#### HIGHWAY WORK PROPOSAL

Notice of Award Dated

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

Proposal Number: 010

COUNTY STATE PROJECT FEDERAL PROJECT DESCRIPTION HIGHWAY

Racine 2260-08-70 WISC 2021479 Durand Ave, City Of Racine; Kearney STH 011

Ave To East Of Memorial Dr

# ADDENDUM REQUIRED

# ATTACHED AT BACK

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

Proposal Guaranty Required: \$75,000.00  Payable to: Wisconsin Department of Transportation	Attach Proposal Guaranty on back of this PAGE.
Bid Submittal Date: September 14, 2021 Time (Local Time): 11:00 am	Firm Name, Address, City, State, Zip Code SAMPLE
Contract Completion Time October 15, 2023	NOT FOR BIDDING PURPOSES
Assigned Disadvantaged Business Enterprise Goal 9%	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.

Type of Work:

For Department Use Only

Grading, Base, Concrete Pavement, Concrete Driveway, Asphalt Pavement, Curb and Gutter, Sidewalk, Storm Sewer, Signs, Pavement Markings, Street Lighting, Traffic Signals, Trees, Landscape Block Wall

Date Guaranty Returned

# PLEASE ATTACH PROPOSAL GUARANTY HERE

#### **Effective with November 2007 Letting**

# PROPOSAL REQUIREMENTS AND CONDITIONS

The bidder, signing and submitting this proposal, agrees and declares as a condition thereof, to be bound by the following conditions and requirements.

If the bidder has a corporate relationship with the proposal design engineering company, the bidder declares that it did not obtain any facts, data, or other information related to this proposal from the design engineering company that was not available to all bidders.

The bidder declares that they have carefully examined the site of, and the proposal, plans, specifications and contract forms for the work contemplated, and it is assumed that the bidder has investigated and is satisfied as to the conditions to be encountered, as to the character, quality, and quantities of work to be performed and materials to be furnished, and as to the requirements of the specifications, special provisions and contract. It is mutually agreed that submission of a proposal shall be considered conclusive evidence that the bidder has made such examination.

The bidder submits herewith a proposal guaranty in proper form and amount payable to the party as designated in the advertisement inviting proposals, to be retained by and become the property of the owner of the work in the event the undersigned shall fail to execute the contract and contract bond and return the same to the office of the engineer within fourteen (14) days after having been notified in writing to do so; otherwise to be returned.

The bidder declares that they understand that the estimate of quantities in the attached schedule is approximate only and that the attached quantities may be greater or less in accordance with the specifications.

The bidder agrees to perform the said work, for and in consideration of the payment of the amount becoming due on account of work performed, according to the unit prices bid in the following schedule, and to accept such amounts in full payment of said work.

The bidder declares that all of the said work will be performed at their own proper cost and expense, that they will furnish all necessary materials, labor, tools, machinery, apparatus, and other means of construction in the manner provided in the applicable specifications and the approved plans for the work together with all standard and special designs that may be designed on such plans, and the special provisions in the contract of which this proposal will become a part, if and when accepted. The bidder further agrees that the applicable specifications and all plans and working drawings are made a part hereof, as fully and completely as if attached hereto.

The bidder, if awarded the contract, agrees to begin the work not later than ten (10) days after the date of written notification from the engineer to do so, unless otherwise stipulated in the special provisions.

The bidder declares that if they are awarded the contract, they will execute the contract agreement and begin and complete the work within the time named herein, and they will file a good and sufficient surety bond for the amount of the contract for performance and also for the full amount of the contract for payment.

The bidder, if awarded the contract, shall pay all claims as required by Section 779.14, Statutes of Wisconsin, and shall be subject to and discharge all liabilities for injuries pursuant to Chapter 102 of the Statutes of Wisconsin, and all acts amendatory thereto. They shall further be responsible for any damages to property or injury to persons occurring through their own negligence or that of their employees or agents, incident to the performance of work under this contract, pursuant to the Standard Specifications for Road and Bridge Construction applicable to this contract.

In connection with the performance of work under this contract, the contractor agrees to comply with all applicable state and federal statutes relating to non-discrimination in employment. No otherwise qualified person shall be excluded from employment or otherwise be subject to discrimination in employment in any manner on the basis of age, race, religion, color, gender, national origin or ancestry, disability, arrest or conviction record (in keeping with s.111.32), sexual orientation, marital status, membership in the military reserve, honesty testing, genetic testing, and outside use of lawful products. This provision shall include, but not be limited to the following: employment, upgrading, demotion or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation, and selection for training, including apprenticeship. The contractor further agrees to ensure equal opportunity in employment to all applicants and employees and to take affirmative action to attain a representative workforce.

The contractor agrees to post notices and posters setting forth the provisions of the nondiscrimination clause, in a conspicuous and easily accessible place, available for employees and applicants for employment.

If a state public official (section 19.42, Stats.) or an organization in which a state public official holds at least a 10% interest is a party to this agreement, this contract is voidable by the state unless appropriate disclosure is made to the State of Wisconsin Ethics Board.

# **Effective with August 2015 Letting**

# BID PREPARATION

# Preparing the Proposal Schedule of Items

#### A General

- (1) Obtain bidding proposals as specified in section 102 of the standard specifications prior to 11:45 AM of the last business day preceding the letting. Submit bidding proposals using one of the following methods:
  - 1. Electronic bid on theinternet.
  - 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="https://wisconsindot.gov/Pages/doing-bus/contractors/hcci/bid-let.aspx">https://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 PM local time on the Thursday before the letting. Check the department's web site after 5:00 PM local time on the Thursday before the letting to ensure all addenda have been accounted for before preparing the bid. When bidding using methods 1 and 2 above, check the Bid Express<sup>TM</sup> on-line bidding exchange at <a href="http://www.bidx.com/">http://www.bidx.com/</a> after 5:00 PM local time on the Thursday before the letting to ensure that the latest schedule of items Expedite file (\*.ebs or \*.00x) is used to submit the final bid.

(4) Interested parties can subscribe to the Bid Express<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="https://wisconsindot.gov/Pages/doing-bus/contractors/hcci/bid-let.aspx">https://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, 4<sup>th</sup> floor, 4822 Madison Yards Way, Madison, WI, during regular business hours

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

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

# B.1 On the Internet

- (1) Do the following before submitting the bid:
  - 1. Have a properly executed annual bid bond on file with the department.

- 2. Have a digital ID on file with and enabled by Info Tech Inc. Using this digital ID will constitute the bidder's signature for proper execution of the bidding proposal.
- (2) In lieu of preparing, delivering, and submitting the proposal as specified in 102.6 and 102.9 of the standard specifications, submit the proposal on the internet as follows:
  - 1. Download the latest schedule of items reflecting all addenda from the Bid Express TM web site.
  - 2. Use Expedite TM 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.
  - 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:

https://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 Web site to assure that the schedule of items is prepared properly.

(2) Staple an 8 1/2 by 11 inch printout of the Expedite<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 TM 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		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 Co	orporate Seal)		
(Signature and Title)	•		
(Company Name)			
(Signature and Title)			
(Company Name)	<u> </u>		
(Signature and Title)		(Name of Surety) (Affix Seal)	
(Company Name)	·	(Signature of Attorney-in-Fact)	
(Signature and Title)			
NOTA	RY FOR PRINCIPAL	NOTARY FOR	SURETY
	(Date)	(Date	s)
State of Wisconsin	)	State of Wisconsin	)
	) ss. County )		) ss. County )
On the above date, this instrunamed person(s).	ument was acknowledged before me by the	On the above date, this instrument wa named person(s).	s acknowledged before me by the
(Signature, Nota	ary Public, State of Wisconsin)	(Signature, Notary Public	, State of Wisconsin)
(Print or Type Name, Notary Public, State of Wisconsin)		(Print or Type Name, Notary F	Public, State of Wisconsin)
(Date 0	Commission Expires)	(Date Commissi	on 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	Estimated Value	
			_
			_
			_

#### **DECEMBER 2000**

# CERTIFICATION REGARDING DEBARMENT, SUSPENSION, AND OTHER RESPONSIBILITY MATTERS - PRIMARY COVERED TRANSACTIONS

# **Instructions for Certification**

- 1. By signing and submitting this proposal, the prospective contractor is providing the certification set out below.
- 2. The inability of a person to provide the certification required below will not necessarily result in denial of participation in this covered transaction. The prospective contractor shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective contractor to furnish a certification or an explanation shall disqualify such person from participation in this transaction.
- 3. The certification in this clause is a material representation of fact upon which reliance was placed when the department determined to enter into this transaction. If it is later determined that the contractor knowingly rendered an erroneous certification in addition to other remedies available to the Federal Government the department may terminate this transaction for cause or default.
- 4. The prospective contractor shall provide immediate written notice to the department to whom this proposal is submitted if at any time the prospective contractor learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
- 5. The terms "covered transaction," "debarred," "suspended," "ineligible," "lower tier covered transaction," "participant," "person," "primary covered transaction," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of the rules implementing Executive Order 12549. You may contact the department to which this proposal is being submitted for assistance in obtaining a copy of those regulations.
- 6. The prospective contractor agrees by submitting this proposal that, should this contract be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department entering into this transaction.
- 7. The prospective contractor further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," which is included as an addendum to PR-1273 "Required Contract Provisions Federal Aid Construction Contracts," without

modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.

- 8. The contractor may rely upon a certification of a prospective subcontractor/materials supplier that it is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A contractor may decide the method and frequency by which it determines the eligibility of its principals. Each contractor may, but is not required to, check the Disapproval List (telephone # 608/266/1631).
- 9. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of a contractor is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- 10. Except for transactions authorized under paragraph 6 of these instructions, if a contractor in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department may terminate this transaction for cause or default.

Certification Regarding Debarment, Suspension, and Other Responsibility Matters - Primary Covered Transactions

- (1) The prospective contractor certifies to the best of its knowledge and belief, that it and its principals:
  - (a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
  - (b) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements or receiving stolen property;
  - (c) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offense enumerated in paragraph (1)(b) of this certification; and
  - (d) Have not within a three-year period preceding this proposal had one or more public transactions (Federal, State or local) terminated for cause or default.
- (2) Where the prospective contractor is unable to certify to any of the statements in this certification, such prospective contractor shall attach an explanation to this proposal.

# **Special Provisions**

# **Table of Contents**

	Article Description	Page #
1.	General	3
2.	Scope of Work	3
3.	Prosecution and Progress.	3
4.	Traffic	4
5.	Holiday and Special Event Work Restrictions.	5
6.	Utilities	6
7.	Municipality Acceptance of Sanitary Sewer Construction	7
8.	Hauling Restrictions.	7
9.	Information to Bidders, WPDES General Construction Storm Water Discharge Permit.	8
10.	Erosion Control.	8
11.	Notice to Contractor – Contamination Beyond Construction Limits	8
12.	Notice to Contractor – Traffic Signal Equipment Lead Time	9
13.	Notice to Contractor – Sign Removal	9
14.	Coordination with Businesses and Residents	9
15.	Public Convenience and Safety.	9
16.	Sealing Pipes, Item 204.0280.	9
17.	Abandoning Sewer, Item 204.0291.S.	9
18.	Removing Lighting Units, Item 204.9060.S.01	10
19.	Removing Traffic Signals STH 11 (Durand Ave) & S Memorial Dr, Item 204.9105.S.01	10
20.	Removing Loop Detector Wire & Lead-In Cable STH 11 (Durand Ave) & S Memorial D 204.9105.S.02.	
21.	Removing Landscaping Stone STA 160+48 to STA 161+62 RT, Item 204.9165.S.01	11
22.	Excavation, Hauling, and Disposal of Petroleum Contaminated Soil, Item 205.0501.S.	12
23.	Select Crushed Material, Item 312.0110	14
24.	Concrete Pavement Joint Layout, Item 415.5110.S.	15
25.	Manhole Covers Type J-Special, Item 611.0535	15
26.	Cover Plates Temporary, Item 611.8120.S	16
27.	Landscape Planting Surveillance and Care Cycles.	16
28.	General Requirements for Electrical Work	16
29.	Lighting Systems, General.	16
30.	Electrical Service Meter Breaker Pedestal STH 11 (Durand Ave) & S Memorial Dr, Iter 656.0200.01.	
31.	Traffic Signals.	18
32.	Optimized Aggregate Gradation Incentive, Item 715.0710	18
33.	Flexural Strength for Concrete Mix Design.	21
34.	Coloring Concrete Custom Red, Item SPV.0035.01	21
35.	Standard LED Luminaires, Item SPV.0060.01.	22
36.	Traffic Signal Controller & Cabinet STH 11 (Durand Ave) & S Memorial Dr, Item SPV.0	0060.0223

37.	Furnish and Install Ethernet Radio STH 11 (Durand Ave) & S Memorial Dr, Item SPV.0060.03	38
38.	Catch Basins 8-FT Diameter, Item SPV.0060.04.	39
39.	Field Facilities Office Space, Item SPV.0060.05.	39
40.	Utility Line Opening, Item SPV.0060.06	40
41.	Marking Contrast Epoxy 4-Inch, Item SPV.0090.01; Marking Contrast Epoxy 8-Inch, Item SPV.0090.02.	41
42.	Video Vehicle Detection System STH 11 (Durand Ave) & S Memorial Dr, Item SPV.0105.01	41
43.	Wall Modular Block Gravity Landscape, Item SPV.0165.01	47
44.	Proof Rolling, Item SPV.0170.01.	52
45.	Shredded Hardwood Bark Mulch, Item SPV.0180.01	53
46.	Management of Solid Waste, Item SPV.0195.01.	53

2260-08-70 2 of 56

# STSP'S Revised January 13, 2021 SPECIAL PROVISIONS

#### 1. General.

Perform the work under this construction contract for Project 2260-08-70, Durand Avenue, City of Racine, Kearney Avenue to STH 32, STH 11, Racine 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, 2021 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 (20210113)

# 2. Scope of Work.

The work under this contract shall consist of pavement removal, excavation common, base aggregate dense, concrete curb and gutter, concrete pavement, storm sewer, pavement marking, signing, lighting, traffic signals, traffic control, erosion control, restoration, and all incidental items necessary to complete the work as shown on the plans and included in the proposal and contract.

104-005 (20090901)

# 3. Prosecution and Progress.

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

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

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.

Do not proceed with work under this contract until April 4, 2022.

#### Racine Transit (RYDE)

RYDE operates bus route 7 along Durand Avenue. RYDE plans to temporarily close all bus stops during construction. RYDE will remove and reinstall bus stop signs and posts. Contact RYDE at least 10 business days prior to closing the eastbound direction of Durand Avenue.

Invite RYDE to all coordination meetings between the contractor, the department, local officials and business people to discuss the project schedule of operations including vehicular and pedestrian access during construction operations.

Contact information:

Willie McDonald
General Manager – RYDE
1900 Kentucky St
Racine, WI 53405
(262) 619-2443
willie.mcdonald@citvofracine.org

2260-08-70 3 of 56

#### **Timing Requirements**

Peak hours and off-peak hours are defined as follows:

Peak Hours: 7:00 AM to 9:00 AM Monday – Friday

3:00 PM to 6:00 PM Monday – Friday

Off-Peak Hours: All other days and times not listed as peak hours.

# **Street Lighting**

Maintain street lighting for the duration of construction with the use of existing lighting, proposed lighting, or a combination thereof. Install all proposed street lighting elements in stages 1 and 2, except for the lighting in the median east of Station 161+50. Do not remove existing street lighting until the proposed street lighting elements in stages 1 and 2 are complete and activated.

# **Residential and Commercial Driveway Access**

Contact property owners at least 48 hours prior to removing a driveway from service. If a property has a single driveway and the driveway width is equal to or wider than 20 feet then the driveway construction shall be staged to maintain access at all times. If a property has multiple driveways, then access shall be maintained at all times to at least one driveway.

Other arrangements regarding driveway access may be made; however, these arrangements shall be agreed to in writing and signed by the prime contractor and property owner of the affected driveway. Provide a copy of the signed agreement to the engineer. Restore private and commercial entrances with a crushed aggregate surface the same day the entrance is removed.

#### **Storm Sewer**

During construction of the storm sewer pipe from Structures 12 to 4, backfill the trench at the end of each day.

#### **Interim Completion of Work**

Complete all construction operations on Durand Avenue and S. Memorial Drive with the exception of the landscape planting surveillance and care cycles by September 1, 2022.

If the contractor fails to complete all contract works with the exception of the landscape planting surveillance and care cycles by September 1, 2022, the department will assess the contractor \$1,985 in interim liquidated damages for each calendar day that this work remains incomplete after 12:01 AM on September 2, 2022. An entire calendar day will be charged for any period of time within a calendar day that the work remains incomplete beyond 12:01 AM.

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

#### 4. Traffic.

Complete all work as shown in the traffic control plans. All variations from the traffic control plans shall be approved in writing at least 48 hours prior to any traffic control change. Notify the engineer at least 48 hours prior to any traffic control changes.

Maintain emergency and local vehicular access at all times along Durand Avenue and all local roadways within the project limits.

No operations shall proceed until all traffic control devices for such work are in the proper location.

#### Stage 1

Prior to closing eastbound Durand Avenue, implement the eastbound detour route as shown in the plans.

Maintain a single westbound 11-foot lane on Durand Avenue. Westbound Durand Avenue west of Madison Street may be closed one time during off-peak hours for the storm sewer connections within the live travel lane at Station 145+00 LT.

Maintain two 11-foot lanes on S. Memorial Drive.

2260-08-70 4 of 56

Close the side roads of Coolidge Avenue, Phillips Avenue, Packard Avenue, Hamilton Avenue, and Capitol Avenue south of Durand Avenue. Do not close adjacent side roads simultaneously without the approval of the engineer. Coolidge Avenue shall not be closed simultaneously with Phillips Avenue. Phillips Avenue shall not be closed simultaneously with either Coolidge Avenue or Packard Avenue. Packard Avenue shall not be closed simultaneously with either Phillips Avenue or Hamilton Avenue. Hamilton Avenue shall not be closed simultaneously with Packard Avenue. Coordinate side road closures with the City of Racine. Contact Ara Molitor at (262) 636-9487.

Maintain pedestrian access along the north side of Durand Avenue.

#### Stage 2

Maintain two 11-foot lanes on Durand Avenue.

Maintain two 11-foot lanes on S. Memorial Drive.

Close the side roads of Madison Street, Wellington Drive, and Hamilton Avenue north of Durand Avenue. Wellington Drive shall not be closed simultaneously with either Madison Street or Hamilton Avenue. Close the side road of Glendale Avenue east of S. Memorial Drive. Coordinate side road closures with the City of Racine. Contact Ara Molitor at (262) 636-9487.

Prior to closing either Madison Street or Hamilton Avenue north of Durand Avenue, implement the pedestrian detour route as shown in the plans.

Prior to closing Wellington Drive, implement the pedestrian detour route as shown in the plans.

Maintain pedestrian access along the south side of Durand Avenue. Maintain pedestrian access crossing Durand Avenue at Madison Street and Wellington Drive according to allowable intersection closures.

#### Stage 3

Maintain two 11-foot lanes on Durand Avenue.

Maintain two 11-foot lanes on S. Memorial Drive.

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

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

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

TABLE 108-1 CLOSURE TYPE AND REQUIRED MINIMUM ADVANCE NOTIFICATION

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

#### 5. Holiday and Special Event Work Restrictions.

Do not perform work on, nor haul materials of any kind along or across any portion of the highway carrying Durand Avenue or S. Memorial Drive traffic, and entirely clear the traveled way and shoulders of such portions of the highway of equipment, barricades, signs, lights, and any other material that might impede the free flow of traffic during the following holiday and special event periods:

2260-08-70 5 of 56

- From noon Friday, May 27, 2022 to 6:00 AM Tuesday, May 31, 2022 for Memorial Day;
- From noon Friday, July 1, 2022 to 6:00 AM Tuesday, July 5, 2022 for Independence Day;
- From noon Friday, September 2, 2022 to 6:00 AM Tuesday, September 6, 2022 for Labor Day.

stp-107-005 (20210113)

#### 6. Utilities.

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

stp-107-066 (20080501)

Underground and overhead utility facilities are located within the project limits. Utility adjustments are required for this construction project as noted below. Coordinate construction activities with a call to Diggers Hotline or a direct call to the utilities that have facilities in the area as required per statutes. Use caution to ensure the integrity of underground facilities and maintain code clearances from overhead facilities at all times. Location of existing and new facilities are approximate.

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

The following utility owners have facilities within the project area. Facilities will be relocated as mentioned below.

**AT&T Wisconsin** has underground and overhead facilities within the project limits. Overhead facilities will be transferred to the new We Energies poles. Underground facilities in the southwest quadrant of the Durand Avenue/S Memorial Drive intersection will be discontinued and new facilities will be installed along Hamilton Avenue south of Durand Ave. Underground facilities in the northeast quadrant of the Durand Avenue/S Memorial Drive intersection will be discontinued. Various pedestals within the project limits will be either adjusted or removed. AT&T Wisconsin's work will occur before construction, beginning approximately June 2021 and is anticipated to take 90 working days.

The AT&T Wisconsin contact is Michael VanBoven, (262) 636-0514, <a href="mv3658@att.com">mv3658@att.com</a>.

City of Racine Water has underground and aboveground facilities within the project limits.

City of Racine Water's work will occur before and during construction. Some water main adjustments and hydrant relocations will occur before construction, beginning approximately May 2021 and are anticipated to take 2 working days. Other water main and valve adjustments will occur during construction.

There is a potential conflict at Station 150+65, 16' RT, which the City of Racine Water will adjust during construction. At all other locations where the proposed storm sewer crosses existing water main conflicts are not anticipated; however, the clearance between the two pipes may be less than 18 inches. Notify the Water Utility Construction Department at (262) 636-9437 at least 3 working days prior to beginning storm sewer work at these locations. Water main adjustments are anticipated to take 1 working day per crossing location.

There are numerous water valves that the City of Racine Water will adjust during construction. Each adjustment is anticipated to take 15 minutes. Contact the Water Utility Construction Department at least 3 working days prior to needing valve adjustments.

The City of Racine Water contact is Chad Regalia, (262) 497-4611, chad.regalia@cityofracine.org.

**Everstream** will construct new underground facilities prior to construction. The planned facilities are shown on the plans in their approximate location. The planned route will be on the south side of Durand Avenue between STH 32 and just east of S. Memorial Drive, where the route will cross to the north side of Durand Avenue and continue west to the S. Memorial Drive intersection. The route will also be on the east side of S. Memorial Drive north of Durand Avenue.

This work will occur before construction, beginning approximately May 2021 and is anticipated to take 10 working days.

The Everstream contact is Shad Garcia, (414) 409-1708, <a href="mailto:shad.garcia@everstream.net">shad.garcia@everstream.net</a>.

2260-08-70 6 of 56

**Spectrum Communications** has underground and overhead facilities within the project limits. Spectrum Communications' work will occur before and during construction. Underground work will occur before construction, beginning approximately May 2021 and is anticipated to take 30 working days. Overhead relocation work will occur before and during construction, beginning approximately March 2022 and is anticipated to take 45 working days. Contact Spectrum 14 calendar days prior to commencing work.

The Spectrum Communications contact is Gerald Schultz, (414) 232-7178, gerald.schultz@charter.com.

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

We Energies Electric's work will occur before and during construction. All overhead and underground facilities will be adjusted before construction, beginning approximately July 2021 and are anticipated to take 160 working days. A We Energies Electric manhole in the Durand Avenue/S. Memorial Drive intersection will be adjusted during construction and is anticipated to take 5 working days.

Notify We Energies Electric 14 calendar days prior to final paving at this manhole.

The We Energies Electric contact is James Nelson, (262) 884-6734, james.nelson@we-energies.com.

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

We Energies Gas' work will occur before and during construction. All underground facilities will be adjusted before construction, beginning approximately June 2021 and are anticipated to take 100 working days. Valves within construction limits will be adjusted during construction and are anticipated to take 1 working day per valve.

We Energies Gas plans to discontinue an existing 10-inch steel main at the proposed storm sewer trunk line location between Structures 9 and 12. See Utility Details.

Notify We Energies Gas 14 calendar days prior to final paving or grading at valves that will need adjusting.

The We Energies Gas contact is Wesley Nunn, (414) 659-4933, wesley.nunn@we-energies.com.

#### 7. Municipality Acceptance of Sanitary Sewer Construction.

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

#### 8. Hauling Restrictions.

Conduct operations in a manner that will cause a minimum of inconvenience to the free flow of vehicles on roadways carrying Durand Avenue and S. Memorial Drive traffic. The contractor will be allowed access to these roads at locations approved by the engineer.

When hauling across any public roads, provide the necessary flagging and signing to control the construction equipment movements. The flagging operations shall not impede traffic flow on the public roads.

2260-08-70 7 of 56

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

The department has obtained coverage through the Wisconsin Department of Natural Resources to discharge storm water associated with land disturbing construction activities of this contract under the Wisconsin Pollutant Discharge Elimination System General Construction Storm Water Discharge Permit (WPDES Permit No. WI-S066796-1). A certificate of permit coverage is available from the regional office by contacting Robert Bellin at (262) 521-4405. Post the permit in a conspicuous place at the construction site.

stp-107-056 (20180628)

#### 10. Erosion Control.

Supplement standard spec 107.20 with the following:

Provide the ECIP 14 calendar days prior to the pre-construction conference. Provide 1 copy of the ECIP to WisDOT and 1 copy of the ECIP to the WDNR Liaison (Kristina Betzold, 2300 N. Dr. Martin Luther King Jr. Dr., Milwaukee, WI 53212, Tel: (414) 263-8517, Email: <a href="mailto:Kristina.Betzold@Wisconsin.gov">Kristina.Betzold@Wisconsin.gov</a>). Pursue operations in a timely and diligent manner, continuing all construction operations methodically from the initial removals and topsoil stripping operations through the subsequent grading, paving, and re-topsoiling to minimize the period of exposure to possible erosion. Do not implement the ECIP until it has been approved by the department.

Re-topsoil graded areas, as designated by the engineer, immediately after grading is completed within those areas. Place fertilizer and sod, as designated by the engineer, within 7 calendar days after placement of topsoil. If graded areas are left exposed for more than 14 calendar days, seed those areas with temporary seed and mulch.

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

Saw cut slurry, grinding, or chipping waste shall be collected during the process and not allowed to run, drip, or fall into the storm water conveyance system.

Stockpile excess material or spoils on upland areas away from wetlands, floodplains and waterways. Stockpiled soil shall be protected against erosion. If stockpiled material is left for more than 14 calendar days, seed the stockpile with temporary seed and mulch.

Do not pump water from the construction site to a storm water conveyance without the water first passing through a sediment trap or filter bag.

#### 11. Notice to Contractor – Contamination Beyond Construction Limits.

The department completed testing for soil and ground water contamination for locations within this project where excavation is required. Testing indicated that petroleum-contaminated soil is present at the following sites:

- 1. Former Bauman Oil Bulk Plant / Floyd's Towing, 1525 Durand Avenue
- 2. Advanced Mechanical Contractors, 1500 Durand Avenue

The contaminated soils at the above sites are expected to be beyond the excavation limits necessary to complete the work under this project. Control construction operations at these locations to ensure that they do not extend beyond the excavation limits indicated in the plans. If contaminated soils are encountered at these sites or elsewhere on the project during excavation, terminate excavation in the area and notify the engineer.

The Hazardous Materials Report is available by contacting:

Andrew Malsom WisDOT SE Region 141 NW Barstow St Waukesha, WI 53187 (262) 548-6705

2260-08-70 8 of 56

#### 12. Notice to Contractor – Traffic Signal Equipment Lead Time.

Submit shop drawings for signal poles and arms to the engineer within five calendar days after executing the contract. Order signal poles and arms within two business days after engineer's approval. This is to assure the equipment is procured in a timely fashion and, therefore, installed, inspected, and ready for turn-on at the required date.

#### 13. Notice to Contractor – Sign Removal.

Contact Ara Molitor, City of Racine, at (262) 636-9487 at least 5 working days prior to the removal of existing signs within the project corridor.

The department assumes that all signs are in good condition prior to the contractor's removal operation. Prior to removal, inspect and provide a list of any damaged signs to the engineer.

Deliver removed signs to 1415 Hampden Place, Racine WI 53403. Contact Ara Molitor, City of Racine, at (262) 636-9487 at least 5 working days prior to delivery to make arrangements.

#### 14. Coordination with Businesses and Residents.

The department will 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 1 week before the start of work under this contract and hold one meeting per month thereafter. The department will arrange for a suitable location for meetings that provides reasonable accommodation for public involvement. The department will prepare and coordinate publication of the meeting notices and mailings for meetings. The contractor shall schedule meetings with at least 2 weeks' prior notice to the engineer to allow for these notifications.

stp-108-060 (20141107)

#### 15. 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 8:00 PM until the following 7:00 AM, unless prior written approval is obtained from the engineer.

stp-107-001 (20060512)

#### 16. Sealing Pipes, Item 204.0280.

Add the following to standard spec 204.3.3.2:

(4) Remove brick, concrete block, or other concrete previously used to seal the pipe prior to placing the pipe into active service or at the direction of the engineer.

# 17. Abandoning Sewer, Item 204.0291.S.

#### **A** Description

This special provision describes abandoning existing sewer by filling it with cellular concrete as the plans show and conforming to standard spec 204 and standard spec 501 as modified in this special provision.

# **B** Materials

Provide cellular concrete meeting the following specifications: 1 part cement, 1 part fly ash, 8 parts sand, or an approved equal, and water. Provide cement meeting the requirements of standard spec 501.2.1 for Type 1 Portland Cement. Provide sand meeting the requirements of standard spec 501.2.5.3. Provide water meeting the requirements of standard spec 501.2.4.

2260-08-70 9 of 56

#### **C** Construction

Fill the abandoned sewer pipe with cellular concrete as the engineer directs. In the event that the sewer cannot be completely filled from existing manholes, tap the sewer where necessary and fill from these locations.

#### **D** Measurement

The department will measure Abandoning Sewer in volume by the cubic yard as specified in standard spec 109.1.3.

#### E Payment

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

ITEM NUMBER

DESCRIPTION

UNIT
204.0291.S

Abandoning Sewer

CY

Payment is full compensation for furnishing all materials and excavating and backfilling where necessary. stp-204-050 (20080902)

# 18. Removing Lighting Units, Item 204.9060.S.01.

#### **A Description**

This special provision describes removing lighting poles and associated incidentals conforming to standard spec 204.

#### B (Vacant)

#### **C** Construction

Contact the City of Racine street lighting department at (262) 770-9958 at least 14 calendar days prior to removing existing street lighting.

Transport poles, mast arms, transformer bases and LED luminaires to the City of Racine maintenance yard.

Dispose of remaining materials. Recycle materials where possible.

Remove associated underground conductors feeding lighting units being removed.

#### **D** Measurement

The department will measure Removing Lighting Units by each lighting unit, acceptably completed.

#### **E** Payment

Add the following to standard spec 204.5:

ITEM NUMBER DESCRIPTION UNIT 204.9060.S.01 Removing Lighting Units EACH

Payment is full compensation for removing, transporting and/or disposing of the pole, mast arms, banners, banner arms, trombone arms, concrete ballast, traffic signals, transformer bases and luminaires; for removing related underground or above ground cable, splicing through the underground conduit.

#### 19. Removing Traffic Signals STH 11 (Durand Ave) & S Memorial Dr. Item 204.9105.S.01.

#### **A Description**

This special provision describes removing existing traffic signals as shown on the plans, according to the pertinent provisions of standard spec 204, and as hereinafter provided. Specific removal items are noted in the plans.

#### B (Vacant)

# **C** Construction

Arrange for the de-energizing of the traffic signals with the local electrical utility after receiving approval from the engineer that the existing traffic signals can be removed.

2260-08-70 10 of 56

Notify the City of Racine at least five working days prior to the removal of the traffic signals. Complete the removal work as soon as possible following shut down of this equipment.

The city assumes that all equipment is in good condition and in working order prior to the contractor's removal operation. Prior to removal, inspect and provide a list of any damaged or non-working traffic signal equipment to the engineer. Any equipment not identified as damaged or not working, prior to removal, shall be replaced by the contractor at no cost to the city.

Remove all standards and poles per plan from their concrete footings and disassemble out of traffic. Remove the transformer bases from each pole. Remove the signal heads, mast arms, luminaires, wiring/cabling, and traffic signal mounting devices from each signal standard, arm or pole. Ensure that all access hand-hole doors and all associated hardware remain intact. Remove the signal cabinet from the footing. Dispose of the underground signal cable, internal wires and street lighting cable. Deliver the remaining materials to the City Public Works Facility, 801 Pearl Street. Contact Ara Molitor, at (262) 636-9487 to coordinate delivery.

#### **D** Measurement

The department will measure Removing Traffic Signals as a single lump sum of work for each intersection, acceptably completed.

#### E Payment

Add the following to standard spec 204.5:

ITEM NUMBERDESCRIPTIONUNIT204.9105.S.01Removing Traffic Signals STH 11 (Durand Ave) & S Memorial DrLS

Payment is full compensation for removing, disassembling traffic signals; for scrapping of some materials; for disposing of scrap material; for delivering the requested materials to the city, and incidentals.

# 20. Removing Loop Detector Wire & Lead-In Cable STH 11 (Durand Ave) & S Memorial Dr, Item 204.9105.S.02.

#### **A** Description

This special provision describes the removing loop detector wire and lead-in cable at the intersection of Durand Avenue & Memorial Drive. Specific removal items are noted in the plans.

#### B (Vacant)

#### **C** Construction

Notify the City of Racine at least three working days prior to the removal of the loop detector wire and lead-in cable.

Remove and dispose of detector lead-in cable including loop wire for abandoned loops per plan.

#### **D** Measurement

The department will measure Remove Loop Detector Wire and Lead-in Cable as a single lump sum unit of work for each intersection, 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

204.9105.S.02 Removing Loop Detector Wire & Lead-In Cable STH 11 (Durand Ave) & S Memorial Dr LS

Payment is full compensation for removing, scrapping and disposal.

# 21. Removing Landscaping Stone STA 160+48 to STA 161+62 RT, Item 204.9165.S.01.

#### **A Description**

This special provision describes removing landscaping stone conforming to standard spec 204.

#### B (Vacant)

2260-08-70 11 of 56

#### C (Vacant)

#### **D** Measurement

The department will measure Removing Landscaping Stone in square feet, acceptably completed.

