declare the bid ineligible for execution.

#### 7. Department's Criteria for DBE Participation

#### **Department's DBE List**

- a. The department maintains a DBE list on the department's website
   http://wisconsindot.gov/Documents/doing-bus/civil-rights/dbe/ucp-directory.xlsx
- b. The DBE office is also available to assist at 414-438-4583 or 608-266-6961.

#### 8. Counting DBE Participation

#### **Assessing DBE Work**

- a. The department will only count the DBE usage towards the contract DBE goal if the DBE firm is certified as a DBE by one of the unified certification program agencies. If a firm becomes DBE certified before entering into a subcontract, the department may consider that DBE usage towards the contract goal. The department only counts the value of the work a DBE actually performs towards the DBE goal. The department assesses the DBE work as follows:
- b. The department counts work performed by the DBE's own resources. The department includes the cost of materials and supplies the DBE obtains for the work. The department also includes the cost of equipment the DBE leases for the work. The department will not include the cost of materials, supplies, or equipment the DBE purchases or leases from the prime contractor or its affiliate, except the department will count non-project specific leases the DBE has in place before the work is advertised.
- c. The department counts fees and commissions the DBE charges for providing a bona fide professional, technical, consultant, or managerial services. The department also counts fees and commissions the DBE charges for providing bonds or insurance. The department will only count costs the engineer deems reasonable based on experience or prevailing market rates.
- d. If a DBE subcontracts work, the department counts the value of the subcontracted work only if the DBE's subcontractor is also a DBE.
- e. The contractor shall maintain records and may be required to furnish periodic reports documenting its performance under this item.
- f. It is the prime contractor's responsibility to determine the DBE's ability to perform the work with the use of the UCP directory.

#### 9. Commercially Useful Function

- a. The department counts expenditures of a DBE toward the DBE goal only if the DBE is performing a commercially useful function on that contract.
- b. A DBE is performing a commercially useful function if the following conditions are met:
- **c.** For contract work, the DBE is responsible for executing a distinct portion of the contract work and it is carrying out its responsibilities by actually performing, managing, and supervising that work.
- **d.** For materials and supplies, the DBE is responsible for negotiating price, determining quality and quantity, ordering, and paying for those materials and supplies.

#### 10. Trucking

All bidders are expected to adhere to the department's current trucking policy posted on the HCCI website

http://wisconsindot.gov/Documents/doing-bus/civil-rights/dbe/trucking-utilization-policy.pdf

#### 11. Manufacturers and Suppliers

The department counts material and supplies a DBE provides under the contract. The department will give full credit toward the DBE goal if the DBE is a manufacturer of those materials or supplies. The department will give 60 percent credit toward the DBE goal if the DBE is merely a supplier of those materials or supplies. It is the bidder's responsibility to find out if the DBE is considered a supplier or a manufacturer before listing them on Commitment to Subcontract to DBE form DT1506.

#### 12. DBE Prime

If the prime contractor is a DBE, the department will only count the work the contractor performs with its own forces, the work DBE subcontractors perform, and the work DBE suppliers or manufacturers perform.

#### 13. Joint Venture

If a DBE performs as a participant in a joint venture, the department will only count that portion of the total dollar value of the contract equal to that portion of the work that the DBE performs with its own forces.

#### 14. Mentor Protégé

- a. If a DBE performs as a participant in a mentor protégé agreement, the department will credit the portion of the work performed by the DBE protégé firm
- b. On every other project that the mentor protégé team identifies itself on.
- c. For no more than one half of the total contracted DBE goal on any WisDOT project.

#### 15. DBE Replacement

In the event a Prime Contractor needs to replace a DBE firm originally listed on the approved DBE Commitment Form DT1506, the Prime Contractor must comply with the department's DBE Replacement Policy located on the DBE page on the following web site:

http://wisconsindot.gov/Documents/doing-bus/civil-rights/dbe/policy-statement.pdf

#### 16. Changes to the approved DBE Commitment Form DT1506

If there are any changes to the approved Commitment to Subcontract to DBE Form DT1506, the prime contractor must submit a revised DBE Commitment Form DT1506 and relevant attachment A(s) to the DBE Programs Office within 5 business days.

#### 17. Contract Modifications

When additional opportunity is available by contract modifications, the Prime Contractor shall utilize DBE Subcontractors that were committed to equal work items, in the original contract.

#### 18. Payment

Costs for conforming to this Additional Special Provision (ASP) and any associated DBE requirements are incidental to the contract.

# APPENDIX A Sample Contractor Solicitation Letter Page 1 This sample is provided as a guide not a requirement

#### GFW SAMPLE MEMORANDUM

TO: DBE FIRMS

FROM: POTENTIAL PRIME CONTRACTOR OR MAJOR SUBCONTRACTOR

SUBJECT: REQUEST FOR DBE QUOTES

LET DATE & TIME

**DATE:** MONTH DAY YEAR

CC: DBE OFFICE ENGINEER

Our company is considering bidding on the projects indicated on the next page, as a prime and/or a subcontractor for the Wisconsin Department of Transportation Month-date-year Letting. Page 2 lists the projects and work items that we may subcontract for this letting. We are interested in obtaining subcontractor quotes for these projects and work categories. Also note that we are willing to accept quotes in areas we may be planning to perform ourselves as required by federal rules.

Please review page 2, respond whether you plan to quote, highlight the projects and work items you are interested in performing and return it via fax or email within 3 days. Plans, specifications and addenda are available through WisDOT at the DBE Support Services office or at the Highway Construction Contract Information (HCCI) site at http://roadwaystandards.dot.wi.gov/hcci/

Your quote should include all of the costs required to complete the items you propose to perform including labor, equipment, material, and related bonding or insurance. The quote should note items that you are DBE certified to perform, tied items, and any special terms. Page 2, with the indicated projects and items you plan to quote, should be used as a cover sheet for your quote.

Please make every effort to have your quotes into our office by time deadline the prior to the letting date. <u>Make</u> sure the correct letting date, project ID and proposal number, unit price and extension are included in your quote. We prefer quotes be sent via SBN but prime's alternative's are acceptable. Our office hours are include hours and days. Please call our office as soon as possible prior to the letting if you need information/clarification to prepare your quote at contact number.

If you wish to discuss or evaluate your quote in more detail, contact us after the contract is awarded. Status of the contract can be checked at WisDOT's HCCI site at <a href="http://roadwaystandards.dot.wi.gov/hcci/">http://roadwaystandards.dot.wi.gov/hcci/</a>

All questions should be directed to:

Project Manager, John Doe, Phone: (000) 123-4567

Email: Joe@joetheplumber.com

Fax: (000) 123-4657

# Sample Contractor Solicitation Letter Page 2 This sample is provided as a guide not a requirement

REQUEST FOR QUOTATION

Prime's Name:  Letting Date:  Project ID:							
Please check all that apply  Yes, we will be quoting on the No, we are not interested in quality Please take our name off your We have questions about quot	noting on the monthly DBI ing this letting	letting or it E contact li	s items refer	e contact n	ne at this nur		
Prime Contractor 's Contact Pers	son	7		DRE Co	ontractor Co	ntact Person	
DI .			DI				
Phone:		_	Phone				
Fax: Email:		_	Fax Email				
Eman.		_	Eman				
Please circle Proposal No.	the jobs and	l items you	will be qu	oting below	<b>w</b> 5	6	7
County							
WORK DESCRIPTION:							
Clear and Grub	X		X	X		X	X
Dump Truck Hauling	X		X	X		X	X
Curb & Gutter/Sidewalk, Etc.	X		X	X		X	X
Erosion Control Items	X		X	X		X	X
Signs and Posts/Markers	X	37	X	X		X	X
Traffic Control		X	X X	X		X X	X
Electrical Work/Traffic Signals Pavement Marking		X	X	X	X	X	X
Sawing Pavement		X	X	X	X	X	X
QMP, Base	X	X	Λ	X	X	X	X
Pipe Underdrain	X	71		X	21	24	24
Beam Guard	71			X	X	X	X
Concrete Staining							X
Trees/Shrubs	X						X
Again please make every effort to have you  We prefer quotes be sent via SBN but	orime's prefe	rred altern	ative's are	acceptable			
If there are further questions please direct	them to the	orime contra	actor's conta	ct person a	t phone nun	nber.	

# APPENDIX B BEST PRACTICES FOR PRIME CONTRACTOR & DBE SUBCONTRACTOR GOOD FAITH EFFORT

This list is not a set of requirements; it is a list of potential strategies

#### **Primes**

- ➤ Prime contractor open houses inviting DBE firms to see the bid "war room" or providing technical assistance
- Participate in speed networking and mosaic exercises as arranged by DBE office
- ➤ Host information sessions not directly associated with a bid letting;
- Participate in a formal mentor protégé or joint venture with a DBE firm
- > Participate in WisDOT advisory committees i.e. TRANSAC, or Mega Project committee meetings
- Facilitate a small group DBE 'training session' Clarifying how your firm prepares for bid letting, evaluates subcontractors, preferred qualifications and communication methods
- Encourage subcontractors to solicit and highlight DBE participation in their quotes to you
- P Quality of communication, not quantity creates the best results. Contractors should do as thorough a job as possible in communicating with DBE firms before the bid and provide any assistance requested to assure best possible bid.

#### DBE

- ➤ DBE firms should contact primes as soon as possible with questions regarding their quotes or bid; seven days prior is optimal.
- ➤ Continually check for contract addendums on the HCCI website through the Thursday prior to letting to stay abreast of changes.
- Review the status of contracts on the HCCI website reviewing the 'apparent low bidder' list, and bid tabs at a minimum.
- Prepare a portfolio or list of related projects and prime and supplier references; be sure to note transportation-related projects of similar size and scope, firm expertise and staffing.
- Participate in DBE office assessment programs
- Participate on advisory and mega-project committees
- Sign up to receive the DBE Contracting Update
- > Consider membership in relevant industry or contractor organizations
- Active participation is a must. Quote as many projects as you can reasonably work on; quoting the primes and bidding as a prime with the department are the only ways to get work.

# APPENDIX C Types of Efforts considered in determining GFE

#### This list represents concepts being assessed; analysis requires additional steps

- 1. Whether the contractor attended any pre-solicitation or pre-bid meetings that were scheduled by WisDOT to inform DBEs of contracting and subcontracting opportunities;
- 2. Whether the contractor provided written notice to a reasonable number of specific DBEs that their interest in the contract was being solicited, in sufficient time to allow the DBEs to participate effectively;
- 3. Whether the contractor followed up initial solicitations of interest by contacting DBEs to determine if the DBEs were interested; returned the phone calls of interested DBE firms.
- 4. Whether the contractor selected portions of the work to be performed by DBEs in order to increase the likelihood of meeting the DBE goal;
- 5. Whether the contractor provided interested DBEs with adequate information about the plans, specifications and requirements of the contract;
- 6. Whether the contractor negotiated in good faith with interested DBEs, not rejected DBEs as unqualified without sound reasons based on a thorough investigation of their capabilities;
- 7. Whether the contractor made efforts to assist interested DBEs in being more competitive.
- 8. Whether the contractor effectively used the services of available minority community organizations: minority contractors groups, local, state, and Federal minority business assistance offices, and other organizations that provide assistance to small businesses and DBE firms.
- 9. Whether Prime used CRCS to identify DBE who specialize in relevant work areas.
- 10. Whether the contractor used available resources including contacting the DBE office, using WisDOT's website
- 11. Whether the contractor returned calls of firms expressing interest in a timely manner.

#### **APPENDIX D**

### Good Faith Effort Evaluation Guidance Excerpt from Appendix A of 49 CFR Part 26

#### APPENDIX A TO PART 26 -- GUIDANCE CONCERNING GOOD FAITH EFFORTS

- I. When, as a recipient, you establish a contract goal on a DOT assisted contract, a bidder must, in order to be responsible and/or responsive, make good faith efforts to meet the goal. The bidder can meet this requirement in either of two ways. First, the bidder can meet the goal, documenting commitments for participation by DBE firms sufficient for this purpose. Second, even if it doesn't meet the goal, the bidder can document adequate good faith efforts. This means that the bidder must show that it took all necessary and reasonable steps to achieve a DBE goal or other requirement of this part which, by their scope, intensity, and appropriateness to the objective, could reasonably be expected to obtain sufficient DBE participation, even if they were not fully successful.
- II. In any situation in which you have established a contract goal, part 26 requires you to use the good faith efforts mechanism of this part. As a recipient, it is up to you to make a fair and reasonable judgment whether a bidder that did not meet the goal made adequate good faith efforts. It is important for you to consider the quality, quantity, and intensity of the different kinds of efforts that the bidder has made. The efforts employed by the bidder should be those that one could reasonably expect a bidder to take if the bidder were actively and aggressively trying to obtain DBE participation sufficient to meet the DBE contract goal. Mere pro forma efforts are not good faith efforts to meet the DBE contract requirements. We emphasize, however, that your determination concerning the sufficiency of the firm's good faith efforts is a judgment call: meeting quantitative formulas is not required.
- III. The Department also strongly cautions you against requiring that a bidder meet a contract goal (i.e., obtain a specified amount of DBE participation) in order to be awarded a contract, even though the bidder makes an adequate good faith efforts showing. This rule specifically prohibits you from ignoring bona fide good faith efforts.
- IV. The following is a list of types of actions which you should consider as part of the bidder's good faith efforts to obtain DBE participation. It is not intended to be a mandatory checklist, nor is it intended to be exclusive or exhaustive. Other factors or types of efforts may be relevant in appropriate cases.
  - A. Soliciting through all reasonable and available means (e.g. attendance at pre-bid meetings, advertising and/or written notices) the interest of all certified DBEs who have the capability to perform the work of the contract. The bidder must solicit this interest within sufficient time to allow the DBEs to respond to the solicitation. The bidder must determine with certainty if the DBEs are interested by taking appropriate steps to follow up initial solicitations.
  - B. Selecting portions of the work to be performed by DBEs in order to increase the likelihood that the DBE goals will be achieved. This includes, where appropriate, breaking out contract work items into economically feasible units to facilitate DBE participation, even when the prime contractor might otherwise prefer to perform these work items with its own forces.
  - C. Providing interested DBEs with adequate information about the plans, specifications, and requirements of the contract in a timely manner to assist them in responding to a solicitation.