#### **E** Payment

Add the following to standard spec 204.5:

ITEM NUMBER DESCRIPTION UNIT 204.9165.S.01 Removing Landscaping Stone STA 160+48 to STA 161+62 RT SF

stp-204-025 (20150630)

#### 22. Excavation, Hauling, and Disposal of Petroleum Contaminated Soil, Item 205.0501.S.

## **A** Description

#### A.1 General

This special provision describes excavating, loading, hauling, and disposing of petroleum contaminated soil at a DNR approved bioremediation facility. The closest DNR approved bioremediation facilities are:

Republic Services Kestrel Hawk Landfill 1989 Oakes Rd Racine, WI 53406 (262) 884-7081

Advanced Disposal Emerald Park Landfill W124 S10629 S 124th St Muskego, WI 53150 (414) 529-1360

Waste Management Pheasant Run Landfill 19414 60th St Bristol, WI 53104 (866) 909-4458

Perform this work conforming to standard spec 205 and 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 soil.

#### A.2 Notice to the Contractor – Contaminated Soil Locations

The department completed testing for soil and groundwater contamination for locations within this project where excavation is required. Testing indicated that petroleum-contaminated soil is present at the following locations the plans show:

- 1. Station 151+25 to 153+00 from reference line to project limits right, from 1 to 8+ feet below grade. The estimated volume of contaminated soil to be excavated at this location is 555 CY (approximately 944 tons using a conversion factor of 1.7 tons per cubic yard).
- 2. Station 153+00 to 154+00 from reference line to project limits right, from 6+ feet below grade. The estimated volume of contaminated soil to be excavated at this location is 94 CY (approximately 159 tons using a conversion factor of 1.7 tons per cubic yard).
- 3. Station 154+00 to 155+00 from reference line to project limits right, from 1 to 7+ feet below grade. The estimated volume of contaminated soil to be excavated at this location is 528 CY (approximately 897 tons using a conversion factor of 1.7 tons per cubic yard).
- 4. Station 154+25 to 154+75, from reference line to project limits left, from 1 to 8+ feet below grade. The estimated volume of contaminated soil to be excavated at this location is 247 CY (approximately 420 tons using a conversion factor of 1.7 tons per cubic yard).
- 5. Station 160+50 to 161+00 from reference line to project limits right, from 1 to 6 feet below grade. The estimated volume of contaminated soil to be excavated at this location is 110 CY (approximately 187 tons using a conversion factor of 1.7 tons per cubic yard).

2260-08-70 12 of 56

Directly load soil excavated by the project at the above locations into trucks that will transport the soil to a DNR-licensed bioremediation facility.

If contaminated soils are encountered elsewhere on the project, terminate excavation activities in the area and notify the engineer.

Active groundwater monitoring wells were not observed within the construction limits. If active groundwater monitoring wells are encountered elsewhere during construction, notify the engineer and protect the wells to maintain their integrity. The environmental consultant will determine if monitoring wells need to be maintained. For monitoring wells that do need to be maintained, adjust the wells that do not conflict with structures or curb and gutter to be flush with the final grade. For wells that conflict with the previously mentioned items or if monitoring wells are not required to be maintained, they will be abandoned by others.

For further information regarding previous investigation and remediation activities at these sites contact:

Name: Andrew Malsom

Address: 141 NW Barstow St, PO Box 798, Waukesha, WI 53187-0798

Phone: (262) 548-6705 Fax: (262) 548-6891

E-mail: Andrew.malsom@dot.wi.gov

#### A.3 Coordination

Coordinate work under this contract with the environment consultant:

Consultant: TRC Environmental Corporation

Address: 150 N Patrick Blvd, Suite 180, Brookfield, WI 53045

Contact: Marita Stollenwerk

Phone: (262) 901-2158 office, (262) 328-4528 cell

Fax: (262) 879-1220

E-mail: <u>mstollenwerk@trccompanies.com</u>

The role of the environmental consultant will be limited to:

- 1. Determining the location and limits of contaminated soil to be excavated based on soil analytical results from previous investigations, visual observations, and field screening of soil that is excavated;
- 2. Identifying contaminated soils to be hauled to the bioremediation facility;
- 3. Documenting that activities associated with management of contaminated soil are in conformance with the contaminated soil management methods for this project as specified herein; and
- 4. Obtaining the necessary approvals for disposal of contaminated soil from the bioremediation facility.

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 activities in the areas of contamination to the environmental consultant. Also notify the environmental consultant at least three calendar days before beginning excavation activities in each of the contaminated areas.

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

Identify the DNR approved bioremediation facility that will be used for disposal of contaminated soils and provide this information to the environmental consultant no later than 30 calendar days before beginning excavation activities in the contaminated areas or at the preconstruction conference, whichever comes first. The environmental consultant will be responsible for obtaining the necessary approvals for disposal of contaminated soils from the bioremediation facility. Do not transport contaminated soil offsite without prior approval from the environmental consultant.

#### A.4 Health and Safety Requirements

Add the following to standard spec 107.1:

During excavation activities, expect to encounter soil contaminated with gasoline, diesel fuel, fuel oil, or other petroleum related products. 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.

2260-08-70 13 of 56

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 up-to-date OSHA training to the engineer before the start of work.

# B (Vacant)

#### **C** Construction

Add the following to standard spec 205.3:

Control operations in the contaminated areas to minimize the quantity of contaminated soil excavated.

The environmental consultant will periodically evaluate soil excavated from the contaminated areas to determine if the soil will require offsite bioremediation. The environmental consultant will evaluate excavated soil based on field screening results, visual observations, and soil analytical results from previous environmental investigations. Assist the environmental consultant in collecting soil samples for evaluation using excavation equipment. The sampling frequency shall be a maximum of one sample for every 20 cubic yards excavated.

Directly load and haul soils designated by the environmental consultant for offsite bioremediation to the DNR approved bioremediation facility. Use loading and hauling practices that are appropriate to prevent any spills or releases of petroleum-contaminated soils or residues. Before transport, sufficiently dewater soils designated for off-site bioremediation so as not to contain free liquids.

If dewatering is required in an area of known contamination, water generated from dewatering activities may contain contaminants and require testing, special handling, temporary storage, and disposal. Contaminated groundwater may be discharged to the sanitary sewer with prior approval from the city of Racine.

Ensure continuous dewatering and excavation safety at all times. Provide, install, operate, maintain adequate pumping equipment, disassemble, and remove pumping equipment.

Costs associated with excavation and dewatering in the contaminated area are considered incidental to this pay item. The Wisconsin Department of Transportation will be the generator of regulated solid waste from the construction project.

Limit excavation in the location described in A.2 to minimize the handling of groundwater. Notify the engineer of any dewatering activities, and obtain any permits necessary to discharge or dispose of contaminated water. Provide copies of such permit 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.

#### **D** Measurement

The department will measure Excavation, Hauling, and Disposal of Petroleum Contaminated Soil in tons of contaminated soil, accepted by the bioremediation facility as documented by weight tickets generated by the bioremediation facility.

#### **E** Payment

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

ITEM NUMBER DESCRIPTION UNIT 205.0501.S Excavation, Hauling, and Disposal of Petroleum Contaminated Soil TON

Payment is full compensation for excavating, segregating, loading, hauling, and treatment via bioremediation of contaminated soil; obtaining solid waste collection and transportation service operating licenses; assisting in the collection soil samples for field evaluation; and dewatering of soils before transport, if necessary.

# 23. Select Crushed Material, Item 312.0110.

Replace standard spec 312.2(6) with the following:

(6) The department will assess Select Crushed Material acceptability based primarily on the engineer's visual inspection. The department may require the contractor to sample, test, and report gradation or the fracture results to show conformance of the material. One test per source, production process, or change of production process may be required.

2260-08-70 14 of 56

Replace standard spec 312.5(2) with the following:

(2) Payment for Select Crushed Material is full compensation for providing and compacting Select Crushed Material and all work necessary to provide gradation or fracture test results.

SER-321-001 (20160831)

# 24. Concrete Pavement Joint Layout, Item 415.5110.S.

#### **A** Description

This special provision describes providing a concrete pavement or concrete base joint layout design for intersections and marking the location of joints in the field

#### B (Vacant)

#### **C** Construction

Plan and locate all points necessary to establish the horizontal position of the transverse and longitudinal joints in the concrete to prevent uncontrolled cracking. Submit a joint layout design to the engineer at least 7 calendar days before paving each intersection. Do not lay out joints until the engineer has reviewed the joint layout design. Mark the location of concrete joints in the field. Follow the plan details for joints in concrete making adjustments as required to fit field conditions.

#### **D** Measurement

The department will measure Concrete Pavement Joint Layout as a single lump sum unit for all joint layout designs and marking, 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

415.5110.S

Concrete Pavement Joint Layout

LS

Payment is full compensation for providing the intersection joint layout designs and marking all joints in the field.

The department will adjust pay for crack repairs as specified in standard spec 415.5.3.

stp-415-020 (20170615)

#### 25. Manhole Covers Type J-Special, Item 611.0535.

Add the following to standard spec 611.2:

(5) Furnish chimney seal consisting of flexible heat-shrinkable sleeve with an irradiated and cross-linked polyethylene impermeable backing, coated with protective heat-activated adhesive. Provide separate closure to create a complete sleeve with the adhesive bonding to the substrate.

Add the following to standard spec 611.3.6.2:

(2) Install chimney seal according to manufacturer's recommendations. Ensure surfaces are clean, dry, and free of frost, sharp edges, and projections that could damage manhole chimney seal system. Field verify for suitable dimensions and layout before installation. Provide flexible heat-shrinkable sleeves as necessary to cover the manhole chimney from the cone to over the frame flange. Allow sleeve to cool before backfilling. Use care during backfilling to prevent damage to sleeve. Use extruded polyethylene mesh or other suitable protective shield as necessary to prevent damage to sleeve during backfilling.

Add the following to standard spec 611.5:

#### 611.5.7 Manhole Covers Type J-Special

In addition to standard spec 611.5.4, payment also includes chimney seals.

2260-08-70 15 of 56

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

#### **A** Description

This special provision describes providing and removing steel plates 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 NUMBER DESCRIPTION UNIT 611.8120.S Cover Plates Temporary EACH

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. stp-611-006 (20151210)

# 27. Landscape Planting Surveillance and Care Cycles.

Replace standard spec 632.3.18.1 with the following:

(1) A plant establishment period of 1 year shall follow the completion of planting.

Replace standard spec 632.3.19.2 with the following:

If the care specialist fails to perform any of the required care cycles as specified in standard spec 632.3.19.1, the department will assess daily damages in the amount of \$500 to cover the cost of performing the work with other forces. The department will assess these damages for each day the requirements of the care cycle remain incomplete, except when the engineer extends the required time period.

# 28. General Requirements for Electrical Work.

Add the following to standard spec 651.3.3:

(8) The City of Racine will perform any required lighting and traffic signal inspections.

# 29. Lighting Systems, General.

#### A General

Work shall conform to standard spec 651, 652, 653, 654, 655, 656, 657 and 659 and these special provisions.

#### **B** Splices

#### **B.1 Lighting Units**

Splices shall accept (4) #14-#2 conductors, be underground/overhead rated and include gel filled hinged splice closure. Utilize NSI Easy-Splice Gel Tap Splice Kit series connectors (ESGTS-2) or TE Connectivity GTAP-1. Provide two wraps of electrical tape around closure. Split bolts and connectors with plugs/caps are not allowed.

2260-08-70 16 of 56

#### **B.2 Pull Boxes**

Splices shall accept quantity and size of conductors required at individual pull boxes (which may be of differing configurations), be direct burial and submersible rated. Utilize multi-cable compression connectors with the splice encased in a Scotchcast 85 series multi-mold permanent resin compound or TE Connectivity PXE series. Split bolts and connectors with plugs/caps are not allowed. No splices are allowed in pull boxes, unless indicated on the plans or approved by city.

#### **C** Branch Circuit Tagouts

Any circuit which the contractor does not personally tag out at the disconnect shall be considered live and is subject to being activated by another person with no notice to the contractor. Tagouts shall be made with manufactured tags and shall be endorsed with the date and the name of the contractor. Tagouts shall be cleared at the end of the workday.

#### **D** Threaded Fasteners

All threaded fasteners (i.e. anchor bolts, screws, bolts, etc.) shall be liberally coated with an approved anti-seize compound, excess shall be wiped off. Excepting fasteners inside control cabinets, fasteners up to half an inch in diameter shall be stainless steel.

#### **E** Circuit Identification

Color coding shall be accomplished by use of cable jackets of the proper color. All tails of all splices shall be coded. Secondary distribution circuits shall be color-coded as shown on the plans; the ground conductor shall be green.

Each accessible location of underground cable in control cabinets, pull boxes and pole/transformer bases shall have a permanent embossed 304 stainless steel tag with 3/16" characters (Panduit MEHT187 system, Dymo Rhino M1011 metal tape embosser, ShortOrderProducts Hand Held Embosser system or approved equal) attached using black outdoor rated nylon ties. The tag shall include information identifying the cabinet and conductor circuit number (i.e. LC2-5).

#### F Existing Underground Wiring

Existing underground conduit or duct shown or indicated to be removed, shall be removed and disposed of properly to extent possible, otherwise it shall be abandoned below grade. All conductors within underground conduits, structure conduits or duct shall be removed and disposed of. Work shall be incidental to other related work.

# 30. Electrical Service Meter Breaker Pedestal STH 11 (Durand Ave) & S Memorial Dr, Item 656.0200.01.

Add the following to standard spec 656.2.3:

The city will be responsible for the electric service installation request for any city maintained facility.

Electric utility company service installation and energy cost will be billed to and paid for by the maintaining authority.

Add the following to standard spec 656.3.4:

Install the cabinet base and meter breaker pedestal first, so the electric utility company can install the service lateral. Finish grade the service trench, replace topsoil that is lost or contaminated with other materials, fertilize, seed, and mulch all areas that are disturbed by the electric utility company.

Add the following to standard spec 656.5(3):

Payment for grading the service trench, replacing topsoil, fertilizer, seed, and mulch will be incidental to this work unless the bid items are in the contract and then they will be paid for at the contract price.

2260-08-70 17 of 56

# 31. Traffic Signals.

Note that failure to comply with the state standards and specifications may result in the cost of the corrections to be made at the contractor's expense. Also, any additional disruption of city-owned facilities shall be repaired or relocated as needed at the contractor's expense.

Notify the City of Racine at least three weeks prior to the beginning of the traffic signal work.

Furnish the engineer with material lists and specifications of all traffic control equipment for approval prior to installation.

#### Replace standard spec 658.2(4) with the following:

For pedestrian signal faces: furnish polycarbonate resin housings, doors, and visors. Use yellow, Federal Standard 595 – FS13538, housings and dull black door faces and visors. For 16-inch heads, mount a z-crate visor and gasket to the door with stainless steel tabs. Drill the housing for top and bottom pipe mounting with the ability to rotate 270 degrees on the poly mounting brackets.

#### Replace standard spec 658.2(5) with the following:

For pedestrian push buttons: furnish freeze-proof ADA compliant pedestrian push buttons made by a department-approved manufacturer. The contractor shall place a Size 1, Type H reflective (R10-3EL, R, D) sign sticker (per state sign plate), message series – B, directly above each push button. Include a directional arrow or arrows on the sign as the plans show.

#### Add the following to standard spec 658.2(7):

Use an approved type of pole or standard vertical mounting brackets/clamps for signal faces from an approved manufacturer. Pedestrian traffic signal heads mounted in the median shall use federal yellow aluminum side of pole 2-way upper and lower arm assemblies providing 16  $\frac{1}{2}$ -inch center to center spacing.

#### Add the following to standard spec 658.3:

Connect all ungrounded conductors with wire nuts in the appropriate sections of the signal heads. Connect the neutral conductors to the terminal strip. Be certain to twist wires prior to installing the wire nuts. All wire nuts must be installed facing up to prevent the entrance of water.

# 32. Optimized Aggregate Gradation Incentive, Item 715.0710.

#### **Description**

This special provision describes optional contractor optimized aggregate gradation, optional optimized mixture designs, and associated additional requirements for class 1 concrete used in concrete pavements. Conform to standard specification part 7 and as follows:

# **Optimized Aggregate Gradation**

Replace standard spec 715.2.2 with the following:

A Job Mix Formula (JMF) contains all of the following:

- Proportions for each aggregate fraction conforming to table 1.
- Individual gradations for each aggregate fraction.
- Composite gradation of the combined aggregates including working ranges on each sieve according to table 2.

Submit the target JMF and aggregate production gradation test results to the engineer for review 10 business days before initial concrete placement.

2260-08-70 18 of 56

**TABLE 1 TARANTULA CURVE GRADATION BAND** 

SIEVE SIZES	PERCENT RETAINED
2 in.	0
1 1/2 in.	<u>&lt;</u> 5
1 in.	<u>&lt;</u> 16
3/4 in.	≤ 20
1/2 in.	4-20
3/8 in.	4-20
No. 4	4-20
No. 8 <sup>[1]</sup>	<u>≤</u> 12
No. 16 <sup>[1]</sup>	<u>≤</u> 12
No. 30 <sup>[1] [2]</sup>	4-20
No. 50 <sup>[2]</sup>	4-20
No. 100 <sup>[2]</sup>	<u>≤</u> 10
No. 200 <sup>[2]</sup>	≤ 5.0

<sup>[1]</sup> Minimum of 15% retained on the sum of the #8, #16, and #30 sieves.

**TABLE 2 JMF WORKING RANGE** 

WORKING RANGE <sup>[1]</sup> (PERCENT)		
+/- 5		
+/- 5		
+/- 5		
+/- 5		
+/- 5		
+/- 5		
+/- 5		
+/- 4		
+/- 4		
+/- 4		
+/- 3		
+/- 2		
+/- 2		

Working range limits of composite gradation based on moving average of 4 tests.

#### Replace standard spec 710.5.6 with the following:

Determine the complete gradation, including P200, using a washed analysis for both fine and coarse aggregates. Test each stockpile for each component aggregate once per 1,500 cubic yards during concrete production.

Take samples by one of the following sampling methods:

- 1. At the belt leading to the weigh hopper.
- 2. Working face of the stock piles at the concrete plant if approved by the engineer.

The department will take independent QV samples using the same sampling method the contractor uses for QC sampling. QV samples may be taken by the contractor's QC personnel if witnessed by the department's QV personnel. The department will split each QV sample and retain half for all dispute resolutions. If QV test results conform to the specification, the department will take no further action. If QV test results are nonconforming, add the QV to the QC test results as if it were an additional QC test.

2260-08-70 19 of 56

<sup>&</sup>lt;sup>[2]</sup> Conform to 24-34% retained of fine sand on the #30-200 sieves.

If, during concrete production, the moving average of four for any sieve fall outside the allowable JMF working range do the following:

- 1. Notify the engineer of the test results within 1 business day from the time of sampling.
- 2. Make immediate adjustments to the JMF, within the limits specified in Table 3.
- 3. Review JMF adjustments with the engineer. Both the contractor and engineer will sign the adjusted JMF if the adjustments comply with Table 3.
- 4. If the moving average of four falls outside the adjusted allowable working range, stop production and provide a new mix design including JMF to the engineer.

TABLE 3	ALLOWABLI	E JMF /	<b>ADJUSTMENTS</b>
---------	-----------	---------	--------------------

SIEVE SIZES	ALLOWABLE ADJUSTMENT (PERCENT)
<u>≥</u> No. 4	+/- 5
No. 8 – No. 30	+/- 4
No. 50	+/- 3
No. 100	+/- 2

#### **Dispute Resolution**

The department will resolve disputes as specified in standard spec 106.3.4.3.5 using QV split samples.

#### **Sublot and Lot Size**

A sublot consists of up to 1,500 cubic yards. A lot consists of two sublots.

#### **Optimized Concrete Mixtures**

The contractor may use a reduced cementitious content for concrete pavement placed if the contractor does the following:

- 1. Use an optimized aggregate gradation as defined in this special provision.
- Conform to the additional testing requirements for flexural strength as specified in the contract special provisions.
- 3. Submit aggregate gradation result records no more than 2 years old when developing the mix design.
- 4. Determine the volume of voids in the optimized aggregates using ASTM C29.
- Download and follow the instructions tab of the Optimized Gradation and Mix Design Spreadsheet located at:

https://wisconsindot.gov/Pages/doing-bus/eng-consultants/cnslt-rsrces/qmp/default.aspx

- 6. Design an appropriate paste content based upon the Performance-based PCC Mix Design Guide located at:
  - https://wisconsindot.gov/Pages/doing-bus/eng-consultants/cnslt-rsrces/gmp/default.aspx
- 7. Provide a minimum Vpaste/Vvoids of 1.25. (Paste/Void ratio equals the volume of paste divided by the volume of voids.).
- 8. Evaluate workability of trial batches by following section 6.8 of AASHTO Draft Performance Engineered Concrete Pavement Mixtures Specifications located at:

https://wisconsindot.gov/Pages/doing-bus/eng-consultants/cnslt-rsrces/qmp/default.aspx

- 9. Submit trial batch workability results when submitting the mix design.
- 10. Submit the CP Tech center computer spreadsheet concrete mix design to the engineer for review at least 3 business days before producing concrete.
- 11. Provide a minimum cement content of 520 pounds per cubic yard, except if using type I, IL, or III cement in a mix where the geologic composition of the coarse aggregate is primarily igneous or metamorphic materials, provide a minimum cement content of 660 pounds per cubic yard.
- 12. The contractor may use class C fly ash or grade 100 or 120 slag as a partial replacement for cement. For binary mixes use up to 30% fly ash or slag. For ternary mixes use up to 30% fly ash plus slag in combination. Replacement values are in percent by weight of the total cementitious material in the mix.
- 13. See CMM 8-70.2.2.3 for additional guidance.

# Measurement

The department will measure Optimized Aggregate Gradation Incentive by the dollar, for each combined averaged lot of QC test results meeting Table 1.

2260-08-70 20 of 56

#### **Payment**

The department will pay incentive of 3 percent of the contract unit price for concrete pavement under the following bid item:

ITEM NUMBER DESCRIPTION UNIT 715.0710 Optimized Aggregate Gradation Incentive DOL

stp-715-005 (20200629)

# 33. Flexural Strength for Concrete Mix Design.

This special provision describes optional testing requirements for flexural strength during the mix design process. Conform to standard spec part 7 as modified in this special provision.

Add the following to standard spec table 701-2:

TEST	TEST STANDARD
Flexural Strength of Concrete	AASHTO T97

Replace standard spec 715.2.3.1(1) with the following:

- (1) Provide both compressive and flexural strength information to demonstrate the strength of the proposed mix design. Use either laboratory strength data for new mixes or field strength data for established mixes as follows:
  - 1. Use at least 5 pairs of cylinders for compressive strength. Demonstrate that the 28-day compressive strength will equal or exceed the 85 percent within limits criterion specified in standard spec 715.5.2.
  - Use at least 5 pairs of beams for flexural strength. Demonstrate that the 28-day flexural strength will equal or exceed 650 psi.

stp-715-010 (20170615)

#### 34. Coloring Concrete Custom Red, Item SPV.0035.01.

#### **A Description**

This special provision describes coloring concrete Custom Red for incorporation full-depth in work constructed under other contract bid items. Conform to standard spec 405 as modified in this special provision.

#### **B** Materials

Replace standard spec 405.2.1.1(1) with the following:

- (1) Integrally color concrete using non-fading pigments conforming to ASTM C979.
  - For Custom Red: Follow color pigment manufacturer's recommendations for minimum and maximum percentage of loading by weight of total cementitious material in the mix. Match the concrete color in reasonably close conformance with Custom Red color, which is similar to Federal Standard 595 FS 30152.

Replace standard spec 405.2.1.1(3) with the following:

(3) The department will accept the color based on comparison to the final and accepted color sample of the test slab produced by conforming to all requirements under standard spec 405.2.1.4.3 for Trial Batches.

# **C** Construction

Replace standard spec 405.3.1(1) with the following:

(1) Construct work incorporating colored concrete conforming to contract specifications under the associate bid items except cure with clear curing compound and use only non-chloride admixtures as specified in 405.2. For crosswalks, texture with a medium broom finish, 1/16 to 1/8-inch deep, but utilizing a stiff, fiber-bristled broom or other concrete finishing tool. Textured finish shall be applied perpendicular to the pedestrian path of travel.

2260-08-70 21 of 56

Replace standard spec 405.3.1(7) with the following:

(7) Protect the colored concrete from damage. Do not permit construction traffic or material storage on colored concrete. Exclude foot traffic from colored concrete for at least 15 days after placement.

#### **D** Measurement

The department will measure Coloring Concrete by the cubic yard, acceptably incorporated into work done under other contract bid items including material incorporated into one sample panel or one test slab that achieves a color the engineer accepts, as required under standard spec 405.3.

#### **E** Payment

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

ITEM NUMBER

DESCRIPTION

UNIT

SPV.0035.01

Coloring Concrete Custom Red

CY

Payment is full compensation for developing mix designs and providing sample panels or test slabs; for furnishing pigments; for special construction procedures required under 405.3; for texturing; for removing test slabs, restoring the site, and disposing of waste material; and for other costs associated with coloring concrete.

# 35. Standard LED Luminaires, Item SPV.0060.01.

#### **A Description**

The work under these items consists of furnishing and installing LED luminaires as shown in the plans.

#### **B** Materials

The luminaires shall be as manufactured by Cree (LEDway) to match existing luminaires used in City of Racine.

#### **B.1 Luminaires**

LED luminaires shall be of a slim, low profile design optimized for minimum wind loading, constructed from rugged extruded aluminum and cast aluminum components. LED drivers are mounted in the aluminum housing which is suitable for wet listed operation (per UL 1598 requirements). Integrated high performance aluminum heat-sink specifically designed for LED applications. Finish includes an E-coat epoxy primer with an ultra-durable powder topcoat (gray/silver finish) resistant to corrosion and ultraviolet degradation and abrasion. Heat-sink finish is clear anodized.

Luminaire light distribution shall be equivalent to a Type 2 Medium.

The complete assembly shall be UL Listed for Wet Locations.

A unitized electrical module equipped with the LED drivers and surge protection shall be accessible via a separate chamber and be capable of being removed without entering or disturbing the optical chamber. Surge Protection shall meet ANSI 136.2 specified 10kV\5kA rating and be UL1449 listed.

An additional separate wiring chamber shall be provided complete with a three station terminal block and plug assembly connection to the removable electrical module.

The LED luminaires shall consist of 5700K (±500), 70CRI (min.), replaceable modular LED bars. L70 lumen maintenance factor shall exceed 150,000hrs.

Luminaires shall utilize 80 LEDs, nominal 11,982 initial lumen output, 139W, 525ma driver, 120-277V input voltage. BUG rating of B3-U0-G3, Cree STR-LWY-2M-HT-08-E-UL-SV-525 to match existing.

Warranty: 10 year manufacturer warranty on luminaire parts and finish.

#### **C** Construction

Install new LED luminaire on mast arm and level per manufacturer requirements.

#### **D** Measurement

The department will measure luminaires as each unit, acceptably completed.

2260-08-70 22 of 56

#### **E** Payment

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

ITEM NUMBER

DESCRIPTION

UNIT

SPV.0060.01

Standard LED Luminaires

EACH

Payment is full compensation for furnishing and installing new LED luminaire and pole wiring.

# 36. Traffic Signal Controller & Cabinet STH 11 (Durand Ave) & S Memorial Dr, Item SPV.0060.02.

#### **A Description**

This work shall consist of furnishing and installing traffic signal controller(s) and cabinet(s) as shown on the plans and as hereinafter provided.

Contactor shall provide shop drawings for Traffic Signal Controller & Cabinet to be approved by City of Racine prior to ordering equipment.

The traffic controllers and cabinets at the intersection shall include any necessary provisions to accommodate fiber optic interconnect.

The contractor shall submit two copies of the following to the City of Racine: Detection wiring diagrams, cable and routing diagrams, pole to pull box wiring diagrams, conductor layout standards and the associated head arrangements and other pertinent details.

Equipment will be examined, and tests will be performed to ensure that proper and sufficient equipment is furnished as is required to complete the signal plan operation and sequence in compliance with the intent of the contract specifications.

All testing and equipment examination shall be in the presence of the contractor's representative furnishing the equipment. The contractor's representative will be notified of any needed modifications or corrections to be accomplished by the contractor.

The cabinet shall not be installed until it is in proper working order and approved by City of Racine personnel or their designee.

After the contractor has mounted the cabinet on the cabinet foundation, they shall connect all the field wiring inside the controller cabinet and test the signal circuits for correct operation. The contractor shall connect and test the signal circuits outside the controller cabinet as directed by the engineer. Connecting and testing signal circuits shall be considered part of this item of work.

The controller shall be a fully traffic actuated, solid state, digital microprocessor controller, capable of providing the number and sequence of phases, overlaps, and any special logic as described herein and shown on the accompanying plan. The controller shall provide a functional Ethernet port. The controller shall be an Eagle/EPAC M60 series controller.

The controller shall be fully programmed and shall be mounted in a control cabinet to operate as a complete and functioning intersection traffic signal control system. The equipment items included shall be, but not necessarily limited to, cabinet, microprocessor controller, monitor, detector amplifiers, power supply, power distribution panel, interior cabinet wiring, and other associated electrical and electronic equipment interior to the control cabinet that is necessary to provide the type of operation described in these specifications.

Dual ring, programmable for both single and dual entry concurrent timing, eight-phase frame or equivalent shall be provided. Volume density and pedestrian timing shall be provided for all phases. MUTCD flashing capability shall be provided. All controls shall be according to the accompanying plans and with NEMA Standards Publication No.TS2-2003.

The intersection controller unit shall be capable of up to 8-phase operation plus four programmable overlaps regardless of whether preemption, coordination or the special programming is used. The intersection cabinet shall be wired for a minimum of twelve and include twelve 3 circuit load switches.

2260-08-70 23 of 56

#### **B** Materials

# **B.1 Electrical and Operational Aspects**

# **B.1.1 Buffering**

All logic circuit inputs shall be internally buffered to withstand transients and noise, such as might result from normal usage, without damage to any mechanism components.

# **B.1.2 Timing Features**

All controller timing parameters shall be fully programmable from the front panel using switches and/or keyboard inputs, and memory storage features shall be nonvolatile under power off conditions for at least 30 days. The locking, nonlocking detection mode and recall switches shall also be accessible on the front panel.

# **B.1.3 Minimum Green Timing**

The passage timer shall time concurrently with the minimum green timer, so that the duration of the minimum green time is directly adjustable and is independent of the passage time setting.

# **B.1.4 Dual Ring Timing**

In the dual ring application, no more than two phases shall be permitted to time concurrently, and no more than one phase per ring. The controller shall provide barrier protection against concurrent timing of two conflicting phases; no phases assigned to one side of the barrier shall be permitted to time concurrently, if a conflict will occur. The controller shall service calls on a single entry basis, and both rings shall cross the barrier simultaneously according to the following logic:

- Phases timing concurrently shall terminate simultaneously if both have a gap out due to excessive time between actuations.
- 2. Phases timing concurrently shall terminate simultaneously if both have a maximum time out.
- 3. In the event that one phase has not achieved a gap out or maximum time out, the other gapped out phase shall be Permitted to leave the gapped out condition and retime an extension when an actuation is received.

# **B.1.5 Manual (Police) Control**

If manual control is used, actuation of the manual control shall permit manual advance of the Walk, Pedestrian Clearance, and Green interval terminations only. Manual termination of Yellow or All Red clearance intervals shall not be permitted.

# **B.1.6 Red Revert**

An adjustable red revert control shall be provided to assure adequate red display when recycling a phase during call-away or red rest mode operation. A call for service to a different phase shall be preceded by an all-red clearance interval, as programmed.

# **B.1.7 Coordination**

The controller shall be capable of operation in progressive coordination systems and mutual coordination and shall contain, but not be limited to, the following external inputs, with all functions brought out (continued next page):

- 1. Vehicle/Pedestrian Detectors
- 2. Pedestrian Omit per phase per phase
- 3. Hold per phase
- 4. Phase Omit per phase
- 5. Internal Maximum Inhibit per ring
- 6. Omit Red Clearance per ring
- 7. Red rest per ring
- 8. Maximum II per ring
- 9. Force-Off per ring
- 10. Stop Timing per ring
- 11. Manual Control per controller
- 12. Select Minimum Recall per controller
- 13. External Start per controller
- 14. Semi-Mode per controller

2260-08-70 24 of 56

#### **B.1.8 Minimum Safe Timings Control**

Controllers shall not accept any operator input or stored timing parameters that would result in intervals shorter than the following: yellow clearance - 3.0 seconds, minimum walk - 4.0 seconds, minimum pedestrian clearance - 6.0 seconds. At the beginning of each of the above intervals, the controller shall check the previously stored data against these minimums. If an operator attempts to load an incorrect timing parameter, the controller unit shall output a unique error code on the front panel display. As an alternate to minimum timing control, a coded keyboard entry security feature may be provided.

# **B.1.9 Indicator Lights and Switches**

Indicator lights shall be provided to show the status of each signal phase on. Indicator lights shall also be used to show interval status, phase termination information, and presence of vehicular and pedestrian calls for each phase. An indicator light shall also be provided to show the status of the backup battery charging circuit.

The controller shall have an on off switch and fuse for AC power.

#### **B.1.10 Data Display**

The data panel shall be a removable handheld unit. The panel shall contain a display panel consisting of LED display characters. The face of the display shall be scratch, chemical, and solvent resistant. In the case of writing data or parameters into the controller there shall be a visual indication that the data has been accepted. The number of characters shall be adequate to read or write all data and parameters in decimal format together with a data descriptor in either alpha numeric format, or thumbwheel switch display. A data key shall be provided.

# **B.1.11 Diagnostic Program**

A diagnostic program shall be prepared by the manufacturer of the controller unit which will demonstrate the proper operation of all the inputs, outputs, controls and indicators in the controller, and shall have visual conformation on the front panel. The diagnostic program shall be either resident in the controller or furnished as a separate plug in module. A flow chart and listing of the diagnostic routine shall be furnished with the controller unit.

#### **B.1.12 Preemption**

#### B.1.12.1 General

These specifications detail a preemptor program for use with 2 through 8 phase actuated controller.

The preemptor shall be capable of being adaptable to meet the various types of applications such as railroad, fire station, and bridge preempts.

The preemptor shall be internal to the controller and shall not alter controller capability or interchangeability under normal operation. The preemptor shall be completely programmable by the user.

# **B.1.12.2 Preempt Program**

#### **B.1.12.2.1 Preempt Registration**

The preempt call input shall initialize preempt registration and start preempt sequence unless a priority call input is activated which would treat the current controller preemptions state as normal operation and reinitiate call registration.

# B.1.12.2.2 Preempt Delay

As soon as the preempt call is registered the preempt delay will begin timing unless preempt delay is set zero or preempt delay omit was active during preempt call registration. Delay shall be programmable from 0 to 255 seconds minimum.

As soon as preempt delay is timed out, current running phases not next to be common in preempt sequence are cleared. If the running phases are green and must be cleared, special programmable values of minimum green, walk and pedestrian intervalswill time normal times. Concurrently a special preempt clearance is generated. This clearance is designed for advance track signals and any overlaps that may be green and require yellow clearance.

#### **B.1.12.2.3 Entry Clearance Phase(s) Select**

Two sequential phases or phase pairs shall be available to be run as programmable fixed time intervals as an entry sequence. Two entry options shall be available, each programmable. The entry sequence shall be capable of being omitted entirely.

2260-08-70 25 of 56

#### B.1.12.2.4 Dwell Sequence

After the entry sequence, the preemptor shall enter the dwell sequence. During the dwell sequence the controller shall cycle between selected phases on a pre-timed or actuated basis. Pedestrian phasing may be normal or omitted entirely. When the dwell sequence is entered, a preempt dwell output shall be generated. The preemptor shall remain in dwell for the length of the dwell extension timer which shall be capable of being held in reset by the preempt call input. Dwell extension shall be omittable by setting the timer to zero.

#### B.1.12.2.5 Exit Sequence

After leaving dwell, the controller shall enter one or two programmed exit phases(s) or phase pairs sequences. The sequence will time programmed minimum green and place a vehicle call on all phases not omitted. After timing exit phase minimum green the controller shall time and sequence normally.

# **B.1.13 Time Base Coordination**

These specifications detail a Time Base Coordinator program for use with 2 through 8 phase actuated controller.

The units shall allow traffic control equipment to be coordinated without requiring the use of interconnection cables. The units shall coordinate traffic control equipment based on signals from a precise time base which will allow output control signals to be changed at the proper pre-programmed time to achieve the coordinated operation of an intersection with other intersections or the desired operation of an isolated intersection. The coordinators may also use a programmer for a master intersection controller which in turn is interconnected with secondary intersection controllers. The units shall also be capable of providing a command for MUTCD flash, and shall allow a full year program to be initiated and carried out without the necessity of field adjustment foranticipated special events, etc.

The time base coordinator shall be internal to the controller and shall not alter controller capability or interchangeability under normal operation. The time base coordinator shall be completely programmable by the user.

# **B.2 Monitoring**

A conflict monitor meeting the following requirements shall be provided.

#### **B.2.1 General**

Each cabinet assembly shall be wired to operate with one Malfunction Management Unit (MMU). The MMU shall be a Type 16.

This specification sets forth the minimum requirements for a shelf-mountable, sixteen channel, solid-state Malfunction Management Unit (MMU). The MMU shall meet, as a minimum, all applicable sections of the NEMA Standards Publication No. TS2-2003. Where differences occur, this specification shall govern.

# **B.2.2 Monitoring Functions**

The following monitoring functions shall be provided in addition to those required by the NEMA Standard Section 4.

# **B.2.2.1 Dual Indication Monitor**

Dual Indication monitoring shall detect simultaneous input combinations of active Green (Walk), Yellow, or Red (Don't Walk) field signal inputs on the same channel. In Type 12 mode this monitoring function detects simultaneous input combinations of active Green and Yellow, Green and Red, Yellow and Red, Walk and Yellow, or Walk and Red field signal inputs on the same channel.

When voltages on two inputs of a vehicle channel are sensed as active for more than 450 msec, the MMU shall enter the fault mode, transfer the OUTPUT relay contacts to the Fault position, and indicate the DUAL INDICATION fault. The MMU shall remain in the fault mode until the unit is reset by the RESET button or the EXTERNAL RESET input. When voltages on two inputs of a vehicle channel are sensed as active for less than 200 msec, the MMU shall not transfer the OUTPUT relay contacts to the Fault position.

When operating with Port 1 communications enabled, Bit #68 (Spare Bit #2) of the Type #129 response frame shall be set to indicate a Dual Indication fault has been detected.

Dual Indication Monitoring shall be disabled when the RED ENABLE input is not active.

Programming shall be provided to enable the Dual Indication monitoring function for the Green and Red, Green and Yellow, and Yellow and Red combinations for each individual channel. In the Type 12 mode, the Walk inputs shall be logically OR'ed with the Green inputs for purposes of Dual Indication programming.

2260-08-70 26 of 56

#### **B.2.2.2 Field Check Monitoring**

The Field Check Monitor function shall provide two modes of operation, Field Check Fault and Field Check Status.

Field Check Monitoring shall be disabled when the RED ENABLE input is not active.

#### **B.2.2.2.1 Field Check Monitor**

In the Field Check Fault mode, when the field signal input states sensed by the MMU do not correspond with the data provided by the Controller Unit in the Type #0 message for 10 consecutive messages, the MMU shall enter the fault mode, transfer the OUTPUT relay contacts to the Fault position, and indicate the FIELD CHECK FAIL fault. Bit #67 (Spare Bit #1) of the Type #129 response frame shall be set to indicate a Field Check fault has been detected. The MMU shall remain in the fault mode until the unit is reset by the RESET button or the EXTERNAL RESET input.

#### B.2.2.2.2 Field Check Status

The Field Check Status mode shall work in combination with the other fault monitoring functions of the MMU. When a Conflict, Red Fail, Clearance Fail, or Dual Indication Fail triggers the MMU, the Channel Status Display and Fault Status Display shall correspond to that detected fault. If Field Check errors were detected while the fault was being timed, the inputs on which the Field Check errors were detected shall be reported on the Channel Status display. Bit #67 (Spare Bit #1) of the Type #129 response frame shall also be set to indicate Field Check errors have been detected.

# **B.2.2.2.3 Field Check Programming**

Programming shall be provided to enable the Field Check monitoring function for each Green, Yellow, and Red input individually. Programming shall be provided to enable the Field Check monitoring function for channel 2, 4, 6, and 8 Walk input individually when operating in the Type 12 with SDLC mode.

# **B.2.2.3 Recurrent Pulse Monitoring**

The Signal Monitor shall detect Conflict, Red Fail, and Dual Indication faults that result from intermittent or flickering field signal inputs. These recurring pulses shall result in a latching fault with the RECURRENT PULSE STATUS indicated along with the resulting Conflict, Red Fail, or Dual Indication status. An option shall be provided to disable the RP detect function for testing purposes.

When operating with Port 1 communications enabled, Bit #69 (Spare Bit #3) of the Type #129 response frame shall be set to indicate a Recurrent Pulse status has been detected.

# **B.2.2.4 External Watchdog Monitoring**

The MMU shall provide the capability to monitor an optional external logic level output from a Controller Unit or other external cabinet circuitry. If the MMU does not receive a change in state on the EXTERNAL WATCHDOG input for 1500 msec (±100 msec), the MMU shall enter the fault mode, transfer the OUTPUT relay contacts to the Fault position, and indicate the WATCHDOG fault. The MMU shall remain in the fault mode until the unit is reset by the RESET button or the EXTERNAL RESET input. An MMU Power Failure shall reset the WATCHDOG fault state of the monitor. The EXTERNAL WATCHDOG input shall be wired to connector MSB-S.

When operating with Port 1 communications enabled, Bit #70 (Spare Bit #4) of the Type #129 response frame shall be set to indicate an External Watchdog fault has been detected.

# **B.2.2.5 Type Fault Monitor**

The MMU shall verify at power-up that the Type 12 or Type 16 operating mode as determined by the TYPE SELECT input is consistent with the mode set by the last external reset.

Detection of a Type Fault shall place the MMU into the fault mode, transfer the OUTPUT relay contacts to the Fault position, and indicate the TYPE 12/16 fault. The MMU shall remain in the fault mode until the unit is reset by the RESET button or the EXTERNAL RESET input. An MMU Power Failure shall reset the Type Fault state of the monitor.

# **B.2.2.6 Flashing Yellow Arrow PPLT Support**

The MMU shall be designed to monitor an intersection with up to four approaches using the four section Flashing Yellow Arrow (FYA) movement outlined by the NCHRP Research Project 3-54 on Protected/Permissive signal displays with Flashing Yellow Arrows. Two cabinet configurations shall be supported for both the MMU Type 16 and Type 12 modes depending on the number of loadswitches provided and the capabilities of the Controller Unit. In both modes the MMU shall be designed to provide

2260-08-70 27 of 56

the same fault coverage for the FYA approaches as it does for conventional protected left turn phases including Conflict, Red Fail, Dual Indication, and both Minimum Yellow and Minimum Yellow Plus Red Clearance monitoring.

# **B.2.3 Configuration Options**

# **B.2.3.1 RYG ONLY Red Fail Option**

The MMU shall provide the capability to exclude the Walk inputs from the Red Fail fault detection algorithm when operating in the Type 12 mode. When the option is selected, the absence of signals on the Green, Yellow, and Red field outputs of a channel will place the MMU unit into the fault mode, transfer the OUTPUT relay contacts to the Fault position, and indicate the RED FAIL fault.

# **B.2.3.2 LED Signal Threshold Adjust**

The MMU shall provide the capability to sense field inputs signals with the following thresholds:

Conflict, Dual Indication Low Threshold Signal Inputs (Green, Yellow, and Red)

No Detect less than 15 Vrms
Detect greater than 25 Vrms

Red Fail High Threshold Signal Inputs (Green, Yellow, and Red)

No Detect less than 50 Vrms
Detect greater than 70 Vrms

# **B.2.3.3 CVM LOG Disable Option**

The MMU shall provide a means to disable the logging of CVM fault events.

# **B.2.4 Display Functions**

The following display functions shall be provided in addition to those required by the NEMA TS-2 Standard Section 4. A PC shall not be required to display the following parameters.

# **B.2.4.1 Field Signal Voltages Display**

A mode shall be provided to display the RMS voltage of each field signal input. If the MMU is not in the fault mode, the displayed voltage will be the currently applied RMS voltage. If the MMU is in the fault mode, the displayed voltage will be the applied RMS voltage at the time of the fault.

#### **B.2.4.2 Cabinet Control Signal Voltages Display**

A mode shall be provided to display the RMS voltage of the AC Line and Red Enable, the frequency of the AC Line, and the ambient temperature measured at the MMU. If the MMU is not in the fault mode, the displayed values will be the currently applied values. If the MMU is in the fault mode, the displayed values will be the applied values at the time of the fault.

# **B.2.4.3 Field Check Status Display**

When the MMU is in the fault mode, a display screen for the front panel display shall be provided to identify all field signal inputs with Field Check status.

# **B.2.4.4 Recurrent Pulse Status Display**

When the MMU is in the fault mode, a display screen for the front panel display shall be provided to identify all field signal inputs with Recurrent Pulse status.

# **B.2.4.5 Configuration Display**

A display mode for the front panel display shall be provided that allows the setting and viewing of all MMU configuration parameters. The configuration parameters provided on the program card shall be viewable only. A PC shall not be required to completely program or view the MMU configuration parameters.

# **B.2.4.6 Event Logs Display**

A display mode for the front panel display shall be provided to review all details of the Previous Fail log, AC Line log, and the Monitor Reset log.

#### **B.2.4.7 Clock Set Display**

A display mode for the front panel display shall be provided to view and set the time and date of the MMU real time clock.

2260-08-70 28 of 56

#### **B.2.5 Operating Modes**

The MMU shall operate in both the Type 12 mode and Type 16 mode as required by the NEMA Standard.

# B.2.5.1 Help System

A context sensitive Help system shall be provided that is activated by a separate Help button. The Main Status display shall respond with text messages relevant to the position in the menu navigation level. When the MMU is in the fault mode the Help system shall respond with the Diagnostic mode described in 0.

#### **B.2.5.2 Setup Wizard**

A built-in setup mode shall be provided that automatically configures the Dual Indication enable, Field Check enable, Red Fail enable, and Minimum Yellow Plus Red Clearance enable parameters from user input consisting only of channel assignment and class (vehicle, ped, pp-turn, etc) responses.

#### **B.2.5.3 Diagnostic Wizard**

A built-in Diagnostic Wizard shall be provided that displays detailed diagnostic information regarding the fault being analyzed. This mode shall provide a concise view of the signal states involved in the fault, pinpoint faulty signal inputs, and provide guidance on how the technician should isolate the cause of the malfunction. The Diagnostic Wizard shall be automatically invoked when the MMU is in the fault mode and the HELP button is pressed. It shall also be automatically invoked when the MMU is inthe Previous Fail (PF) event log displayand the HELP button is pressed.

# B.2.5.4 TS-1 Type 12 With SDLC Mode

The MMU shall be capable of operating in the Type 12 mode with SDLC communications enabled on Port 1. The Channel Status display shall operate in the Type 12 configuration and provide the field check function for up to four pedestrian Walk inputs.

#### **B.3 Cabinet Materials**

#### **B.3.1 Enclosure**

#### **B.3.1.1 Size**

The MMU shall be compact so as to fit in limited cabinet space. It shall be possible to install on a shelf that is at least 7" deep. Overall dimensions, including mating connectors and harness, shall not exceed 10.5" x 4.5" x 11" (H x W x D).

# B.3.1.2 Material

The enclosure shall be constructed of sheet aluminum with a minimum thickness of 0.062", and shall be finished with an attractive and durable protective coating. Model, serial number, and program information shall be permanently displayed on the top surface.

# **B.3.2 Electronics**

# **B.3.2.1 Microprocesor Monitor**

A microprocessor shall be used for all timing and control functions. Continuing operation of the microprocessor shall be verified by an independent monitor circuit, which shall force the OUTPUT RELAY to the de-energized "fault" state and illuminate the DIAGNOSTIC indicator if a pulse is not received from the microprocessor within a defined period not to exceed 500 ms. Only an MMU Power Failure shall reset the DIAGNOSTIC fault state of the monitor.

# **B.3.2.2 RMS Voltage Measurement**

High speed sampling techniques shall be used to determine the true RMS value of the AC field inputs. Each AC input shall be sampled at least 32 times per line cycle. The RMS voltage measurement shall be insensitive to phase, frequency, and waveform distortion.

#### B.3.2.3 Sockets

In the interest of reliability, no IC sockets shall be used.

# B.3.2.4 Battery

All user programmed configuration settings shall be stored in an electrically erasable programmable readonly memory (EEPROM). Designs using a battery to maintain configuration data shall not be acceptable. If a battery is used, it shall provide power only to the real time clock.

2260-08-70 29 of 56

#### **B.3.2.5 Field Input Terminals**

All 120 VAC field terminal inputs shall provide an input impedance of at least 150K ohms and be terminated with a discrete resistor having a power dissipation rating of 0.5 Watts or greater.

# **B.3.2.6 Component Temperature Range**

All electrical components used in the MMU except the front panel Status LCD shall be rated by the component manufacturer to operate over the full NEMA temperature range of -34oC to +74oC.

#### **B.3.2.7 Printed Circuit Boards**

All printed circuit boards shall meet the requirements of the NEMA Standard plus the following requirements toenhance reliability:

- 1. All plated-through holes and exposed circuit traces shall be plated with solder.
- 2. Both sides of the printed circuit board shall be covered with a solder mask material.
- 3. The circuit reference designation for all components and the polarity of all capacitors and diodes shall be clearly marked adjacent to the component. Pin #1 for all integrated circuit packages shall be designated on both sides of all printed circuit boards.
- 4. All printed circuit board assemblies shall be coated on both sides with a clear moisture-proof and fungusproof sealant.

#### **B.3.3 Front Panel and Connectors**

# **B.3.3.1 MMU Status Display**

Four line by 20 character alpha-numeric LCD display shall be provided to report MMU status, time and date, menu navigation, etc. This display shall be separate from the full intersection channel status display.

#### **B.3.3.2 Full Intersection Channel Status Display**

A separate Red, Yellow, and Green indicator shall be provided for the channel status LCD display for each channel to show full intersection status simultaneously. For Type 12 mode operation a separate Red, Yellow, Green and Walk indicator shall be provided for each channel to show full intersection status simultaneously. Individual icons shall also be provided to indicate channels involved in a fault.

#### **B.3.3.3 LED Display Indicators**

The following LED display indicators shall be provided:

- 1. **Power Indicator** The green POWER indicator shall flash at a rate of 2Hz when the AC LINE voltage is below the drop-out level. It shall illuminate steadily when the AC LINE voltage returns above the restore level. It shall extinguish when the AC Line voltage is less than 75 Vrms.
- 2. **Fault Indicator** The red FAULT indicator shall illuminate when the MMU is in the fault mode and the OUTPUT relay has transferred to the Fault position.
- 3. **Port 1 Receive Indicator** The yellow RECEIVE indicator shall illuminate for a 40 msec pulse each time a Port 1 message is correctly received from the Controller Unit.
- 4. **Port 1 Transmit Indicator** The yellow TRANSMIT indicator shall illuminate for a 40 msec pulse each time a Port 1 message is transmitted from the MMU.
- 5. **EIA-232 Receive Indicator** The yellow COMM indicator shall illuminate for a 40 msec pulse each time a message is correctly received on the EIA-232 port.
- 6. **Diagnostic Indicator** The red DIAGNOSTIC indicator shall illuminate when the MMU has detected an internal diagnostic failure.

# **B.3.3.4 Controls**

All displays, controls, and connectors shall be mounted on the front panel of the MMU.

A momentary contact button shall be provided that initiates the context sensitive help system described in 0.

#### **B.3.3.5 MS Connectors**

The MS connectors on the MMU shall have a metallic shell and be attached to the chassis internally. The connectors shall be mounted on the front of the unit according to the following: Connector A shall intermate with a MS 3116 22-55 SZ, and Connector B shall intermate with a MS 3116 16-26 S.

In the interest of reliability and repair ability, printed circuit board mounted MS connectors shall not be acceptable. Internal MS harness wire shall be a minimum of AWG #22, 19 strands.

2260-08-70 30 of 56

#### B.3.3.6 EIA-232 Port

The EIA-232 port shall be electrically isolated from the MMU electronics using optical couplers and shall provide a minimum of 2500 Vrms isolation. The connector shall be an AMP 9721A or equivalent 9 pin metal shell D subminiature type with female contacts. Pin assignments shall be as shown in the following table:

PIN	<u>FUNCTION</u>
1	DCD*
2	TX DATA
3	RX DATA
4	DTR (Data Terminal Ready)
5	SIGNAL GROUND
6	DSR*
7	DSR*
8	CTS*
9	NC

<sup>\*</sup>Jumper options shall be provided to allow the connection of Pin #4 to be made with Pin #7, and the connection of Pin #8 to be made with Pin #1 and or Pin #6.

# **B.3.4 Monitor Configuration Parameters**

All Nema standard configuration parameters shall be provided by a program card meeting the requirements of clause 4.3.6 of Nema TS-2. All configuration parameters for functions and options beyond the requirements of the standard shall be stored in non-volatile memory within the MMU. This memory shall be programmable from the front panel menu driven interface, data downloaded via the EIA-232 port, or loaded from shadow memory located on the program card (see 0).

# **B.3.5 Program Card Memory**

The program card supplied with the MMU shall provide non-volatile memory that contains the configuration parameters for the enhanced features of the MMU, such that transferring the program card to a different MMU completely configures that MMU. The non-volatile memory device used on the program card shall not utilize any I/O pins designated as "Reserved" by Nema TS-2.

#### **B.3.5.1 Event Logging Functions**

The MMU shall be capable of storing in non-volatile memory a minimum of 100 events. Each event shall be marked with the time and date of the event. These events shall consist of fault events, AC Line events, reset events, and configuration change events. The capability to assign a four digit identification number and 30 character description to the unit shall be provided. The event logs shall be uploaded to a PC using the serial port of the MMU and Windows based software provided by the manufacturer.

Each event log report shall contain the following information:

- 1. Monitor ID#: a four digit (0000-9999) ID number and 30 character description assigned to the monitor.
- 2. Time and Date: time and date ofoccurrence.
- 3. Event Number: identifies the record number in the log. Event #1 is the most recent event.

#### B.3.5.2 Reports

# **B.3.5.2.1 Monitor Status Report (CS)**

The Current Status report shall contain the following information:

- 1. Fault Type: the fault type description.
- 2. Field Status: the current GYR(W) field status and field RMS voltages if the monitor is not in the fault state, or the latched field status and field RMS voltages and fault channel status at the time of the fault.
- 3. Cabinet Temperature: the current temperature if the monitor is not in the fault state, or the latched temperature at the time of the fault.
- 4. C Line Voltage: the current AC Line voltage and frequency if the monitor is not in the fault state, or the AC Line voltage and frequency at the time of the fault.
- **5.** Control Input Status: the current state and RMS voltages of the Red Enable input and Load Switch Flash bit input if the monitor is not in the fault state, or the status latched at the time of the fault.

2260-08-70 31 of 56

# B.3.5.2.2 Previous Fault Log (PF)

The Previous Fault log shall contain the following information:

- 1. Fault Type: the fault type description.
- 2. Field Status: the latched field status with RMS voltages, fault channel status, RP Detect status and Field Check status at the time of the fault.
- 3. Cabinet Temperature: the latched temperature at the time of the fault.
- 4. AC Line Voltage: the AC Line voltage and frequency at the time of the fault.
- 5. Control Input Status: the latched state of the Red Enable input at the time of the fault.

# B.3.5.2.3 AC Line Even Log (AC)

The AC Line log shall contain the following information:

1. Event Type: describes the type of AC Line event that occurred.

a. **Power-up** AC on, monitor performed a cold start

b. **Interrupt** AC Line < Brownout level

c. Restore AC restored from AC brown-out or AC interruption (AC Off), no cold start

2. AC Line Voltage: the AC Line voltage and frequency at the time of the event.

#### B.3.5.2.4 Monitor Reset Log (MR)

The Monitor Reset log shall contain the following information:

The monitor was reset from a fault by the front panel Reset button, or External Reset input, or a non-latched event clear.

# B.3.5.2.5 Configuration Change Log (CF)

The Configuration Change log shall contain the following information:

- 1. The status of all configuration programming including the contents of the Program Card.
- 2. Any configuration programming inputs such as 24V Inhibit, Port 1 Disable, Type Select.
- 3. Configuration Check Value: A unique check value that is based on the configuration of items #a and #babove.

The log shall also indicate which items have been changed since the last log entry.

# B.3.5.2.6 Signal Sequence Log (SSQ)

A minimum of five logs shall be provided that graphically display all field signal states and Red Enable for up to 30 seconds prior to the current fault trigger event. The resolution of the display shall be at least 50 milliseconds.

# **B.4 Cabinet Equipment**

#### **B.4.1 General**

Each controller shall be furnished completely housed in a door-in-door ground mounted metal cabinet that meets the requirements for a TS2 Type 2 traffic control cabinet assembly. The cabinet assembly shall meet, as a minimum, all applicable sections of the NEMA Standard Publication No. TS2-1992. Where differences occur, this specification shall govern.

Each eight phase cabinet shall consist of a size M36 cabinet capable of being base mounted, type three configuration main panel, 8 position (16 loop) detector rack, and auxiliary equipment as defined this specification.

# **B.4.1 Cabinet Construction**

Each cabinet shall be constructed from type 5052-H32 aluminum with a minimum thickness of 0.125 inches.

Each cabinet shall be designed and manufactured with materials that will allow rigid mounting, whether intended for pole, base or pedestal mounting. The cabinet must not flex on its mount.

2260-08-70 32 of 56

A rain channel shall be incorporated into the design of the main door opening to prevent liquids from entering the enclosure. Each cabinet door opening must be a minimum of 80 percent of the front surface of the cabinet. A stiffener plate shall be welded across the inside of the main door to prevent flexing.

The top of each cabinet shall incorporate a 1-inch slope toward the rear to prevent rain accumulation.

Each cabinet shall be supplied with a natural aluminum finish unless otherwise noted. Sufficient care shall be taken in handling to ensure that scratches are minimized. All surfaces shall be free from weld flash. Welds shall be smooth, neatly formed, free from cracks, blowholes and other irregularities. All sharp edges shall be ground smooth.

All seams shall be sealed with RTV sealant or equivalent material on the interior of the cabinet.

All cabinets shall be supplied with two easily removable shelves manufactured from 5052-H32 aluminum. Shelves shall be a minimum of 10 inches deep.

The shelf shall have horizontal slots at the rear and vertical slots at the front of the turned down side flange. The shelf shall be installed by first inserting the rearedge of the shelf on the cabinet rear sidewall mounting studs, then lowering the shelf on the front sidewall mounting studs. The shelf shall be held in place by a nylon tie- wrap inserted through holes on the front edge of the shelf and around the front sidewall mounting studs.

The front edge of the upper shelf shall have holes punched every 6 inches to accommodate tie wrapping of cables/harnesses.

One set of vertical "C" channels shall be mounted on each interior wall of the cabinet for the purpose of mounting the cabinet components. The channels shall accommodate spring-mounted nuts or studs. All mounting rails shall extend to within 7 inches of the top and bottom of the cabinets. Sidewall rail spacing shall be 7.88 inches center-to-center. Rear wall rail spacingshall be 18.50 inches center-to-center. (Size 5 and 6 cabinets) or 7.88 inches in size 3 cabinets. The rails shall be mounted to the cabinet with bolts (pressed into plates welded to interior of cabinet) to form a modular assembly.

The main door and police door-in-door shall close against a weatherproof and dust- proof, closed-cell neoprene gasket seal. The gasket material for the main door shall be a minimum of 0.250 inches thick by 1.00 inch wide. The gasket material for the police door shall be a minimum of 0.250 inches thick by 0.500 inches wide. The gaskets shall be permanently bonded to the cabinet.

The lower section of the cabinet door shall be equipped with a louvered air entrance. The air inlet shall be large enough to allow sufficient airflow per the rated fan capacity. Louvers must satisfy the NEMA rod entry test for 3R ventilated enclosures. A non-corrosive, vermin- and insect-proof, removable air filter shall be secured to the air entrance. The filter shall fit snugly against the cabinet door wall.

The roof of the cabinet shall incorporate an exhaust plenum with a vent screen. Perforations in the vent screen shall not exceed 0.125 inches in diameter.

The main door hinge shall be a one-piece, continuous piano hinge with a stainless steel pin running the entire length of the door. The hinge shall be attached in such a manner that no rivets or bolts are exposed.

The main door of a size 5 or larger cabinet shall include a mechanism capable of holding the door open at approximately 90, 125, and 150 degrees under windy conditions. Manual placement of the mechanism shall not be required by the field technician. The main door of a size 3 cabinet shall include a mechanism capable of holding the door open at approximately 90 and 150 degrees under windy conditions.

The main door shall be equipped with a Corbin tumbler lock number 1548-1. Two keys shall be supplied.

The police door-in-door shall be provided with a treasury type lock Corbin No. R357SGS or exact equivalent and one key.

All cabinet inside and outside surfaces shall be primed with phosphate treatment and primer. After priming, all exterior surfaces shall receive a minimum of 2 coats of rust resistant silver grey enamel and interior surfaces shall be furnished with rust resistant high gloss white enamel.

Each cabinet shall be of sufficient size to accommodate all equipment. At a minimum, the minimal cabinet size is as follows:

- Size M36 cabinet - 51" H x 36" W x 19" D

2260-08-70 33 of 56

# **B.4.2 Terminals and Facilities / Main Panel Design and Construction**

The main panel shall be constructed from 5052-H32 brushed aluminum of 0.125 inches minimum thickness and formed so as to minimize any flexing when plug-in components are installed.

All position main panels shall be hinged at the bottom to allow easy access to all wiring on the rear of the panel.

The main panel shall be fully wired in the following configuration:

Type 3 Configuration - Twelve load switch sockets, six flash transfer relay sockets, one flasher socket and two main panel BIU rack slots.

All load switch and flash transfer relay socket reference designators shall be silk- screen labeled on the front and rear of the main panel to match drawing designations. Socket pins shall be marked for reference on the rear.

Up to eight load switch sockets may be positioned horizontally or stacked in two rows on the main panel. Main panels requiring more than eight load switch sockets shall be mounted in two horizontal rows.

All load switches shall be supported by a bracket extending at least half the length of the load switch.

Rack style mounting shall be provided to accommodate the required BIUs per the configuration listed in section 3.3 above. A dual-row, 64-pin female DIN 41612 Type B connector shall be provided for each BIU rack position. Card guides shall be provided for both edges of the BIU. Terminal and facilities BIU mounting shall be an integral part of the main panel. Detector rack BIU mounting shall be an integral part of the detector rack.

All BIU rack connectors shall have pre-wired address pins corresponding to the requirements of the TS2 specification. The address pins shall control the BIU mode of operation. BIUs shall be capable of being interchanged with no additional programming.

The 12- load switch position main panels shall have all field wires contained on two rows of horizontally mounted terminal blocks. The upper row shall be wired for the pedestrian and overlap field terminations. The lower row shall be reserved for phase one through phase eight vehicle field terminations.

All field output circuits shall be terminated on a barrier type terminal block with a minimum rating of 60 amps.

All field input/output I/O) terminals shall be identified by permanent alphanumerical labels. All labels shall use standard nomenclature per the NEMA TS2 specification.

All field flash sequence programming shall be accomplished at the field terminals with the use of a screwdriver only.

Field terminal blocks shall be wired to use four positions per vehicle or overlap phase (green, yellow, red, flash). It shall not be necessary to de-bus field terminal blocks for flash programming.

It shall also be possible to program which flasher circuit the phase shall be connected to.

The main panel shall contain at least one flasher socket (silk screen labeled) capable of operating a 15-amp, 2-pole, NEMA solid state flasher. The flasher shall be supported by a bracket that extends at least half its length.

One RC network shall be wired in parallel with each group of three flash-transfer relays and any other relay coils.

All logic-level, NEMA-controller and Malfunction Management Unit input and output terminations on the main panel shall be permanently labeled. Cabinet prints shall identify the function of each terminal position.

At a minimum, two 20-position terminal blocks shall be provided at the top of the main panel to provide access to the controller unit's programmable and non- programmable I/O. Terminal blocks for DC signal interfacing shall have a number  $6-32 \times 7/32$  inch screw as minimum.

2260-08-70 34 of 56

All main panel wiring shall conform to the following wire size:

Green/Walk load switch output - 14 gauge
Yellow load switch output - 14 gauge
Red/Don't Walk load switch output - 14 gauge
MMU (other than AC power) - 22 gauge
Controller I/O - 22 gauge

AC Line (power panel to main panel, 1 for each 4 LS) - 10 gauge main panel

AC Line (main panel)

AC Neutral (power panel to main panel)

Earth ground (power panel)

Logic ground

Flash programming

- 14 gauge

- 10 gauge

- 8 gauge

- 22 gauge

- flasher terminal

14 gaugefield terminal14 gauge

All wiring, 14 AWG and smaller, shall conform to MIL-W-16878/1, type B/N, 600V, 19-strand tinned copper. The wire shall have a minimum of 0.010 inches thick PVC insulation with clear nylon jacket and rated to 105 degrees Celsius. All 12 AWG and larger wire shall have UL listed THHN/THWN 90 degrees Celsius, 600V, 0.020 inches thick PVC insulation and clear nylon jacketed.

All controller and Malfunction Management Unit cables shall be of sufficient length to allow the units to be placed on either shelf or the outside top of the cabinet in the operating mode. Connecting cables shall be sleeved in a braided nylon mesh. The use of exposed tie-wraps or interwoven cables are unacceptable.

All cabinet configurations shall be provided with enough RS-485 Port 1 communication cables to allow full capabilities of that cabinet. Each communication cable connector shall be a 15-pin metal shell D subminiature type. The cable shall be a shielded cable suitable for RS-485 communications.

All main panels shall be pre-wired for a Type-16 Malfunction Management Unit. Provide necessary terminal for video detection.

All wiring shall be neat in appearance. All cabinet wiring shall be continuous from its point of origin to its termination point. Butt type connections/splices are not acceptable.

All control cables shall be protected by a nylon jacket or equivalent protection to prevent any contact with cabinet metal shelves, doors and any other sharp corners.

All connecting cables and wire runs shall be secured by mechanical clamps. Stick- on type clamps are not acceptable.

The grounding system in the cabinet shall be divided into three separate circuits (AC Neutral, Earth Ground, and Logic Ground). These ground circuits shall be connected together at a single point as outlined in the NEMA TS2 Standard.

All pedestrian pushbutton inputs from the field to the controller shall be opto- isolated through the BIU and operate at 12 VAC.

All wire (size 16 AWG or smaller) at solder joints shall be hooked or looped around the eyelet or terminal block post prior to soldering to ensure circuit integrity. Lap joint soldering is not acceptable.

# **B.4.3 Power Panel Design and Construction**

The power panel shall consist of a separate, wholly enclosed module, securely fastened to the right sidewall of the cabinet. The power panel shall be wired to provide the necessary power to the cabinet, controller, Malfunction Management Unit, cabinet power supply and auxiliary equipment.

# **B.4.4 Auxiliary Cabinet Equipment**

The cabinet shall be provided with a thermostatically controlled (adjustable between 80-150 degrees Fahrenheit) ventilation fan in the top of the cabinet plenum. The fan shall be a ball bearing type fan and shall be capable of drawing a minimum of 100 cubic feet of air per minute. The fan unit shall not crack, creep, warp or have bearing failure within a 7 year duty cycle. The maximum noise level shall be less than 40 decibels. The fan unit shall be corrosion resistant.

2260-08-70 35 of 56

A 25-watt incandescent lamp shall be included. The lamp shall be wired to a door activated switch mounted near the top of the door.

Provide a 15 amp circuit breaker for auxiliary equipment, 20 amp circuit breaker for street lights and a non-GFI outlet for additional equipment.

Provide all necessary hardware to accommodate fiber optic interconnect and Ethernet communications.

Provide a photocell and contactor for street lighting powered from signal cabinet.

Install all additional control units in cabinet per plans. Control units include, but are not limited to, audible pedestrian push button control unit, emergency vehicle preemption control device including card rack, and video detection processor.