- D. (1) Negotiating in good faith with interested DBEs. It is the bidder's responsibility to make a portion of the work available to DBE subcontractors and suppliers and to select those portions of the work or material needs consistent with the available DBE subcontractors and suppliers, so as to facilitate DBE participation. Evidence of such negotiation includes the names, addresses, and telephone numbers of DBEs that were considered; a description of the information provided regarding the plans and specifications for the work selected for subcontracting; and evidence as to why additional agreements could not be reached for DBEs to perform the work.
  - (2) A bidder using good business judgment would consider a number of factors in negotiating with subcontractors, including DBE subcontractors, and would take a firm's price and capabilities as well as contract goals into consideration. However, the fact that there may be some additional costs involved in finding and using DBEs is not in itself sufficient reason for a bidder's failure to meet the contract DBE goal, as long as such costs are reasonable. Also, the ability or desire of a prime contractor to perform the work of a contract with its own organization does not relieve the bidder of the responsibility to make good faith efforts. Prime contractors are not, however, required to accept higher quotes from DBEs if the price difference is excessive or unreasonable.
- E. Not rejecting DBEs as being unqualified without sound reasons based on a thorough investigation of their capabilities. The contractor's standing within its industry, membership in specific groups, organizations, or associations and political or social affiliations (for example union vs. non-union employee status) are not legitimate causes for the rejection or non solicitation of bids in the contractor's efforts to meet the project goal.
- F. Making efforts to assist interested DBEs in obtaining bonding, lines of credit, or insurance as required by the recipient or contractor.
- G. Making efforts to assist interested DBEs in obtaining necessary equipment, supplies, materials, or related assistance or services.
- H. Effectively using the services of available minority/women community organizations; minority/women contractors' groups; local, state, and Federal minority/women business assistance offices; and other organizations as allowed on a case-by-case basis to provide assistance in the recruitment and placement of DBEs.
- V. In determining whether a bidder has made good faith efforts, you may take into account the performance of other bidders in meeting the contract. For example, when the apparent successful bidder fails to meet the contract goal, but others meet it, you may reasonably raise the question of whether, with additional reasonable efforts, the apparent successful bidder could have met the goal. If the apparent successful bidder fails to meet the goal, but meets or exceeds the average DBE participation obtained by other bidders, you may view this, in conjunction with other factors, as evidence of the apparent successful bidder having made good faith efforts.

# Appendix E Small Business Network [SBN] Overview

The Small Business Network is a part of the Bid Express\* service that was created to ensure that prime bidders have a centralized online location to find subs - including small and disadvantaged business enterprises (DBEs). It is available for prime bidders to use as part of their Basic Service subscription. Within the Small Business Network, **Prime Contractors** can:

#### 1. Easily select proposals, work types and items:

a. After adding applicable work types, select items that you wish to quote. Enter the sub-quote quantities and add comments, if desired. Adding or removing items and work types can be done quickly. If needed, you can save the sub-quote for completion at a later time.

#### 2. Create sub-quotes for the subcontracting community:

- a. Create sub-quotes with ease using the intuitive sub-quote creator. In seven short steps, you can rapidly create a custom sub-quote directed to all subcontractors that bid on the applicable work types. Steps include: provide contact information and sub-quote expiration date, select letting and proposal, add work types and items, specify terms and conditions, upload attachments, and select vendors.
- b. Create a sub-quote to send to subcontractors or suppliers that lists the items in a proposal that you want quoted
- c. Create an unlimited number of sub-quotes for items you want quoted, and optionally mark them as a DBE-preferred request
- d. Add attachments to sub-quotes

#### 3. View sub-quote requests & responses:

- a. After logging into the Bid Express service, you can quickly review all of your sub-quote requests and all unsolicited sub-quote requests from subcontractors. To simplify the Small Business Network home screen, sub-quote requests can be hidden with one click if they are not applicable.
- b. View or receive unsolicited sub-quotes that subcontractors have posted, complete with terms, conditions and pricing

#### 4. View Record of Subcontractor Outreach Effort:

- a. For each sub-quote produced, a *Record of Subcontractor Outreach Effort* is generated that shows the response statistics for a particular sub-quote. If accepted by the letting agency, this report may serve as proof of a "Good Faith" effort in reaching out to the DBE community.
- b. Easily locate pre-qualified and certified small and disadvantaged businesses
- c. Advertise to small and disadvantaged businesses more efficiently and cost effectively
- d. Document your interactions with subs/DBEs by producing an Outreach Report (may be accepted as proof of DBE outreach at the discretion of each agency)

The Small Business Network is a part of the Bid Express\* service that was created to ensure that small businesses have a centralized area to access information about upcoming projects. It can help small businesses learn more about opportunities, compete more effectively, network with other contractors and subcontractors, and win more jobs.

#### 1. View and reply to sub-quote requests from primes:

a. After logging into the Bid Express service, you can quickly review all incoming sub-quote requests and all unsolicited sub-quotes created by your company. Receive notifications by selected work type. To simplify on the Small Business Network home screen, sub-quote requests can be filtered by work types relevant to your interests, or hidden with one click if they are not applicable.

#### 2. Select items when responding to sub-quote requests from primes:

- a. You have the freedom to choose and price any number of items when responding to a sub-quote request. Quantities can be modified, and per-item comments are also available.
- View requests for sub-quotes for work that primes have posted for projects they are bidding, add your pricing, terms, and conditions, and submit completed sub-quotes to the requesting primes
- c. Add attachments to a sub-quote

#### 3. Create and send unsolicited sub-quotes to specific contractors:

a. Create unsolicited sub-quotes with ease using the intuitive sub-quote creator. In eight short steps, you can rapidly create a custom sub-quote directed at any number of specific vendors of your choosing. Steps include: provide contact information and sub-quote expiration date, select letting and proposal, add work types and items, specify terms and conditions, upload attachments, and select vendors.

#### 4. Easily select and price items for unsolicited sub-quotes:

- a. After adding applicable work types, select items that you wish to quote. The extended price calculates automatically, cutting out costly calculation errors. Comments can be provided on an per-item basis as well.
- b. Create an unsolicited sub-quote that lists the items from a proposal that you want to quote, include pricing, terms and conditions, and send it to selected prime/plan holder
- c. Add attachments to a sub-quote
- d. Add unsolicited work items to sub-quotes that you are responding to

#### 5. Easy Access to Valuable Information

- a. Receive a confirmation that your sub-quote was opened by a prime
- b. View Bid Tab Analysis data from past bids, including the high, average and low prices of items.
- c. View important notices and publications from DOT targeted to small and disadvantaged businesses

#### 6. Accessing Small Business Network for WisDOT contracting opportunities

- a. If you are a contractor not yet subscribing to the Bid Express service, go to **www.bidx.com** and select "Order Bid Express." The Small Business Network is a part of the Bid Express Basic Service.
- b. DBE firms can request a Bid Express Small Business Network Account at no cost by calling 414-438-4588

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#### 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:

#### 440.3.5.2 Corrective Actions for Localized Roughness

Replace paragraph two with the following effective with the September 2016 letting:

(2) The engineer will not direct corrective action or assess a pay reduction for an area of localized roughness without physically riding that work. The engineer will not direct corrective action on bridges without authorization from the department's bureau of structures.

#### 450.3.2.1 General

Replace the entire text with the following effective with the June 2016 letting:

#### 450.3.2.1.1 Preparation and Paving Operations

- (1) Do not place asphaltic mixture when the air temperature approximately 3 feet above grade, in shade, and away from artificial heat sources is less than 36 F for upper layers or 32 F for lower layers unless the engineer allows in writing. The contractor should place HMA pavement for projects in the northern asphalt zone between May 1 and October 15 inclusive and for projects in the southern asphalt zone between April 15 and November 1 inclusive. CMM 4-53 figure 2 defines asphalt zones. Notify the engineer at least one business day before paving.
- (2) Unless the contract specifies otherwise, conform to the following:
  - Keep the road open to all traffic during construction.
  - Prepare the existing foundation for treatment as specified in 211.
  - Incorporate loose roadbed aggregate as a part of preparing the foundation, in shoulder construction, or dispose of as the engineer approves.
- (3) Place asphaltic mixture only on a prepared, firm, and compacted base, foundation layer, or existing pavement substantially surface-dry and free of loose and foreign material. Do not place over frozen subgrade or base, or where the roadbed is unstable.

#### 450.3.2.1.2 Cold Weather Paving

#### 450.3.2.1.2.1 General

- (1) Conform to these cold weather paving provisions for work performed under the following:
  - The 460 HMA Pavement bid items.
  - The 465 Asphaltic Surface bid items.
  - Special provisions that require placing mixture conforming to the contract requirements under 460 for HMA pavement or under 465 for asphaltic surface.

#### 450.3.2.1.2.2 Cold Weather Paving Plan

- (1) Submit a written cold weather paving plan to the engineer at the preconstruction meeting. In that plan outline material, operational, and equipment changes for paving when the air temperature approximately 3 feet above grade, in shade, and away from artificial heat sources is less than 40 F. Include the following:
  - Use a department-accepted HMA mix design that incorporates a warm mix additive from the department's approved products list. Do not use a foaming process that introduces water into the mix.
  - Identify the warm mix additive and dosage rate.
  - Identify modifications to the compaction process and when to use them.
- (2) Engineer written acceptance is required for the cold weather paving plan. Engineer acceptance of the plan does not relieve the contractor of responsibility for the quality of HMA pavement placed in cold weather except as specified in 450.5.2(3).

#### 450.3.2.1.2.3 Cold Weather Paving Operations

(1) Do not place asphaltic mixture when the air temperature approximately 3 feet above grade, in shade, and away from artificial heat sources is less than 40 F unless a valid engineer-accepted cold weather paving plan is in effect.

(2) If the national weather service forecast for the construction area predicts ambient air temperature less than 40 F at the projected time of paving within the next 24 hours, confirm or submit revisions to the cold weather paving plan for engineer validation. Update the plan as required to accommodate the conditions anticipated for the next day's operations. Upon validation of the plan, the engineer will allow paving for the next day. Once in effect, pave conforming to the engineer-accepted cold weather paving plan for the balance of that work day or shift regardless of the temperature at the time of paving.

#### 450.4 Measurement

Add the following as paragraph three effective with the June 2016 letting:

(3) The department will measure HMA Cold Weather Paving by the ton of HMA mixture placed conforming to an engineer-accepted cold weather paving plan.

#### 450.5 Payment

Replace the entire text with the following effective with the June 2016 letting:

#### 450.5.1 General

- (1) All costs of furnishing, maintaining, and operating the truck scale or other weighing equipment and furnishing the weigh tickets are incidental to the contract.
- (2) Nonconforming material allowed to remain in place is subject to price adjustment under 105.3.2.
- (3) Full-depth sawing to remove integrally placed safety edge where not required is incidental to the contract.
- (4) The contractor is responsible for the quality of HMA placed in cold weather.

#### 450.5.2 Cold Weather Paving

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

 ITEM NUMBER
 DESCRIPTION
 UNIT

 450.4000
 HMA Cold Weather Paving
 TON

- (2) Payment for HMA Cold Weather Paving is full compensation for additional materials and equipment specified for cold weather paving under 450.3.2.1.2 including costs for preparing, administering, and following the contractor's cold weather paving plan. The department will not pay for HMA Cold Weather Paving for HMA placed as follows:
  - If the lot density is less than the minimum specified in table 460-3 for mixture placed under 460.
  - On days when the department is assessing liquidated damages.
- (3) If because of an excusable compensable delay under 108.10.3, the engineer directs the contractor to pave when the temperature is less than 36 F for the upper layer or less than 32 F for lower layers, the department:
  - Will relieve the contractor of responsibility for damage and defects the engineer attributes to cold weather paving.
  - Will not assess disincentives for density or ride.
- (4) If HMA pavement is placed under 450.3.2.1.2 and the HMA Cold Weather Paving bid item is not in the contract, the department will pay for the additional costs specified in 450.5.2(2) as extra work. The department will pay separately for providing HMA pavement and HMA surface under 460.5, 465.5, and the contract special provisions.

#### 460.3.4 Cold Weather Paving

Delete the entire subsection effective with the June 2016 letting:

#### 460.5.1 General

Replace the entire text with the following effective with the June 2016 letting:

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

<u>ITEM NUMBER</u> <u>DESCRIPTION</u> <u>UNIT</u>

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#### Effective with September 2016 Letting

AS	P-	6
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460.5000 - 5999	HMA Pavement (gradation) LT (binder)(designation)	TON
460.6000 - 6999	HMA Pavement (gradation) MT (binder)(designation)	TON
460.7000 - 7999	HMA Pavement (gradation) HT (binder)(designation)	TON
460.8000 - 8999	HMA Pavement (gradation) SMA (binder)(designation)	TON
460.2000	Incentive Density HMA Pavement	DOL

#### 460.5.2.2 Disincentive for HMA Pavement Density

Replace paragraph two with the following effective with the June 2016 letting:

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

#### 460.5.2.4 Cold Weather Paving

Delete the entire subsection effective with the June 2016 letting:

#### 501.2.6 Fly Ash

Replace paragraph four with the following effective with the July 2016 letting:

(4) Use only one source of fly ash for a bid item of work under the contract, unless the engineer directs or allows otherwise in writing.

#### 502.3.7.8 Floors

Replace paragraph sixteen with the following effective with the September 2016 letting:

(16) The finished bridge floor shall conform to the surface test specified in 415.3.10. The engineer will not direct corrective grinding without authorization from the department's bureau of structures.

#### 550.5.2 Piling

Add the following as paragraph three effective with the December 2015 letting:

(3) The department will not entertain a change order request for a differing site condition under 104.2.2.2 or for a quantity change under 104.2.2.4.3 for the Piling bid items. Instead the department will adjust pay under the Piling Quantity Variation administrative item if the total driven length of each size is less than 85 percent of, or more than 115 percent of the contract quantity as follows:

Percent of Contract Length Driven

Pay Adjustment

< 85

(85% contract length - driven length) x 20% unit price

> 115

(driven length - 115% contract length) x 5% unit price

#### 643.2.1 General

Replace paragraph two with the following effective with the December 2015 letting:

(2) Use reflective sheeting from the department's approved products list on barricades, drums, and flexible tubular marker posts.

#### 715.3.1.2.1 General

Replace paragraph one with the following effective with the July 2016 letting:

(1) Designate the location and size of all lots before placing concrete. Ensure that no lot contains concrete of more than one mix design or placement method defined within 715.3.1.2 as follows:

Mix design change A modification to the mix requiring the engineer's approval under 710.4(5).

> For paving mixes, a source change under item 1 of 710.4(5) for fly ash of the same class that does not require a modification under items 2 through 4 of 710.4(5) does not constitute a mix design change.

**Placement method** Either slip-formed, not slip-formed, or placed under water.

#### **Errata**

Make the following corrections to the standard specifications:

#### 460.2.7 HMA Mixture Design - TABLE 460-2 MIXTURE REQUIREMENTS

Correct errata in the Fractured Faces row of table 460-2 to reference ASTM D5821.

Fractured Faces (ASTM D5821) (one face/2 face, % by count) 60 /	65 /	75 / 60 85 /	80 98 / 90	100/100	100/90	
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#### Correct errata in footnote two of table 460-2 to reference AASHTO M323.

[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.

#### 641.2.9 Overhead Sign Supports

Correct errata adding back accidentally deleted paragraphs one through three.

- (1) Provide commercially fabricated overhead sign supports conforming to AASHTO design and fabrication standards for structural supports for highway signs, luminaires, and traffic signals. Use a design life of 50 years with a wind importance factor of 1.00. Design to withstand a 3 second gust wind speed of 90 mph. Do not use the methods of appendix C of those AASHTO standards.
- (2) Design structures, listed as applicable structure types in the AASHTO standards, to the fatigue category criteria as follows:
  - 1. Structures carrying variable message signs:
    - Category I criteria for structures over all roadway types.
  - 2. Structures carrying type II or III signs:
    - Category I criteria for structures used over highways and free flow ramps.
    - Category II criteria for structures with arms greater than 30 feet used over local roads and city streets.
    - Category III criteria for structures with arms 30 feet or less used over local roads and city streets.
- (3) Use the posted speed limit of the roadway beneath the structure for truck-induced gusts.
- (4) Submit shop drawings identified by structure number, design computations, and material specifications, to the engineer before erecting sign supports. Provide tightening procedures for mast arm or luminaire arm to pole shaft connections on the shop drawings. Have a professional engineer registered in the state of Wisconsin sign, seal, and date the shop drawings and certify that the design conforms to AASHTO standards and the contract.
- (5) Provide steel pole shafts and mast arms zinc coated according to ASTM A123. Provide tapered pole and arm shafts with a minimum taper of 0.14 inch per foot for single-member vertical and single-member horizontal structure components. Provide bolts and other hardware conforming to 641.2.2.

#### **ADDITIONAL SPECIAL PROVISION 7**

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

# ADDITIONAL SPECIAL PROVISION 9 Electronic Certified Payroll Submittal

(1) Use the department's Civil Rights Compliance System (CRCS) to submit certified payrolls electronically. Details are available online through the department's highway construction contractor 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, as well as all trucking firms, submit their weekly certified payrolls electronically through CRCS. These payrolls are due within seven calendar days following the close of the payroll period. Every firm providing physical labor towards completing the project is a subcontractor under this special provision.
- (3) Upon receipt of contract execution, promptly make all affected firms aware of the requirements under this special provision and arrange for them to receive CRCS training as they are about to begin payrolls. The department will provide training either in a classroom setting at one of our regional offices or by telephone. Contact Tess Mulrooney at 608-267-4489 to schedule the training.
- (4) The department will reject all paper submittals of forms DT-1816 and DT-1929 for information required under this special provision. All costs for conforming to this special provision are incidental to the contract.
- (5) Firms wishing to export payroll data from their computer system into CRCS should have their payroll coordinator send several sample electronic files to Tess two months before a payroll needs to be submitted. Not every contractor's payroll system is capable of producing export files. For details, see pages 17-22 of the CRCS System Background Information manual available online on the Labor, Wages, and EEO Information page at:

http://wisconsindot.gov/Documents/doing-bus/civil-rights/labornwage/crcs-payroll-manual.pdf

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### REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS

- I. General
- II. Nondiscrimination
- III. Nonsegregated Facilities
- IV. Davis-Bacon and Related Act Provisions
- Contract Work Hours and Safety Standards Act Provisions
- VI. Subletting or Assigning the Contract
- VII. Safety: Accident Prevention
- VIII. False Statements Concerning Highway Projects
- Implementation of Clean Air Act and Federal Water Pollution Control Act
- Compliance with Governmentwide Suspension and Debarment Requirements
- Certification Regarding Use of Contract Funds for Lobbying

#### **ATTACHMENTS**

A. Employment and Materials Preference for Appalachian Development Highway System or Appalachian Local Access Road Contracts (included in Appalachian contracts only)

#### I. GENERAL

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under Title 23 (excluding emergency contracts solely intended for debris removal). The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services).

The applicable requirements of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The prime contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Form FHWA-1273 must be included in all Federal-aid designbuild contracts, in all subcontracts and in lower tier subcontracts (excluding subcontracts for design services, purchase orders, rental agreements and other agreements for supplies or services). The design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Contracting agencies may reference Form FHWA-1273 in bid proposal or request for proposal documents, however, the Form FHWA-1273 must be physically incorporated (not referenced) in all contracts, subcontracts and lower-tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services related to a construction contract).

2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract.

- 3. A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.
- 4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by convicts who are on parole, supervised release, or probation. The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors.

#### II. NONDISCRIMINATION

The provisions of this section related to 23 CFR Part 230 are applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more. The provisions of 23 CFR Part 230 are not applicable to material supply, engineering, or architectural service contracts.

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR 60, 29 CFR 1625-1627, Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The contractor and all subcontractors must comply with: the requirements of the Equal Opportunity Clause in 41 CFR 60-1.4(b) and, for all construction contracts exceeding \$10,000, the Standard Federal Equal Employment Opportunity Construction Contract Specifications in 41 CFR 60-4.3.

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR 60, and 29 CFR 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), and Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The following provision is adopted from 23 CFR 230, Appendix A, with appropriate revisions to conform to the U.S. Department of Labor (US DOL) and FHWA requirements.

1. Equal Employment Opportunity: Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (28 CFR 35, 29 CFR 1630, 29 CFR 1625-1627, 41 CFR 60 and 49 CFR 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140 shall constitute the EEO and specific affirmative action standards for the contractor's project activities under

this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

- a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract.
- b. The contractor will accept as its operating policy the following statement:

"It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, pre-apprenticeship, and/or on-the-job training."

- 2. EEO Officer: The contractor will designate and make known to the contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active EEO program and who must be assigned adequate authority and responsibility to do so.
- 3. Dissemination of Policy: All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:
- a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer.
- b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.
- c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minorities and women.
- d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.
- e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

- **4. Recruitment:** When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.
- a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish with such identified sources procedures whereby minority and women applicants may be referred to the contractor for employment consideration.
- b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.
- c. The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such applicants will be discussed with employees.
- **5. Personnel Actions:** Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, national origin, age or disability. The following procedures shall be followed:
- a. The contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.
- b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.
- c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.
- d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of their avenues of appeal.

#### 6. Training and Promotion:

a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are

applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.

- b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).
- c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.
- d. The contractor will periodically review the training and promotion potential of employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.
- 7. Unions: If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:
- a. The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.
- b. The contractor will use good faith efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age or disability.
- c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the contracting agency and shall set forth what efforts have been made to obtain such information.
- d. In the event the union is unable to provide the contractor with a reasonable flow of referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age or disability; making full efforts to obtain qualified and/or qualifiable minorities and women. The failure of a union to provide sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.
- 8. Reasonable Accommodation for Applicants / Employees with Disabilities: The contractor must be familiar

with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established there under. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.

- 9. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment: The contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.
- a. The contractor shall notify all potential subcontractors and suppliers and lessors of their EEO obligations under this contract.
- b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

#### 10. Assurance Required by 49 CFR 26.13(b):

- a. The requirements of 49 CFR Part 26 and the State DOT's U.S. DOT-approved DBE program are incorporated by reference.
- b. The contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the contracting agency deems appropriate.
- 11. Records and Reports: The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.
- a. The records kept by the contractor shall document the following:
- (1) The number and work hours of minority and nonminority group members and women employed in each work classification on the project;
  - (2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and
  - (3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women;
- b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on <a href="Form FHWA-1391">Form FHWA-1391</a>. The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor

will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

#### **III. NONSEGREGATED FACILITIES**

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more.

The contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color, religion, sex, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location, under the contractor's control, where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

#### IV. DAVIS-BACON AND RELATED ACT PROVISIONS

This section is applicable to all Federal-aid construction projects exceeding \$2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size). The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. Contracting agencies may elect to apply these requirements to other projects.

The following provisions are from the U.S. Department of Labor regulations in 29 CFR 5.5 "Contract provisions and related matters" with minor revisions to conform to the FHWA-1273 format and FHWA program requirements.

#### 1. Minimum wages

a. All laborers and mechanics employed or working upon the site of the work, will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions

of paragraph 1.d. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph 1.b. of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

- b.(1) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:
  - (i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and
  - (ii) The classification is utilized in the area by the construction industry; and
  - (iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.
  - (2) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.
  - (3) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. The Wage and Hour Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or

will notify the contracting officer within the 30-day period that additional time is necessary.

- (4) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs 1.b.(2) or 1.b.(3) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.
- c. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.
- d. If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

#### 2. Withholding

The contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor under this contract, or any other Federal contract with the same prime contractor, or any other federallyassisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the contracting agency may, after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

#### 3. Payrolls and basic records

a. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-

Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

- b.(1) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the contracting agency. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee ( e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at http://www.dol.gov/esa/whd/forms/wh347instr.htm or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the contracting agency for transmission to the State DOT, the FHWA or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the contracting agency..
- (2) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:
  - (i) That the payroll for the payroll period contains the information required to be provided under §5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under §5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;
  - (ii) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;
  - (iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

- (3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH–347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(2) of this section.
- (4) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.
- c. The contractor or subcontractor shall make the records required under paragraph 3.a. of this section available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the FHWA may, after written notice to the contractor, the contracting agency or the State DOT, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

#### 4. Apprentices and trainees

a. Apprentices (programs of the USDOL).

Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice.

The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

b. Trainees (programs of the USDOL).

Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration.

The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration.

Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

c. Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.

d. Apprentices and Trainees (programs of the U.S. DOT).

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeymen shall not be greater than permitted by the terms of the particular program.

- **5. Compliance with Copeland Act requirements.** The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.
- **6. Subcontracts.** The contractor or subcontractor shall insert Form FHWA-1273 in any subcontracts and also require the subcontractors to include Form FHWA-1273 in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.
- **7. Contract termination: debarment.** A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.
- 8. Compliance with Davis-Bacon and Related Act requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.
- 9. Disputes concerning labor standards. Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

#### 10. Certification of eligibility.

- a. By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
- b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
- c. The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

### V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

The following clauses apply to any Federal-aid construction contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.

- 1. Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.
- 2. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (1.) of this section, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1.) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1.) of this section.
- 3. Withholding for unpaid wages and liquidated damages. The FHWA or the contacting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2.) of this section.
- **4. Subcontracts.** The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1.) through (4.) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1.) through (4.) of this section.

#### VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System.

- 1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).
- a. The term "perform work with its own organization" refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions:
- the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;
- (2) the prime contractor remains responsible for the quality of the work of the leased employees;
- (3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and
- (4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.
- b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract.
- 2. The contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.
- 3. The contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.
- 4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is

evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.

5. The 30% self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements.

#### VII. SAFETY: ACCIDENT PREVENTION

- This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.
- 1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract.
- 2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).
- 3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C.3704).

### VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR 635) in one or more places where it is readily available to all persons concerned with the project:

18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 1, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined under this title or imprisoned not more than 5 years or both."

### IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

By submission of this bid/proposal or the execution of this contract, or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

- 1. That any person who is or will be utilized in the performance of this contract is not prohibited from receiving an award due to a violation of Section 508 of the Clean Water Act or Section 306 of the Clean Air Act.
- 2. That the contractor agrees to include or cause to be included the requirements of paragraph (1) of this Section X in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements.

## X. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost \$25,000 or more – as defined in 2 CFR Parts 180 and 1200.

#### 1. Instructions for Certification – First Tier Participants:

- a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.
- b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this

covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction.

- c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default.
- d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
- e. The terms "covered transaction," "debarred,"
  "suspended," "ineligible," "participant," "person," "principal,"
  and "voluntarily excluded," as used in this clause, are defined
  in 2 CFR Parts 180 and 1200. "First Tier Covered
  Transactions" refers to any covered transaction between a
  grantee or subgrantee of Federal funds and a participant (such
  as the prime or general contract). "Lower Tier Covered
  Transactions" refers to any covered transaction under a First
  Tier Covered Transaction (such as subcontracts). "First Tier
  Participant" refers to the participant who has entered into a
  covered transaction with a grantee or subgrantee of Federal
  funds (such as the prime or general contractor). "Lower Tier
  Participant" refers any participant who has entered into a
  covered transaction with a First Tier Participant or other Lower
  Tier Participants (such as subcontractors and suppliers).
- f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.
- g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.
- h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (<a href="https://www.epls.gov/">https://www.epls.gov/</a>), which is compiled by the General Services Administration.

- i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- j. Except for transactions authorized under paragraph (f) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

\* \* \* \* \*

## 2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:

- a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:
- (1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency;
- (2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
- (3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (a)(2) of this certification; and
- (4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.
- b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

#### 2. Instructions for Certification - Lower Tier Participants:

(Applicable to all subcontracts, purchase orders and other lower tier transactions requiring prior FHWA approval or estimated to cost \$25,000 or more - 2 CFR Parts 180 and 1200)

- a. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.
- b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which

this transaction originated may pursue available remedies, including suspension and/or debarment.

- c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.
- d. The terms "covered transaction," "debarred,"
  "suspended," "ineligible," "participant," "person," "principal,"
  and "voluntarily excluded," as used in this clause, are defined
  in 2 CFR Parts 180 and 1200. You may contact the person to
  which this proposal is submitted for assistance in obtaining a
  copy of those regulations. "First Tier Covered Transactions"
  refers to any covered transaction between a grantee or
  subgrantee of Federal funds and a participant (such as the
  prime or general contract). "Lower Tier Covered Transactions"
  refers to any covered transaction under a First Tier Covered
  Transaction (such as subcontracts). "First Tier Participant"
  refers to the participant who has entered into a covered
  transaction with a grantee or subgrantee of Federal funds
  (such as the prime or general contractor). "Lower Tier
  Participant" refers any participant who has entered into a
  covered transaction with a First Tier Participant or other Lower
  Tier Participants (such as subcontractors and suppliers).
- e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.
- f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.
- g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (<a href="https://www.epls.gov/">https://www.epls.gov/</a>), which is compiled by the General Services Administration.
- h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the

department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

\* \* \* \*

## Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:

- 1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency.
- 2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

\* \* \* \* \*

### XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts which exceed \$100,000 (49 CFR 20).

- 1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:
- a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
- 2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.
- 3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

# ATTACHMENT A - EMPLOYMENT AND MATERIALS PREFERENCE FOR APPALACHIAN DEVELOPMENT HIGHWAY SYSTEM OR APPALACHIAN LOCAL ACCESS ROAD CONTRACTS

This provision is applicable to all Federal-aid projects funded under the Appalachian Regional Development Act of 1965.

- 1. During the performance of this contract, the contractor undertaking to do work which is, or reasonably may be, done as on-site work, shall give preference to qualified persons who regularly reside in the labor area as designated by the DOL wherein the contract work is situated, or the subregion, or the Appalachian counties of the State wherein the contract work is situated, except:
- a. To the extent that qualified persons regularly residing in the area are not available.
- b. For the reasonable needs of the contractor to employ supervisory or specially experienced personnel necessary to assure an efficient execution of the contract work.
- c. For the obligation of the contractor to offer employment to present or former employees as the result of a lawful collective bargaining contract, provided that the number of nonresident persons employed under this subparagraph (1c) shall not exceed 20 percent of the total number of employees employed by the contractor on the contract work, except as provided in subparagraph (4) below.
- 2. The contractor shall place a job order with the State Employment Service indicating (a) the classifications of the laborers, mechanics and other employees required to perform the contract work, (b) the number of employees required in each classification, (c) the date on which the participant estimates such employees will be required, and (d) any other pertinent information required by the State Employment Service to complete the job order form. The job order may be placed with the State Employment Service in writing or by telephone. If during the course of the contract work, the information submitted by the contractor in the original job order is substantially modified, the participant shall promptly notify the State Employment Service.
- 3. The contractor shall give full consideration to all qualified job applicants referred to him by the State Employment Service. The contractor is not required to grant employment to any job applicants who, in his opinion, are not qualified to perform the classification of work required.
- 4. If, within one week following the placing of a job order by the contractor with the State Employment Service, the State Employment Service is unable to refer any qualified job applicants to the contractor, or less than the number requested, the State Employment Service will forward a certificate to the contractor indicating the unavailability of applicants. Such certificate shall be made a part of the contractor's permanent project records. Upon receipt of this certificate, the contractor may employ persons who do not normally reside in the labor area to fill positions covered by the certificate, notwithstanding the provisions of subparagraph (1c) above.
- 5. The provisions of 23 CFR 633.207(e) allow the contracting agency to provide a contractual preference for the use of mineral resource materials native to the Appalachian region.

6. The contractor shall include the provisions of Sections 1 through 4 of this Attachment A in every subcontract for work which is, or reasonably may be, done as on-site work.

### **Non-discrimination Provisions**

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

- **1. Compliance with Regulations:** The contractor (hereinafter includes consultants) will comply with the Acts and the Regulations relative to Non-discrimination in Federally-assisted programs of the U.S. Department of Transportation, Federal Highway Administration, as they may be amended from time to time, which are herein incorporated by reference and made a part of this contract.
- **2. Non-discrimination:** The contractor, with regard to the work performed by it during the contract, will not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The contractor will not participate directly or indirectly in the discrimination prohibited by the Acts and the Regulations, including employment practices when the contract covers any activity, project, or program set forth in Appendix B of 49 CFR Part 21.
- **3. Solicitations for Subcontracts, Including Procurements of Materials and Equipment:** In all solicitations, either by competitive bidding, or negotiation made by the contractor for work to be performed under a subcontract, including procurements of materials, or leases of equipment, each potential subcontractor or supplier will be notified by the contractor of the contractor's obligations under this contract and the Acts and the Regulations relative to Non-discrimination on the grounds of race, color, or national origin.
- **4. Information and Reports:** The contractor will provide all information and reports required by the Acts, the Regulations, and directives issued pursuant thereto and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Recipient or the Federal Highway Administration to be pertinent to ascertain compliance with such Acts, Regulations, and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish the information, the contractor will so certify to the Recipient or the Federal Highway Administration, as appropriate, and will set forth what efforts it has made to obtain the information.
- **5. Sanctions for Noncompliance:** In the event of a contractor's noncompliance with the Non-discrimination provisions of this contract, the Recipient will impose such contract sanctions as it or the Federal Highway Administration may determine to be appropriate, including, but not limited to:
  - a. Withholding payments to the contractor under the contract until the contractor complies; and/or
  - b. Cancelling, terminating, or suspending a contract, in whole or in part.

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

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

### **Pertinent Non-Discrimination Authorities:**

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

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

#### **SEPTEMBER 2002**

## NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY (EXECUTIVE ORDER 11246)

- 1. The Offeror's or Bidder's attention is called to the "Employment Practices" and "Equal Opportunity Clause" set forth in the Required Contract Provisions, FHWA 1273.
- 2. The goals and timetables for minority and female participation expressed in percentage terms for the contractor's aggregate work force in each trade, on all construction work in the covered area, are as follows:

### **Goals for Minority Participation for Each Trade:**

_County_	<u>%</u>	_County_	_%_	_County_	<u>%</u>
Adams	1.7	Iowa	1.7	Polk	2.2
Ashland	1.2	Iron	1.2	Portage	0.6
Barron	0.6	Jackson	0.6	Price	0.6
Bayfield	1.2	Jefferson	7.0	Racine	8.4
Brown	1.3	Juneau	0.6	Richland	1.7
Buffalo	0.6	Kenosha	3.0	Rock	3.1
Burnett	2.2	Kewaunee	1.0	Rusk	0.6
Calumet	0.9	La Crosse	0.9	St. Croix	2.9
Chippewa	0.5	Lafayette	0.5	Sauk	1.7
Clark	0.6	Langlade	0.6	Sawyer	0.6
Columbia	1.7	Lincoln	0.6	Shawano	1.0
Crawford	0.5	Manitowoc	1.0	Sheboygan	7.0
Dane	2.2	Marathon	0.6	Taylor	0.6
Dodge	7.0	Marinette	1.0	Trempealeau	0.6
Door	1.0	Marquette	1.7	Vernon	0.6
Douglas	1.0	Menominee	1.0	Vilas	0.6
Dunn	0.6	Milwaukee	8.0	Walworth	7.0
Eau Claire	0.5	Monroe	0.6	Washburn	0.6
Florence	1.0	Oconto	1.0	Washington	8.0
Fond du Lac	1.0	Oneida	0.6	Waukesha	8.0
Forest	1.0	Outagamie	0.9	Waupaca	1.0
Grant	0.5	Ozaukee	8.0	Waushara	1.0
Green	1.7	Pepin	0.6	Winnebago	0.9
Green Lake	1.0	Pierce	2.2	Wood	0.6

#### Goals for female participation for each trade: 6.9%

These goals are applicable to all the contractor's construction work, (whether or not it is federal or federally assisted), performed in the covered area. If the contractor performs construction work in the geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the contractor also is subject to the goals for both its federally involved and nonfederally involved construction.

The contractor's compliance with the Executive Order and the Regulations in 41 CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3(a), and its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from contractor to contractor or from project to project for the sole purpose of meeting the contractor's goals shall be a violation of the contract, the Executive Order and the Regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

3. The contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs within ten (10) working days of award of any construction subcontract in excess of \$10,000.00 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address and telephone number of the subcontractor, employer identification number of the subcontractor; estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the subcontract is to be performed.

As referred to in this section, the Director means:

Director Office of Federal Contract Compliance Programs Ruess Federal Plaza 310 W. Wisconsin Ave., Suite 1115 Milwaukee, WI 53202

The "Employer Identification Number" means the Federal Social Security number used on the Employer's Quarterly Federal Tax Return, U.S. Treasury Department Form 941.

4. As used in this notice, and in the contract resulting from solicitation, the "covered area" is the county(ies) in Wisconsin to which this proposal applies.

#### **APRIL 2013**

#### ADDITIONAL FEDERAL-AID PROVISIONS

### NOTICE TO ALL BIDDERS

To report bid rigging activities call:

#### 1-800-424-9071

The U.S. Department of Transportation (DOT) operates the above toll-free "hotline" Monday through Friday, 8:00 a.m. to 5:00 p.m., Eastern Time. Anyone with knowledge of possible bid rigging, bidding collusion, or other fraudulent activities should use the "hotline" to report such activities.

The "hotline" is part of the DOT's continuing effort to identify and investigate highway construction contract fraud and abuse and is operated under the direction of the DOT Inspector General. All information will be treated confidentially and caller anonymity will be respected.

#### **Effective August 2015 letting**

#### **BUY AMERICA PROVISION**

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

### 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

1 of 1

### Cargo Preference Act Requirement

All Federal-aid projects shall comply with 46 CFR 381.7 (a) – (b) as follows:

- (a) Agreement Clauses. "Use of United States-flag vessels:"
- (1) Pursuant to Pub. L. 664 (43 U.S.C. 1241(b)) at least 50 percent of any equipment, materials or commodities procured, contracted for or otherwise obtained with funds granted, guaranteed, loaned, or advanced by the U.S. Government under this agreement, and which may be transported by ocean vessel, shall be transported on privately owned United States-flag commercial vessels, if available.
- (2) Within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, 'on-board' commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph (a)(1) of this section shall be furnished to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590."
- (b) Contractor and Subcontractor Clauses. "Use of United States-flag vessels: The contractor agrees—"
- (1) To utilize privately owned United States-flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to this contract, to the extent such vessels are available at fair and reasonable rates for United States-flag commercial vessels.
- (2) To furnish within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, 'on-board' commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph (b) (1) of this section to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590.
- (3) To insert the substance of the provisions of this clause in all subcontracts issued pursuant to this contract.

### WISCONSIN DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS AND TRANSPORTATION FACILITIES

#### SUPPLEMENTAL REQUIRED CONTRACT PROVISIONS

- I. Wage Rates, Hours of labor and payment of Wages
- II. Payroll Requirements
- III. Postings at the Site of the Work
- IV. Affidavits
- V. Wage Rate Redistribution
- VI. Additional Classifications

### I. WAGE RATES, HOURS OF LABOR AND PAYMENT OF WAGES

The schedule of "Minimum Wage Rates" attached hereto and made a part hereof furnishes the prevailing wage rates that have been determined pursuant to Section 103.50 of the Wisconsin Statutes. These wage rates are the minimum required to be paid to the various laborers, workers, mechanics and truck drivers employed by contractors and subcontractors on the construction work embraced by the contract and subject to prevailing hours and wages under Section 103.50, Stats. If necessary to employ laborers, workers, mechanics or truck drivers whose classification is not listed on the schedule, they shall be paid at rates conformable to those listed for similar classifications. Apprentices shall be paid at rates not less than those prescribed in their state indenture contacts.