Provide a sealable print pouch shall be mounted to the door of the cabinet. The pouch shall be of sufficient size to accommodate one complete set of cabinet prints.

Provide two sets of complete and accurate cabinet drawings shall be supplied with each cabinet.

Provide one set of manuals for each controller supplied.

#### **B.4.5 Vehicle Detection**

A vehicle detector amplifier rack shall be provided in each cabinet. Detector racks shall be in the following configuration.

Shall support up to 16 channels of loop detection and one BIU.

Each cabinet shall contain detector interface panels for the purpose of connecting field loops and vehicle detector amplifiers. The panels shall be manufactured from FR4 G10 fiberglass, 0.062 inches thick, with a minimum of 2 oz. of copper for all traces.

One 16-position interface panel shall be provided for each 16-channel rack. The interface panel shall be secured to a mounting plate and attached to the left sidewall of the cabinet.

Each interface panel shall allow for the connection of eight or sixteen independent field loops. A ground bus terminal shall be provided between each loop pair terminal to provide a termination for the loop lead-in cable ground wire.

Lightning protection device mounting holes shall be provided to accommodate an Edco SRA-16C, or Edco SRA-6, or Edco LCA-6, or a varistor lightning protection device. Lightning protection devices shall not be provided.

A cable consisting of 20 AWG twisted pair wires shall be provided to enable connection to and from the panel to a detector rack. The twisted pair wires shall be color-coded red and white wires.

All termination points shall be identified by a unique number and silk screened on the panel.

Each detector rack shall be powered by the cabinet power supply (refer to section 9.6 of this specification).

#### **B.4.6 Cabinet Test Switches and Police Panel**

A test switch panel shall be mounted on the inside of the main door. The test switch panel shall provide the following:

- 1. AUTO/FLASH SWITCH. When in the flash position, power shall be maintained to the controller and the intersection shall be placed in flash. The controller shall not be stop timed when in flash.
- 2. STOP TIME SWITCH. When applied, the controller shall be stop timed in the current interval.
- 3. CONTROL EQUIPMENT POWER ON/OFF. This switch shall control the controller, MMU, and cabinet power supply AC power.

The police door switch panel shall contain the following:

- SIGNALS ON/OFF SWITCH. In the OFF position, power shall be removed from signal heads in the intersection. The controller shall continue to operate. When in the OFF position, the MMU shall not conflict or require reset.
- 2. FLASH/NORMAL SWITCH. In the flash position, power shall not be removed from the controller and stop time shall be applied.

All toggle type switches shall be heavy duty and rated 15 amps minimum. Single- or double-pole switches may be provided, as required.

2260-08-70 36 of 56

Any exposed terminals or switch solder points shall be covered with a non-flexible shield to prevent accidental contact.

All switch functions must be permanently and clearly labeled.

All wire routed to the police door-in-door and test switch pushbutton panel shall be adequately protected against damage from repetitive opening and closing of the main door.

All test switch panel wiring shall be connected to the main panel via a multiple pin type connector.

# **B.4.7 Auxiliary Devices**

Load switches shall be solid state and shall conform to the requirements of Section 6.2 of the NEMA TS2 Standard.

Load switches shall be dedicated per phase. The use of load switches for other partial phases is not acceptable.

The flasher shall be solid state and shall conform to the requirements of section 6.3 of the NEMA TS2 Standard.

All flash transfer relays shall meet the requirements of Section 6.4 of the NEMA TS2 Standard.

The coil of the flash transfer relay must be deenergized for flash operation.

All Bus Interface Units (BIUs) shall meet the requirements of Section 8 of the NEMA TS2 Standard.

The full complement of Bus Interface Units shall be supplied with each cabinet to allow for maximum phase and function utilization for which the cabinet is designed. BIU's shall be from the same manufacture as the controller manufacturer used in the city.

Each Bus Interface Unit shall include power on, transmit and valid data indicators. All indicators shall be LEDs.

The cabinet power supply shall meet the requirements of Section 5.3.5 of the NEMA TS2 Standard.

The cabinet power supply shall provide LED indicators for the line frequency, 12 VDC, 12 VAC, and 24 VDC outputs.

The cabinet power supply shall provide (on the front panel) jack plugs for access to the +24 VDC for test purposes.

One cabinet power supply shall be supplied with each cabinet assembly.

#### **B.5 Equipment List and Drawings**

Detailed shop drawings of the control cabinet, equipment layout drawings and wiring diagrams of all equipment installed in the controller cabinet shall be submitted to the city for approval. Two sets of cabinet wiring diagrams shall be contained in a heavy duty clear plastic envelope mounted on the inside of the front door.

At the time of delivery, the contractor shall furnish one set of instruction manuals and an itemized price list for each type of equipment, their subassemblies, and their replacement parts. The instruction book shall include the following information: a) Table of Contents, b) operating procedure, c) step-by-step maintenance and troubleshooting information for the entire assembly, d) circuit wiring diagrams, e) pictorial diagrams of parts locations, f) parts numbers, and g) theory of operation. The instructional manuals shall include itemized parts lists. The itemized parts lists shall include the manufacturer's name and parts number for all components (such as IC', diodes, switches, relays, etc.) used in each piece of equipment. The list shall include cross references to parts numbers of other manufacturers who make the same replacement parts.

# **B.6 Warranty**

Certify that the equipment meets the required specification and supply a complete catalog description. The following documents shall also be provided.

- 1. A supplier warranty statement which stipulates that equipment to be supplied shall be warranted for two years from the date of purchase.
- 2. Operations manuals.
- 3. Maintenance manuals.
- 4. Schematic diagrams.
- 5. Component and equipment locations within the cabinet.

2260-08-70 37 of 56

If a malfunction in the controller unit, or its auxiliary equipment occurs during the warranty period, the supplier shall, within 24 hours after notification (excluding Saturday and Sunday), furnish a like controller unit module, or auxiliary equipment, for use while the warranted unit is being repaired. The isolation of any malfunction during the warranty period shall be the responsibility of the supplier. After the supplier has repaired and returned the equipment, the city shall then return the spare component to the supplier.

Consistent with customary trade practices, the manufacturer shall furnish a warranty for all electrical or mechanical equipment described herein. The contractor shall turn such warranty over to the owner for potential dealing with the guarantor.

During the installation and testing of the controller, the contractor shall provide, at his own expense, a competent representative to oversee, direct and manage the installation and testing of the controller. In the final stages of the installation and testing, the manufacturer's representative shall be available at the job site for consultation until such time as the controller operation is tested and accepted.

If a malfunction in the controller unit or its auxiliary equipment occurs during the warranty period, the supplier shall, within 24 hours after notification (excluding Saturday and Sunday), furnish a like controller unit, module, or auxiliary equipment, for use while the warranted unit is being repaired. The isolation of any malfunction and the repair and/or replacement of any device within the warranty period shall be the responsibility of the supplier. After the supplier has repaired and returned the equipment, the city shall return the spare component to the supplier.

# **C** Construction

Perform work according to standard spec 651.3, 652.3, 653.3, 654.3, 655.3, 656.3, 657.3, 658.3 and 659.3 except as specified below.

Install the traffic signal cabinet on the concrete control cabinet base the same day it is delivered to the site location.

Request a signal inspection of the completed signal installation to the engineer at least five working days prior to the time of the requested inspection. City personnel will perform the inspection.

#### **D** Measurement

The department will measure Traffic Signal Controller & Cabinet as a 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

**EACH** 

SPV.0060.02 Traffic Signal Controller & Cabinet STH 11 (Durand Ave) & S Memorial Dr

Payment is full compensation for furnishing and installing the signal controller and conflict monitor together with cabinet, all required control units, all additional harnesses for preemption, switches for flashing operation, and fittings as are necessary to assure that the controller will perform the said functions.

# 37. Furnish and Install Ethernet Radio STH 11 (Durand Ave) & S Memorial Dr, Item SPV.0060.03.

# **A** Description

This special provision describes furnishing and installing a new 5.8 GHz Ethernet radio and associated external antenna at a new or existing cabinet or new or existing pole.

# **B** Materials

Materials shall include the following:

- 1. One 5.8 GHz Ethernet bridge with integral antenna
- 2. One 5.8 GHz Ethernet bridge power converter
- 3. One 5.8 GHz Ethernet bridge mounting bracket
- 4. One 5.8 GHz Ethernet bridge external antenna where directed by the plans or by the engineer
- 5. Mounting hardware
- 6. Outdoor rated Category 6 communications cable
- 7. Inline network cable surge suppressor
- 8. Coax cable from 5.8 GHz Ethernet bridge to external antenna

2260-08-70 38 of 56

Ethernet radio shall be compatible with EPAC traffic signal controllers.

#### **C** Construction

Bond the surge suppressor to the cabinet grounding system.

Install the 5.8 GHz Ethernet Bridge in a point-to-point or point-to-multipoint configuration as shown on the plans and as directed by the engineer. Mounting height of 12'-15' is recommended to allow sufficient line of sight. Sufficient line of sight shall be field-verified by the engineer and vendor.

Use the manufacturer's set-up software to configure the Ethernet bridge radio for its intended use. Use the signal strength indicator on the radio to find the optimum position. Also perform a frequency analysis to determine the optimal hop pattern of the radios and test the continuity of the link by polling the radios using the software provided. The position of the radio and the hop pattern shall be adjusted until the polls show at least 200 consecutive polling intervals have been successfully transmitted and received. Demonstrate to the engineer that the hop pattern selected corresponds to the optimal noise free frequencies identified in the frequency analysis. Deliver 3 copies of the final test results for signal strength, frequency analysis, and test polling.

#### **D** Measurement

The department will measure Furnish and Install Ethernet Radio by each individual unit, acceptably completed.

# E Payment

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

ITEM NUMBER DESCRIPTION UNIT

SPV.0060.03 Furnish and Install Ethernet Radio STH 11 (Durand Ave) & S Memorial Dr EACH

Payment is full compensation for installing, setting up, configuring, and testing the 5.8 GHz Ethernet bridge radio, surge suppressor, cables, and connections.

# 38. Catch Basins 8-FT Diameter, Item SPV.0060.04.

Furnish and install catch basins according to standard spec 611 and the plan details.

# 39. Field Facilities Office Space, Item SPV.0060.05.

#### **A** Description

This special provision describes furnishing, equipping, and maintaining a field office as required in the contract at engineer-approved locations conforming to standard spec 642 and as follows.

#### **B** Materials

Provide Field Facilities Office Space conforming to standard spec 642.2.1 except delete paragraphs (1), (7), and (9).

Replace standard spec 642.2.1(4) with the following:

Provide and maintain suitable interior sanitary facilities conforming to State and local health requirements, in clean and good working condition, and stock with sanitary supplies for the duration of the contract. Furnish office space in an existing office building or existing building converted to office space with a minimum of 1200 square feet. The facility shall have no fee parking with a minimum parking for 15 cars. The space shall include a meeting room with a minimum of 350 square feet. The exterior door(s) shall have locks in good working order and keys provided for all field staff. The office space shall be located within 2 miles of the construction project.

2260-08-70 39 of 56

Equip the office as specified in standard spec 642.2.2.1 except delete paragraph (1) and (4) and add the following:

- 1. Five suitable office desks with drawers and locks.
- 2. Five ergonomically correct office chairs in working condition with at a minimum: 5-legged base with casters, seat adjustable from 15 to 22 inches from the floor with a seamless waterfall, rounded, front edge, and high backrest with no arms or adjustable arms.
- 3. Four 6-foot folding tables.
- 4. One 10-foot folding table.
- 5. Five 2-drawer file cabinets.
- 6. Three 4-shelf bookcases.
- 7. Twenty folding chairs.

Provide for the professional cleaning of the field office during regular business hours twice monthly. Provide clearly marked recycling and waste receptacles within the field office, and separate recycling and waste dumpsters near the field office. Cover outdoor containers to keep out rain, snow, and wind-driven debris. Provide regularly scheduled recycling and waste pick-up.

#### **C** Construction

Conform to standard spec 642.3 except delete paragraph (2).

#### **D** Measurement

The department will measure the Field Facilities Office Space as each office, acceptably completed.

# **E** Payment

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

ITEM NUMBERDESCRIPTIONUNITSPV.0060.05Field Facilities Office SpaceEACH

Payment is full compensation for providing, equipping, securing, and maintaining the facility; for parking, for telecommunications equipment, installation, and service fees; and for providing bottled water, utilities, fuel, ventilation, and toilet facilities as required, either independently or jointly with the field laboratory, for the time specified in standard spec 642.3.

The department will pay for the cost of telecommunications usage fees incurred by department staff.

SER-642-002 (20160808)

# 40. Utility Line Opening, Item SPV.0060.06.

# **A** Description

This work consists of excavating to uncover utilities for the purpose of determining elevation and potential conflicts 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.

Perform the utility line openings as soon as possible and at least 10 days in advance of proposed utility construction to allow any conflicts to be resolved with minimal disruption. Where utilities are within 6 feet of each other at a potential conflict location, only one utility line opening will be called for. In these cases, a single utility line opening will be considered full payment to locate multiple utilities. Provide utility line openings with a trench up to 10 feet long as measured at the trench bottom, and of any depth required to locate the intended utility.

Notify the utility engineers or their agents of this work a minimum of 3 working days prior to the work so they may be present when the work is completed. Do not perform utility line openings without the approval of the engineer.

2260-08-70 40 of 56

#### **D** Measurement

The department will measure Utility Line Opening as each individual opening, 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 Utility Line Opening 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, and for cleanup.

Existing pavement removal necessary to facilitate utility line openings will be considered part of or paid for under Utility Line Openings. Replacement pavement, concrete curb, gutter, and sidewalk items will be considered separate from Utility Line Openings and will be measured and paid for separately.

# 41. Marking Contrast Epoxy 4-Inch, Item SPV.0090.01; Marking Contrast Epoxy 8-Inch, Item SPV.0090.02.

#### **A** Description

This special provision describes applying contrast epoxy marking conforming to standard spec 646, as the plans show, and as follows.

#### **B** Materials

Furnish epoxy pavement marking materials conforming of standard spec 646.2.

#### **C** Construction

For 4-inch markings, apply two 1  $\frac{1}{2}$ -inch wide black epoxy lines with a 4-inch separation between the two black lines for the first pass, followed by a 4-inch wide white epoxy line second pass, for a total width of 7 inches. Apply epoxy pavement marking conforming to standard spec 646.3.

For 8-inch markings, apply two 1  $\frac{1}{2}$ -inch wide black epoxy lines with an 8-inch separation between the two black lines for the first pass, followed by an 8-inch wide white epoxy line second pass, for a total width of 11 inches. Apply epoxy pavement marking conforming to standard spec 646.3.

#### **D** Measurement

The department will measure Marking Contrast Epoxy by the linear foot, acceptably completed, measured once as the length of the centerline of the completed installation.

#### E Payment

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

ITEM NUMBERDESCRIPTIONUNITSPV.0090.01Marking Contrast Epoxy 4-InchLFSPV.0090.02Marking Contrast Epoxy 8-InchLF

Payment is full compensation for providing replacement markings.

SER-646-001 (20180213)

# 42. Video Vehicle Detection System STH 11 (Durand Ave) & S Memorial Dr, Item SPV.0105.01.

#### **A Description**

This specification describes furnishing and installing a system that detects vehicles on a roadway using only video images of vehicle traffic. This item includes all materials and labor necessary to install a completely functional vehicle detection system including but not limited to cameras, processors, video monitor, mounting hardware, power cable, and coaxial cable. The system includes an Iteris branded camera.

2260-08-70 41 of 56

#### **B** Materials

#### **B.1 System Hardware**

The video detection system (VDS) shall consist of up to four video cameras, a video detection processor (VDP) capable of processing from one to four video sources, either wired or wireless, wireless video transmission receiver, receiver antenna and a pointing device.

# **B.2 System Software**

The system shall include software that detects vehicles in multiple lanes using only the video image. Detection zones shall be defined using only an on board video menu and a pointing device to place the zones on a video image. Up to 24 detection zones per camera view shall be available. A separate computer shall not be required to program the detection zones.

# **B.3 Functional Capabilities**

# **B.3.1 System Configuration**

The VDS will be deployed at locations where site conditions and roadway geometry vary. The VDS system may also be deployed at locations where existing cabinets or equipment exist. Existing site configurations will dictate the availability of cabinet space and VDS usage.

The proposed VDS shall be available in various configurations to allow maximum deployment flexibility. Each configuration shall have identical user interface for system setup and configuration. The communications protocol to each configuration shall be identical and shall be hardware platform independent. The proposed VDS shall have multiple configurations available for deployment.

Description	No. Video Inputs	No. Video Outputs	Mounting Configuration	Power Supply Requirements
Single-Channel Rack Mounted	1	1	Rack Mount (Type 170 or NEMA TS-1, TS-2 Racks)	12/24 VDC Power From Rack
Dual-Channel Rack Mounted	2	1	Rack Mount (Type 170 or NEMA TS-1, TS-2 Racks)	12/24 VDC Power From Rack
Quad-Channel Rack Mounted	4	1	Rack Mount (Type 170 or NEMA TS-1, TS-2 Racks)	12/24 VDC Power From Rack

**TABLE 1 - VDS CONFIGURATION** 

An option to have wireless video transmission between the camera sensor and VDP shall also be available from the VDS manufacturer.

Wired camera systems shall be able to transmit NTSC or PAL video signals, with minimal degradation, up to 1000 feet under ideal conditions.

Wireless camera systems shall be able to transmit an NTSC video signal, with minimal signal degradation, up to 500 feet under normal conditions and up to 900 feet under ideal electromagnetic interference conditions. Adjacent sources of electromagnetic radiation, or the absence of a direct line of sight between transmitter and receiver antennas, may result in video signal degradation.

#### **B.3.2 System Interfaces**

The following interfaces shall be provided for each of the configurations identified in Table 1.

- 1. Video Input: Each video input shall accept RS170 (NTSC) or CCIR (PAL) signals from an external video source (camera sensor or VCR). The interface connector shall be BNC type and shall be located on the front of the video processing unit. The video input shall have the capability to select 75-ohm or high impedance (Hi-Z) termination.
- Video Lock LED: A LED indicator shall be provided to indicate the presence of the video signal. The LED shall illuminate upon valid video synchronization and turn off when the presence of a valid video signal is removed.

2260-08-70 42 of 56

- 3. Video Output: One video output shall be provided. The video output shall be RS170 or CCIR compliant and shall pass through the input video signal. For multi-channel video input configurations, a momentary push-button shall be provided on the front panel to toggle through each input video channel. In the absence of a valid video signal, the channel shall be skipped, and the next valid video signal shall be switched. The video output shall have the capability to show text and graphical overlays to aid in system setup. The overlays shall display real-time actuation of detection zones upon vehicle detection or presence. Overlays shall be able to be turned off by the user. Control of the overlays and video switching shall also be provided through the serial communications port. The video output interface connector shall be BNC type.
- 4. Serial Communications: A serial communications port shall be provided on the front panel. The serial port shall compliant with EIA232 electrical interfaces and shall use a DB9 type connector. The serial communications interface shall allow the user to remotely configure the system and/or to extract calculated vehicle/roadway information. The interface protocol shall be documented, or interface software shall be provided. The interface protocol shall support multi-drop or point-to-multipoint communications. Each VDS shall have the capability to be addressable.
- 5. Contact Closure Output: Open collector contact closure outputs shall be provided. Four open collector outputs shall be provided for the single, dual or quad channel rack-mount configuration. Additionally, the VDPs shall allow the use of extension modules to provide up to 24 open collector contact closures per camera input. Each open collector output shall be capable of sinking 30 mA at 24 VDC. The open collector output will be used for vehicle detection indicators as well as discrete outputs for alarm conditions.
- 6. Detection LEDs: LEDs shall be provided on the front panel. The LEDs shall illuminate when a contact closure output occurs. Rack-mounted video processors shall have a minimum of four LEDs. Rack-mounted extension modules shall have two or four LEDs to indicate detection.
- 7. Mouse Port: A USB mouse shall be provided on the front panel of the rack mount video processing unit. The mouse port shall not require special mouse software drivers. The mouse port shall be used as part of system setup and configuration. A mouse shall be provided with each video processor.

# **B.3.3 General System Functions**

Detection zones shall be programmed via an on board menu displayed on a video monitor and a pointing device connected to the VDP. The menu shall facilitate placement of detection zones and setting of zone parameters or to view system parameters. A separate computer shall not be required for programming detection zones or to view system operation.

The VDP shall store up to three different detection zone patterns. The VDP can switch to any one of the three different detection patterns within 1 second of user request via menu selection with the pointing device.

The VDP shall detect vehicles in real time as they travel across each detection zone.

The VDP shall have an EIA232 port for communications with an external computer. The VDP EIA232 port shall be multi-drop capable.

The VDP shall accept new detection patterns from an external computer through the EIA232 port when the external computer uses the correct communications protocol for downloading detection patterns. A Microsoft Windows-based software designed for local or remote connection and providing video capture, real-time detection indication and detection zone modification capability shall be provided with the system.

The VDP system shall have the capability to automatically switch to any one of the stored configurations based on the time of day which shall be programmable by the user.

The VDP shall send its detection patterns to an external computer through the EIA232 port when requested when the external computer uses the correct communications protocol for uploading detection patterns.

The VDP shall default to a safe condition, such as a constant call on each active detection channel, in the event of unacceptable interference with the video signal.

The system shall be capable of automatically detecting a low-visibility condition such as fog and respond by placing all defined detection zones in a constant call mode. A user-selected output shall be active during the low-visibility condition that can be used to modify the controller operation if connected to the appropriate controller input modifier(s). The system shall automatically revert to normal detection mode when the low-visibility condition no longer exists.

2260-08-70 43 of 56

# **B.3.4 Vehicle Detection**

Up to 24 detection zones per camera input shall be supported and each detection zone can be sized to suit the site and the desired vehicle detection region.

The VDP shall provide up to 24 open collector output channels per camera input using one or more extension modules.

A single detection zone shall be able to replace multiple inductive loops and the detection zones shall be OR'ed as the default or may be AND'ed together to indicate vehicle presence on a single phase of traffic movement.

Placement of detection zones shall be done by using only a pointing device, and a graphical interface built into the VDP and displayed on a video monitor, to draw the detection zones on the video image from each video camera. No separate computer shall be required to program the detection zones.

Up to 3 detection zone patterns shall be saved for each camera within the VDP memory. The VDP's memory shall be non-volatile to prevent data loss during power outages.

The selection of the detection zone pattern for current use shall be done through a menu. It shall be possible to activate a detection zone pattern from VDP memory and have that detection zone pattern displayed within 1 second of activation.

The VDP system shall have the capability to automatically switch to any one of the stored configurations based on the time of day which shall be programmable by the user.

When a vehicle is detected within a detection zone, the corners of the detection zone shall activate on the video overlay display to confirm the detection of the vehicle.

Detection shall be at least 98% accurate in good weather conditions, with slight degradation possible under adverse weather conditions (e.g. rain, snow, or fog) which reduce visibility. Detection accuracy is dependent upon site geometry, camera placement, camera quality and detection zone location, and these accuracy levels do not include allowances for occlusion or poor video due to camera location or quality.

The VDP shall provide dynamic zone reconfiguration (DZR). DZR enables normal operation of existing detection zones when one zone is being added or modified during the setup process. The VDP shall output a constant call on any detector channel corresponding to a zone being modified.

Detection zone setup shall not require site specific information such as latitude and longitude to be entered into the system.

The VDP shall process the video input from each camera at 30 frames per second. Multiple camera processors shall process all video inputs simultaneously.

The VDP shall output a constant call for each enabled detector output channel if a loss of video signal occurs. The VDP shall output a constant call during the background learning period.

Detection zone outputs shall be configurable to allow the selection of presence, pulse, extend, and delay outputs. Timing parameters of pulse, extend, and delay outputs shall be user definable between 0.1 to 25.0 seconds.

Up to six detection zones per camera view shall have the capability to count the number of vehicles detected. The count value shall be internally stored for later retrieval through the EIA232 port. The zone shall also have the capability to calculate and store average speed and lane occupancy at bin intervals of 10 seconds, 20 seconds, 1 minute, 5 minutes, 15 minutes, 30 minutes and 60 minutes.

#### **B.4 Hardware**

# **B.4.1 General**

The VDP and extension module (EM) shall be specifically designed to mount in a standard detector rack, using the edge connector to obtain power and provide contact closure outputs. No adapters shall be required to mount the VDP or EM in a standard detector rack. Detector rack rewiring shall not be required.

The EM shall be available to avoid the need of rewiring the detector rack, by enabling the user to plug an extension module into the appropriate slot in the detector rack. The extension module shall be connected to the VDP by an 8 wire cable with modular connectors, and shall output contact closures according to user selectable channel assignments. The EM is available in 2, 4, or 24 channel configurations.

2260-08-70 44 of 56

#### **B.4.2 Input Power**

The VDP and EM shall be powered by 12/24 volts DC. VDP power consumption shall not exceed 7 watts. The EM power consumption shall not exceed 2.5 watts.

#### **B.4.3 Detection Outputs**

The VDP and EM shall include detector output pin out compatibility with industry standard detector racks. The 24-channel EM shall provide output through a 37-pin "D" connector on the front panel.

# **B.4.4 Video Inputs**

VDPs shall include one, two or four BNC video input connections suitable for composite video inputs. The video input shall include a switch selectable 75-ohm or high impedance termination to allow camera video to be routed to other devices, as well as input to the VDP for vehicle detection.

# **B.4.5 Video Outputs**

The front of the VDP shall include one BNC video output providing real time video output that can be routed to other devices.

#### **B.4.6 Mechanical and Environmental**

The VDP shall operate satisfactorily in a temperature range from -34 °C to +74 °C and a humidity range from 0%RH to 95%RH, non-condensing as set forth in NEMA specifications.

The front panel of the VDP shall have detector test switches to allow the user to place calls on each channel. The test switch shall be able to place either a constant call or a momentary call depending on the position of the switch.

The front face of the VDP shall contain indications, such as LED displays, to enable the user to view real time detections for each channel of detection when the system is operational.

The VDP shall include an EIA232 port for serial communications with a remote computer. This port shall be a 9-pin "D" subminiature connector on the front of the VDP.

The VDP shall utilize non-volatile memory technology to enable the loading of modified or enhanced software through the EIA232 port and without modifying the VDP hardware.

# **B.4.7 Video Detection Camera**

Video detection cameras used for traffic detection shall be furnished by the video detection processor (VDP) supplier and shall be gualified by the supplier to ensure proper system operation.

The camera shall produce a useable video image of the bodies of vehicles under all roadway lighting conditions, regardless of time of day. The minimum range of scene luminance over which the camera shall produce a useable video image shall be the minimum range from nighttime to daytime, but not less than the range 1.0 lux to 10,000 lux.

The imager luminance signal to noise ratio (S/N) shall be more than 50 dB.

The camera shall be digital signal processor (DSP) based and shall use a CCD sensing element and shall output color video with resolution of not less than 470 TV lines. The CCD imager shall have a minimum effective area of 768(h) x 494(v) pixels.

The camera shall include an electronic shutter control based upon average scene luminance and shall be equipped with an auto-iris lens that operates in tandem with the electronic shutter.

The camera shall utilize automatic white balance.

The camera shall include a variable focal length lens with variable focus that can be adjusted, without opening up the camera housing, to suit the site geometry by means of a portable interface device designed for that purpose and manufactured by the detection system supplier.

The horizontal field of view shall be adjustable from 5.4 to 50.7 degrees. This camera configuration may be used for the majority of detection approaches in order to minimize the setup time and spares required by the user. The lens shall be a 10x zoom lens with a focal length of 3.8mm to 38.0 mm.

The lens shall also have an auto-focus feature with a manual override to facilitate ease of setup.

The camera shall incorporate the use of preset positioning that store zoom and focus positioning information. The camera shall have the capability to recall the previously stored preset upon application of power.

2260-08-70 45 of 56

The camera electronics shall include automatic gain control (AGC) to produce a satisfactory image at night.

The camera shall be housed in a weather-tight sealed enclosure. The enclosure shall be made of 6061 anodized aluminum. The housing shall be field rotatable to allow proper alignment between the camera and the traveled road surface.

The camera enclosure shall be equipped with a sunshield. The sunshield shall include a provision for water diversion to prevent water from flowing in the camera's field of view. The camera enclosure with sunshield shall be less than 6" diameter, less than 18" long, and shall weigh less than 6 pounds when the camera and lens are mounted inside the enclosure.

The enclosure shall be design so that the pan, tilt and rotation of the camera assembly can be accomplished independently without affecting the other settings.

The camera enclosure shall include a proportionally controlled heater, where the output power of the heater varies with temperature, to assure proper operation of the lens functions at low temperatures and prevent moisture condensation on the optical faceplate of the enclosure.

The glass face on the front of the enclosure shall have an anti-reflective coating to minimize light and image reflections.

The glass face shall also employ a special coating to minimize the buildup of environmental debris such as dirt and water.

When mounted outdoors in the enclosure, the camera shall operate satisfactorily in a temperature range from -34 °C to +60 °C and a humidity range from 0% RH to 100% RH. Measurement of satisfactory video shall be based upon VDP system operation.

The camera shall be powered by 120-240 VAC 50/60 Hz. Power consumption shall be 45 watts or less under all conditions. An optional DC power configuration shall be available for 12 VDC operation.

Recommended camera placement height shall be 33 feet (or 10 meters) above the roadway, and over the traveled way on which vehicles are to be detected. For optimum detection the camera should be centered above the traveled roadway. The camera shall view approaching vehicles at a distance not to exceed 350 feet for reliable detection (height to distance ratio of 10:100). Camera placement and field of view (FOV) shall be unobstructed and as noted in the installation documentation provided by the supplier.

The camera enclosure shall be equipped with separate, weather-tight connections for power and video cables at the rear of the enclosure. These connections may also allow diagnostic testing and viewing of video at the camera while the camera is installed on a mast arm or pole using a lens adjustment module (LAM) supplied by the VDP supplier. Video and power shall not reside within the same connector.

The video signal shall be fully isolated from the camera enclosure and power cabling.

#### **B.4.8 Video Monitor**

The monitor shall be a flat screen color video monitor with a minimum 9" diagonal picture display. It shall support EIA standards RS-170 composite video signal (1.0 v p-p, 75 OHM).

It shall have a resolution of 900 lines at center. Video bandwidth shall be >11 MHz. Loop through connectors shall be provided, and both input and output connectors shall be BNCs.

The monitor power source shall be 120 VAC +/- 10%, 60 Hz. Power consumption shall not be greater than 18 W. Ambient operating temperature shall be +50 to +122 degrees Fahrenheit.

Located on the front panel, the controls shall be on/off, contrast, bright, vertical hold, and horizontal hold. Rear panel shall have controls for vertical size, vertical linearity and scan switch.

Dimensions shall not exceed 9" (W), 10" (H), and 7" (D). Weight shall not exceed 10 pounds.

#### **B.4.9 Coaxial Cable**

The coaxial cable to be used between the camera and the VDP in the traffic cabinet shall be Belden 8281. This cable shall be suitable for installation in conduit or overhead with appropriate span wire. BNC plug connectors should be used at both the camera and cabinet ends. The coaxial cable, BNC connector, and crimping tool shall be approved by the supplier of the video detection system, and the manufacturer's instructions must be followed to ensure proper connection.

2260-08-70 46 of 56

#### **B.4.10 Power Cable**

The power cabling shall be 16 AWG three conductor cable with a minimum outside diameter of 0.325 inch and a maximum diameter of 0.490 inch. The cabling shall comply with the National Electric Code, as well as local electrical codes. Cameras may acquire power from the luminaire if necessary.

#### **C** Construction

The video detection camera shall be installed by factory-certified installers as recommended by the supplier and documented in installation materials provided by the supplier. Proof of factory certification shall be provided.

The supplier shall maintain an adequate inventory of parts to support maintenance and repair of the video detection system. These parts shall be available for delivery within 30 days of placement of an acceptable order at the supplier's then current pricing and terms of sale for said parts.

The supplier shall maintain an ongoing program of technical support for the video detection system. This technical support shall be available via telephone, or via personnel sent to the installation site upon placement of an acceptable order at the supplier's then current pricing and terms of sale for on site technical support services.

Installation or training support shall be provided by a factory-authorized representative and shall be a minimum IMSA-Level II Traffic Signal Technician certified.

All product documentation shall be written in the English language.

#### **D** Measurement

The department will measure Video Vehicle Detection System as a lump sum, acceptably completed.

# **E** Payment

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

ITEM NUMBER

DESCRIPTION

UNIT

SPV.0105.01

Video Vehicle Detection System STH 11 (Durand Ave) & S Memorial Dr

LS

Payment is full compensation for furnishing and installing control units, cameras, cabling, mounting brackets, testing and setting up the system.

# 43. Wall Modular Block Gravity Landscape, Item SPV.0165.01.

#### **A** Description

This special provision describes designing, furnishing materials and erecting a permanent earth retention system according to the lines, dimension, elevations and details as shown on the plans and provided in the contract. The design life of the wall and all wall components shall be 75 years minimum.

#### **B** Materials

# **B.1 Proprietary Wall Systems**

The supplied wall system must be from the department's approved list of Modular Block Gravity Landscape Wall systems. Proprietary wall systems must conform to the requirements of this specification and be pre-approved for use by the department's Bureau of Structures. The department maintains a list of pre-approved proprietary wall systems. See the approved products list titled "Proprietary Retaining Wall System Vendors." The name of the pre-approved proprietary wall system selected shall be furnished to the engineer within 25 days after the award of contract. The department also maintains a separate list of plants pre-approved by the department to provide wall facing units. See the approved products list titled "Precast Concrete and Block Fabricators." The identity of the plant manufacturing the facing units shall be furnished to the engineer at least 14 days prior to the project delivery.

To be eligible for use on this project, a system must have been pre-approved by the Bureau of Structures and added to that list prior to the bid closing date. To receive pre-approval, the retaining wall system must comply with all pertinent requirements of this provision and be prepared according to the requirements of Chapter 14 of the department's LRFD Bridge Manual. Information and assistance with the pre-approval process can be obtained by contacting the Bureau of Structures, Structures Maintenance Section at the following email address: DOTDLStructuresFabrication@dot.wi.gov.