While the wage rates shown are the minimum rates required by the contract to be paid during its life, this in not a representation that labor can be obtained at these rates. It is the responsibility of bidders to inform themselves as to the local labor conditions and prospective changes or adjustments of wage rates. No increase in the contract price shall be allowed or authorized on account of the payment of wage rates in excess of those listed herein.

Pursuant to Section 103.50 of the Wisconsin Statutes, the prevailing hours of labor have been determined to be up to 10 hours per day and 40 hours per calendar week Monday through Friday. If any laborer, worker, mechanic or truck driver is permitted or required to work more than the prevailing number of hours per day or per calendar week on this contract, they shall be paid for all hours in excess of the prevailing hours at a rate of at least one and one-half (1 1/2) times their hourly rate of pay. All work on Saturday, Sunday and the following holidays is to be paid at time and a half: (1) January 1, (2) the last Monday in May, (3) July 4, (4) the first Monday in September, (5) the fourth Thursday in November, (6) December 25, (7) the day before if January 1, July 4 or December 25 falls on a Saturday and (8) the day following if January 1, July 4 or December 25 falls on a Sunday.

All laborers, workers, mechanics and truck drivers shall be paid unconditionally not less often than once a week. Persons who own and operate their own trucks must receive the prevailing truck driver rate for the applicable type of truck (i.e. 2 axle, 3 or more axle, articulated, eculid or dumptor) he or she operates, plus an agreed upon amount for the use of his or her truck. Every owner-operator MUST be paid separately for their driving and for the use of their truck.

For those projects subject to the requirements of the Davis-Bacon Act, the Secretary of Labor will also have determined "Minimum Wage Rates" for work to be performed under the contract. These rates are, for all or most of the labor, worker, mechanic or truck driver classifications, identical to those established under Section 103.50 of the Wisconsin Statutes. In the event the rates are not identical, the higher of the two rates will govern.

#### II. PAYROLL REQUIREMENTS

All contractors and subcontractors must submit weekly Certified Payrolls and Compliance Statement verifying that all laborers, workers, mechanics and truck drivers working on the project have been paid the prevailing wage rates for all work performed under the contract required by Section 103.50 of the Wisconsin Statutes.

#### III. POSTINGS AT THE SITE OF THE WORK

In addition to the required postings furnished by the Department, the contractor shall post the following in at least one conspicuous place at the site of work:

- a. "NOTICE TO EMPLOYEES," which provides information required to be posted by the provisions of Section 103.50 of the Wisconsin Statutes.
- b. A copy of the State of Wisconsin Minimum Wages Rates. (Four pages.)
- c. A copy of the contractor's Equal Employment Opportunity Policy.
- d. On any project involving federal aid, in addition to the furnished postings, the contractor shall post a copy of the "Davis-Bacon Act, Minimum Wage Rates". (Three pages.)

#### IV. WAGE RATE REDISTRIBUTION

The amount specified as the hourly basic rate of pay and the amount(s) specified as the fringe benefit contribution(s), for all classes of laborers, workers, mechanics or truck drivers may be redistributed, when necessary, to conform to those specified in any applicable collective bargaining agreement, provided that both parties to such agreement

request and receive the approval for any such redistribution from both the Department of Transportation and the Department of Workforce Development prior to the implementation of such redistribution.

#### V. ADDITIONAL CLASSIFICATIONS

Any unlisted laborer or mechanic classification that is needed to perform work on this project, and is not included within the scope of any of the classifications listed in the application prevailing wage rate determination, may be added after award only if all of the following criteria have been met:

- 1. The affected employer(s) must make a written request to WisDOT Central Office to utilize the unlisted classification on this project.
- 2. The request must indicate the scope of the work to be performed by the unlisted classification and must indicate the proposed wage/fringe benefit package that the unlisted classification is to receive.
- 3. The work to be performed by the unlisted classification must not be performed by a classification that is included in the applicable prevailing wage rate determination.
- 4. The unlisted classification must be commonly employed in the area where the project is located.
- 5. The proposed wage/fringe benefit package must bear a reasonable relationship to those set forth in the applicable prevailing wage rate determination.
- 6. The request should be made prior to the actual performance of the work by the unlisted classification.
- 7. DWD must approve the use of the unlisted classification and the proposed wage/fringe benefit package. USDOL also must approve the use of the unlisted classification and the proposed wage/fringe benefit package on federal aid projects.
- 8. WisDOT and DWD may amend the proposed wage/fringe benefit package, as deemed necessary, and may set forth specific employment ratios and scope of work requirements in the approval document.

The approved wage/fringe benefit package shall be paid to all laborers, workers, mechanics or truck drivers performing work within the scope of that performed by the unlisted classification, from the first day on which such work is performed. In the event that work is performed by the unlisted classification prior to approval, the wage/fringe benefit package to be paid for such work must be in conformance with the wage/fringe

benefit package approved for such work. Under this arrangement a retroactive adjustment in wages and/or fringe benefits may be required to be made to the affected laborers, workers, mechanics or truck drivers by the affected employer(s).

#### ANNUAL PREVAILING WAGE RATE DETERMINATION FOR ALL STATE HIGHWAY PROJECTS PRICE COUNTY

Compiled by the State of Wisconsin - Department of Workforce Development for the Department of Transportation
Pursuant to s. 103.50, Stats.
Issued on May 1, 2016

**CLASSIFICATION:** Contractors are required to call the Department of Workforce Development if there are any questions regarding the proper trade or classification to be used for any worker on a public works project.

**OVERTIME:** Time and one-half must be paid for all hours worked over 10 hours per day and 40 hours per calendar week and for all hours worked on Saturday, Sunday and the following six (6) holidays: January 1; the last Monday in May; July 4; the 1st Monday in September; the 4th Thursday in November; December 25; the day before if January 1, July 4 or December 25 falls on a Saturday; the day following if January 1, July 4 or December 25 falls on a Sunday.

**FUTURE INCREASE:** If indicated for a specific trade or occupation, the full amount of such increase MUST be added to the "TOTAL" indicated for such trade or occupation on the date(s) such increase(s) becomes effective.

**PREMIUM PAY:** If indicated for a specific trade or occupation, the full amount of such pay MUST be added to the "HOURLY BASIC RATE OF PAY" indicated for such trade or occupation, whenever such pay is applicable.

**SUBJOURNEY:** Wage rates may be available for some of the classifications indicated below. Any employer that desires to use any subjourney classification on a project MUST request the applicable wage rate from the Department of Workforce Development PRIOR to the date such classification is used on such project. Form ERD-10880 is available for this purpose and can be obtained by writing to the Department of Workforce Development, Equal Rights Division, P.O. Box 8928, Madison, WI 53708.

TRADE OR OCCUPATION	HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
	\$	<b>\$</b>	\$
Bricklayer, Blocklayer or Stonemason	31.55	18.52	50.07
Carpenter	33.02	17.12	50.14
Future Increase(s): Add \$1.42/hr on 6/1/2016.  Premium Pay: DOT PREMIUM: Pay two times the hourly basic rate of Independence Day, Labor Day, Thanksgiving Day & Christmas Day.	n Sunday, New Ye	ear's Day, Memor	ial Day,
Cement Finisher	34.16	18.90	53.06
Future Increase(s): Add \$1.75 on 6/1/16.  Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic ra Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Department of Transportation or responsible governing agency requirartificial illumination with traffic control and the work is completed after	Day. 2) Add \$1.40/ es that work be p	hr when the Wisc erformed at night	consin
Electrician	29.20	17.36	46.56
Fence Erector	35.62	0.00	35.62
Ironworker	32.50	20.58	53.08
Line Constructor (Electrical)	40.81	18.06	58.87
Painter	29.87	18.79	48.66
Pavement Marking Operator	30.00	18.83	48.83
Piledriver	20 11	21.09	51.20
Roofer or Waterproofer	30.40	2.23	32.63
Teledata Technician or Installer	22.50	12.74	35.24
Tuckpointer, Caulker or Cleaner	32.15	17.66	49.81
Underwater Diver (Except on Great Lakes)	36.74	16.00	52.74
Heavy Equipment Operator - ELECTRICAL LINE CONSTRUCTION ONL	LY 36.73	15.92	52.65
Light Equipment Operator -ELECTRICAL LINE CONSTRUCTION ONLY	32.65	16.12	48.77
Heavy Truck Driver - ELECTRICAL LINE CONSTRUCTION ONLY	28.57	13.71	42.28

PRICE COUNTY Page 2

TRADE OR OCCUPATION	HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
			\$
Light Truck Driver - ELECTRICAL LINE CONSTRUCTION ONLY	26.53	13.09	39.62
Groundman - ELECTRICAL LINE CONSTRUCTION ONLY	21.75	12.97	34.72
TRUCK DRIVERS			
Single Axle or Two Axle	36.72	21.15	57.87
Three or More Axle	25.28	18.02	43.30
Articulated, Euclid, Dumptor, Off Road Material Hauler	25.78	18.96	44.74
Premium Pay: DOT PREMIUM: Pay two times the hourly basic rate of Independence Day, Labor Day, Thanksgiving Day & Christmas Day.			ial Day,
Pavement Marking Vehicle	23.82	17.72	41.54
Shadow or Pilot Vehicle	OF 00	18.02	43.30
Truck Mechanic	25.29	18.02	43.30
LABORERS			
General Laborer Future Increase(s): Add \$1.00/hr eff. 06/01/2016; Add \$1.00/hr eff. 06 Premium Pay: Add \$.10/hr for topman, air tool operator, vibrator or tall operated), chain saw operator and demolition burning torch laborer; A and luteman), formsetter (curb, sidewalk and pavement) and strike of powderman; Add \$.25/hr for bottomman; Add \$.35/hr for line and grace DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2 involving temporary traffic control setup, for lane and shoulder closure.	mper operator (me Add \$.15/hr for bitu f man; Add \$.20/h de specialist; Add New Year's Day, N 2) Add \$1.25/hr for es, when work und	uminous worker ( r for blaster and \$.45/hr for pipela Memorial Day, work on projects	ıyer.
conditions is necessary as required by the project provisions (includin such time period).  Asbestos Abatement Worker  Landscaper Future Increase(s): Add \$1.00/hr eff. 06/01/2016; Add \$1.00/hr eff. 06 Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic ra Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Dinvolving temporary traffic control setup, for lane and shoulder closure conditions is necessary as required by the project provisions (includin such time period).	24.92 30.67 /01/2017 Ite on Sunday, Ne Day. 2) Add \$1.25/ es, when work und	to and/or cleanup 15.12 15.65 w Year's Day, Me hr for work on pr der artificial illum	ination o after 40.04 46.32 emorial ojects ination
conditions is necessary as required by the project provisions (including such time period).  Asbestos Abatement Worker  Landscaper Future Increase(s): Add \$1.00/hr eff. 06/01/2016; Add \$1.00/hr eff. 06 Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic range Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Einvolving temporary traffic control setup, for lane and shoulder closure conditions is necessary as required by the project provisions (including such time period).  Flagperson or Traffic Control Person Future Increase(s): Add \$1.00/hr eff. 06/01/2016; Add \$1.00/hr eff. 06	24.92 30.67 /01/2017 Ite on Sunday, Net Day. 2) Add \$1.25/ es, when work und og prep time prior to 27.30 /01/2017	to and/or cleanup  15.12  15.65  w Year's Day, Mehr for work on proder artificial illumite and/or cleanup  15.65	40.04 46.32 emorial ojects ination o after
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conditions is necessary as required by the project provisions (including such time period).  Asbestos Abatement Worker  Landscaper  Future Increase(s): Add \$1.00/hr eff. 06/01/2016; Add \$1.00/hr eff. 06 Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic range Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Dinvolving temporary traffic control setup, for lane and shoulder closure conditions is necessary as required by the project provisions (including such time period).  Flagperson or Traffic Control Person  Future Increase(s): Add \$1.00/hr eff. 06/01/2016; Add \$1.00/hr eff. 06 Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic range Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Department of Transportation or responsible governing agency requirgartificial illumination with traffic control and the work is completed after the control of the control and the work is completed after the control and the work is completed.	24.92 30.67 /01/2017 Ite on Sunday, Ner Day. 2) Add \$1.25/ es, when work und g prep time prior to 27.30 /01/2017 Ite on Sunday, Ner Day. 2) Add \$1.25/ es that work be pour sunset and befo	to and/or cleanup  15.12  15.65  w Year's Day, Me hr for work on pr der artificial illumi to and/or cleanup  15.65  w Year's Day, Me hr when the Wise erformed at night re sunrise.	40.04 46.32 emorial ojects ination o after 42.95 emorial consin t under
conditions is necessary as required by the project provisions (including such time period).  Asbestos Abatement Worker  Landscaper  Future Increase(s): Add \$1.00/hr eff. 06/01/2016; Add \$1.00/hr eff. 06 Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rangle Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Einvolving temporary traffic control setup, for lane and shoulder closure conditions is necessary as required by the project provisions (including such time period).  Flagperson or Traffic Control Person  Future Increase(s): Add \$1.00/hr eff. 06/01/2016; Add \$1.00/hr eff. 06 Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic ranguage Department of Transportation or responsible governing agency require artificial illumination with traffic control and the work is completed after Fiber Optic Laborer (Outside, Other Than Concrete Encased)	24.92 30.67 /01/2017 tte on Sunday, Never Day. 2) Add \$1.25/es, when work under gree time prior of the constant of the constan	to and/or cleanup  15.12  15.65  w Year's Day, Me hr for work on pr der artificial illumi to and/or cleanup  15.65  w Year's Day, Me hr when the Wise erformed at night	40.04 46.32 emorial ojects ination o after 42.95 emorial consin
conditions is necessary as required by the project provisions (including such time period).  Asbestos Abatement Worker  Landscaper  Future Increase(s): Add \$1.00/hr eff. 06/01/2016; Add \$1.00/hr eff. 06 Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic range Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Einvolving temporary traffic control setup, for lane and shoulder closure conditions is necessary as required by the project provisions (including such time period).  Flagperson or Traffic Control Person  Future Increase(s): Add \$1.00/hr eff. 06/01/2016; Add \$1.00/hr eff. 06 Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic range Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Experiment of Transportation or responsible governing agency requirg artificial illumination with traffic control and the work is completed after Fiber Optic Laborer (Outside, Other Than Concrete Encased)	24.92 30.67 /01/2017 tte on Sunday, Never Day. 2) Add \$1.25/es, when work under gree time prior of the constant of the constan	to and/or cleanup  15.12  15.65  w Year's Day, Me hr for work on pr der artificial illumi to and/or cleanup  15.65  w Year's Day, Me hr when the Wise erformed at night re sunrise.  4.31	40.04 46.32 emorial ojects ination o after 42.95 emorial consin t under

PRICE COUNTY Page 3

#### TRADE OR OCCUPATION

HOURLY **BASIC RATE** OF PAY

37.77

37.27

**HOURLY FRINGE BENEFITS** 

21.85

21.85

**TOTAL** 

59.62

59.12

Derrick, With or Without Attachments, With a Lifting Capacity of Over 100 Tons, Self-Erecting Tower Crane With a Lifting Capacity Of Over 4,000 Lbs., Crane With Boom Dollies; Traveling Crane (Bridge Type).