2260-08-70 47 of 56

To be eligible to provide wall facing units for this project, a block manufacturing plant must be preapproved by the Bureau of Technical Services and added to that list prior to the bid closing date. Information and assistance with the pre-approval process can be obtained by contacting the Bureau of Technical Services at the following email address: DOTProductSubmittal@wisconsin.gov.

# **B.2 Design Requirements**

It is the responsibility of the contractor to submit a design and supporting documentation as required by this special provision, for review and acceptance by the department, to show the proposed wall design conforms to the design specifications. The submittal shall include the following items for review: detailed plans and shop drawings, complete design calculations, explanatory notes, supporting materials, and specifications. The detailed plans and shop drawings shall include all details, dimensions, quantities and cross-sections necessary to construct the walls. Submit shop drawings to the engineer conforming to 105.2 with electronic submittal to the fabrication library under 105.2.2. Certify that shop drawings conform to quality control standards by submitting department form <a href="DT2329">DT2329</a> with each set of shop drawings. Department review does not relieve the contractor from responsibility for errors or omissions on shop drawings. Submit no later than 60 days from the date of notification to proceed with the project and a minimum of 30 days prior to the date proposed to begin wall construction.

The plans and shop drawings shall be prepared on reproducible sheets 11 inch x 17 inch, including borders. Each sheet shall have a title block in the lower right corner. The title block shall include the WisDOT project identification number and structure number. Design calculations and notes shall be on 8 ½ inch x 11 inch sheets, and shall contain the project identification number, name or designation of the wall, date of preparation, initials of designer and checker, and page number at the top of the page. All plans, shop drawings, and calculations shall be signed, sealed and dated by a professional engineer licensed in the State of Wisconsin.

The design of the wall shall be in compliance with the current American Association of State Highway and Transportation Officials LRFD (AASHTO LRFD) Bridge Design Specifications with latest interim specifications for Mechanically Stabilized Earth Walls, WisDOT's current Standard Specifications for Highway and Structure Construction (standard spec), Chapter 14 of the WisDOT LRFD Bridge Manual and standard engineering design procedures as determined by the department. Loads, load combinations, load and resistance factors shall be as specified in AASHTO LRFD Section 11. The associated resistance factors shall be defined according to Table 11.5.7-1 in AASHTO LRFD.

Design and construct the walls according to the lines, grades, heights and dimensions shown on the plans, as herein specified, and as directed by the engineer.

Walls shall be designed for a minimum live load surcharge of 100 psf according to Chapter 14 of the WisDOT LRFD Bridge Manual or as shown on the plans.

A maximum value of the angle of internal friction of the wall backfill material used for design shall be assumed to be 30 degrees without a certified report of tests. If a certified report of tests yields an angle of internal friction greater than 30 degrees, the larger test value may be used for design, up to a maximum value of 36 degrees.

An external stability check at critical wall stations showing Capacity Demand Ratio (CDR) for sliding, eccentricity, and bearing checks is provided by the department and are provided on the wall plans.

The design of the wall by the contractor shall consider the internal and compound stability of the wall mass according to AASHTO LRFD 11.10.6. Internal stability shall also be considered at each block level. Calculations for factored stresses and resistances shall be based upon assumed conditions at the end of the design life. The width of the modular block (front face to back face) shall be included in the design computations and shown on the wall shop drawings. Blocks must have a minimum width of 8 inches. Block widths may vary among courses, but shall consist of only a single block. Compound stability shall be computed for the applicable strength limits. Sample analyses and hand calculations shall be submitted to verify the output of any software program used. The design calculations and notes shall clearly indicate the Capacity to Demand Ratios (CDR) for all internal and external stabilities as defined in AASHTO LRFD.

Wall facing units shall be designed according to AASHTO LRFD 11.10.2.3.

2260-08-70 48 of 56

The minimum embedment of the wall shall be 1 foot 6 inches below finished grade, or as given on the plans. All walls shall be provided with a concrete or base aggregate leveling pad. Minimum wall embedment does not include the leveling pad depth. Step the leveling pad to follow the general slope of the ground line. Frost depth shall not be considered in designing the wall for depth of leveling pad.

Wall facing units shall be installed on a leveling pad.

# **B.3 Wall System Components**

Materials furnished for wall system components under this contract shall conform to the requirements of this specification. All documentation related to material and components of the wall systems specified in this subsection shall be submitted to the engineer.

# **B.3.1 Wall Facing**

Wall facing units shall consist of precast modular concrete blocks. Furnish concrete produced by a dry-cast or wet-cast process. Concrete for all blocks shall not contain less than 565 pounds of cementitious materials per cubic yard. The contractor may use cement conforming to standard spec 501.2.1 or may substitute for portland cement at the time of batching conforming to standard spec 501.2.6 for fly, 501.2.7 for slag, or 501.2.8 for other pozzolans. In either case the maximum total supplementary cementitious content is limited to 30% of the total cementitious content by weight.

Dry-cast concrete blocks shall be manufactured according to ASTM C1372 and this specification.

All units shall incorporate a mechanism or devices that develop a mechanical connection between vertical block layers. Units that are broken, have cracks wider than 0.02" and longer than 25% of the nominal height of the unit, chips larger than 1", have excessive efflorescence, or are otherwise deemed unacceptable by the engineer, shall not be used within the wall. A single block front face style shall be used throughout each wall. The color and surface texture of the block shall be as given on the plan.

The top course of facing units shall be as noted on the plans.

Solid precast concrete unit designed to be compatible with the remainder of the wall. The finishing course shall be bonded to the underlying facing units with a durable, high strength, flexible adhesive compound compatible with the block material.

A formed cast-in-place concrete cap. A cap of this type shall have texture, color, and appearance, as noted on the plans. The vertical dimension of the cap shall not be less than 3 1/2 inches. Expansion joints shall be placed in the cap at a maximum spacing of 20 feet unless noted otherwise on the plan. Use Grade A, A-FA, A-S, A-T, A-IS, A-IP or A-IT concrete conforming to standard spec 501 as modified in standard spec 716. Provide QMP for cast in place cap and coping concrete as specified in standard spec 716, Class II Concrete.

Block dimensions may vary no more than ±1/8 inch from the standard values published by the manufacturer. Blocks must have a minimum width (front face to back face) of 8 inches. The minimum front face thickness of blocks shall be 4 inches measured perpendicular from the front face to inside voids greater than 4 square inches. The minimum allowed thickness of any other portions of the block is 1¾ inches. The front face of the blocks shall conform to plan requirements for color, texture, or patterns.

If pins are used to align modular block facing units, they shall consist of a non-degrading polymer, or hot dipping galvanized steel and be made for the express use with the modular block units supplied, to develop mechanical interlock between facing unit block layers. Connecting pins shall be capable of holding the wall in the proper position during backfilling. Furnish documentation that establishes and substantiates the design life of such devices.

All block materials shall be furnished palleted and banded, with every pallet marked for quantity, lot number, lot size, manufacturing plant, and manufacturing date(s). Materials furnished loose or unmarked will be rejected. Rejected materials shall be removed from the project at no cost to the department.

2260-08-70 49 of 56

#### **B.3.1.1 Material Testing**

Perform or procure quality control testing of project materials according to the following requirements:

Toot	Method	Requirement	
Test		Dry-cast	Wet-cast
Compressive Strength (psi)	ASTM C140 or ASTM C39 [4]	5000 min.	4000 min.
Air Content (%)	AASHTO T152 [4]	N/A	6.0 +/-1.5
Water Absorption (%)	ASTM C140 [3]	6 max. <sup>[3]</sup>	N/A
Freeze-Thaw Loss (%) 40 cycles, 5 of 5 samples 50 cycles, 4 of 5 samples	ASTM C1262 [1] [2] [3]	1.0 max. <sup>[2][3]</sup> 1.5 max. <sup>[2][3]</sup>	N/A

- 1. Test shall be run using a 3% saline solution and blocks greater than 45 days old.
- 2. Test results that meet either of the listed requirements for Freeze-Thaw Loss are acceptable.
- 3. An independent testing laboratory shall control and conduct all sampling and testing under ASTM C140/Water Absorption and ASTM C1262. Prior to sampling, the manufacturer shall identify materials by lot. Five blocks per lot shall be randomly selected for testing. Solid blocks used as a finishing or top course shall not be selected. The selected blocks shall remain under the control of the person who conducted the sampling until shipped or delivered to the testing laboratory. The contractor and fabricator shall coordinate with the independent testing agency to ensure that strength and air content samples can be taken appropriately during manufacturing. At the time of delivery of materials, furnish the engineer a certified report of test from an AASHTO-registered or ASTM-accredited independent testing laboratory for each lot.
- 4. The manufacturer may perform their own quality control testing under ASTM C140/Compressive Strength, ASTM C39, and AASHTO T152, if qualified for this work under the requirements for plant certification.

The contractor and fabricator shall coordinate with the independent testing agent (if used) to ensure that strength and air content samples can be taken appropriately during manufacturing. At the time of delivery of materials, furnish the engineer a certified report of test from an AASHTO-registered or ASTM-accredited independent testing laboratory for each lot furnished.

The certified test report shall include the following:

- Project ID
- Production process used (dry-cast or wet-cast)
- Name and location of testing facility
- · Name of sampling technician
- Lot number, lot size, and date(s) of fabrication

Quality control testing of project materials shall be completed not more than 18 months prior to delivery. Lot size shall not exceed the maximum testing frequencies, which shall not exceed 5000 blocks for dry-cast blocks and the lesser of 150 CY or 1 day's production for wet-cast blocks. Test results will represent all blocks within the lot. Each pallet of blocks delivered shall bear lot identification information. Block lots that do not meet the requirements of this specification or blocks without supporting reports will be rejected and shall be removed from the project at no expense to the department.

Nonconforming materials will be subject to evaluation according to standard spec 106.5.

# **B.3.2 Leveling Pad**

Provide an unreinforced cast-in-place concrete or base aggregate leveling pad. Use Grade A, A-FA, A-S, A-T, A-IS, A-IP, or A-IT concrete conforming to standard spec 501 as modified in standard spec 716. Provide QMP for leveling pad concrete as specified in standard spec 716, Class III Concrete. Use Base Aggregate Dense 1 1/4-Inch conforming to standard spec 305.

The minimum width of the concrete leveling pad shall be as wide as the proposed blocks plus 6-inches, with 6-inches of the leveling pad extending beyond the front face of the blocks. The minimum thickness of the leveling pad shall be 6-inches.

2260-08-70 50 of 56

The minimum width of the base aggregate leveling pad shall be as wide as the proposed blocks plus 12-inches, and the modular blocks centered on the leveling pad. The minimum thickness of the leveling pad shall be 12-inches after compaction.

#### **B.3.3 Backfill**

Furnish and place backfill for the wall as shown on the plans and as hereinafter provided.

Wall Backfill, Type A, shall comply with the requirements for Coarse Aggregate Size No. 1 as given in standard spec 501.2.5.4. All backfill placed within a zone from the top of the leveling pad to the top of the final layer of wall facing units and within 1 foot behind the back face of the wall shall be Wall Backfill, Type A. This includes all material used to fill openings in the wall facing units.

A layer of Geotextile Type "DF" (Schedule B) shall be placed vertically between the backfill and the Type A backfill. The geotextile shall extend from the top of the leveling pad to 6 inches below the surface of the retained soil. The geotextile shall then wrap across the top of the Type A backfill to the back of block wall facing.

Backfill placed between retained soil and Type A backfill shall comply with the requirements for Granular Backfill Grade 1 as contained in standard spec 209.2.2. The contractor may substitute Type A Backfill for Granular Backfill Grade 1.

#### **C** Construction

#### C.1 Excavation and Backfill

Excavation and preparation of the foundation for the wall and the leveling pad shall be according to standard spec 206. At the end of each working day, provide good temporary drainage such that the backfill shall not become contaminated with run-off soil or water if it should rain. Do not stockpile or store materials or large equipment within 10 feet of the back of the wall.

Place backfill materials in the areas as indicated on the plans and as detailed in this specification. Backfill lifts shall be no more than 8-inches in depth, after compaction. Backfilling shall closely follow erection of each course of wall facing units.

Conduct backfilling operations in such a manner as to prevent damage or misalignment of the wall facing units or other wall components. At no expense to the department, correct any such damage or misalignment as directed by the engineer. A field representative of the wall supplier shall be available during wall construction to provide technical assistance to the contractor and the engineer.

Do not operate tracked or wheeled equipment on the backfill within 3 feet from the back face of modular blocks. The engineer may order the removal of any large or heavy equipment that may cause damage or misalignment of the wall facing units.

# **C.2 Compaction**

Compact wall backfill Type A with at least three passes of lightweight manually operated compaction equipment acceptable to the engineer.

Ensure adequate moisture is present in the backfill during placement and compaction to prevent segregation and to help achieve compaction.

Compaction of backfill within 3 feet of the back face of the wall should be accomplished using lightweight compaction devices. Use of heavy compaction equipment or vehicles should be avoided within 3 feet of the modular blocks.

#### **C.3 Wall Components**

# C.3.1 General

Erect wall facing units and other associated elements according to the wall manufacturer's construction guide and to the lines, elevations, batter, and tolerances as shown on the plans. Center the initial layer of facing units on the leveling pad; then level them and properly align them. Fill formed voids or openings in the facing units with wall backfill, Type A. Remove all debris on the top of each layer of facing units, before placing the next layer of facing units.

Install all pins, rods, clips, or other devices used to develop mechanical interlock between facing unit layers according to the manufacturer's directions.

2260-08-70 51 of 56

#### C.3.2 Leveling Pad

Provide an unreinforced cast-in-place concrete or base aggregate leveling pad as shown on the plans. Vertical tolerances shall not exceed 3/4-inch when measured along a 10-foot straight edge. Allow the concrete to set at least 12 hours prior to placing wall facing units.

The bottom row of wall facing units shall be horizontal and 100% of the unit surface shall bear on the leveling pad.

#### C.4 Geotechnical Information

Geotechnical data to be used in the design of the wall is given on the wall plan.

#### **D** Measurement

The department will measure Wall Modular Block Gravity Landscape by the square foot, acceptably completed. The department will compute the measured quantity from the theoretical pay limits the contract plans show. The department will make no allowance for wall area constructed above or below the theoretical pay limits. All work beyond the theoretical pay limits is incidental to the cost of work. The department will make no allowance for as-built quantities.

#### E Payment

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

ITEM NUMBERDESCRIPTIONUNITSPV.0165.01Wall Modular Block Gravity LandscapeSF

Payment is full compensation for supplying a design and shop drawings; preparing the site, including all necessary excavation and disposal of materials; supplying all necessary wall components to produce a functional wall system including cap, copings, leveling pad, and leveling pad steps; constructing the retaining system and providing temporary drainage; providing backfill, backfilling, compacting, developing/completing/documenting the quality management program, and performing compaction testing.

Any required aggregate, structural backfill, or asphalt will be paid for at the contract unit price for those items.

# 44. Proof Rolling, Item SPV.0170.01.

#### **A** Description

This special provision describes the testing of the stability of the compacted subgrade and base material by rolling with a tri-axle dump truck.

#### **B** Materials

Fully load a tri-axle dump truck to within 3 tons of the vehicle legal load limit and provide a minimum gross vehicle weight of 30 tons. Uniformly inflate all tires to the pressure recommended by the manufacturer for the applicable wheel load.

#### **C** Construction

Completely compact and shape the subgrade to approximate grade. Test roll at normal walking speed under the direction of the engineer or his representative. Roll the road subgrade and base across the width of the entire roadway. Make multiple passes throughout the length of the test area. Center each pass on a proposed lane.

#### **D** Measurement

The department will measure Proof Rolling by the station, along the roadway reference line, acceptably completed.

# **E** Payment

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

ITEM NUMBER DESCRIPTION UNIT SPV.0170.01 Proof Rolling STA

Payment is full compensation for performing the proof rolling and for retesting as determined by the engineer.

2260-08-70 52 of 56

# 45. Shredded Hardwood Bark Mulch, Item SPV.0180.01.

# **A** Description

This special provision describes furnishing and installing mulch according to the applicable sections of standard spec 632 and as modified in this special provision.

#### **B** Materials

Furnish mulch that is finely shredded hardwood bark mulch and the product of a mechanical chipper, hammermill, or tub grinder.

Provide fibrous wood mulch, uniformly dark brown in color, free of large wood chunks, and substantially free of mold, dirt, sawdust, and foreign material. Ensure that no portion of the material is in an advanced state of decomposition.

Provide fibrous wood mulch not containing manufactured boards or chemically treated wood, including but not limited to wafer board, particle board, and chromated copper arsenate (CCA) or penta-treated wood. Ensure that the material does not contain bark of black walnut trees.

Provide air dried mulch, passing a 4-inch screen, with no more than 20 percent by mass passing a 0.10-inch sieve. Ensure that unattached bark or greenleaf composition, either singly or combined, do not exceed 20 percent each by mass. The maximum length of individual pieces cannot exceed 4 inches.

#### **C** Construction

Add the following to standard spec 632.3.9:

(2) Do not build up mulch onto trunk of tree. Do not use any weed barrier fabric in mulch areas. Do not damage plants, structures, and/or other materials already in place, when placing the mulch.

#### **D** Measurement

The department will measure Shredded Hardwood Bark Mulch by the square yard, acceptably completed.

# **E** Payment

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

SPV.0180.01 Shredded Hardwood Bark Mulch SY

Payment is full compensation for furnishing and installing all materials.

# 46. Management of Solid Waste, Item SPV.0195.01.

#### A General

# A.1 Description

This work will conform with the requirements of Section 205 of the Standard Specifications; to pertinent parts of the Wisconsin Administrative Code, Chapters NR 700-736 Environmental Investigation and Remediation of Environmental Contamination; Wisconsin Administration Code, Chapters NR 500-538, Solid Waste; and as shown on the plans and as supplemented herein.

Soil considered to be solid waste due to chlorinated VOCs will be encountered within the construction limits. The solid waste may contain NR 500 non-exempt industrial wastes including soil mixed with foundry sand. Impacted waste material excavated during construction which cannot in the opinion of the environmental consultant be managed as common excavation or as petroleum-contaminated soil will be managed as solid waste.

This work consists of excavating, segregating, temporary stockpiling, loading, hauling, and disposing of solid waste material at a WDNR-approved disposal facility. The nearest WDNR-approved disposal facilities are:

Republic Services Kestrel Hawk Landfill 1989 Oakes Rd. Racine, WI 53406 (262) 884-7081

2260-08-70 53 of 56

Advanced Disposal Emerald Park Landfill W124 S10629 South 124th Street Muskego, WI 53150 (414) 529-1360 Waste Management Pheasant Run Landfill 19414 60th St. Bristol, WI 53104 (866) 909-4458

Provide information to the environmental consultant and engineer that indicates the WDNR-approved disposal facility that the contractor will use.

#### A.2 Notice to the Contractor-Solid Waste Location

The department and others completed hazardous materials assessment for locations within this project where excavation is required. Investigation for soil contamination was conducted at select locations. Results indicate that solid waste (soil contaminated with chlorinated solvents) is present at the following location as shown on the plans:

S. Memorial Drive Station 78+35 to 79+05, from project limits left to 10 feet right of reference line, from approximately 4 to 8+ feet bgs. Approximately 61 cubic yards (approximately 104 tons at an estimated 1.7 tons per cubic yard) of solid waste soil will be excavated from this area.

Directly load solid waste soil excavated by the project at the above location into trucks that will transport the material to a WDNR-licensed landfill facility for landfill disposal.

If obviously contaminated soils or signs of NR 500 non-exempt solid waste and hazardous materials are unexpectedly encountered elsewhere on the project, terminate excavation activities in the area and notify the engineer. Examples of these unexpected conditions may include, but are not limited to, buried containers or tanks, noxious odors and fumes, stained soils, sheen on ground water, other industrial wastes, and significant volumes of municipal or domestic garbage.

Active groundwater monitoring wells were not observed within the construction limits. If active groundwater monitoring wells are encountered during construction, notify the engineer and protect the wells to maintain their integrity. The environmental consultant will determine if monitoring wells need to be maintained. For monitoring wells that do need to be maintained, adjust the wells that do not conflict with structures or curb and gutter to be flush with the final grade. For wells that conflict with the previously mentioned items or if monitoring wells are not required to be maintained, they will be abandoned by others.

If dewatering is required at the above location, conduct the dewatering according to Section C below.

# A.3 Excavation Management Plan Approval

The excavation management plan for this project has been designed to minimize the off-site disposal of contaminated waste. The excavation 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 in these areas contact:

Name: Andrew Malsom

Address: 141 NW Barstow Street, Waukesha, WI 53187-0798

Phone: (262) 548-6705 Fax: (262) 548-6891

E-mail: <u>andrew.malsom@dot.state.wi.us</u>

#### A.4 Coordination

Coordinate work under this contract with the environment consultant:

Consultant: TRC Environmental Corporation

Address: 150 N. Patrick Blvd., Ste. 180, Brookfield, WI 53045

Contact: Marita Stollenwerk

Phone: (262) 901-2158 office, (262) 328-4528 cell

Fax: (262) 879-1220

E-mail: <u>mstollenwerk@trccompanies.com</u>

2260-08-70 54 of 56

The role of the environmental consultant will be limited to:

- 1. Determining the location and limits of solid waste to be excavated based on soil analytical results from previous investigations, visual observations, and field screening of soil that is excavated;
- 2. Identifying soils to be hauled to the landfill facility;
- 3. Documenting that activities associated with management of solid waste are in conformance with the solid waste management methods for this project as specified herein; and
- 4. Obtaining the necessary approvals for disposal of solid waste from the landfill facility.

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 activities in the area of solid waste fill described in A.2 to the environmental consultant. Identify the WDNR licensed landfill facility that will be used for disposal of solid waste, and provide this information to the environmental consultant no later than 30 calendar days prior to commencement of excavation in the impacted area or at the preconstruction conference, whichever comes first. The environmental consultant will be responsible for obtaining the necessary approvals from the landfill facility for disposal of the solid waste.

Coordinate with the environmental consultant to ensure that the environmental consultant is present during excavation in the impacted area. Notify the environmental consultant at least three calendar days prior to commencement of excavation in the impacted area. Perform excavation in the impacted area on a continuous basis until excavation work is completed. Do not transport soil containing solid waste offsite without prior approval from the environmental consultant.

# A.5 Health and Safety Requirements

Supplement standard spec 107.1 with the following:

During excavation activities, expect to encounter historic fill contaminated with industrial waste (foundry sand) and associated regulated metals and organic compounds. 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 impacted area as required by 29 CFR 1910.120. Submit the site-specific health and safety plan and written documentation of up-to-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 impacted area to minimize the quantity of soil excavated.

The environmental consultant will periodically monitor soil excavated from the area identified in A.2 above. The environmental consultant will evaluate excavated soil based on field screening results, visual observations, and soil analytical results from previous environmental investigations. Assist the environmental consultant in collecting soil samples for evaluation using excavation equipment. The sampling frequency shall be a maximum of one sample for every 20 cubic yards excavated.

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

Verify that the vehicles used to transport material are licensed for such activity according to applicable state and federal regulations. Obtain the necessary disposal facility approvals and WDNR approvals for disposal. Do not transport regulated solid waste off-site without obtaining the approval of the environmental consultant and engineer and notifying the disposal facility.

During excavations in the areas of known contamination, larger chunks of clean concrete (~2 cubic feet), asphalt and bricks shall be segregated from the fill, to the extent practical and managed as common excavation. Under NR 500.08 this material is exempt from licensing and requirements of Wisconsin Administrative Code NR 500-538 of the solid waste regulations, and will be reused as designated by the engineer as fill on the project, or it will be disposed of off-site at the contractor's disposal site(s).

2260-08-70 55 of 56

If dewatering is required in areas of known contamination, water generated from dewatering activities may contain chlorinated solvents, petroleum compounds and/or metals. Such water may require analytical testing, and with approval of the City of Racine Wastewater Utility be discharged to the sanitary sewer as follows:

Meet all applicable requirements of the City of Racine Wastewater Utility including the control of suspended solids. Perform all necessary monitoring to document compliance with the City of Racine Wastewater Utility requirements. Furnish, install, operate, maintain, disassemble, and remove treatment equipment necessary to comply with the City of Racine Wastewater Utility requirements.

Ensure continuous dewatering and excavation safety at all times. Provide, operate, and maintain adequate pumping equipment and drainage and disposal facilities.

Notify the engineer of any dewatering 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.

Costs associated with excavation dewatering in contaminated areas are considered incidental to this pay item. The Wisconsin Department of Transportation will be the generator of regulated solid waste from this construction project.

#### **D** Measurement

The department will measure solid waste by the ton of waste accepted by the disposal facility and as documented by weight tickets.

# E Payment

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

ITEM NUMBERDESCRIPTIONUNITSPV.0195.01Management of Solid WasteTON

Payment is full compensation for excavating, segregating, loading, hauling, and landfill disposal of solid waste; obtaining solid waste collection and transportation service operating licenses; assisting in the collection of soil samples for field evaluation; dewatering of soils prior to transport, if necessary.

2260-08-70 56 of 56

# 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>6</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>3</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.

# II. 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.

#### III. 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 under-representation 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 (DBE) PROGRAM IMPLEMENTATION

#### **Authority**

Wisconsin Department of Transportation (WisDOT) is a recipient of funds from the US Department of Transportation's Federal Highway Administration. The DBE program is a federal program applicable on all contracts administered by WisDOT that include federal-aid highway funds. The authority for the DBE program is the Transportation Bill as approved by Congress periodically. DBE program guidance and requirements are outlined in the Code of Federal Regulations at 49 CFR Part 26. This contract is subject to DBE provisions because it is financed with federal-aid-highway funds. Additionally, this contract is subject to the *State of Wisconsin Standard Specifications for Highway and Structure Construction* and all applicable contract documents.

#### Requirements

Pursuant to the federal DBE program regulation at 49 CFR Part 26, a contractor's failure to comply with any provision of the DBE program regulatory provisions will be considered a material breach of contract. This is nonnegotiable.

If a contractor fails to carry out the DBE program requirements and/or the Required Contract Provisions for Federal Aid Contracts (FHWA 1273) referenced in this document, sanctions will be assessed depending upon the facts, reasoning, severity, and remedial efforts of the contractor that may include: termination of contract, withholding payment, assessment of monetary sanctions, and/or suspension/debarment proceedings that could result in the disqualification of the contractor from bidding for a designated period of time.

- (1) At time of bid, ALL prime contractors must submit DBE Commitments on projects with DBE goals, The submittal of the DBE Commitments includes the DT1506 (Commitment to Subcontract to DBE), which can be attached as a PDF or entered digitally into the bid submittal and Attachments A OR quotes from all DBEs included on the Commitment. The prime contractor must submit a signed Attachment A via eSubmit (preferred) or the DBE Alert email box within 24-hours of the bid closing for all quotes submitted at the time of bid. If the assigned DBE contract goal is not met, Form DT1202 (Documentation of Good Faith Effort) and all supplemental DT1202 documentation is due within 24-hours of bid closing. Any change to DBE Commitments thereafter must follow modification of DBE subcontracting commitment (Section 9).
- (2) The Department requires this list of DBE subcontractors from all bidders at time of bid to ensure the lowest possible cost to taxpayers and fairness to other bidders and subcontractors. Bid shopping is prohibited.
- (3) The contractor must utilize the specific DBE firms listed in the approved DBE Commitment to perform the work and/or supply the materials for which the DBE firm is listed unless the contractor obtains written consent in advance from WisDOT. The contractor will not be entitled to payment for any work or materials on the approved DBE Commitment that is not performed or supplied by the listed DBE without WisDOT's written consent.

#### Description

The Wisconsin Department of Transportation is committed to the compliant administration of the DBE Program. The DBE provisions work in tandem with FHWA 1273 and WisDOT's *Standard Specifications for Highway and Structure Construction* and *Construction and Materials Manual*. The WisDOT Secretary is signatory to assurances of department-wide compliance.

The Department assigns the contract DBE goal as a percentage of work items that could be performed by certified DBE firms on the contract. The assigned DBE goal is expressed on the bid proposal as a percentage applicable to the total contract bid amount.

- (1) WisDOT identifies the assigned DBE goal in its contract advertisements and posts the contract DBE goal on the cover of the bidding proposal. The contractor can meet the assigned contract DBE goal by subcontracting work to a DBE firm or by procuring services or materials from a DBE firm.
- (2) Under the contract, the prime contractor should inform, advise, and develop participating DBE firms to be more knowledgeable contractors who are prepared to successfully complete their contractual agreement through the proactive provision of assistance in the following areas:
  - § Produce accurate and complete quotes
  - § Understand highway plans applicable to their work
  - § Understand specifications and contract requirements applicable to their work
  - § Understand contracting reporting requirements
- (3) The Department encourages contractors to assist DBE subcontractors more formally by participating in WisDOT's Business Development program as a mentor, coach, or resource. For comprehensive information on the Disadvantaged Business Enterprise Program, visit the Department's Civil Rights and Compliance Section website at: <a href="http://wisconsindot.gov/Pages/doing-bus/civil-rights/dbe/default.aspx">http://wisconsindot.gov/Pages/doing-bus/civil-rights/dbe/default.aspx</a>

#### 1. Definitions

Interpret these terms, used throughout this additional special provision, as follows:

- a. Assigned DBE Contract Goal: The percentage shown on the cover of the Highway Work Proposal that represents the feasible level of DBE participation for each contract. The goal is calculated using the Engineer's Estimate and DBE Interest Report. Goal assignment includes review of FHWA funds, analyzes bid items for subcontract opportunity and compatibility with DBE certified firm work codes. Additional factors considered include proximity, proportion, and regulations.
- b. **Bid Shopping:** In construction law, bid shopping is the practice of divulging a subcontractor's bid to another prospective contractor(s) before or after the award of a contract to secure a lower bid.
- c. DBE: Disadvantaged Business Enterprise A for-profit small business concern where socially and economically disadvantaged individuals own at least a 51% interest and control management and daily business operations.
- d. DBE Commitment: The DBE Commitment is identified in the Commitment to Subcontract to DBE (Form DT1506) and is expressed as the amount of DBE participation the prime contractor has secured. The DT1506, a contract document completed by the bidder, is required to be considered a responsive bidder on an FHWA-funded contract that has an assigned DBE goal. The prime contractor will have the option to submit the DT1506 digitally, as an entry with the bid in Bid Express, or as an attachment to the bid.
- e. **DBE Utilization:** The actual participation of a DBE subcontractor on a project. WisDOT verifies DBE utilization through review of the DBE Commitment, payments to subcontractors, and contract documentation. The Prime Contractor receives DBE credit for payments made to the DBE firms performing the work listed on the approved DBE Commitment, and those submitted after approved commitment with Attachment A.
- f. Good Faith Effort: Legal term describing a diligent and honest effort taken by a reasonable person under the same set of facts or circumstances. For DBE subcontracting, the bidder must show that it took all necessary and reasonable steps to achieve the assigned DBE goal by the scope, intensity, and

appropriateness of effort that could reasonably be expected for a contractor to obtain sufficient DBE participation.

- g. **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.
- h. **Reasonable Price:** Contractors are expected to assess reasonable price by analyzing the contract scope for DBE subcontract feasibility and comparing common line items in DBE and non-DBE subcontract quotes for the same work. Per federal regulation, reasonable price is not necessarily the lowest price.
- i. **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.
- j. **Tied quote:** Subcontractor quote that groups multiple bid/line items at a bundled/package price with a notation that the items within the quote will not be separated.

#### 2. WisDOT DBE Program Compliance

#### a. Documentation Submittal

The Commitment to Subcontract to DBE (Form DT1506 or digital submittal), Attachments A OR quotes from all DBEs included in the Commitment will be submitted at bid by ALL prime contractors. If the assigned DBE contract goal is not met, Documentation of Good Faith Effort (Form DT1202) must be submitted within 24-hours of bid closing. Supplemental DT1202 documentation and signed Attachments A from DBEs included in the DBE Commitment are also due within 24-hours of bid closing. Form DT1202, supporting GFE documentation, and signed Attachments A, not submitted at the time of bid, must be submitted through eSubmit (preferred) or to the DBE Alert email box.

\*\*Bidders have the option of submitting the DBE Commitment at the time of bid via direct entry through Bid Express OR with attachment of Form DT1506 (Commitment to Subcontract to DBE). The DBE Commitment entered with bid is the digital form of the DT1506. Separate submission of Form DT1506 is not required if the DBE Commitment is entered in Bid Express. Form DT1202, if applicable, is no longer required to be submitted at time of bid; submit DT1202 within the 24-hour supplemental time frame following bid closing.

Naming conventions: Follow eSubmit <u>instructions</u>, OR when emailing files, use the following language to identify your submission- "Project #, Proposal #, Let date, Business Name, GFE" and "Project #, Proposal #, Let date, Business Name, Attachment A" Email: DBE Alert@dot.wi.gov

The DBE Office will not certify Good Faith Effort and the Bureau of Project Development will consider the bid nonresponsive if the contractor fails to furnish the DBE Commitment (digitally entered into the bid OR Form DT1506 as an attachment), Attachments A, and Form DT1202 if applicable, as required. See sample forms in the Appendix.

#### b. Verification of DBE Commitment

The documentation related to DBE subcontract commitment submitted prior to contract award is evaluated as follows:

#### (1) DBE Goal Met

If the bidder indicates that the contract DBE goal is met, the Department will evaluate the DBE Commitment submitted with bid OR Form DT1506, and Attachments A to verify the actual DBE

percentage calculation. If the DBE Commitment is verified, the contract is eligible for award with respect to the DBE Commitment.

#### (2) DBE Goal Not Met

- a) If the bidder indicates a bid percentage on the DBE Commitment that does not meet the assigned DBE contract goal, the bidder must request alternative evaluation of good faith effort through submission of Form DT1202 (Documentation of Good Faith Effort) within 24-hours of bid including narrative description. Supplementary documentation of good faith effort that supports the DT1202 submission is also due within 24-hours of bid submission and prior to bid posting. The Department will review the bidder's DBE Commitment and evaluate the bidder's good faith efforts submission.
- b) Following evaluation of the bidder's Good Faith Effort documentation the bidder will be notified that the Department intends to:
  - 1. *Approve* the request (adequate documentation of GFE has been submitted)- no conditions placed on the contract with respect to the DBE Commitment;
  - 2. *Deny* the request (inadequate documentation of GFE has been submitted)- the contract is viewed as non-responsive per Wisconsin Standard Specifications for Highway and Structure Construction and will not be executed.
- c) If the Department denies the bidder's request, the contract is ineligible for award. The Department will provide a written explanation for denying the request to the bidder. The bidder may appeal the Department's denial (see Section 4).

Supplemental good faith effort documentation must be submitted through eSubmit (preferred) OR to the DBE Office by email at: DBE\_Alert@dot.wi.gov. Email naming convention: "Project #, Proposal #, Let date, Business Name, GFE"

#### 3. Department's Criteria for Good Faith Effort Documentation

The Federal-aid Construction Contract Provision, referenced as FHWA-1273, explicitly states that the prime contractor shall be responsible for all work performed on the contract by piecework, station work, or subcontract. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of the contract including assurances of equal employment opportunity laws, DBE regulations, and affirmative action. Compliance encompasses responsible and responsive action, documentation, and good faith effort.

Contractually, all contractors, subcontractors, and service providers on the contract are bound by FHWA 1273 and DBE program provisions. **Prime contractors should encourage subcontractors to utilize DBE firms whenever possible to contribute to the assigned DBE contract goal.** 

Bidders are required to document good faith effort. Per 49 CFR Part 26.53, good faith effort is demonstrated in one of two ways. The bidder:

- (1) Documents that it has obtained enough DBE participation to meet the goal; OR
- (2) Documents that it made adequate good faith efforts to meet the goal, even though it did not succeed

Appendix A of 49 CFR Part 26 provides guidance concerning good faith efforts. WisDOT evaluates good faith effort on a contract basis just as each contract award is evaluated individually.

The efforts employed by the bidder should be those that WisDOT can reasonably expect a bidder to take to actively and aggressively obtain DBE participation sufficient to meet the DBE contract goal. The Department will only approve demonstration of good faith effort if the bidder documents the quality, quantity, and intensity of the variety of activities undertaken that are commensurate with expected efforts to meet the stated goal.

The Department, in conjunction with industry stakeholders, has developed the following guidance for contractor good faith effort activity. 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.

#### a. Solicitation Guidance for Prime Contractors:

- (1) Document all efforts and decisions made toward achieving the DBE goal on the contract. The bidder should use WisDOT-approved DBE outreach tools, including the UCP DBE Directory and the Bid Express Small Business Network to foster DBE participation on all applicable contracts.
- (2) As needed, request assistance with DBE outreach and follow-up by contacting the Department's DBE Support Services Office by phone or email request at least 14 days prior to the bid letting date. Phone numbers are (414) 438-4584 and/or (608) 267-3849; Fax: (414) 438-5392; E-mail: DBE Alert@dot.wi.gov
- (3) Participate in and document a substantive conversation with at least one DBE firm per Let, to discuss questions, concerns, and any other contract related matters that may be applicable to the DBE firm. Guidelines for this conversation are provided in Appendix A of ASP-3.
- (4) Request quotes by identifying potential items to subcontract and solicit. In their initial contacts, contractors are strongly encouraged to include a single page, 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 B. 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 firms to do work in a prime contractor's area of specialization.
  - i. Solicit quotes from certified DBE firms who match possible items to subcontract using all reasonable and available means. Additionally, forward copies of solicitations highlighting the work areas for which quotes are being sought to DBE\_Alert@dot.wi.gov
  - ii. Acceptable outreach tools include SBN (Small Business Network, see Appendix C): <a href="https://www.bidx.com/wi/main">https://www.bidx.com/wi/main</a>, postal mail, email, fax, and phone.
    - a. Contractors must ask DBE firms for a response in their solicitations. See *Sample Contractor Solicitation Letter*, Appendix B. This letter may be included as an attachment to the sub-quote request.
    - b. Solicit quotes at least 10 calendar days prior to the letting date to allow DBE firms sufficient time to respond. Prime contractors should contact DBE firms early, asking if they need help organizing their quote, assistance confirming equipment needs, or other assistance supporting their submission of a competitive quote for their services.
    - c. A follow up solicitation should take place within 5 calendar days of the letting date. Email and/or SBN are the preferred method for the solicitation.
  - iii. Upon request, provide interested DBE firms with adequate information about plans, specifications, and the requirements of the contract by letter, information session, email, phone call, and/or referral.
  - iv. When potential exists, the contractor should advise interested DBE firms on how to obtain bonding, line of credit, or insurance if requested.
  - v. Document DBE firm's interest in quoting by taking appropriate steps to follow up initial solicitation with:
    - a. Email to all prospective DBE firms in relevant work areas
    - b. Phone call log to DBE firms who express interest via written response or call
    - c. Fax/letter confirmation
    - d. Signed copy of record of subcontractor outreach effort

#### b. Guidance for Evaluating DBE quotes

- (1) Quote evaluation practices required to evaluate DBE quotes:
  - i. Reasonable Price: Contractors are expected to assess reasonable price by analyzing the contract scope for DBE subcontract feasibility and comparing common line items in DBE and

non-DBE subcontract quotes for the same work. Per federal regulation, reasonable price is not necessarily the lowest price. See 49 CFR Part 26, Appendix A. IV.D(2).

- (2) Documentation submitted by the prime of the following evaluation is required to evaluate DBE quotes by contractors:
  - Evaluation of DBE firm's ability to perform "possible items to subcontract" using legitimate reasons, including but not limited to, *a discussion* between the prime and DBE firm regarding its capabilities prior to the bid letting. If lack of capacity is the reason for not utilizing the DBE firm's quote, the prime is required to contact the DBE by phone and email regarding their ability to perform the work indicated in the UCP directory listed as their work area by NAICS code. Only the work area indicated by the NAICS code(s) listed in the UCP directory can be counted toward DBE credit. Documentation of the conversation is required.
    - In striving to meet an assigned DBE contract goal, contractors are expected to use DBE quotes that are responsive and reasonable. This includes DBE quotes that are not the low quote.
    - Additional evaluation Evaluation of DBE quotes with <u>tied bid items</u>. Typically, this type of quoting represents a cost saving but is not clearly stated as a discount. Tied quotes are usually presented as an 'all or none' quote. When non-DBE subcontractors submit tied bid items in their quotes, the DBE firm's quote may not appear competitive. In such a case, the following steps are taken in comparing the relevant quotes. These are qualitative examples:
      - i Compare bid items common to both quotes, noting the reasonableness in the price comparison.
      - ii Review quotes from other firms for the bid items not quoted by the DBE firm to see if combining both can provide the same competitive advantage that the tied bid items offered.

See Appendix D – Good Faith Effort Evaluation Measures and Appendix E - Good Faith Effort Best Practices.

- c. Requesting Good Faith Effort Evaluation At the time of bid- if the DBE goal is not met in full, the prime contractor must indicate they will file form DT1202- Documentation of Good Faith Effort within 24-hours of bid submission. Supplementary documentation of good faith effort that supports the DT1202 submission is also due within 24-hours of bid submission and prior to bid posting. Supporting documentation for the DT1202 is to include the following:
  - (1) Solicitation Documentation: The names, addresses, email addresses, and telephone numbers of DBE firms contacted along with the dates of both initial and follow-up contact; electronic copies of all written solicitations to DBE firms. A printed copy of SBN solicitation is acceptable.
  - (2) Selected Work Items Documentation: Identify economically feasible work units to be performed by DBEs to include activities such as: list of work items to be performed; breaking up of large work items into smaller tasks or quantities; flexible time frames for performance and delivery schedules.
  - (3) Documentation of Project Information provided to interested DBEs: A description of information provided to the DBE firms regarding the plans, specifications, and estimated quantities for portions of the work to be performed by that DBE firm.
  - (4) Documentation of Negotiation with Interested DBEs: Provide sufficient evidence to demonstrate that good faith negotiations took place. Merely sending out solicitations requesting bids from DBEs does not constitute sufficient good faith efforts.
  - (5) Documentation of Sound Reasoning for Rejecting DBEs and copies of each quote received from a DBE firm and, if rejected, copies of quotes from non-DBEs for same items.
  - (6) Documentation of Assistance to Interested DBEs- Bonding, Credit, Insurance, Equipment, Supplies/Materials
  - (7) Documentation of outreach to Minority, Women, and Community Organizations and other DBE Business Development Support: Contact organizations and agencies for assistance in contacting, recruiting, and

providing support to DBE subcontractors, suppliers, manufacturers, and truckers at least 14 days before bid opening. Participate in or host activities such as networking events, mentor-protégé programs, small business development workshops, and others consistent with DBE support.

Naming conventions: eSubmit (preferred) follow instructions OR when emailing files, use the following language to identify your submission- "Project #, Proposal #, Let date, Business Name, GFE" Email: DBE Alert@dot.wi.gov

If the Good Faith Effort documentation is deemed adequate, the request will be approved and the DBE office will promptly notify the Prime Contractor and Bureau of Project Development.

If the DBE Office denies the request, the Prime Contractor will receive written correspondence outlining the reasons. The Department encourages the Prime Contractor to communicate with DBE staff to clarify any questions related to meeting goals and/or contractor demonstration of good faith efforts.

If the contract is awarded, the Prime Contractor must obtain written consent from the DBE Office to change or replace any DBE firm listed on the approved DBE Commitment. No contractor, prime or subsequent tier, shall be paid for completing work assigned to a DBE subcontractor on an approved DBE Commitment unless WisDOT has granted permission for the reduction, replacement, or termination of the assigned DBE in writing. If a prime contractor or a subcontractor on any tier uses its own forces to perform work assigned to a DBE on an approved DBE Commitment, they will not be paid for the work. Any changes to DBE Commitment after the approval of the DBE Commitment must be reviewed and approved by the DBE Office prior to the change (see Section 9).

#### 4. Bidder's Documentation of Good Faith Effort Evaluation Request Appeal Process

A bidder can appeal the Department's decision to deny the bidder's demonstration of Good Faith Effort through Administrative Reconsideration. The bidder must provide a written justification refuting the specific reasons for denial as stated in the Department's denial notice. The bidder may meet in person with the Department if so requested. Failure to appeal within 5 business days after receiving the Department's written notice denying the request constitutes a forfeiture of the bidder's right of appeal. Receipt of appeal is confirmed by email date stamp or certified mail signed by WisDOT staff. A contract will not be executed without documentation that the DBE provisions have been fulfilled.

The Department will appoint a representative who did not participate in the original good faith effort determination, to assess the bidder's appeal. The Department will issue a written decision within 5 business days after the bidder presents all written and oral information. In that written decision, the Department will explain the basis for finding that the bidder did or did not demonstrate an adequate good faith effort to meet the contract DBE goal. The Department's decision is final.

#### 5. Determining DBE Eligibility

#### **Directory of DBE firms**

- a. The only resource for DBE firms certified in the State of Wisconsin is the Wisconsin Unified Certification Program (UCP) DBE Directory. WisDOT maintains a current list of certified DBE firms at: <a href="http://wisconsindot.gov/Documents/doing-bus/civil-rights/dbe/dbe-ucp-directory.xlsx">http://wisconsindot.gov/Documents/doing-bus/civil-rights/dbe/dbe-ucp-directory.xlsx</a>
- **b.** The DBE Program office is available to assist with contracting DBE firms:(608) 267-3849.

c. DBE firms are certified based on various factors including the federal standards from the Small Business Administration that assigns a North American Industrial Classification (NAICS) Codes. DBE firms are only eligible for credit when performing work in their assigned NAICS code(s). If a DBE subcontractor performs work that is not with its assigned NAICS code, the prime contractor should contact the DBE Office to inquire about compatibility with the Business Development Program.

#### 6. Counting DBE Participation

#### **Assessing DBE Work**

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 UCP agencies. 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:

- a. The Department counts work performed by the DBE firm's own resources. The Department includes the cost of materials and supplies the DBE firm obtains for the work. The Department also includes the cost of equipment the DBE firm leases for the work. The Department will not include the cost of materials, supplies, or equipment the DBE firm purchases or leases from the prime contractor or its affiliate, with the exception of non-project specific leases the DBE has in place before the work is advertised.
- b. The Department counts fees and commissions the DBE subcontractor charges for providing 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 program engineer deems reasonable based on experience or prevailing market rates.
- **c.** If a DBE firm subcontracts work, the Department counts the value of the work subcontracted to a DBE subcontractor.
- **d.** The contractor will maintain records and may be required to furnish periodic reports documenting its performance under this item.
- e. It is the Prime Contractor's responsibility to determine whether the work that is committed and/or contracted to a DBE firm can be counted for DBE credit by referencing the work type and NAICS code listed for the DBE firm on the Wisconsin UCP DBE Directory.
- f. It is the Prime Contractor's responsibility to assess the DBE firm's ability to perform the work for which it is committing/contracting the DBE to do. Note that the Department encourages the Prime Contractor to assist and develop DBE firms to become fully knowledgeable contractors to successfully perform on its contracts.
- **g.** The Prime Contractor will inform the DBE office via email of all DBE subcontractors added to the project following execution of the contract. The Prime Contractor may omit submission of another form DT1506, but must submit signed Attachment A forms for additional DBE firms.
- **h.** See Section 7 for DBE credit evaluation for Trucking and Section 8 for DBE credit evaluation for Manufacturers, Suppliers, and Brokers

Naming conventions: When emailing files, please use the following language to identify your submission-"Project #, Proposal #, Let date, Business Name, Attachment A" Email: DBE\_Alert@dot.wi.gov \*Note: A sublet request is required for DBE work, regardless of subcontract tier, and also for reporting materials or supplies furnished by a DBE.

- Sublet Requests via form DT1925 or WS1925 are required for 1st Tier DBEs
- For all 2nd Tier and below notification of DBE sublet is indicated by the contractor entering them in CRCS

#### 7. Credit Evaluation for Trucking

All bidders are expected to adhere to the Department's current trucking policy posted on the HCCI website at: http://wisconsindot.gov/Documents/doing-bus/civil-rights/dbe/trucking-utilization-policy.pdf

The prime contractor is responsible for ensuring that all subcontractors including trucking firms, receive Form FHWA 1273: https://www.fhwa.dot.gov/programadmin/contracts/1273/1273.pdf

See Section 8 for Broker credit.

#### 8. Credit Evaluation for Manufacturers, Suppliers, Brokers

The Department will calculate the amount of DBE credit awarded to a prime using a DBE firm for the provisions of materials and supplies on a contract-by-contract basis. The Department will count the material and supplies that a DBE firm provides under the contract for DBE credit based on whether the DBE firm is a manufacturer, supplier, or broker. Generally, DBE credit is determined through evaluation of the DBE owner's role, responsibility, and contribution to the transaction. Maximum DBE credit is awarded when the DBE firm manufactures materials or supplies. DBE credit decreases when the DBE firm solely supplies materials, and minimal credit is allotted when the DBE firm's role is administrative or transactional. It is the bidder's responsibility to confirm that the DBE firm is considered a supplier or a manufacturer before listing them on Commitment to Subcontract to DBE form DT1506 or DBE Commitment submitted with the bid.

#### a. Manufacturers

- (1) A manufacturer is a firm that operates or maintains a factory or establishment that produces, on the premises, the materials, supplies, articles, or equipment required under the contract and of the general character described by the specifications.
- (2) If the materials or supplies are obtained from a DBE manufacturer, **100**% percent of the cost of the materials or supplies counts toward DBE goals.

#### b. Regular Dealers of Material and/or Supplies

- (1) Supplies purchased in bulk from DBE firms at the beginning of the season may be credited to current contracts if submitted with appropriate documentation to the DBE office.
- (2) A regular dealer is a firm that owns, operates, or maintains a store, warehouse, or other establishment in which the materials, supplies, articles or equipment of the general character described by the specifications and required under the contract are bought, kept in stock, and regularly sold or leased to the public in the usual course of business.
- (3) If the materials or supplies are purchased from a DBE regular dealer, count **60%** percent of the cost of the materials or supplies toward DBE goals.
- (4) At a minimum, a regular dealer must meet the following criteria to be counted for DBE credit:
  - i. The DBE firm must be an established, regular business that engages, as its principal business and under its own name, in the purchase and sale or lease of the products in question.
  - ii. The DBE firm must both own and operate distribution equipment for the product--bulk items such as petroleum products, steel, cement, gravel, stone, or asphalt. If some of the distribution equipment is leased, the lease agreement must accompany the DBE Commitment form for evaluation of the dealer's control before the DBE office approves the DBE credit.

- (5) When DBE suppliers are contracted, additional documentation must accompany the DBE Commitment and Attachment A forms. An invoice or bill-of-sale that includes names of the bidder and the DBE supplier, along with documentation of the calculations used as the basis for the purchase agreement, subcontract, or invoice. WisDOT recognizes that the amount on the Attachment A form may be more or less than the amount on the invoice per b.(1) above.
  - i. The bidder should respond to the following questions and include with submission of form DT1506 or the DBE Commitment entered with bid:
    - a. What is the product or material?
    - b. Is this item in the prime's inventory or was the item purchased when contract was awarded?
    - c. Which contract line items were referenced to develop this quote?
    - d. What is the amount of material or product used on the project?

#### c. Brokers, Transaction Expediters, Packagers, Manufacturers' Representatives

- (1) No portion of the cost of the materials, supplies, services themselves will count for DBE credit. However, WisDOT will evaluate the fees or commissions charged when a prime purchases materials, supplies, or services from a DBE certified firm which is neither a manufacturer nor a regular dealer, namely: brokers, packagers, manufacturers' representatives, or other persons who arrange or expedite transactions.
- (2) Brokerage fees are calculated as 10% of the purchase amount.
- (3) WisDOT may count the amount of fees or commissions charged for assistance in the procurement of the materials and supplies, fees, or transportation charges for the delivery of materials or supplies required on a job site.
- (4) Evaluation of DBE credit includes review of the contract need for the item/service, the sub-contract or invoice for the item/service, and a comparison of the fees customarily allowed for similar services to determine whether they are reasonable.

#### 9. DBE Commitment Modification Policy (Formerly "DBE Replacement Policy")

#### a. Issuing a Contract Change Order

Any changes or modifications to the contract once executed are considered contract modifications and as such require a change order. In addition, the DBE office must provide consent for reduction, termination, or replacement of subcontractors approved on the DBE Commitment *in advance* of the modification for the prime contractor to receive payment for work or supplies. Additions to the DBE Commitment do not require advance notification of the DBE office. (see below e. DBE Utilization beyond the approved DBE Commitment)

#### b. Contractor Considerations

- (1) A prime contractor cannot modify the DBE Commitment through reduction in participation, termination, or replacement of a DBE subcontractor listed on the approved DBE Commitment without prior written consent from the DBE Office. This includes, but is not limited to, instances in which a prime contractor seeks to perform work originally designated for a DBE subcontractor with its own forces or those of an affiliate, a non-DBE firm, or with another DBE firm.
- (2) If a prime contractor reduces participation, replaces, or terminates a DBE subcontractor who has been approved for DBE credit toward its contract, the prime is required to provide documentation supporting its inability to fulfill the contractual commitment made to the Department regarding the DBE utilization.
- (3) The Prime Contractor is required to demonstrate efforts to find another DBE subcontractor to perform at least the same amount of work under the contract as the DBE subcontractor that was terminated, to the extent needed to meet the assigned DBE contract goal. When additional opportunity is available by contract modifications, the Prime Contractor must utilize DBE subcontractors that were committed to equal work items, in the original contract.

- (4) In circumstances when a DBE subcontractor fails to complete its work on the contract for any reason, or is terminated from a contract, the Prime Contractor must undertake efforts to maintain its commitment to the assigned DBE goal.
- (5) The DBE subcontractor should communicate with the Prime Contractor regarding its schedule and capacity in the context of the contract. If the DBE firm anticipates that it cannot fulfill its subcontract, they will advise the Prime Contractor and suggest a DBE subcontractor that may replace their services and provide written consent to be released from its subcontract.
  - i. Before the Prime Contractor can request modification to the approved DBE Commitment, the Prime Contractor must:
    - Make every effort to fulfill the DBE Commitment by working with the listed DBE subcontractor to ensure that the firm is fully knowledgeable of the Prime Contractor's expectations for successful performance on the contract. Document these efforts in writing.
    - b. If those efforts fail, provide written notice to the DBE subcontractor of the Prime Contractor's intent to request to modify the Commitment through reduction in participation, termination, and/or replacement of the subcontractor including the reason(s) for pursuing this action.
    - c. Copy the DBE Office on all correspondence related to changing a DBE subcontractor who
      has been approved for DBE credit on a contract, including preparation and coordination
      efforts.
    - d. Clearly state the amount of time the DBE firm has to remedy and/or respond to the notice of intent to replace/terminate. The DBE must be allowed five days from the date notice was received as indicated by email time stamp or signed certified mail, to respond, in writing. EXCEPTION: The Prime Contractor must provide a verifiable reason for a response period shorter than five days. For example, a WisDOT project engineer or project manager confirms that WisDOT has eliminated an item the DBE subcontractor was contracted for.
    - e. The DBE subcontractor must acknowledge the contract modification with written response to the Prime Contractor and the DBE Office. If objecting to the subcontract modification, the DBE subcontractor must outline the basis for objection to the proposed modification, providing sound reasoning for WisDOT to reject the prime's request.

#### c. Request to Modify DBE Subcontracting Commitment

The written request referenced above may be delivered by email or fax. The request must contain the following:

- 1. Project ID number
- 2. WisDOT Contract Project Engineer's name and contact information
- 3. DBE subcontractor name and work type and/or NAICS code
- 4. Contract's progress schedule
- 5. Reason(s) for requesting that the DBE subcontractor be replaced or terminated
- 6. Attach/include all communication with the DBE subcontractor to deploy/address/resolve work completion

Naming conventions: When emailing files, please use the following language to identify your submission-"Project #, Proposal #, Let date, Business Name, MODIFICATION" Email: DBE\_Alert@dot.wi.gov + Project Engineer

WisDOT will review the request and any supporting documentation submitted to evaluate if the circumstance and the reasons constitute good cause for replacing or terminating the approved DBE subcontractor.

Good Causes to Replace a DBE subcontractor according to the federal DBE program guidelines {49 CFR part 26.53}

The listed DBE subcontractor fails or refuses to execute a written contract

- The listed DBE subcontractor fails or refuses to perform the work of its subcontract in a way consistent
  with normal industry standards. Provided, however, that good cause does not exist if the failure or
  refusal of the DBE subcontractor to perform its work on the subcontract results from the bad faith or
  discriminatory action of the prime contractor
- The listed DBE subcontractor fails or refuses to meet the prime contractor's reasonable, nondiscriminatory bond requirements
- The listed DBE subcontractor becomes bankrupt, insolvent, or exhibits credit unworthiness
- The listed DBE subcontractor is ineligible to work on public works projects because of suspension and debarment proceedings pursuant 2 CFR Parts 180, 215, and 1,200 or applicable state law
- The prime has determined that the listed DBE subcontractor is not a responsible contractor
- The listed DBE subcontractor voluntarily withdraws from the project and provides written notice of its withdrawal
- The listed DBE subcontractor is ineligible to receive DBE credit for the type of work required
- A DBE firm owner dies or becomes disabled with the result that the listed DBE subcontractor is unable to complete its work on the contract

#### d. Evaluation and Response to the Request

WisDOT's timely response to the Prime Contractor's request for modification of the approved DBE Commitment will be provided to the prime and the WisDOT project engineer via email.

If WisDOT determines that the Prime Contractor's basis for reduction in participation, replacement, or termination of the DBE subcontractor is not consistent with the good cause guidelines, the DBE office will provide a response via email within 48-hours of receipt of request from the Prime Contractor as indicated by email time stamp. The communication will include: the requirement to utilize the committed DBE, actions to support the completion of the contractual commitment, a list of available WisDOT support services, and administrative remedies, including withholding payment to the prime, that may be invoked for failure to comply with federal DBE guidelines for DBE replacement.

The WisDOT contact for all actions related to modification of the approved DBE Commitment is the DBE Program Engineer who can be reached at DBE\_Alert@dot.wi.gov or (414) 335-0413.

#### e. DBE Utilization beyond the approved DBE Commitment

When the prime or a subcontractor increases the scope of work for an approved DBE subcontractor or adds a DBE subcontractor who was not on the approved form DT1506 or DBE Commitment submitted with bid at any time after contract execution, this is referred to as voluntary DBE contract goal achievement. The contractor must follow these steps to ensure that the participation is accurately credited toward the DBE goal:

- (1) Forward a complete, signed Attachment A form to the DBE Office. A complete Attachment A includes DBE subcontractor contact information, signatures, subcontract value, and description of the work areas to be performed by the DBE. The DBE Office will verify the DBE participation and revise the DBE Commitment based on the email/discussion and the new Attachment A.
- (2) When adding to an existing DBE Commitment, submit a new Attachment A to the DBE Alert mailbox
- (3) OR Submit a final Attachment A to DBE Alert during the Finals Process when Compliance receives notice of "Substantially Complete" Naming conventions: When emailing files, please use the following language to identify your submission- "Project #, Proposal #, Let date, Business Name, New Attachment A" Email: DBE\_Alert@dot.wi.gov

#### Special note on trucking

- DBE truckers added to the sublets in CRCS *will* be approved without DBE credit (You will see a "N" in CRCS instead of "Y")
- Prime Contractors may enter a "place holder" e.g. \$1000.00, for DBE Trucking in CRCS if the full amount of trucking is unknown for sublet purposes only
- The hiring contractor may obtain the Attachment A with DBE signature included but the **Prime Contractor** must sign the Attachment A before submitting

#### 10. Commercially Useful Function

- **a.** Commercially Useful Function (CUF) is evaluated after the contract has been executed, while the DBE certified firm is performing contracted work items.
- **b.** The Department uses Form DT1011, DBE Commercially Useful Function Review and Certification to evaluate if the DBE is performing a commercially useful function. WisDOT counts expenditures of a DBE toward the DBE goal only if the DBE is performing a commercially useful function on that contract.
- c. A DBE firm is performing a commercially useful function if the following conditions are met:
  - (1) For contract work, the DBE is responsible for executing a distinct portion of the work and is carrying out its responsibilities by actually performing, managing, and supervising that work.
  - (2) For materials and supplies, the DBE is responsible for negotiating price, determining quality and quantity, ordering, and paying for those materials and supplies.

#### 11. Credit Evaluation for DBE Primes

WisDOT calculates DBE credit based on the amount and type of work performed by DBE certified firms for work submitted with required documentation. If the prime contractor is a DBE certified firm, the Department will only count the work that the DBE prime performs with its own forces for DBE neutral credit. The Department will also calculate DBE credit for work performed by any other DBE certified subcontractor, DBE certified supplier, and DBE certified manufacturer on the contract in each firm's approved NAICS code/work areas that are submitted with required documentation. Crediting for manufacturers and suppliers is calculated consistent with Section 8 of this document and 49 CFR Part 26.

#### 12. Joint Venture

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

#### 13. 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.** DBE credit is evaluated and confirmed by the DBE Office for any contracts on which the mentor-protégé team identifies itself to the DBE Office as a current participant of the Mentor-Protégé Program.
- **c.** Refer to WisDOT's Mentor-Protégé guidelines for guidance on the number of contracts and amount of DBE credit allowed on WisDOT projects.

#### 14. Use of Joint Checks

The use of joint checks is allowable if it is a commonly recognized business practice in the material industry. A joint check is defined as a two-party check between a DBE subcontractor, a prime contractor, and the regular dealer or materials supplier who is neither the prime nor an affiliate of the prime. Typically, the prime contractor issues one check as payor to the DBE subcontractor and to the supplier jointly (to guarantee payment to the supplier) as payment for the material/supplies used by the DBE firm in cases where the DBE subcontractor and materials have been approved for DBE credit. The DBE subcontractor gains the opportunity to establish a direct contracting relationship with the supplier to potentially facilitate a business rapport that results in a line of credit or increased partnering opportunities.

The cost of material and supplies purchased by the DBE firm is part of the value of work performed by the DBE to be counted toward the goal. To receive credit, the DBE firm must be responsible for negotiating price, determining quality and quantity, ordering the materials, and installing (where applicable) and "paying for the material itself." See 49 CFR 26.55(c)(1).

The approval to use joint checks constitutes a commitment to provide further information to WisDOT, upon request by staff. WisDOT will allow the use of joint checks when the following conditions are met:

- **a.** The Prime Contractor must request permission to use joint checks from the DBE Office by submitting the Application to Use Joint Checks.
  - (1) Request should be made when the DBE Commitment or the Request to Sublet is submitted; the request will not be considered if submitted after the DBE Subcontractor starts its work.
  - (2) Approval/Permission must be granted prior to the issuance of any joint checks.
  - (3) The payment schedule for the supplier must be presented to the DBE office before the first check is issued.
  - (4) The joint check for supplies must be strictly for the cost of approved supplies.
- **b.** The DBE subcontractor is responsible for furnishing and/or installing the material/work item and is not an 'extra participant' in the transaction. The DBE firm's role in the transaction cannot be limited solely to signing the check(s) to release payment to the material supplier. At a minimum, the DBE subcontractor's tasks should include the following:
  - (1) The DBE subcontractor (not the prime/payor) negotiates the quantities, price, and delivery of materials.
  - (2) The DBE subcontractor consents to sign/release the check to the supplier by signing the Application to Use Joint Checks after establishing the conditions and documentation of payment within the subcontract terms or in a separate written document.
- **c.** The Prime contractor/payor acts solely as a guarantor.
  - (1) The Prime Contractor agrees to furnish the check used for the payment of materials/supplies under the contract.
  - (2) The prime contractor/payor cannot require the subcontractor to use a specific supplier or the prime contractor's negotiated unit price.

#### 15. Payment

Costs for conforming to this Additional Special Provision (ASP) and any associated DBE requirements are incidental to the contract.

## Appendix A Substantive Conversation Guidelines

The substantive conversation is critical to all bidders' demonstration of good faith effort to meet the DBE goal prior to bid opening. Relationship building between primes and subcontractors is crucial to DBE goal attainment. Responsible bidders seek to build rapport with potential DBE subcontractors to understand capacity, areas of expertise, and assess contracting feasibility. Bidders who compete for WisDOT contracts are specialty contractors responding to a growing and changing contract environment. Just as these specialists are responsible for care of the roads, they are likewise responsible for contributing to the health of the industry. The substantive conversation drives collaboration that will build industry health and capacity. The following is intended to provide guidance for such discussions but is not an exhaustive list. Contractors are encouraged to incorporate their existing strategies for cultivating business relationships as well.

### <u>Prior to Bid Opening- this discussion should happen as early as possible (WisDOT advertisements are released 5</u> weeks prior to each Let)

- Determine DBE subcontractor's interest in quoting
- · If response indicates inexperience with quoting- offer support/assistance to the DBE in understanding the industry including fundamentals a subcontractor needs to know, required reading and/or resources.
- Assess their interest and experience in the road construction industry by asking questions such as:
  - 1. Have you competed for other WisDOT contracts? Ratio of competed/to wins
  - 2. Have you performed on any transportation industry contracts (locally or with other states)?
  - 3. What the largest contract you've completed?
  - 4. Have you worked in the industry: apprentice, journeyman, safety, inspection etc.?
  - 5. Does this project fit into your schedule? Are you working on any contracts now?
  - 6. Have you reviewed a copy of the plans? Are you comfortable performing within the scope and quantity considerations of this contract?
  - 7. What region do you work in? Home base?
  - 8. Which line items are you considering?
  - 9. Have you read/are you familiar with WisDOT Standard Specifications? Construction Material Manual?
  - 10. Do you understand where your work fits in the project schedule, project phases?

#### Following Bid Opening- this discussion can happen at any time

- 1. After reviewing their quote, note the following in your discussion:
- Does the quote look complete? Irregular?
- Are there errors in the quote? Are items very high or very low?
- In general, does the quote look competitive?
- 2. Questions and Advice for the bidder to share with the potential DBE subcontractor:
- · What line items would typically be in a competitive quote for a subcontractor of their specialty?
- How many employees and what is their role/experience/expertise in your firm?
- Do you have resources for labor (union member, family-based, community-resourced) and capital (banking relationship, bond agent, CPA)?
- · Where have you worked: cities, states, government, commercial, residential/private sector, etc. Explain similarities or differences.
- Refer them to reliable, trusted, industry resources that can educate or connect them to relevant resources, education/certification resources, more appropriate contract opportunities.
- Discussion about prime contract and subcontract liability, critical path items, contract quantities, schedule risks, and potential profit/loss (for upcoming known projects or in general).
- Discussion of bonding, insurance, and overall business risk considerations.

# APPENDIX B Sample Contractor Solicitation Letter Page 1 This sample is provided as a guide not a requirement

#### **GFESAMPLE 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 <a href="http://roadwaystandards.dot.wi.gov/hcci/">http://roadwaystandards.dot.wi.gov/hcci/</a>

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 sure</u> the correct letting date, project ID and proposal number, unit price and extension are included in your quote. We prefer quotes be sent via SBN but prime's alternatives are acceptable. Our office hours are include hours and days.

Please call our office as soon as possible prior to the letting if you need information/clarification to prepare your quote at contact number.

If you wish to discuss or evaluate your quote in more detail, contact us after the contract is awarded. Status of the contract can be checked at WisDOT's HCCI site at <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 QUOTE

Prime's Name:  Letting Date:  Project ID:							
Please check all that apply							
Yes, we will be quoting or No, we are not interested Please take our name off We have questions about	in quoting your mon	g on the I thly DBE	etting or its contact lis	items re t			this numbe
Prime Contractor 's Contact Perso	n:		DBE Cor	ntractor C	Contact Pe	erson:	
Phone:			Phone:				
Fax:			Fax:				
Email:			Email:				
Please circ	cle the jol	bs and it	tems you v	will be q	uoting be	elow	
Proposal No.	1	2	3	4	5	6	7
County							
WORK DESCRIPTION:							
Clearing and Grubbing	Χ		X	Χ		Χ	X
Dump Truck Hauling	Χ		X	Χ		Χ	X
Curb & Gutter/Sidewalk, Etc.	Χ		X	Χ		Χ	X
Erosion Control Items	Χ		X	Χ		Χ	X
Signs and Posts/Markers	Χ		X	Χ		Χ	X
Traffic Control		X	X	Χ		Χ	X
Electrical Work/Traffic Signals		Х	X	Χ		Χ	
Pavement Marking		Х	X	Χ	X	Χ	X
Sawing Pavement		Х	Χ	Χ	Х	Χ	Х
QMP, Base	Χ	Х		Χ	Х	Χ	Х
Pipe Underdrain	Х			Х			
Beam Guard				Х	Х	Х	Х
Concrete Staining							Х
Trees/Shrubs	Х						Х

Again please make every effort to have your quotes into our office by time deadline prior to the letting date.