Future Increase(s): Add \$1.30/hr on 6/1/2016: Add \$1.25/hr on 6/1/2017.

Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.50/hr night work premium. See DOT'S website for details about the applicability of this night work premium at:

http://wisconsindot.gov/Pages/doing- bus/civil- rights/labornwage/prevailing- wage- compliance. aspx.

Backhoe (Track Type) Having a Mfgr.'s Rated Capacity of 130,000 Lbs. or Over; Caisson Rig; Crane, Tower Crane, Portable Tower, Pedestal Tower or Derrick, With Boom, Leads &/or Jib Lengths Measuring 175 Ft or Under: Crane, Tower Crane, Portable Tower, Pedestal Tower or Derrick, With or Without Attachments, With a Lifting Capacity of 100 Tons or Under, Self-Erecting Tower Crane With A Lifting Capacity Of 4,000 Lbs., & Under: Dredge (NOT Performing Work on the Great Lakes); Licensed Boat Pilot (NOT Performing Work on the Great Lakes); Pile Driver.

Future Increase(s): Add \$1.30/hr on 6/1/2016; Add \$1.25/hr on 6/1/2017.

Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.50/hr night work premium. See DOT'S website for details about the applicability of this night work premium at:

http://wisconsindot.gov/Pages/doing- bus/civil- rights/labornwage/prevailing- wage- compliance. aspx.

Air Track, Rotary or Percussion Drilling Machine &/or Hammers, Blaster; Asphalt Heater, Planer & Scarifier; Asphalt Milling Machine; Asphalt Screed; Automatic Subgrader (Concrete); Backhoe (Track Type) Having a Mfgr.'s Rated Capacity of Under 130,000 Lbs., Backhoe (Mini, 15,000 Lbs. & Under); Bituminous (Asphalt) Plant & Paver, Screed; Boatmen (NOT Performing Work on the Great Lakes); Boring Machine (Directional, Horizontal or Vertical); Bridge (Bidwell) Paver; Bulldozer or Endloader; Concrete Batch Plant, Batch Hopper; Concrete Breaker (Large, Auto, VIbratory/Sonic, Manual or Remote); Concrete Bump Cutter, Grinder, Planing or Grooving Machine; Concrete Conveyor System; Concrete Laser/Screed; Concrete Paver (Slipform); Concrete Pump, Concrete Conveyor (Rotec or Bidwell Type); Concrete Slipform Placer Curb & Gutter Machine; Concrete Spreader & Distributor; Crane (Carry Deck, Mini) or Truck Mounted Hydraulic Crane (10 Tons or Under); Crane With a Lifting Capacity of 25 Tons or Under; Forestry Equipment, Timbco, Tree Shear, Tub Grinder, Processor; Gradall (Cruz-Aire Type); Grader or Motor Patrol; Grout Pump; Hydro-Blaster (10.000 PSI or Over); Loading Machine (Conveyor); Material or Stack Hoist; Mechanic or Welder; Milling Machine; Post Hole Digger or Driver; Roller (Over 5 Ton); Scraper (Self Propelled or Tractor Drawn) 5 cu vds or More Capacity; Shoulder Widener; Sideboom; Skid Rig; Stabilizing or Concrete Mixer (Self-Propelled or 14S or Over); Straddle Carrier or Travel Lift; Tractor (Scraper, Dozer, Pusher, Loader); Tractor or

Future Increase(s): Add \$1.30/hr on 6/1/2016; Add \$1.25/hr on 6/1/2017.

Truck Mounted Hydraulic Backhoe; Trencher (Wheel Type or Chain Type); Tube Finisher; Tugger (NOT Performing Work on the Great Lakes); Winches

& A- Frames.

Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.50/hr night work premium. See DOT'S website for details about the applicability of this night work premium at:

http://wisconsindot.gov/Pages/doing- bus/civil- rights/labornwage/prevailing- wage- compliance. aspx.

(Self-Propelled or Tractor Mounted, Towed & Light Equipment); Concrete

37.01

58.86

Belting, Burlap, Texturing Machine; Broom or Sweeper; Compactor

21.85

TRADE OR OCCUPATION	HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS \$	TOTAL \$
Finishing Machine (Road Type); Environmental Burner; Farm or Industric Type Tractor; Fireman (Asphalt Plant, Pile Driver & Derrick NOT Perform Work on the Great Lakes); Forklift; Greaser; Hoist (Tugger, Automatic); Digger; Joint Sawer (Multiple Blade); Launch (NOT Performing Work on Great Lakes); Lift Slab Machine; Mechanical Float; Mulcher; Power Subgrader; Robotic Tool Carrier (With or Without Attachments); Roller (Rubber Tire, 5 Ton or Under); Self Propelled Chip Spreader; Shoulderin Machine; Skid Steer Loader (With or WIthout Attachments); Telehandler Tining or Curing Machine.  Future Increase(s): Add \$1.30/hr on 6/1/2016; Add \$1.25/hr on 6/1/20 Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic raday, Independence Day, Labor Day, Thanksgiving Day & Christmas I See DOT'S website for details about the applicability of this night wor http://wisconsindot.gov/Pages/doing- bus/civil- rights/labornwage/pre	al ning Jeep the of 17. ate on Sunday, Nev Day. 2) Add \$1.50/h	v Year's Day, Me nr night work pre	morial
Air Compressor (&/or 400 CFM or Over); Air, Electric or Hydraulic Jackin System; Augers (Vertical & Horizontal); Automatic Belt Conveyor & Surg Bin; Boiler (Temporary Heat); Concrete Proportioning Plant; Crusher, Screening or Wash Plant; Generator (&/or 150 KW or Over); Heaters (Mechanical); High Pressure Utility Locating Machine (Daylighting Mach Mudjack; Oiler; Prestress Machine; Pug Mill; Pump (3 Inch or Over) or W Points; Rock, Stone Breaker; Screed (Milling Machine); Stump Chipper; Tank Car Heaters; Vibratory Hammer or Extractor, Power Pack.	e ine); Vell	21.40	57.57
Fiber Optic Cable Equipment.	28.50	0.88	29.38

#### SUPERSEDES DECISION WI20120010 U. S. DEPARTMENT OF LABOR (DAVIS-BACON ACT, MINIMUM WAGE RATES)

Truck Drivers:

1 & 2 Axles

Three or More Axles; Euclids, Dumptor &

STATE: Wisconsin

GENERAL DECISION NUMBER: WI160010

DESCRIPTION OF WORK: Highways and Airport Runway and Taxiway Construction

		Basic Hourly	Fringe
LABORE	RS CLASSIFICATION:	Rates	Benefits
Group 1:	General Laborer; Tree Trimmer; Conduit Layer;		
Oroup II	Demolition and Wrecking Laborer; Guard Rail, Fence		
	and Bridge Builder; Landscaper, Multiplate Culvert		
	Assembler; Stone Handler; Bituminous Worker (Shovele	*	
	Loader, Utility Man); Batch Truck Dumper; or Cement H	landler;	
	Bituminous Worker; (Dumper, Ironer, Smoother, Tamper	r);	
	Concrete Handler	\$30.67	16.55
Group 2:	Air Tool Operator; Joint Sawer and Filler (Pavement);		
	Vibrator or Tamper Operator (Mechanical Hand Operate	d); 30.77	16.55
Group 3:	Bituminous Worker (Raker and Luteman); Formsetter		
•	(Curb, Sidewalk, and Pavement); Strike Off man	30.82	16.55
Group 4:	Line and Grade Specialist	31.02	16.55
Group 5:	Blaster and Powderman	30.87	16.55
Group 6:	Flagperson; Traffic Control		
C. Cap C.	rage on, rand control		

DATE: September 2, 2016

Fringe

**Benefits** 

Basic Hourly

Rates

Notes: Welders receive rate prescribed for craft performing operation to which welding is incidental. Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29 CFR, 5.5(a)(1)(ii)). Includes Modification #0 dated January 8, 2016; Modification #1 dated January 29, 2016; Modification #2 dated February 26, 2016; Modification #3 dated March 11, 2016; Modification #4 dated April 8, 2016; Modification #5 dated June 17, 2016; Modification #6 dated July 1, 2016; Modification #7 dated July 22, 2016; Modification #8 dated July 29, 2016; Modification #9 dated August 19, 2016; Modification #10 dated August 26, 2016; Modification #11 dated September 2, 2016.

#### CLASSES OF LABORER AND MECHANICS

Bricklayer	32.14	16.56
Carpenter	30.48	15.80
Millwright	32.11	15.80
Piledriverman		
Ironworker	31.04	23.45
Cement Mason/Concrete Finisher	39.46	17.17
Electrician		See Page 3
Line Construction		· ·
Lineman	42.14	32% + 5.00
Heavy Equipment Operator	40.03	32% + 5.00
Equipment Operator	33.71	32% + 5.00
Heavy Groundman Driver	26.78	14.11
Light Groundman Driver	24.86	13.45
Groundsman	23.18	32% + 5.00
Painters	24.39	11.72
Well Drilling:		
Well Driller	16.52	3.70

## SUPERSEDES DECISION WI20120010 U. S. DEPARTMENT OF LABOR (DAVIS-BACON ACT, MINIMUM WAGE RATES)

STATE: Wisconsin

GENERAL DECISION NUMBER: WI160010

DESCRIPTION OF WORK: Highways and Airport Runway and Taxiway Construction

Basic Hourly Fringe POWER EQUIPMENT OPERATORS Basic Hourly Fringe POWER EQUIPMENT OPERATORS CLASSIFICATION: CLASSIFICATION: (Continued) Rates Benefits Rates Benefits (scraper, dozer, pusher, loader); scraper -Group 1: Cranes, tower cranes and derricks, with or without attachments, with a rubber tired (single or twin engine); lifting capacity of over 100 tons endloader hydraulic backhoe (tractor-type); or cranes, tower cranes and trenching machine; skid rigs; tractor, side derricks with boom. leads and/or boom (heavy); drilling or boring machine jib lengths measuring 176 feet or (mechanical heavy); roller (over 5 tons); \$39.27 \$21.80 percussion or rotary drilling machine; air longer ..... track: blaster: loading machine (conveyor): Group 2: Cranes, tower cranes and derricks. tugger; boatmen; winches and A-frames; post with or without attachments, with a driver; material hoist operator. ..... \$38.27 \$21.80 lifting capacity of 100 tons or less or cranes, tower cranes and Group 4: Greaser, roller steel (5 tons or less); roller (pneumatic tired) - self-propelled; derricks with boom. leads and/or jib lengths measuring 175 feet or tractor (mounted or towed compactors and less, and backhoes (excavators) light equipment); shouldering machine; having a manufacturer's rated self-propelled chip spreader; concrete capacity of 3 cu. yds. and over, spreader; finishing machine; mechanical caisson rigs, pile driver, dredge float; curing machine; power subgrader; operator, dredge engineer..... \$38.77 \$21.80 joint saw (multiple blade) belting machine: burlap machine: texturing Group 3: Mechanic or welder - heavy duty machine; tractor, endloader (rubber equipment, cranes with a lifting capacity tired) - light; jeep digger; fork lift; of 25 tons or less, concrete breaker mulcher; launch operator; fireman; (manual or remote); vibrator/sonic concrete environmental burner. ..... \$38.01 \$21.80 breaker; concrete laser screed; concrete slipform paver; concrete batch plant Group 5: Air compressor; power pack; vibratory operator; concrete pavement spreader - heavy hammer and extractor; heavy equipment, duty (rubber tired); concrete spreader and leadman; tank car heaters; stump chipper; distributor, automatic subgrader (concrete): curb machine operator: concrete proconcrete grinder and planing machine; concrete portioning plants generators; mudjack slipform curb and gutter machine: slipform operator: rock breaker: crusher or concrete placer; tube finisher; hydro blaster screening plant; screed (milling machine); (10,000 psi and over); bridge paver; concrete automatic belt conveyor and surge bin; conveyor system; concrete pump; stabilizing pug mill operator; oiler; pump (over 3 inches); mixer (self propelled); shoulder widener; drilling machine helper..... \$37.72 \$21.80 asphalt plant engineer; bituminous paver; bump cutter and grooving machine; milling machine; Group 6: Off – road material hauler with or without ejector ..... \$31.82 \$21.80 screed (bituminous paver); asphalt heater, planer and scarifier; backhoes (excavators) having a manufacturers rated capacity of under Premium Pav: 3 cu. vds.; grader or motor patrol; tractor EPA Level "A" protection - \$3.00 per hour EPA Level "B" protection - \$2.00 per hour