We prefer quotes be sent via SBN but prime's preferred alternatives are acceptable.

If there are further questions please direct them to the prime contractor's contact person at phone number.

#### Appendix C 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 later completion.

#### 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-gualified 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. **DBE firms can:** 

#### 1. View and reply to sub-quote requests from primes:

a. After logging into the Bid Express service, you can quickly review all incoming sub-quote requests and all unsolicited sub-quotes created by your company. Receive notifications by selected work type. To simplify on the Small Business Network home screen, sub-quote requests can be filtered by work types relevant to your interests or hidden with one click if they are not applicable.

#### 2. Select items when responding to sub-quote requests from primes:

- a. You have the freedom to choose and price any number of items when responding to a sub-quote request. Quantities can be modified, and per-item comments are also available.
- b. View requests for sub-quotes for work that primes have posted for projects they are bidding, add your pricing, terms, and conditions, and submit completed sub-quotes to the requesting primes. c. Add attachments to a sub-quote.

#### 3. Create and send unsolicited sub-quotes to specific contractors:

a. Create unsolicited sub-quotes with ease using the intuitive sub-quote creator. In eight short steps, you can rapidly create a custom sub-quote directed at any number of specific vendors of your choosing. Steps include: provide contact information and sub-quote expiration date, select letting and proposal, add work types and items, specify terms and conditions, upload attachments, and select vendors.

#### 4. Easily select and price items for unsolicited sub-quotes:

- a. After adding applicable work types, select items that you wish to quote. The extended price
  calculates automatically, cutting out costly calculation errors. Comments can be provided on a peritem 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 414-438-458

#### APPENDIX D

#### Good Faith Effort Evaluation Measures by categories referenced in DBE regulations

Bidders must demonstrate that they took all necessary and reasonable steps to achieve the assigned DBE contract goal. For each contract, all bidders must submit documentation indicating the goal has been met <u>or</u> if falling short of meeting the assigned goal, must request a DBE Goal Waiver and document all efforts employed to secure DBE subcontractor participation on Form DT1202.

DBE staff analyze the bidder's documented good faith efforts to determine if action taken was sufficient to meet the goal. Sufficiency is measured contract-by-contract. WisDOT evaluates active and aggressive efforts, quality, quantity, scope, intensity, and appropriateness of the bidder's efforts as a scale of the principles of Good Faith outlined in 49 CFR Part 26, Appendix A. Additional emphasis is placed on the bidder's demonstration of timely submission of documentation and communication with DBE subcontractors, and business development initiatives undertaken to support DBE firm growth.

The following is a sample of good faith effort activities that are rated according to the accompanying rubric. Contractors are encouraged to identify additional activities that align with their business type(s).

- · Personal, tailored solicitation to firms that specialize in work types planned or desired for subcontracting
- Follow up to initial solicitation via email or phone
- Substantive conversation including topics such as contract liability, critical path work items, schedule risks, and potential profit/loss
- SBN utilization including posting quotes
- · Review and response to DBE quotes including provision of information about plans, specifications, and requirements as applicable
- Documentation requesting subcontractors support DBE goal by solicitation and inclusion of DBE subcontractor quotes
- Responsive and timely submission of organized documentation
- Analysis of number of DBE firms who do work types that you typically subcontract
- Analysis of number of DBE firms who reside in geographical areas where prime seeks work
- Analysis of firms who express interest in bidding/quoting including the number of firms who declined your solicitation
- Reference check of DBE subcontractor work or training (documentation of questions and response required)
- Number of different efforts undertaken to meet the assigned DBE goal as documented in accompanying Form DT1202
- Submission of all DBE quotes received matched with a variety of work to be performed by DBEs
- Number and names of DBE firms provided written advice, or referral to industry-specific business development resources
- · Overall pattern of DBE utilization on all WisDOT contracts which may include contracting with municipalities
- Documentation of resources expended to meet assigned DBE goal (#of hours, staff titles, average pay rate, actions taken)
- Analysis of subcontractable work items to be completed by prime beyond prime contractor's 30%
- Risk analysis of work items that are typically in tied quotes that could be unbundled
- List of contract work items in smallest economically feasible units, identifying schedule impact
- Submission of a Gap Analysis identifying DBE skillset and/or industry needs
- Staff training in EEO and Civil Rights laws as documented in training logs
- Written Capacity Assessment completed with DBE firm documenting its ability to perform the work quoted
- DBE engagement efforts beyond simple solicitation that include a substantive discussion, initiated as early in the acquisition process as possible (*points added for each day prior to letting*)
- Outreach and marketing efforts with minority, women, and veteran-focused organizations at least 10 days prior to bid opening
- Active involvement in WisDOT's Business Development Program, TrANS training, facilitated networking efforts, workshops
- Customized teaching/training efforts for future opportunities with DBE subcontractor, contract specific and/or annually
- · Introduction and reference provided for DBE subcontractor to a prime who has not previously contracted with the DBE firm
- · Prime utilization of a DBE subcontractor the prime has not contracted with previously
- Written referral/recommendation to bond/insurance agents, manufacturer, supplier
- Documented efforts fostering DBE participation through administrative and/or technical assistance
- · Evidence of negotiation with the DBE firm about current and future Let opportunities
- · Recommendation of local and state services that support small business and access to opportunity: DOA, SBA, WEDC, WPI, etc.
- Advice on bonding, lines of credit, or insurance as required to complete the items quoted and contract requirements

#### **GFE EVALUATION RUBRIC – PHASE 1**

	Active & Aggressive Category	Quality Category	Quantity Category	Scope & Intensity Category	Timing Category	Business Develop't Efforts	Total=
Solicitation Documentation							
Selected Work Items Documentation							
Documentation of Project Information provided to Interested DBEs							
Documentation of Negotiation with Interested DBEs							
Documentation of Sound Reason for Rejecting DBEs							
Documentation of Assistance to Interested DBEs- bonding, credit, insurance, equipment, supplies/materials							
Documentation of Outreach to Minority, Women, and Community organizations and other DBE Business Development Support							
Documentation of other GFE activities							
Overall Total=							

#### GFE EVALUATION RATING LEGEND - PHASE 1 - Initial Review

**ACTIVE & AGGRESSIVE:** Demonstrated through engaged and assertive activity

QUALITY: Demonstrated through essential character of conscientious and serious activity

**QUANTITY**: Demonstrated through a measurable number of activities

SCOPE & INTENSITY: Demonstrated through a rigorous approach to an appropriate and purposeful range of activities

**TIMING**: Demonstrated through engagement efforts beyond simple solicitation, initiated early in the process **BUSINESS DEVELOPMENT INITIATIVES**: Demonstrated by efforts to support business growth and health of DBEs

#### **Rating Scale**

- Each qualifying activity is worth 5 points per Category
  - Pro Forma efforts= 0-50 points
     Perfunctory effort characterized by routine or superficial activities
  - Bona Fide= 55+ points
     Genuine effort characterized by sincere and earnest activities

#### GFE EVALUATION - PHASE 2 - Team Review

#### **DBE Office completes:**

- Review of quote comparisons submitted by Prime
- · Bid analysis to confirm if any bid submitted met the DBE goal
- · Review average of other bidders DBE goal achievement
- Team review of combined efforts documented in Phase 1 and 2 by apparent low bidder

#### Excerpt from Appendix A to 49 CFR Part 26:

V. In determining whether a bidder has made good faith efforts, it is essential to scrutinize its documented efforts. At a minimum, you must review the performance of other bidders in meeting the contract goal. 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 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. As provided in §26.53(b)(2)((vi), you must also require the contractor to submit copies of each DBE and non-DBE subcontractor quote submitted to the bidder when a non-DBE subcontractor was selected over a DBE for work on the contract to review whether DBE prices were substantially higher; and contact the DBEs listed on a contractor's solicitation to inquire as to whether they were contacted by the prime. Pro forma mailings to DBEs requesting bids are not alone sufficient to satisfy good faith efforts under the rule.

## APPENDIX E Good Faith Effort Best Practices

This list is not a set of requirements; it is a list of potential strategies

#### **Primes**

- Ø Prime contractor open houses inviting DBE firms to see the bid "war room" or providing technical assistance.
- Ø Participate in speed networking and mosaic exercises as arranged by DBE office.
- Ø Host information sessions not directly associated with a bid letting.
- Ø Participate in a formal mentor protégé or joint venture with a DBE firm.
- Ø Participate in WisDOT advisory committees i.e. TRANSAC, or Mega Project committee meetings.
- Ø Facilitate a small group DBE 'training session' clarifying how your firm prepares for bid letting, evaluates subcontractors, preferred qualifications, and communication methods.
- Ø Encourage subcontractors to solicit and highlight DBE participation in their quotes to you.
- Ø Quality of communication, not quantity creates the best results. Contractors should be thorough in communicating with DBE firms before the bid and provide any assistance requested to assure best possible bid.

#### **DBE**

- Ø DBE firms should contact primes as soon as possible with questions regarding their quotes or bid; seven days prior is optimal.
- Ø Continually check for contract addendums on the HCCI website through the Thursday prior to letting to stay abreast of changes.
- Ø Review the status of contracts on the HCCI website reviewing the 'apparent low bidder' list and bid tabs at a minimum.
- Ø Prepare a portfolio or list of related projects and prime and supplier references; be sure to note transportation related projects of similar size and scope, firm expertise and staffing.
- Ø Participate in DBE office assessment programs.
- Ø Participate on advisory and mega-project committees.
- Ø Sign up to receive the DBE Contracting Update.
- Ø Consider membership in relevant industry or contractor organizations.
- Ø Active participation is a must. Quote as many projects as you can reasonably work on; quoting the primes and bidding as a prime with the Department are the only ways to get work.

# APPENDIX F Good Faith Effort Evaluation Guidance Appendix A of 49 CFR Part 26

I. When, as a recipient, you establish a contract goal on a DOT-assisted contract for procuring construction, equipment, services, or any other purpose, a bidder must, in order to be responsible and/or responsive, make sufficient 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, you have the responsibility 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, based on the regulations and the guidance in this Appendix.

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. Determinations should not be made using quantitative formulas.

- 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. (1) Conducing market research to identify small business contractors and suppliers and soliciting through all reasonable and available means the interest of all certified DBEs that have the capability to perform the work of the contract. This may include attendance at pre-bid and business matchmaking meetings and events, advertising and/or written notices, posting of Notices of Sources Sought and/or Requests for Proposals, written notices or emails to all DBEs listed in the State's directory of transportation firms that specialize in the areas of work desired (as noted in the DBE directory) and which are located in the area or surrounding areas of the project.
- (2) The bidder should solicit this interest as early in the acquisition process as practicable to allow the DBEs to respond to the solicitation and submit a timely offer for the subcontract. The bidder should 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 (for example, smaller tasks or quantities) to facilitate DBE participation, even when the prime contractor might otherwise prefer to perform these work items with its own forces. This may include, where possible, establishing flexible timeframes for performance and delivery schedules in a manner that encourages and facilitates DBE participation.
- 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 with their offer for the subcontract.
- 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. (1) 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 status) are not legitimate causes for the rejection or non-solicitation of bids in the contractor's efforts to meet the project goal. Another practice considered an insufficient good faith effort is the rejection of the DBE because its quotation for the work was not the lowest received. However, nothing in this paragraph shall be construed to require the bidder or prime contractor to accept unreasonable quotes in order to satisfy contract goals.
- (2) A prime contractor's inability to find a replacement DBE at the original price is not alone sufficient to support a finding that good faith efforts have been made to replace the original DBE. The fact that the contractor has the ability and/or desire to perform the contract work with its own forces does not relieve the contractor of the obligation to make good faith efforts to find a replacement DBE, and it is not a sound basis for rejecting a prospective replacement DBE's reasonable quote.
- 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, it is essential to scrutinize its documented efforts. At a minimum, you must review the performance of other bidders in meeting the contract goal. 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 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. As provided in §26.53(b)(2)((vi), you must also require the contractor to submit copies of each DBE and non-DBE subcontractor quote submitted to the bidder when a non-DBE subcontractor was selected over a DBE for work on the contract to review whether DBE prices were substantially higher; and contact the DBEs listed on a contractor's solicitation to inquire as to whether they were contacted by the prime. Pro forma mailings to DBEs requesting bids are not alone sufficient to satisfy good faith efforts under the rule.

VI. A promise to use DBEs after contract award is not considered to be responsive to the contract solicitation or to constitute good faith efforts.

[79 FR 59600, Oct. 2, 2014]

#### **APPENDIX G**

(SAMPLE) Forms DT1506 and DT1202

### COMMITMENT TO SUBCONTRACT TO DBE ATTACHMENT A

#### CONFIRMATION OF PARTICIPATION

Project I.D.:		Prop	osal Number:			
Letting Date:						
Name of DBE Firm Participat	ing in this Contract:					
Name of the Prime/Subcontra	actor who hired the DBE	Firm: (	(list all names of tiers if more th	an one)		
Type of Work or Type of Mate	erial Supplied:					
Total Subcontract Value:			Total DBE Credit Value:			
		Prime	e Contractor Representative's Sign	nature		
FOR PRIME CONTRACTORS ONLY: I certify that I made arrangements with the participating DBE firm to perform the type of work listed or supply the material indicated above for the subcontract value listed above.		Prime Contractor Representative's Name (Print Name)				
		Prime Contractor (Print Company Name)				
		Date				
FOR PARTICIPATING DBE FIR I certify that I made arrangement	s with the Prime	Participating DBE Firm Representative's Signature & Date				
Contractor or the Hiring Contract work or supply the material indic subcontract value listed above.		Participating DBE Firm Representative's Name (Print Name)				
FOR DBE TRUCKING FIRMS ONLY: I certify that I will utilize, for DBE credit, only trucks listed		Participating DBE Firm (Print Company Name)				
on my WisDOT approved Schedule of Owned/Leased Vehicles for DBE Credit form and I will be utilizing the number of trucks as listed below.		DBE Firm's Address:				
#Owned Trucks	# Leased Trucks		# DBE-Owned Leased Trucks	# Non-DBE-Owned Leased Trucks		



#### DOCUMENTATION:OF:GOOD:FAITH:EFFORT:

Wisconsin-Department-of-Transportation

+

Project ID		
Prime Contractor		County
Person-Submitting-Document		Telephone-Number
Address		Email-Address

All-bidders-must-undertake-necessary-and-reasonable-steps-to-achieve-the-assigned-DBE-contract-goal-per-federal-regulatory-guidance-at-49-CFR-Part-26. Bidders-use-this-form-to-document-all-efforts-employed-to-meet-the-assigned-goal-as-a-record-of-contractor-good-faith-efforts-(GFE). Refer-to-ASP3-or-49-CFR-Part-26-for-guidance-on-actions-that-demonstrate-good-faith-effort.

It is critical to list-all-efforts, attach documentation, and follow the instructions to complete this submission. Documentation of good faith effort includes copies of each DBE and non-DBE subcontractor quote submitted to the bidder for the same line items. Utilize the sample documentation logs to document and organize efforts.

Submit-good-faith-effort-documentation-per-ASP-3-guidelines.

Instructions: Provide a narrative description of all activities pursued to demonstrate good faith efforts, any corresponding documentation, and applicable explanation on separate pages. Include the following items, organized in the order listed below.

#### 1.→ Solicitation Documentation:

- a.→ Purpose: To identify all reasonable and available activities the bidder-performed to solicit the interest of all certified DBEs who have the capacity and ability to perform work on the project. All solicitation efforts should begin as early as possible to ensure DBEs have ample time to respond and ask-questions.
- b.→Action:·Identify·and·list·all·activities·engaged·in·to·solicit·DBEs·using·all·reasonable·and-available·means·such·as·written·notice·and·follow-up·communications;·substantive-conversations;·pre-bid-meetings;·networking-events;·market·research;·advertising.

#### 2.→ Selected·Work·Items·Documentation:

- a.→ Purpose: To ensure that all work items are broken out into economically feasible units to facilitate DBE participation. This must occur even when you prefer to perform the work yourself.
- b.→Action: Identify economically feasible work units to be performed by DBEs to include activities such as: list of work items to be performed; breaking up of large work items into smaller tasks or quantities; flexible time frames for performance and delivery schedules.

#### 3.→ Documentation of Project Information provided to Interested DBEs:

- a.→ Purpose: To provide interested DBEs with adequate information about the plans, specifications, and any other contractual requirements in a timely manner to assist DBEs in response to solicitation.
- b.→ Action: Provide DBEs access to plans, specifications, and other contract requirements. Early solicitation allows ample opportunity to provide project information, links to Let advertisements, and substantive engagement with DBEs.

#### 4.→ Documentation of Negotiation with Interested DBEs:

- a.→ Purpose: To ensure that negotiations with interested DBEs were made in good faith providing evidence as to why agreements could not be reached for DBEs to perform work.
- b. Action: Provide-sufficient evidence to demonstrate that good-faith negotiations took place. Merely-sending-out-solicitations requesting-bids from DBEs does not constitute sufficient good-faith efforts. A bidder using good-business judgment considers a number of factors in negotiating with all subcontractors, and the firm's price and capabilities in addition to contract goals are taken 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 failing to meet the DBE goal as long as costs are reasonable. (see 49 CFR Part 26 Appendix A)

#### 5.→ Documentation·of·Sound·Reason·for·Rejecting·DBEs:

- a.→ Purpose: To ensure that bidders avoid rejecting DBEs as unqualified without sound reasons. Reasons for rejection must be based on thorough investigation of DBE capabilities.
- b. Action: Provide-sufficient evidence to demonstrate that DBE-was rejected for sound reasons such as past performance, relevant business experience and stability, safety record, business ethic and integrity, technical capacity, other tangible factors.

#### 6.→ Documentation·of·Assistance·to·Interested·DBEs-·Bonding,·Credit,·Insurance,·Equipment,· Supplies/Materials:·

- a.→ Purpose: To assist interested DBEs in obtaining bonds, lines of credit, insurance, equipment, supplies, materials, and other assistance or services.
- b.→ Action: Assist-interested DBEs in-obtaining-bonding, lines-of-credit-or-insurance, and provide technical assistance-or-information related to plans, specifications, and project requirements. Assist-DBEs in-obtaining equipment, supplies, materials or other services related to meeting project requirements (excluding supplies or equipment the DBE purchases from the prime).

### 7.→ Documentation of outreach to Minority, Women, and Community Organizations and other DBE Business Development Support:

- a.→ Purpose: To effectively use the services of minority, women, and community organizations as well as contractors' groups, local, state, and federal business assistance offices and organization that provide assistance in recruiting and supporting DBEs, as well as participation in activities that support DBE business development.
- b.→ Action: Contact organizations and agencies for assistance in contacting, recruiting, and providing support to DBE subcontractors, suppliers, manufacturers, and truckers at least 14 days before bid opening. Participate in or host activities such as networking events, mentor-protégé programs, small business development workshops, and others consistent with DBE support.

Return to: Wisconsin-Department of Transportation DBE-Program-Office PO-Box-7965 Madison, WI-53707-7965 DBE\_Alert@dot.wi.gov

I-certify-that-I-have-utilized-comprehensive-good-faith-efforts-to-solicit-and-utilize-DBE-fire this-contract-proposal,-as-demonstrated-by-my-responses-and-as-specified-in-Additional	
l-certify-that-the-information-given-in-the-Documentation-of-Good-Faith-Efforts-is-true-and-o	correct to the best of my-knowledge and belief
I-further-understand-that-any-willful-falsification,-fraudulent-statement,-or-misrepresentati involve-debarment-and/or-prosecution-under-applicable-state-(Trans-504)-and-Federal-law	
	ddadd dhainad Barrasantii a Sireat ar
85.88.8	dder/Authorized Representative-Signature)
	(Print-Name)
	(Title)

#### Good·Faith·Effort·-·Sample·Documentation·Logs

The sample logs below are provided as guides rather than exhaustive list. See ASP3, Appendix A for additional examples of demonstrable good faith efforts. Attach documentation for each activity listed.

Acceptable-forms-of-documentation-include-copies-of-solicitations-sent-to-DBEs, notes-from-substantive-conversations-and-negotiations-with-DBEs, copies-of-advertisements-placed, email-communications, all-quotes-received-from-DBEs-and-from-all-subcontractors-who-were-considered-alongside-DBE-quotes, proof-of-attendance-at-applicable-networking-events; flyers-for-events-or-workshops-for-DBEs-offered-by-the-prime, and-other-physical-records-of-good-faith-efforts-activities.

#### SOLICITATION·LOG-

Date	Activity	Name-of-DBE-Solicited	Follow-up
4/1/2020	Sent-May-Let-solicitation	Winterland · Electric	Spoke-with-Mark-Winterland-on-4/15/20-to-ask-if-
			he-would-quote-

#### SELECTED WORK-ITEMS-SOLICITED LOG

Work-Type	DBE-Firm	Contact-Person	Date	Contact·Mode
Payament Markins	ABC-Marking	Leslie·Lynch	4/1/2020	Email; phone
Pavement-Marking	#1-Marking-Co.	Mark-Smart	4/1/2020	Email;·left·VM
Flactrical	Winterland·Electric	Tabitha-Tinker	4/3/2020	Email,·left·VM
Electrical	Superstar-Wiring	Jose-Huascar	4/3/2020	Email; phone

#### INFORMATION-PROVIDED-LOG

Request- Date	DBE-Firm	Information·Requested·&·Provided	Response- Date
4/1/2020	Winterland Electric	Requested-info-on-electrical-requirements;-provided- plan-and-link-to-specs	4/3/2020
4/21/2020	Absolute-Construction	Wanted to know how and when supplies are paid for by WisDOT; referred to spec that covers stockpiling	4/21/2020

#### NEGOTIATIONS:LOG

Date	DBE-Firm	Contact-Name	Work-Type	Quotes Rec'd?	Considere d-for- project?	If-not-selected, why?
4/12/2020	ABC-Landscape	John-Dean	Erosion-Control	Yes	No	Cannot-perform-all-items
4/17/2020	Wild-Ferns	Sandy-Lynn	Erosion-Control	Yes	Yes	
4/20/2020	#1-Marking	Mark-Smart	Electrical	Yes	Yes	

#### ASSISTANCE-LOG

Date	DBE-Firm	Contact-Person	Assistance-Provided
4/1/2020	ABC-Sawing	Jackie-Swiggle	Informed·DBE·on·how·to·obtain·bonding
4/17/2020	Supreme-Construction		Provided-contact-for-wholesale-supply- purchase

#### OUTREACH & BUSINESS DEVELOPMENT LOG

Date	Agency/Organization- Contacted	Contact-Person	Assistance Requested
4/1/2020	Women-in-Construction	LaTonya·Klein	Contact-information for woman-owned suppliers
4/28/2020	WBIC	Sam-Smith	Asked-for-information-to-provide-to-DBE-regarding- financing-programs-through-WBIC

Official Form DT1202 can be found here: www.wisconsindot.gov/DBEcontracting

#### ADDITIONAL SPECIAL PROVISION 4

This special provision does not limit the right of the department, prime contractor, or subcontractors at any tier to withhold payment for work not acceptably completed or work subject to an unresolved contract dispute.

#### **Payment to First-Tier Subcontractors**

Within 10 calendar days of receiving a progress payment for work completed by a subcontractor, pay the subcontractor for that work. The prime contractor may withhold payment to a subcontractor if, within 10 calendar days of receipt of that progress payment, the prime contractor provides written notification to the subcontractor and the department documenting "just cause" for withholding payment.

The prime contractor is not allowed to withhold retainage from payments due subcontractors.

#### **Payment to Lower-Tier Subcontractors**

Ensure that subcontracting agreements at all tiers provide prompt payment rights to lower-tier subcontractors that parallel those granted first-tier subcontractors in this provision.

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

Make the following revisions to the standard specifications:

#### 102.1 Prequalifying Bidders

Replace paragraph two with the following effective with the October 2020 letting:

(2) Furnish a dated prequalification statement on the department's form at least 10 business days before the time set for the letting to close.

#### 102.6 Preparing the Proposal

Replace the entire text with the following effective with the October 2020 letting:

#### 102.6.1 General

- (1) Submit completed proposals on the department's bidding proposal described in 102.2. Submit legible information only. Write everything in ink, by typewriter, or by computer-controlled printer. Provide all dollar amounts in dollars and cents, in numerals. Attach all addenda to the submitted proposal.
- (2) Properly execute the proposal. Place the required signatures, in ink, in the space provided on the bidding proposal as indicated below:

#### **ENTITY SUBMITTING PROPOSAL**

#### **REQUIRED SIGNATURE**

Partnership A partner or a duly authorized agent.

**Joint venture** A member or a duly authorized agent of at least one of the joint venture

firms.

Corporation An authorized officer or duly authorized agent of the corporation. Also show

the name of the state chartering that corporation and affix the corporate

seal.

Limited liability company A manager, a member, or a duly authorized agent.

- (3) Instead of using the schedule of items provided on the department's bidding proposal, the bidder may submit a substitute schedule with the proposal. Use a format for the substitute schedule conforming to the department's guidelines for approval of a bidder-generated schedule of items. Obtain the department's written approval before using a substitute schedule.
- (4) Provide a unit price for each bid item listed in the schedule of items. Calculate and show, in the bid amount column, the products of the respective unit prices and quantities. For a lump sum bid item, show the same price in the unit price column and in the bid amount column pertaining to that bid item. Show the total bid obtained by adding the values entered in the bid amount column for the listed bid items.
- (5) If a unit price or lump sum bid already entered in the proposal needs to be altered, cross out the entered unit price or lump sum bid with ink or typewriter and enter the new price above or below and initial it in ink.
- (6) A change that the bidder makes in the proposal is not an alteration if the bidder makes that change as directed in a specific instruction contained in an addendum.

#### 102.6.2 Disadvantaged Business Enterprise (DBE) Commitment

- (1) Before the letting is closed, submit the following documentation for proposals with a DBE goal:
  - 1. Commitment to subcontract to DBE on department form DT1506.
  - 2. Attachment A for each subcontractor listed on the DT1506.
  - 3. If the DBE goal is not attained, certificate of good faith efforts on department form DT1202.
- (2) Within 24 hours after the letting is closed, email all supplemental documentation for the DT1202 verifying efforts made to attain the DBE goal to DBE\_Alert@dot.wi.gov.

#### 102.7.3 Department Will Reject

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

- (1) Proposals are irregular and the department will reject and will not post them if the bidder:
  - 1. Does not furnish the required proposal guaranty in the proper form and amount as specified in 102.8.
  - Does not submit a unit price for each bid item listed, except for lump sum bid items where the bidder may show the price in the bid amount column for that bid item.
  - 3. Includes conditions or qualifications not provided for in the department-supplied bidding proposal.
  - 4. Submits a bid on a bidding proposal issued to a different bidder without obtaining departmental authorization to do so
  - 5. Submits a bid that contains unauthorized revisions in the name of the party to whom the bidding proposal was issued.
  - 6. Submits a schedule of items with illegibly printed bid item numbers, descriptions, or unit prices.
  - 7. Submits a schedule of items for the wrong contract.
  - 8. Submits a bidder-generated schedule of items with an incorrect bid item number and incorrect description for a single bid item.
  - 9. Omits a bid item or bid items on a bidder-generated schedule of items.
  - 10. Submits a materially unbalanced bid.
  - 11. Does not sign the proposal.
  - 12. Does not submit the DBE forms and required supplemental documentation of the good faith efforts as specified in 102.6.2.

#### 102.12 Public Opening of Proposals

Replace paragraph one with the following effective with the October 2020 letting:

(1) The letting will close at the time and place indicated in the notice to contractors. The department will publicly open and post the total bid for each proposal on the Bid Express web site beginning at noon on the day after the letting is closed except as specified in 102.7.3 and 102.8. If a proposal has no total bid shown, the department will not post the bid. After verification for accuracy under 103.1, the department will post bid totals on the HCCI web site.

https://wisconsindot.gov/Pages/doing-bus/contractors/hcci/bid-let.aspx

#### 103.1 Consideration of Proposals

Replace paragraph one with the following effective with the October 2020 letting:

- (1) Following the public opening of the proposals received, the department will compare them based on the summation of the products of the quantities of work listed and the contract unit prices offered. In case of discrepancies, errors, or omissions, the department will make corrections as specified in 102.7.1. In awarding contracts, the department, in addition to considering the amounts stated in the proposals, may consider one or more of the following:
  - 1. The responsibility of the various bidders as determined from a study of the data required under 102.1.
  - 2. The responsiveness of the bid as determined under 102.6.
  - 3. Information from other investigations that the department may make.

# 107.17.1 General

Replace paragraph four with the following effective with the November 2020 letting:

- (4) Comply with the railroad's rules and regulations regarding operations on or near the railroad right-of-way as follows:
  - When working on the railroad right-of-way.
  - When working within 25 feet of the track centerline or adjacent facilities, including equipment or extensions of equipment that can fall within 25 feet of the track centerline or adjacent facilities.

If the railroad's chief engineering officer requires, arrange with the railroad to obtain the services of qualified railroad employees to protect railroad traffic through the work area. Bear the cost of these services and pay the railroad directly. Notify the railroad's representative, specified in the project special provisions, in writing at least 40 business days before starting work near a track. Provide the specific time planned to start the operations.

#### 109.6.3.3 Retainage

Delete paragraph two effective with the December 2020 letting:

#### 450.2.1 Acronyms and Definitions

Add the following definitions to 450.2.1(2) effective with the November 2020 letting:

**Butt Joint** A transverse joint between existing and newly paved surfaces, formed by

milling or sawing a vertical notch into the existing surface and then paving

against the notch.

Echelon Paving Paving two or more adjacent lanes with adjacent pavers offset from each

other by 200 feet or less.

Notched Wedge Joint A longitudinal joint consisting of a wedge placed at the edge of the initially

paved lane with an overlapping wedge placed on the subsequent lane.

Tandem Paving Paving two or more adjacent lanes with adjacent pavers offset from each

other by more than 200 feet.

Vertical Joint A longitudinal joint between 2 paved lanes with a vertical or nearly vertical

interface between the adjacent mats.

### 450.3.2.8 Jointing

Replace paragraph two with the following with the November 2020 letting:

(2) Where placing against existing HMA pavement, saw or mill the existing mat to form a full-depth joint.

Replace paragraphs five and six with the following effective with the November 2020 letting:

- (5) At the prepave meeting, submit documentation to the engineer that includes the brand name and model of each extruding and compacting device proposed for notched wedge joint construction. Alternatively, submit pictures of fabricated wedging and compacting devices. Do not use devices before engineer approval.
- (6) For notched wedge joints, construct and shape the wedge for each layer using the engineer-approved extruding device and compacting device that will provide a uniform slope and will not restrict the main screed. Compact the wedge with a weighted roller wheel or vibratory plate compactor the same width as the wedge. Clean and apply tack coat to the wedge surface and both notches before placing the adjacent lane.
- (7) For butt and vertical joints, clean and apply tack coat to promote bonding and seal the joint.
- (8) If paving in echelon, the contractor may use a vertical or notched wedge joint. Joints paved in echelon need not be tack coated.

### 460.2.2.3 Aggregate Gradation Master Range

Replace table 460-1 with the following effective with the November 2020 letting:

TABLE 460-1 AGGREGATE GRADATION MASTER RANGE AND VMA REQUIREMENTS

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

<sup>[1] 14.5</sup> for LT and MT mixes.

#### 522.2 Materials

Replace paragraph three with the following effective with the January 2021 letting:

- (3) Manufacture precast reinforced concrete pipe, cattle pass, and apron endwalls in a plant listed under precast concrete fabricators on the APL. Conform to the specified AASHTO standard materials requirements except as follows:
  - The contractor may use cement conforming to 501.2.1 or may substitute for portland cement at the time of batching conforming to 501.2.6 for fly ash, 501.2.7 for slag, or 501.2.8 for other pozzolans. In either case the maximum total supplementary cementitious content is limited to 30 percent of the total cementitious content by weight.

#### 532.2.1 General

Replace paragraph one with the following effective with the November 2020 letting:

(1) Furnish structural steel conforming to ASTM as follows:

<= 1/2 inch thick structural tube and pipe	ASTM A500 grade C
> 1/2 inch thick structural tube and pipe	API 5L PSL 2 grade 46 or ASTM 1085
Tapered vertical supports	ASTM A595 grade A or ASTM A572 grade 55
Multi-sided or greater than 26-inch diameter round tapered poles.	ASTM A572 grade 65
Structural angles and plates	ASTM A709 grade 36

<sup>[2] 15.5</sup> for LT and MT mixes.

#### 532.3.8 Acceptance and Inspection

Add the following new subsection effective with the November 2020 letting:

# 532.3.8 Acceptance and Inspection

- (1) Demonstrate to the engineer that electrical and mechanical systems for each high mast tower installation are fully operational. The department will not accept an installation until the engineer is satisfied that it functions properly.
- (2) Inspect completed "S" or "L" designated structures before opening to public traffic conforming to the BOS structure inspection manual part 4 for sign, signal, and high mast towers available at:

https://wisconsindot.gov/Pages/doing-bus/eng-consultants/cnslt-rsrces/strct/inspection-manual.aspx

Ensure that a department-certified active team leader for sign/signal inspections, listed on the department's highway structures information system (HSIS) website, performs inspections. Conform to the following:

- Notify the engineer at least 5 business days before inspection.
- Ensure that the team leader performing inspections submits the signed inspection reports and provides punch list items as maintenance items in the inspection report to the engineer within one business day after completing each inspection. Submit that signed final inspection report to the engineer and HSIS at:

https://wisconsindot.gov/Pages/doing-bus/eng-consultants/cnslt-rsrces/strct/hsi.aspx

- Notify the engineer and region ancillary structure project manager upon completion of the punch list items.

#### 550.2.1 Steel Piles and Pile Shells

Replace paragraph three with the following effective with the November 2020 letting:

(3) For steel pipe sections and steel pile shells for cast-in-place concrete piles, use ASTM A252 grade 3 steel.