EPA Level "C" protection - \$1.00 per hours

DATE: September 2, 2016

## SUPERSEDES DECISION WI20120010 U. S. DEPARTMENT OF LABOR (DAVIS-BACON ACT, MINIMUM WAGE RATES)

STATE: Wisconsin

Area3-

GENERAL DECISION NUMBER: WI160010

DESCRIPTION OF WORK: Highways and Airport Runway and Taxiway Construction

TREMPEALEAU, VERNON and WASHBURN COUNTIES

FLORENCE (townships of Aurora, Commonwealth, Fern,

Florence and Homestead), MARINETTE (Niagara township)

DESCRIPTIO	ON OF WORK: Highways and Airport Runway and	a raxiway Constru	uction		
LABORERS	CLASSIFICATION:	Rates	<u>Benefits</u>		
Electricians Area 1		\$30.68	17.28	Area4-	BROWN, DOOR, KEWAUNEE, MANITOWOC (except Schleswig), MARINETTE (Wausauke and area south thereof), OCONTO, MENOMINEE (East of a line 6 miles West of the West boundary of Oconto County), SHAWANO (except area North of Townships of Aniwa and Hutchins) COUNTIES.
	ricians	32.00	19.28	Area5-	ADAMS, CLARK (Colby, Freemont, Lynn, Mayville, Sherman, Sherwood, Unity), FOREST,
	rical contracts under \$130,000rical contracts over \$130,000	28.96 31.16 30.50 28.96	18.26 18.34 29.50% + 9.57 24.85% + 9.70		JUNEAU, LANGLADE, LINCOLN, MARATHON, MARINETTE (Area North of the town of Wausaukee), MENOMINEE (Area West of a line 6 miles West of the West boundary of Oconto County), ONEIDA, PORTAGE, SHAWANO (Area North of the townships of Aniwa and Hutchins), VILAS AND WOOD COUNTIES
Area 6		37.02	29%+9.77	Area6-	KENOSHA COUNTY
Area 8 Electi Area 9:	ricians	32.45	26.10% + 10.56	Area8-	DODGE, (Emmet Township only), GREEN, JEFFERSON, LAFAYETTE, RACINE (Burlington township), ROCK and WALWORTH COUNTIES
Electi Area 10 Area 11 Area 12	ricians	36.50 29.64 34.92 34.98	20.39 20.54 25.05 19.89	Area9-	COLUMBIA, DANE, DODGE, (area west of Hwy. 26, except Chester & Emmet Townships), GREEN LAKE (except townships of Berlin, Seneca and St. Marie), IOWA, MARQUETTE (except townships of Neshkoka, Crystal Lake, Newton and Springfield), and SAUK COUNTIES
Area 13 Teledata Syste	em Installer	35.13	23.26	Area 10 -	CALUMET (Township of New Holstein), DODGE (East of Hwy. 26 including Chester Township), FOND DU LAC, MANITOWOC (Schleswig), and SHEBOYGAN COUNTIES
Area 14 Instal	ler/Technician	24.35	13.15	Area 11 -	DOUGLAS COUNTY
Sound & Com	nmunications			Area 12 -	RACINE (except Burlington township) COUNTY
Area 15 Instal	ler	16.47	14.84	Area 13 -	MILWAUKEE, OZAUKEE, WASHINGTON and WAUKESHA COUNTIES
Techr	nician	26.00	17.70	Area 14 -	Statewide.
	CALUMET (except township of New Holstein), G (N. part, including Townships of Berlin, St. Marie MARQUETTE (N. part, including Townships of Cspringfield), OUTAGAMIE, WAUPACA, WAUS	and Seneca), Crystal Lake, Neshl		Area 15 -	DODGE (East of Hwy 26 including Chester Twp, excluding Emmet Twp), FOND DU LAC (Except Waupun), MILWAUKEE, OZAUKEE, MANITOWOC (Schleswig), WASHINGTON, AND WAUKESHA COUNTIES.
	ASHLAND, BARRON, BAYFIELD, BUFFALO, CLARK (except Mayville, Colby, Unity, Sherman, Lynn and Sherwood), CRAWFORD, DUNN, EAU IRON, JACKSON, LA CROSSE, MONROE, PEPPRICE, RICHLAND, RUSK, ST. CROIX, SAWY	, Fremont, J CLAIRE, GRAN IN, PIERCE, POL	T,		

DATE: September 2, 2016

#### FEBRUARY 1999

### NOTICE TO BIDDERS WAGE RATE DECISION

The wage rate decision of the Secretary of Labor which has been incorporated in these advertised specifications is incomplete in that the classifications may be omitted from the Secretary 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 omision 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. The higher of state or federal rate will apply.

Page 1 of 1

## Wisconsin Department of Transportation PAGE: 1 DATE: 09/27/16

#### SCHEDULE OF ITEMS REVISED:

LINE		APPROX.	UNIT PRICE	BID AMOUNT
NO	DESCRIPTION	QUANTITY AND UNITS	!	DOLLARS   CTS
SECTIO	ON 0001 Contract Items			
0010	  201.0110 Clearing	   615.000  SY	   	   
0020	  201.0210 Grubbing 	   615.000  SY		   
	203.0700.S Removing Old Structure Over Waterway With Debris Capture System (station) 01. Station 33+55, 7' LT	  LUMP 	LUMP	       
0040	204.0110 Removing Asphaltic Surface	   135.000  SY	     	   
	204.0115 Removing Asphaltic Surface Butt Joints	   185.000  SY	   	   
0060	204.0120 Removing Asphaltic Surface Milling	   11,645.000  SY		   
	204.0150 Removing Curb & Gutter	   1,920.000  LF		   
	204.0155 Removing Concrete Sidewalk	   825.000  SY		   
0090	204.0195 Removing Concrete Bases	   1.000  EACH		     

### Wisconsin Department of Transportation PAGE: 2 DATE: 09/27/16

SCHEDULE OF ITEMS REVISED:

LINE	I	APPROX.	UNIT PRICE	BID AMOUNT	
NO	DESCRIPTION	QUANTITY AND UNITS	DOLLARS   CTS	DOLLARS CTS	
0100	204.0220 Removing Inlets 	   5.000  EACH		     	
0110	204.0245 Removing Storm  Sewer (size) 01.  12-Inch	   64.000  LF	     	   	
	204.0245 Removing Storm  Sewer (size) 02.  18-Inch	   21.000  LF	     	     	
0130	204.0245 Removing Storm  Sewer (size) 03. 29 X  45-Inch Horizontal  Eliptical	92.000   92.000			
0140	205.0100 Excavation  Common	   1,948.000  CY		   	
	206.1000 Excavation for  Structures Bridges  (structure) 01.  B-50-0082	LUMP	LUMP		
	209.0200.S Backfill  Controlled Low Strength	   140.000  CY	     	   	
	209.1100 Backfill  Granular Grade 1 	   175.000  CY		   	
	210.1500 Backfill  Structure Type A 	   275.000  TON	   	   	
	213.0100 Finishing  Roadway (project) 01.  9240-08-70	   1.000  EACH			

### Wisconsin Department of Transportation PAGE: 3 DATE: 09/27/16

#### SCHEDULE OF ITEMS REVISED:

LINE	   ITEM	APPROX.	UNIT PRICE	BID AMOUNT
NO	DESCRIPTION	QUANTITY AND UNITS	DOLLARS   CTS	   DOLLARS  CTS
0200	213.0100 Finishing  Roadway (project) 02.  9240-08-71	   1.000  EACH		
0210	305.0120 Base Aggregate  Dense 1 1/4-Inch 	   2,100.000  TON		
0220	415.0080 Concrete  Pavement 8-Inch 	   6.000  SY		     .
0230	415.0410 Concrete  Pavement Approach Slab 	   124.000  SY		
0240	416.0160 Concrete  Driveway 6-Inch 	   48.000  SY		
0250	440.4410 Incentive IRI  Ride 	   2,688.000  DOL	1.00000	   2688.00 
0260	450.4000 HMA Cold  Weather Paving 	   2,130.000  TON		       .
0270	455.0605 Tack Coat   	   1,050.000  GAL		
0280	460.2000 Incentive  Density HMA Pavement 	   1,364.000  DOL	1.00000	   1364.00 
0290	460.5224 HMA Pavement 4  LT 58-28 S 	   2,130.000  TON		     

### Wisconsin Department of Transportation PAGE: 4 DATE: 09/27/16

REVISED:

#### SCHEDULE OF ITEMS

CONTRACT: ONTRACT: 20161108027

LINE	!	APPROX.	UNIT PRICE	BID AMOUNT
NO	DESCRIPTION 	QUANTITY AND UNITS	   DOLLARS   CTS	DOLLARS CTS
0300	465.0120 Asphaltic  Surface Driveways and  Field Entrances	   5.000  TON		   
0310	502.0100 Concrete  Masonry Bridges 	722.000  CY	   	   
0320	502.3200 Protective  Surface Treatment 	   1,670.000  SY	     	     
0330	503.0146 Prestressed  Girder Type I 45W-Inch 	   1,395.000  LF		
	505.0400 Bar Steel  Reinforcement HS  Structures	   28,625.000  LB		
	505.0600 Bar Steel  Reinforcement HS Coated  Structures	   109,730.000  LB		
0360	506.2605 Bearing Pads  Elastomeric  Non-Laminated	   30.000  EACH		     
0370	506.4000 Steel  Diaphragms (structure)  01. B-50-0082	   24.000  EACH		   
0380	511.1200 Temporary  Shoring (structure) 01.  B-50-0082	   200.000  SF	   	     
	513.7016 Railing Steel  Type C3 (structure) 01.  B-50-0082	   610.000  LF	     	     
0400	516.0500 Rubberized  Membrane Waterproofing	   26.000  SY		     

## Wisconsin Department of Transportation PAGE: 5 DATE: 09/27/16

SCHEDULE OF ITEMS REVISED:

LINE	I	APPROX.	UNIT PRICE	BID AMOUNT
NO	DESCRIPTION	QUANTITY AND UNITS	DOLLARS   CTS	DOLLARS CTS
0410	517.1015.S Concrete  Staining Multi-Color  (structure) 01.  B-50-0082	2,580.000		
0420	517.1050.S Architectural  Surface Treatment  (structure) 01.  B-50-0082	1,380.000		
0430	517.1050.S Architectural  Surface Treatment  (structure) 02. Traffic  Face B-50-0082	1,200.000		
0440	522.1018 Apron Endwalls  for Culvert Pipe  Reinforced Concrete  18-Inch	1.000		
0450	523.0529 Apron Endwalls for Culvert Pipe Reinforced Concrete Horizontal Elliptical 29x45-Inch	1.000		
	550.0020 Pre-Boring Rock   or Consolidated   Materials	   329.000  LF		
0470	550.1125 Piling Steel HP  12-Inch X 74 Lb	   355.000  LF		   
0480	601.0409 Concrete Curb &  Gutter 30-Inch Type A	   30.000  LF		 
0490	601.0411 Concrete Curb &  Gutter 30-Inch Type D	   1,898.000  LF		

### Wisconsin Department of Transportation PAGE: 6 DATE: 09/27/16

#### SCHEDULE OF ITEMS REVISED:

LINE	!		APPROX.	UNIT PRICE		BID AM	OUNT
NO	DESCRIPTION	1	QUANTITY   AND UNITS	DOLLARS	CTS	DOLLARS	CTS
	602.0405 Concrete  Sidewalk 4-Inch 	    SF	6,570.000  			   	
0510	602.0505 Curb Ramp  Detectable Warning Field  Yellow	      SF	260.000				
0520	602.1500 Concrete Steps	    SF	40.000			   	
0530	606.0300 Riprap Heavy 	    CY	180.000			   	
	606.0700 Grouted Riprap  Heavy 	    CY	15.000			   	
0550	608.0312 Storm Sewer   Pipe Reinforced Concrete   Class III 12-Inch	      LF	57.000  				
0560	608.0318 Storm Sewer  Pipe Reinforced Concrete  Class III 18-Inch	      LF	56.000  			   	
	610.0129 Storm Sewer  Pipe Reinforced Concrete  Horizontal Elliptical  Class HE-III 29x45-Inch	      LF 	92.000      			     	
	611.0530 Manhole Covers  Type J 	      EACI	1.000  H		.	   	
0590	611.0639 Inlet Covers  Type H-S 	      EACI	  000.6 				

### Wisconsin Department of Transportation PAGE: 7 DATE: 09/27/16

SCHEDULE OF ITEMS REVISED:

LINE	!	APPROX.	UNIT PRICE	BID AMOUNT
NO	DESCRIPTION 	QUANTITY AND UNITS	   DOLLARS   CTS	DOLLARS CTS
	611.1230 Catch Basins  2x3-FT 	   6.000  EACH		
	611.2006 Manholes 6-FT  Diameter 	   1.000  EACH		
	611.8110 Adjusting  Manhole Covers 	   4.000  EACH	     	
	611.8115 Adjusting Inlet  Covers 	   2.000  EACH		
	611.8120.S Cover Plates  Temporary 	   6.000  EACH		
	612.0406 Pipe Underdrain  Wrapped 6-Inch 	   230.000  LF		
0660	616.0700.S Fence Safety   	   200.000  LF		   
0670	619.1000 Mobilization   	   1.000  EACH		
	621.0100 Landmark  Reference Monuments	   12.000  EACH	     	
0690	624.0100 Water 	   40.000  MGAL	     	
0700	625.0100 Topsoil   	940.000		 

Wisconsin Department of Transportation PAGE: 8 DATE: 09/27/16 REVISED: SCHEDULE OF ITEMS

PROJECT(S): FEDERAL ID(S):
9240-08-70 WISC 201641
9240-08-71 WISC 201641 CONTRACT: ONTRACT: 20161108027 WISC 2016418 WISC 2016419

LINE	!	APPROX.	UNIT PRICE	BID AMOUNT	
NO	DESCRIPTION	2	   DOLLARS   CTS	DOLLARS CTS	
0710	627.0200 Mulching 	70.000		     	
0720	628.1504 Silt Fence 	765.000	   	   	
	628.1520 Silt Fence  Maintenance 	   1,530.000  LF	 	     	
0740	628.1550 Silt Screen 	90.000		       .	
	628.1905 Mobilizations  Erosion Control	   5.000  EACH	 	   	
0760	628.1910 Mobilizations  Emergency Erosion  Control	   6.000  EACH	 	   	
	628.2008 Erosion Mat  Urban Class I Type B 	930.000	 	   	
	628.6005 Turbidity  Barriers 	   680.000  SY		   	
	628.7005 Inlet  Protection Type A 	   8.000  EACH	     	   	
	628.7010 Inlet  Protection Type B 	2.000  EACH	 	   	
	628.7015 Inlet  Protection Type C 	   48.000  EACH		     	

### Wisconsin Department of Transportation PAGE: 9 DATE: 09/27/16

REVISED: SCHEDULE OF ITEMS

CONTRACT: ONTRACT: 20161108027

LINE	I	APPROX.	UNIT PRICE		
NO	DESCRIPTION	201111111		DOLLARS CTS	
0820	628.7570 Rock Bags   	   25.000  EACH		   	
0830	629.0210 Fertilizer Type  B 	   3.200  CWT	   	     	
	630.0120 Seeding Mixture  No. 20	   55.000  LB	 	     	
	630.0140 Seeding Mixture  No. 40	   35.000  LB		     	
0860	631.0300 Sod Water 	   22.000  MGAL	   	   	
	634.0614 Posts Wood  4x6-Inch X 14-FT 	   31.000  EACH	 	   	
	637.2210 Signs Type II  Reflective H 	   172.840  SF	     	     	
	637.2230 Signs Type II  Reflective F 	   31.660  SF	 	     	
	638.2602 Removing Signs  Type II 	   31.000  EACH		   	
	638.3000 Removing Small  Sign Supports 	   21.000  EACH	 	   	
	642.5001 Field Office  Type B 	   1.000  EACH		     	

### Wisconsin Department of Transportation PAGE: 10 DATE: 09/27/16

SCHEDULE OF ITEMS REVISED:

LINE NO	!	APPROX.	UNIT PRICE	BID AMOUNT
MO	DESCRIPTION 	QUANTITY   AND UNITS	DOLLARS   CTS	DOLLARS CT
	643.0100 Traffic Control  (project) 01.  9240-08-70	1.000   EACH	   	   
	643.0100 Traffic Control  (project) 02.  9240-08-71	   1.000  EACH		   
	643.0300 Traffic Control  Drums 	   9,660.000  DAY		
	643.0420 Traffic Control  Barricades Type III 	3,036.000 DAY		
	643.0705 Traffic Control  Warning Lights Type A 	3,036.000 DAY		   
	643.0900 Traffic Control  Signs 	4,692.000   4,692.000  DAY		     
	643.0920 Traffic Control  Covering Signs Type II 	   9.000  EACH	     	     
1000	643.1000 Traffic Control  Signs Fixed Message 	   224.000  SF	     	     
	643.1050 Traffic Control  Signs PCMS 	   28.000  DAY	     	     
1020	643.2000 Traffic Control  Detour (project) 01.  9240-08-70	   1.000  EACH	     	     
1030	643.3000 Traffic Control  Detour Signs 	22,770.000  DAY	       .	       .

### Wisconsin Department of Transportation PAGE: 11 DATE: 09/27/16

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SCHEDULE OF ITEMS

CONTRACT: ONTRACT: 20161108027

LINE	!	APPROX.	UNIT PRICE	BID AMOUNT
NO	NO   DESCRIPTION	QUANTITY AND UNITS	   DOLLARS   CTS	DOLLARS CTS
	644.1410.S Temporary  Pedestrian Surface  Asphalt	   75.000  SF	 	       .
	644.1420.S Temporary  Pedestrian Surface  Plywood	   150.000  SF	 	     
	644.1430.S Temporary  Pedestrian Surface Plate 	   150.000   SF		       .
	644.1601.S Temporary  Curb Ramp 	   6.000   EACH		     
	644.1616.S Temporary  Pedestrian Safety Fence 	720.000   LF		     
1090	645.0111 Geotextile Type  DF Schedule A 	8.000   SY		       .
1100	645.0120 Geotextile Type  HR 	390.000   SY	   	   
1110	646.0106 Pavement  Marking Epoxy 4-Inch 		   	   
1120	646.0126 Pavement  Marking Epoxy 8-Inch 	   65.000   LF		     
	647.0110 Pavement  Marking Railroad  Crossings Epoxy	2.000   EACH	   	   
1140	647.0166 Pavement  Marking Arrows Epoxy  Type 2	1.000		     

## Wisconsin Department of Transportation PAGE: 12 DATE: 09/27/16

#### SCHEDULE OF ITEMS REVISED:

LINE	!	!	PROX.	UNIT PF	BID AM	
NO	DESCRIPTION		NTITY UNITS	DOLLARS	 DOLLARS	CTS
1150	647.0656 Pavement  Marking Parking Stall  Epoxy	    LF	130.000	 		
1160	647.0766 Pavement  Marking Crosswalk Epoxy  6-Inch	    LF	1,345.000			
1170	650.4000 Construction  Staking Storm Sewer 	    EACH	7.000	  - 		•
1180	650.4500 Construction  Staking Subgrade 	    LF	620.000			
	650.5000 Construction  Staking Base 	    LF	620.000			
	650.5500 Construction  Staking Curb Gutter and  Curb & Gutter	    LF	1,198.000	 		
1210	650.8000 Construction  Staking Resurfacing  Reference	      LF	2,552.000	   	   	
1220	650.8500 Construction  Staking Electrical  Installations (project)  01. 9240-08-70	  LUMP 		  LUMP 		
1230	650.9910 Construction  Staking Supplemental  Control (project) 01.  9240-08-70	  LUMP 		  LUMP 	     	
1240	650.9910 Construction  Staking Supplemental  Control (project) 02.  9240-08-71	LUMP		  LUMP 		

## Wisconsin Department of Transportation PAGE: 13 DATE: 09/27/16

SCHEDULE OF ITEMS REVISED:

LINE	!	APPROX.	UNIT PRICE	BID AMOUNT
NO	DESCRIPTION 	QUANTITY   AND UNITS	DOLLARS   CTS	   DOLLARS  CTS
	650.9920 Construction  Staking Slope Stakes 	   620.000  LF	 	
	652.0125 Conduit Rigid  Metallic 2-Inch 	   48.000  LF		   
1270	652.0225 Conduit Rigid  Nonmetallic Schedule 40  2-Inch	   1,523.000  LF		   
1280	652.0325 Conduit Rigid  Nonmetallic Schedule 80  2-Inch	   52.000  LF		   
	652.0700.S Install  Conduit into Existing  Item	   1.000  EACH	  -  -	   
1300	653.0140 Pull Boxes  Steel 24x42-Inch	   3.000  EACH		   
	653.0222 Junction Boxes  18x12x6-Inch	   4.000  EACH		     
	654.0105 Concrete Bases  Type 5 	   2.000  EACH		   
	655.0610 Electrical Wire  Lighting 12 AWG 	   4,140.000  LF		   
1340	655.0615 Electrical Wire  Lighting 10 AWG	     2,634.000  LF		

### Wisconsin Department of Transportation PAGE: 14 DATE: 09/27/16

SCHEDULE OF ITEMS REVISED:

CONTRACT: ONTRACT: 20161108027

LINE NO	I	APPROX.	UNIT PRICE	BID AMOUNT
NO	DESCRIPTION	QUANTITY   AND UNITS	DOLLARS CTS	3   DOLLARS  CTS
1350	657.0255 Transformer  Bases Breakaway 11  1/2-Inch Bolt Circle	2.000   EACH	   	
	657.0322 Poles Type  5-Aluminum 	   4.000  EACH	   	
1370	657.0610 Luminaire Arms  Single Member 4 1/2-Inch  Clamp 6-FT	   4.000  EACH	       .	
	657.6005.S Anchor  Assemblies Light Poles  on Structures	   2.000  EACH	       .	
1390	659.1115 Luminaires  Utility LED A 	   4.000  EACH	     	
1400	690.0150 Sawing Asphalt   	   1,854.000  LF	   	
1410	690.0250 Sawing Concrete 	   1,508.000  LF	       .	     
	999.1500.S Crack and  Damage Survey	LUMP	  LUMP	
1430	ASP.1T0A On-the-Job  Training Apprentice at  \$5.00/HR	2,000.000	5.0000	  00  10000.00
	ASP.1T0G On-the-Job  Training Graduate at \$5.  00/HR	1,260.000  HRS	     5.0000	6300.00

### Wisconsin Department of Transportation PAGE: 15 DATE: 09/27/16

SCHEDULE OF ITEMS REVISED:

CONTRACT:

ONTRACT: 20161108027

LINE	ITEM	APPROX.	UNIT PRICE		BID AMOUNT	
NO	DESCRIPTION 	QUANTITY   AND UNITS	DOLLARS	CTS	DOLLARS	CTS
1450	SPV.0030 Special 01.  Fertilizer for Lawn Type  Turf	   0.600   CWT		.		
1460	SPV.0060 Special 01.  Adjusting Water Valve  Boxes	   2.000  EACH		•	   	
	SPV.0060 Special 02.  Utility Line Opening  (ULO)	   4.000   EACH		•		
1480	SPV.0060 Special 03.  Removal and Salvage of  Light Pole Assemblies	   12.000  EACH				
	SPV.0060 Special 04.  Lighting Assemblies  Decorative	   7.000  EACH		•		
	SPV.0060 Special 05.  Remove Flashing Beacon 	   2.000  EACH				
	SPV.0060 Special 06.  Moving Bike Rack 	   1.000   EACH			   	
	SPV.0060 Special 07.  Tree Trimming	   5.000  EACH		·	   	
1530	SPV.0090 Special 01.  Drilled Shaft Foundation  36-Inch **P**	   183.000   LF				
1540	SPV.0090 Special 02.  Railing Pedestrian Steel	11.000	   	.   	   	

## Wisconsin Department of Transportation PAGE: 16 DATE: 09/27/16

SCHEDULE OF ITEMS REVISED:

CONTRACT:

ONTRACT: 20161108027

LINE	!	APPROX.	UNIT PRICE	BID AMOUNT
NO	DESCRIPTION 	QUANTITY AND UNITS	DOLLARS   CTS	   DOLLARS  CTS
1550	SPV.0090 Special 03.  Preparing Trail for  Surfacing	   450.000  LF		
1560	SPV.0090 Special 04.  Move Precast Concrete  Barrier	   120.000  LF		
1570	SPV.0090 Special 05.  Remove Railing	   40.000  LF		   
1580	SPV.0105 Special 01.  Remove and Repaint  Railing, R-50-3	  LUMP 	    LUMP 	     
	SPV.0105 Special 02.  Removal of Conduit and  Wire	  LUMP	  LUMP	   
1600	SPV.0105 Special 03.  Seismograph/Vibration  Monitoring	  LUMP	  LUMP	   
1610	SPV.0105 Special 04.  Utility Line Opening  (ULO) Water Main at  Bridge	  LUMP 	  LUMP 	     
1620	SPV.0165 Special 01.  Cut-Stone Boulders 	   72.000  SF		     
1630	SPV.0165 Special 02.  Coarse Aggregate Stone  Mulch	   70.000  SF	   	   
1640	SPV.0180 Special 01.  Trail Surfacing 	1,100.000		

Wisconsin Department of Transportation PAGE: 17 DATE: 09/27/16

SCHEDULE OF ITEMS REVISED:

CONTRACTOR :									
LINE  NO	ITEM   DESCRIPTION 	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT				
			DOLLARS	CTS	DOLLARS	CTS			
	SPV.0180 Special 02. Preparing Topsoil for Lawn Type Turf	   420.000  SY				·			
1660  	SPV.0195 Special 01. Exc, Haul, and Disposal of Contam Sed & Dewtrng of Contam Set	   170.000  TON							
   SECTION 0001 TOTAL			 						
	   TOTAL BID 		   						

### PLEASE ATTACH SCHEDULE OF ITEMS HERE