#### 608.2.1 Pipe

Replace paragraph three with the following effective with the January 2021 letting:

- (3) Manufacture precast reinforced concrete pipe for storm sewer in a plant listed under precast concrete fabricators on the APL. Conform to the specified AASHTO materials requirements for the class of precast concrete pipe specified except as follows:
  - The contractor may use cement conforming to 501.2.1 or may substitute for portland cement at the time of batching conforming to 501.2.6 for fly ash, 501.2.7 for slag, or 501.2.8 for other pozzolans. In either case the maximum total supplementary cementitious content is limited to 30 percent of the total cementitious content by weight.

#### 611.2 Materials

Replace paragraph three with the following effective with the January 2021 letting:

- (3) For precast structures conform to AASHTO M199 for circular structures and ASTM C913 for square and rectangular structures. Manufacture in a plant listed under precast concrete fabricators on the APL. Conform to the specified AASHTO materials requirements for the structure specified except as follows:
  - Use concrete with 470 pounds or more cementitious material per cubic yard.
  - The contractor may use cement conforming to 501.2.1 or may substitute for portland cement at the time of batching conforming to 501.2.6 for fly ash, 501.2.7 for slag, or 501.2.8 for other pozzolans. In either case the maximum total supplementary cementitious content is limited to 30 percent of the total cementitious content by weight.
  - For wet cast use air-entrained concrete with 7.0 percent +/- 1.5 percent air content.

#### 614.3.2.1 Installing Posts

Replace paragraphs four and five with the following effective with the December 2020 letting:

- (4) For bid items 614.0220, 0230, and 2500; do not trim posts before installation and mark one face of each post as follows:
  - Draw an embedment depth line.
  - Above the embedment line, write the post length.
  - Posts 3 through 8 of bid item 614.0220 do not require marking.

Install posts with the markings on the roadway side. Ensure the markings remain on the posts until guardrail final acceptance.

- (5) Ensure that posts are at least the minimum length and minimum embedment the plans show before cutting post tops to the finished elevation. After installation, the engineer may direct the contractor to remove and reinstall up to 5% of the posts to verify they were placed to the required plan depth. If a post is embedded less than the required plan depth, the engineer may direct additional sampling. Re-install sampled posts at the locations and to the depths the plans show. Replace posts and other components that are damaged during sampling.
- (6) Provide offset block-mounted reflectors as the plans show.

### 650.3.7 Structure Layout Staking

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

- (1) Set construction stakes or marks on a line offset from the structure centerline or on a reference line, whichever is appropriate, for both roadway and substructure units. Establish the plan horizontal and vertical positions to the required accuracy. Also, set and maintain stakes and marks as necessary to support the method of operations. Locate stakes and marks to within 0.02 feet of the true horizontal position, and establish the grade elevation to within 0.01 feet of true vertical position.
- (2) For girder bridges, the department will compute deck grades with contractor-supplied girder elevation data.
- (3) For slab span bridges, the department will compute slab grades using contractor-supplied falsework settlement and deflection data at tenth points along slab edges, the crown, and reference line locations. Before releasing falsework, survey top-of-slab elevations at the centerline of the abutments and at the 5/10th point along slab edges, the crown, and reference line locations to verify the camber.

#### 710.2 Small Quantities

Replace paragraph one with the following effective with the November 2020 letting:

- (1) For contracts with only small quantities of material subject to testing, as defined under specific contract QMP provisions, modify the requirements of 710 as follows:
  - 1. The contractor may submit an abbreviated quality control plan as allowed in 701.1.2.3.
  - 2. The engineer may accept aggregate based on documented previous testing and non-random start-up gradation testing as allowed in 710.5.6.1.

#### 710.4 Concrete Mixes

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

- (2) At least 3 business days before producing concrete, document that materials conform to 501 unless the engineer allows or individual QMP specifications provide otherwise. Include the following:
  - 1. For mixes: quantities per cubic yard expressed as SSD weights and net water, water to cementitious material ratio, and air content.
  - 2. For cementitious materials and admixtures: type, brand, and source.
  - For aggregates: absorption, SSD bulk specific gravity, wear, soundness, freeze thaw test results if required, and air correction factor. Also include proposed combined gradation limits and target individual gradations, including P200 limits..

#### 710.5.6 Aggregate Testing

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

#### 710.5.6.1 General

- (1) Test aggregate gradations during concrete production. The department will accept non-random start-up testing during concrete production for the following:
  - Small quantities, as defined in 715.1.1.2, of class I concrete placed under 715.
  - Less than 400 cubic yards of class II ancillary concrete placed under the contract.

#### 710.5.6.2 Gradation Testing During Concrete Production

- (1) Test aggregate gradation during concrete production batching either at a central mix batch plant or at a ready mix plant. The contractor's concrete production QC tests can be used for the same mix design on multiple contracts.
- (2) Conform to combined gradation limits either calculated using department form WS3012 or custom limits approved as a part of the contractor's quality control plan. For class II concrete, also conform to the additional combined gradation requirements specified for class I concrete in 715.2.2.
- (3) Determine the complete gradation using a washed analysis for both fine and coarse aggregates. Report results for the 1 1/2", 1", 3/4", 1/2", 3/8", #4, #8, #16, #30, #50, #100, and #200 sieves.
- (4) Contractor QC testing frequency is based on the cumulative plant production for each mix design across multiple WisDOT contracts.

TABLE 710-1 PLANT PRODUCTION QC GRADATION TESTING FREQUENCY

Daily Plant Production Rate for WisDOT Work	Minimum QC Frequency per Stockpile	
250 cubic yards or less	one test per cumulative total of 250 cubic yards	
more than 250 through 1000 cubic yards	one test per day	
more than 1000 cubic yards	two tests per day	

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

TABLE 710-2 CONTRACT PLACEMENT QV GRADATION TESTING FREQUENCY

Anticipated Daily Placement Rate Each WisDOT Contract	Minimum QV Frequency per Stockpile	
less than or equal to 1000 cubic yards	one test per 5 days of placement	
more than 1000 cubic yards	two tests per 5 days of placement	

#### 715.2.2 Combined Aggregate Gradation

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

- (1) Ensure that the combined aggregate gradation conforms to the following, expressed as weight percentages of the total aggregate:
  - 1. One hundred percent passes the 2-inch sieve.
  - 2. For mixes containing size No. 2 stone, the percent passing the 1-inch sieve is less than or equal to 89. The engineer may waive this requirement if the clear spacing between reinforcing bars is less than 2 inches.
  - 3. The percent passing the No. 4 sieve is less than or equal to 42, except if the coarse aggregate is completely composed of crushed stone, up to 47 percent may pass the No. 4 sieve. For pavement, coarse aggregate may be completely composed of crushed concrete, in which case up to 47 percent may pass the No. 4 sieve.
  - 4. The percent passing the No. 200 sieve is less than or equal to 2.3 percent.

#### 716.2.1 Class II Concrete

Replace paragraphs four through six with the following effective with the November 2020 letting:

- (4) Provide concrete with a 28-day compressive strength that equals or exceeds the following:
  - If the contract specifies f'c, then f'c.
  - If the contract does not specify f'c, then 3000 psi.

# **ERRATA**

# 101.3 Definitions

Adopt AASHTO change order definition.

**Change order** A written order to the contractor detailing changes to the specified work quantities or modifications within the scope of the original contract..

Delete existing contract change order, contract modification, and contract revision definitions.

# 460.2.7(1) HMA Mixture Design

Correct table 460-2 errata by eliminating plasticity index requirements for LT, MT, and HT mixes.

#### **TABLE 460-2 MIXTURE REQUIREMENTS**

Mixture type	LT	MT	HT	SMA
LA Wear (AASHTO T96)				
100 revolutions(max % loss)	13	13	13	13
500 revolutions(max % loss)	50	45	45	35
Soundness (AASHTO T104) (sodium sulfate, max % loss)	12	12	12	12
Freeze/Thaw (AASHTO T103 as modified in CMM 860.2.7) (specified counties, max % loss)	18	18	18	18
Fractured Faces (ASTM D5821 as modified in CMM 860.7.2) (one face/2 face, % by count)	65/	75 / 60	98 / 90	100/90
Flat & Elongated (ASTM D4791) (max %, by weight)	5 (5:1 ratio)	5 (5:1 ratio)	5 (5:1 ratio)	20 (3:1 ratio)
Fine Aggregate Angularity (AASHTO T304, method A, min)	40 <sup>[1]</sup>	43 <sup>[1]</sup>	45	45
Sand Equivalency (AASHTO T176, min)	40	40 <sup>[2]</sup>	45	50
Clay Lumps and Friable Particle in Aggregate (AASHTO T112)	<= 1%	<= 1%	<= 1%	<= 1%
Plasticity Index of Material Added to Mix Design as Mineral Filler (AASHTO T89/90)				<= 4
Gyratory Compaction				
Gyrations for Nini	6	7	8	7
Gyrations for Ndes	40	75	100	65
Gyrations for Nmax	60	115	160	100
Air Voids, %Va (%Gmm Ndes)	4.0 (96.0)	4.0 (96.0)	4.0 (96.0)	4.5 (95.5)
% Gmm Nini	<= 91.5 <sup>[3]</sup>	<= 89.0 <sup>[3]</sup>	<= 89.0	
% Gmm Nmax	<= 98.0	<= 98.0	<= 98.0	<= 98.0
Dust to Binder Ratio <sup>[4]</sup> (% passing 0.075/Pbe)	0.6 - 1.2 <sup>[5]</sup>	0.6 - 1.2 <sup>[5]</sup>	0.6 - 1.2 <sup>[5]</sup>	1.2 - 2.0
Voids filled with Binder (VFB or VFA, %)	68 - 80 <sup>[6] [8]</sup>	65 - 75 <sup>[6] [7] [9]</sup>	65 - 75 <sup>[6] [7] [9]</sup>	70 - 80
Tensile Strength Ratio (TSR) (AASHTO T283)[10] [11]				
no antistripping additive	0.75 min	0.75 min	0.75 min	0.80 min
with antistripping additive	0.80 min	0.80 min	0.80 min	0.80 min
Draindown (AASHTO T305) (%)				<= 0.30
Minimum Effective Asphalt Content, Pbe (%)				5.5

<sup>[1]</sup> For No 6 (4.75 mm) nominal maximum size mixes, the specified fine aggregate angularity is 43 for LT and 45 MT mixes.

<sup>[2]</sup> For No 6 (4.75 mm) nominal maximum size mixes, the specified sand equivalency is 43 for MT mixes.

<sup>[3]</sup> The percent maximum density at initial compaction is only a guideline.

<sup>[4]</sup> For a gradation that passes below the boundaries of the caution zone (ref. AASHTO M323), the dust to binder ratio limits are 0.6 - 1.6.

<sup>[5]</sup> For No 6 (4.75 mm) nominal maximum size mixes, the specified dust to binder ratio limits are 1.0 - 2.0 for LT mixes and 1.5 - 2.0 for MT and HT mixes.

<sup>&</sup>lt;sup>[6]</sup> For No. 6 (4.75mm) nominal maximum size mixes, the specified VFB is 67 - 79 percent for LT mixes and 66 - 77 percent for MT and HT mixes.

<sup>[7]</sup> For No. 5 (9.5mm) and No. 4 (12.5 mm) nominal maximum size mixtures, the specified VFB range is 70 - 76 percent.

<sup>[8]</sup> For No. 2 (25.0mm) nominal maximum size mixes, the specified VFB lower limit is 67 percent.

<sup>[9]</sup> For No. 1 (37.5mm) nominal maximum size mixes, the specified VFB lower limit is 67 percent.

<sup>[10]</sup> WisDOT eliminates freeze-thaw conditioning cycles from the TSR test procedure.

<sup>[11]</sup> Run TSR at asphalt content corresponding to 3.0% air void regressed design, or 4.5% air void design for SMA, using distilled water for testing.

#### 513.2.1(2) General

Correct errata by changing the CMM reference from 875.2 to 875.4.

(2) Conform to the department's certification method of acceptance, as defined in CMM 875.4, for railing and railing components. Furnish a certificate of compliance for miscellaneous hardware.

#### 531.1(1) Description

Correct errata by adding structural steel sign supports constructed under 635.

- (1) This section describes constructing drilled shaft foundations for the following:
  - Overhead sign structures constructed under 532.
  - High mast light towers constructed under 532.
  - Structural steel sign supports constructed under 635.
  - Camera poles constructed under 677.

# 635.3.1(1) Structural Steel Sign Supports

Correct errata by adding "type NS" concrete footings.

(1) Locate and erect the supports as specified for placement and orientation in 637.3.3.2. Construct Type NS concrete footings conforming to 531.

#### 654.5(2) Payment

Correct errata by changing excavating to drilling.

(2) Payment for the Bases bid items is full compensation for providing concrete bases; for embedded conduit and electrical components; for anchor templates, rods, nuts, and washers; for bar steel reinforcement; and for drilling and backfilling.

# **ADDITIONAL SPECIAL PROVISION 7**

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

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

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

 $\underline{https://wisconsindot.gov/Documents/doing-bus/civil-rights/labornwage/crcs-payments-sublets-\underline{manual.pdf}}$ 

# **ADDITIONAL SPECIAL PROVISION 9**

# **Electronic Certified Payroll or Labor Data Submittal**

(1) Use the department's Civil Rights Compliance System (CRCS) to electronically submit certified payroll reports for contracts with federal funds and labor data for contracts with state funds only. Details are available online through the department's highway construction contractor information (HCCI) site on the Labor, Wages, and EEO Information page at:

https://wisconsindot.gov/Pages/doing-bus/civil-rights/labornwage/default.aspx

- (2) Ensure that all tiers of subcontractors, including all trucking firms, either submit their weekly certified payroll reports (contracts with federal funds) or labor data (contracts with state funds only) electronically through CRCS. These payrolls or labor data are due within seven calendar days following the close of the payroll period. Every firm providing physical labor towards completing the project is a subcontractor under this special provision.
- (3) Upon receipt of contract execution, promptly make all affected firms aware of the requirements under this special provision and arrange for them to receive CRCS training as they are about to begin their submittals. The department will provide training either in a classroom setting at one of our regional offices or by telephone. Contact Paul Ndon at (414) 438-4584 to schedule the training.
- (4) The department will reject all paper submittals for information required under this special provision. All costs for conforming to this special provision are incidental to the contract.
- (5) Firms wishing to export payroll/labor data from their computer system into CRCS should have their payroll coordinator contact Paul Ndon at <a href="mailto:paul.ndon@dot.wi.gov">paul.ndon@dot.wi.gov</a>. Not every contractor's payroll system is capable of producing export files. For details, see Section 4.8 CPR Auto Submit (Data Mapping) on pages 49-50; 66-71 of the CRCS Payroll Manual at:

https://wisconsindot.gov/Documents/doing-bus/civil-rights/labornwage/crcs-payroll-manual.pdf

# REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS

- I. General
- II. Nondiscrimination
- III. Nonsegregated Facilities
- IV. Davis-Bacon and Related Act Provisions
- Contract Work Hours and Safety Standards Act Provisions
- VI. Subletting or Assigning the Contract
- VII. Safety: Accident Prevention
- VIII. False Statements Concerning Highway Projects
- IX. Implementation of Clean Air Act and Federal Water Pollution Control Act
- 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.
- 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 November 2020 letting**

#### **BUY AMERICA PROVISION**

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

https://wisconsindot.gov/rdwy/cmm/cm-02-28.pdf

Upon completion of the project certify to the engineer, in writing using department form DT4567, that all steel, iron, and coating processes for steel or iron incorporated into the contract work conform to these "Buy America" provisions. Attach a list of exemptions and their associated costs to the certification form. Department form DT4567 is available at:

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

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 TRANSPORTATION AND SYSTEM DEVELOPMENT

# SUPPLEMENTAL REQUIRED CONTRACT PROVISIONS FOR PROJECTS WITH FEDERAL AID

#### I. PREVAILING WAGE RATES

The attached U.S. Department of Labor (Davis-Bacon Minimum Wage Rates) furnishes the minimum prevailing wage rates pursuant to the Davis-Bacon and Related Acts. The wage rates shown are the minimum rates required by the contract to be paid during its life, however this is not a representation that labor can be obtained at these rates. It is the responsibility of bidders to inform themselves as to the local labor conditions and prospective changes or adjustments of wage rates. No increase in the contract price will be allowed or authorized on account of the payment of wage rates in excess of those listed herein.

### II. COVERAGE OF TRUCK DRIVERS

Truck drivers are covered by Davis-Bacon Minimum Wage Rates in the following circumstances:

- Drivers of a contractor or subcontractor for time spent working on the site
  of the work.
- Drivers of a contractor or subcontractor for time spent loading and/or unloading materials and supplies on the site of the work, if such time is not de minimis. https://www.dol.gov/whd/FOH/FOH\_Ch15.pdf
- Truck drivers transporting materials or supplies between a facility that is deemed part of the site of the work and the actual construction site.
- Truck drivers transporting portions of the building or work between a site
  established specifically for the performance of the contract where a
  significant portion of such building or work is constructed and the physical
  place where the building or work called for in the contract will remain.

Truck drivers are not covered by Davis-Bacon Minimum Wage Rates in the following circumstances:

- · Material delivery truck drivers while off the site of the work.
- Drivers of a contractor or subcontractor traveling between a Davis-Bacon job and a commercial supply facility while they are off the site of the work."
- Truck drivers whose time spent on the site of the work is de minimis, such as only a few minutes at a time merely to pick up or drop off materials or supplies.

Details are available online at:

https://www.dol.gov/whd/recovery/pwrb/Tab9.pdf https://wisconsindot.gov/Pages/doing-bus/civil-rights/labornwage/trckng.aspx

# III. POSTINGS AT THE SITE OF THE WORK

In addition to the required postings furnished by the department, the contractor shall post the following in at least one conspicuous and accessible place at the site of work:

a. A copy of the contractor's Equal Employment Opportunity Policy.

All required documents shall be posted by the first day of work and be accurate and complete. Postings must be readable, in an area where they will be noticed, and maintained until the last day of work.

#### IV. RESOURCES

Required information regarding compliance with federal provisions is found in the following resources:

- · FHWA-1273 included in this contract
- U.S. Department of Labor Prevailing Wage Resource Book
- · U.S. Department of Labor Field Operations Handbook
- U.S. Code of Federal Regulations
- Any applicable law, Act, or Executive Order enacted by the federal government at the time of the letting of this contract

"General Decision Number: WI20210010 07/09/2021

Superseded General Decision Number: WI20200010

State: Wisconsin

Construction Type: Highway

Counties: Wisconsin Statewide.

HIGHWAY, AIRPORT RUNWAY & TAXIWAY CONSTRUCTION PROJECTS (does not include bridges over navigable waters; tunnels; buildings in highway rest areas; and railroad construction)

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.95 for calendar year 2021 applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.95 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2021. If this contract is covered by the EO and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must pay workers in that classification at least the wage rate determined through the conformance process set forth in 29 CFR 5.5(a)(1)(ii) (or the EO minimum wage rate, if it is higher than the conformed wage rate). The EO minimum wage rate will be adjusted annually. Please note that this EO applies to the above-mentioned types of contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but it does not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60). Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Modification Number	Publication Date
0	01/01/2021
1	03/12/2021
2	03/19/2021
3	04/09/2021
4	05/14/2021
5	07/09/2021

BRWI0001-002 06/01/2020

CRAWFORD, JACKSON, JUNEAU, LA CROSSE, MONROE, TREMPEALEAU, AND VERNON COUNTIES

	Rates	Fringes			
BRICKLAYER	.\$ 35.31	24.7 7			
BRWI0002-002 06/01/2020					
ASHLAND, BAYFIELD, DOUGLAS, AND	IRON COUNTIES				
	Rates	Fringes			
BRICKLAYER		23.47			
BRWI0002-005 06/01/2020					
ADAMS, ASHLAND, BARRON, BROWN, BURNETT, CALUMET, CHIPPEWA, CLARK, COLUMBIA, DODGE, DOOR, DUNN, FLORENCE, FOND DU LAC, FOREST, GREEN LAKE, IRON, JEFFERSON, KEWAUNEE, LANGLADE, LINCOLN, MANITOWOC, MARATHON, MARINETTE, MARQUETTE, MENOMINEE, OCONTO, ONEIDA, OUTAGAMIE, POLK, PORTAGE, RUSK, ST CROIX, SAUK, SHAWANO, SHEBOYGAN, TAYLOR, VILAS, WALWORTH, WAUPACA, WAUSHARA, WINNEBAGO, AND WOOD COUNTIES					
	Rates	Fringes			
CEMENT MASON/CONCRETE FINISHER	.\$ 36.68	23.40			
BRWI0003-002 06/01/2020					
BROWN, DOOR, FLORENCE, KEWAUNEE,	MARINETTE, AND	OCONTO COUNTIES			
	Rates	Fringes			
BRICKLAYER	.\$ 35.68	24.40			
BRWI0004-002 06/01/2020					
KENOSHA, RACINE, AND WALWORTH COUNTIES					
	Rates	Fringes			
BRICKLAYER	.\$ 39.90	25.53			
BRWI0006-002 06/01/2020					

ADAMS, CLARK, FOREST, LANGLADE, LINCOLN, MARATHON, MENOMINEE,

# ONEIDA, PORTAGE, PRICE, TAYLOR, VILAS AND WOOD COUNTIES

	Rates	Fringes
BRICKLAYER	•	23.48
BRWI0007-002 06/01/2020		
GREEN, LAFAYETTE, AND ROCK COUNT	IES	
	Rates	Fringes
BRICKLAYER	.\$ 37.07	24.72
BRWI0008-002 06/01/2020		
MILWAUKEE, OZAUKEE, WASHINGTON,	AND WAUKESHA C	OUNTIES
	Rates	Fringes
BRICKLAYER	.\$ 40.75	24.32
BRWI0011-002 06/01/2020		
CALUMET, FOND DU LAC, MANITOWOC,	AND SHEBOYGAN	COUNTIES
	Rates	Fringes
BRICKLAYER	•	24.40
BRWI0019-002 06/01/2020		
BARRON, BUFFALO, BURNETT, CHIPPE PIERCE, POLK, RUSK, ST. CROIX, S	-	
	Rates	Fringes
BRICKLAYER	•	25.22
BRWI0034-002 06/01/2020		
COLUMBIA AND SAUK COUNTIES		
	Rates	Fringes
BRICKLAYER	.\$ 37.36	24.43
CARP0087-001 05/01/2016		

BURNETT (W. of Hwy 48), PIERCE (W. of Hwy 29), POLK (W. of Hwys 35, 48 & 65), AND ST. CROIX (W. of Hwy 65) COUNTIES

	Rates	Fringes
Carpenter & Piledrivermen	\$ 36.85	18.39
CARP0252-002 06/01/2016		

ADAMS, BARRON, BAYFIELD (Eastern 2/3), BROWN, BUFFALO, BURNETT (E. of Hwy 48), CALUMET, CHIPPEWA, CLARK, COLUMBIA, CRAWFORD, DANE, DODGE, DOOR, DUNN, EAU CLAIRE, FLORENCE (except area bordering Michigan State Line), FOND DU LAC, FOREST, GRANT, GREEN, GREEN LAKE, IOWA, IRON, JACKSON, JEFFERSON, JUNEAU, KEWAUNEE, LA CROSSE, LAFAYETTE, LANGLADE, LINCOLN, MANITOWOC, MARATHON, MARINETTE (except N.E. corner), MARQUETTE, MENOMINEE, MONROE, OCONTO, ONEIDA, OUTAGAMIE, PEPIN, PIERCE (E. of Hwys 29 & 65), POLK (E. of Hwys 35, 48 & 65), PORTAGE, PRICE, RICHLAND, ROCK, RUSK, SAUK, SAWYER, SHAWANO, SHEBOYGAN, ST CROIX (E. of Hwy 65), TAYLOR, TREMPEALEAU, VERNON, VILAS, WALWORTH, WASHBURN, WAUPACA, WAUSHARA, WINNEBAGO, AND WOOD COUNTIES

	Rates	Fringes	
CARPENTER			
CARPENTER	\$ 33.56	18.00	
MILLWRIGHT	\$ 35.08	18.35	
PILEDRIVER	\$ 34.12	18.00	
CARP0252-010 06/01/2016			-

## ASHLAND COUNTY

	Rates	Fringes
Carpenters		
Carpenter	\$ 33.56	18.00
Millwright	\$ 35.08	18.35
Pile Driver	.\$ 34.12	18.00

CARP0264-003 06/01/2016

KENOSHA, MILWAUKEE, OZAUKEE, RACINE, WAUKESHA, AND WASHINGTON COUNTIES

	Rates	Fringes	
CARPENTER	\$ 35.78	22.11	
CARP0361-004 05/01/2018			
BAYFIFID (West of Hwy 63) AND I	OOUGLAS COUNTIES		

BAYFIELD (West of Hwy 63) AND DOUGLAS COUNTIES

CARP2337-001 06/01/2016

ZONE A: MILWAUKEE, OZAUKEE, WAUKESHA AND WASHINGTON

ZONE B: KENOSHA & RACINE

	Rates	Fringes
PILEDRIVERMAN		
Zone A	\$ 31.03	22.69
Zone B	\$ 31.03	22.69

ELEC0014-002 06/14/2020

ASHLAND, BARRON, BAYFIELD, BUFFALO, BURNETT, CHIPPEWA, CLARK (except Maryville, Colby, Unity, Sherman, Fremont, Lynn & Sherwood), CRAWFORD, DUNN, EAU CLAIRE, GRANT, IRON, JACKSON, LA CROSSE, MONROE, PEPIN, PIERCE, POLK, PRICE, RICHLAND, RUSK, ST CROIX, SAWYER, TAYLOR, TREMPEALEAU, VERNON, AND WASHBURN COUNTIES

	Rates	Fringes
Electricians:	.\$ 35.98	20.98
ELEC0014-007 07/05/2020		

REMAINING COUNTIES

F	Rates	Fringes
Teledata System Installer		
Installer/Technician\$	27.75	15.14

Low voltage construction, installation, maintenance and removal of teledata facilities (voice, data, and video)

including outside plant, telephone and data inside wire, interconnect, terminal equipment, central offices, PABX, fiber optic cable and equipment, micro waves, V-SAT, bypass, CATV, WAN (wide area networks), LAN (local area networks), and ISDN (integrated systems digital network).

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ELEC0127-002 06/01/2020

KENOSHA COUNTY

	Rates	Fringes	
Electricians:	\$ 41.62	30%+12.70	
FLECO1EO 002 06 (01 /2020			

ELEC0158-002 06/01/2020

BROWN, DOOR, KEWAUNEE, MANITOWOC (except Schleswig), MARINETTE(Wausuakee and area South thereof), OCONTO, MENOMINEE (East of a ine 6 miles West of the West boundary of Oconto County), SHAWANO (Except Area North of Townships of Aniwa and Hutchins) COUNTIES

	Rates	Fringes	
ELECTRICIAN	\$ 34.77	29.75%+10.26	
FLEC0159-003 08/02/2020			

COLUMBIA, DANE, DODGE (Area West of Hwy 26, except Chester and Emmet Townships), GREEN, LAKE (except Townships of Berlin, Seneca, and St. Marie), IOWA, MARQUETTE (except Townships of Neshkoka, Crystal Lake, Newton, and Springfield), and SAUK COUNTIES

	Rates	Fringes
ELECTRICIAN	\$ 41.86	22.67
ELEC0219-004 06/01/2019		

FLORENCE COUNTY (Townships of Aurora, Commonwealth, Fern, Florence and Homestead) AND MARINETTE COUNTY (Township of Niagara)

Rates Fringes

Electricians: Electrical contracts over		
\$180,000 Electrical contracts under		21.80
\$180,000	\$ 31.75	21.73
ELEC0242-005 05/31/2020		
DOUGLAS COUNTY		
	Rates	Fringes
Electricians:		28.11
ELEC0388-002 06/01/2020		
ADAMS, CLARK (Colby, Freemont, Sherwood, Unity), FOREST, JUNE MARINETTE (Beecher, Dunbar, Goowest of a line 6 miles West of County), ONEIDA, PORTAGE, SHAWA AND WOOD COUNTIES	AU, LANGLAD dman & Pemb the West bo	E, LINCOLN, MARATHON, ine), MENOMINEE (Area undary of Oconto
	Rates	Fringes
Electricians:	•	26%+11.20
ELEC0430-002 02/02/2021		
RACINE COUNTY (Except Burlingto	on Township)	
	Rates	Fringes
Electricians:		22.871
* ELEC0494-005 06/01/2021		
MILWAUKEE, OZAUKEE, WASHINGTON,	AND WAUKES	HA COUNTIES
	Rates	Fringes
Electricians:		25.67
* ELEC0494-006 06/01/2021		
CALUMET (Township of New Holsteincluding Chester Township), FC (Schleswig), and SHEBOYGAN COUN	ND DU LAC,	•

Rates Fringes

Electricians:.....\$ 37.91 22.74

\* ELEC0494-013 06/01/2021

DODGE (East of Hwy 26 including Chester Twp, excluding Emmet Twp), FOND DU LAC (Except Waupuin), MILWAUKEE, OZAUKEE, MANITOWOC (Schleswig), WASHINGTON, AND WAUKESHA COUNTIES

	Rates	Fringes
Sound & Communications		
Installer	\$ 22.39	18.80
Technician	\$ 32.49	20.26

Installation, testing, maintenance, operation and servicing of all sound, intercom, telephone interconnect, closed circuit TV systems, radio systems, background music systems, language laboratories, electronic carillion, antenna distribution systems, clock and program systems and low-voltage systems such as visual nurse call, audio/visual nurse call systems, doctors entrance register systems. Includes all wire and cable carrying audio, visual, data, light and radio frequency signals. Includes the installation of conduit, wiremold, or raceways in existing structures that have been occupied for six months or more where required for the protection of the wire or cable, but does not mean a complete conduit or raceway system. work covered does not include the installation of conduit, wiremold or any raceways in any new construction, or the installation of power supply outlets by means of which external electric power is supplied to any of the foregoing equipment or products

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ELEC0577-003 06/01/2020

CALUMET (except Township of New Holstein), GREEN LAKE (N. part including Townships of Berlin, St Marie, and Seneca), MARQUETTE (N. part including Townships of Crystal Lake, Neshkoro, Newton, and Springfield), OUTAGAMIE, WAUPACA, WAUSHARA, AND WINNEBAGO COUNTIES

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#### \* ELEC0890-003 06/01/2021

DODGE (Emmet Township only), GREEN, JEFFERSON, LAFAYETTE, RACINE (Burlington Township), ROCK AND WALWORTH COUNTIES

	Rates	Fringes
Electricians:	.\$ 39.00	25.95%+11.17
ELEC0953-001 06/02/2019		
	Rates	Fringes
Line Construction: (1) Lineman	.\$ 47.53	21.43
Operator(3) Equipment Operator		19.80 18.40
(4) Heavy Groundman Driver.	.\$ 33.27	16.88
<ul><li>(5) Light Groundman Driver.</li><li>(6) Groundsman</li></ul>		16.11 14.60
ENGI0139-005 06/01/2020		

	Rates	Fringes
Power Equipment Operator		
Group 1	\$ 41.62	23.80
Group 2	\$ 41.12	23.80
Group 3	\$ 40.62	23.80
Group 4	\$ 40.36	23.80
Group 5	\$ 40.07	23.80
Group 6		23 80

### HAZARDOUS WASTE PREMIUMS:

EPA Level ""A"" protection - \$3.00 per hour EPA Level ""B"" protection - \$2.00 per hour EPA Level ""C"" protection - \$1.00 per hour

## POWER EQUIPMENT OPERATORS CLASSIFICATIONS

GROUP 1: Cranes, tower cranes, and derricks with or without attachments with a lifting capacity of over 100 tons; or cranes, tower cranes, and derricks with boom, leads and/or jib lengths measuring 176 feet or longer.

GROUP 2: Cranes, tower cranes and derricks with or without attachments with a lifting capacity of 100 tons or less; or

cranes, tower cranes, and derricks with boom, leads, and/or jibs lengths measuring 175 feet or under and Backhoes (excavators) weighing 130,000 lbs and over; caisson rigs; pile driver; dredge operator; dredge engineer; Boat Pilot.

GROUP 3: Mechanic or welder - Heavy duty equipment; cranes with a lifting capacity of 25 tons or under; concrete breaker (manual or remote); vibratory/sonic concrete breaker; concrete laser screed; concrete slipform paver; concrete batch plant operator; concrete pvt. spreader heavy duty (rubber tired); concrete spreader & distributor; automatic subgrader (concrete); concrete grinder & planing machine; concrete slipform curb & gutter machine; slipform concrete placer; tube finisher; hydro blaster (10,000 psi & over); bridge paver; concrete conveyor system; concrete pump; Rotec type Conveyor; stabilizing mixer (self-propelled); shoulder widener; asphalt plant engineer; bituminious paver; bump cutter & grooving machine; milling machine; screed (bituminous paver); asphalt heater, planer & scarifier; Backhoes (excavators) weighing under 130,000 lbs; grader or motor patrol; tractor (scraper, dozer, pusher, loader); scraper - rubber tired (single or twin engine); endloader; hydraulic backhoe (tractor type); trenching machine; skid rigs; tractor, side boom (heavy); drilling or boring machine (mechanical heavy); roller over 5 tons; percussion or rotary drilling machine; air track; blaster; loading machine (conveyor); tugger; boatmen; winches & A-frames; post driver; material hoist.

GROUP 4: Greaser, roller steel (5 tons or less); roller (pneumatic tired) - self propelled; tractor (mounted or towed compactors & light equipment); shouldering machine; self- propelled chip spreader; concrete spreader; finishing machine; mechanical float; curing machine; power subgrader; joint sawer (multiple blade) belting machine; burlap machine; texturing machine; tractor endloader (rubber tired) - light; jeep digger; forklift; mulcher; launch operator; fireman, environmental burner

GROUP 5: Air compressor; power pack; vibrator hammer and extractor; heavy equipment, leadman; tank car heaters; stump chipper; curb machine operator; Concrete proportioning plants; generators; mudjack operator; rock breaker; crusher or screening plant; screed (milling machine); automatic belt conveyor and surge bin; pug mill operator; Oiler, pump (over 3 inches); Drilling Machine Tender, day light machine

GROUP 6: Off-road material hauler with or without ejector.

#### \* IRON0008-002 06/01/2021

BROWN, CALUMET, DOOR, FOND DU LAC, KEWAUNEE, MANITOWOC, MARINETTE, OCONTO, OUTAGAMI, SHAWANO, SHEBOYGAN, AND WINNEBAGO COUNTIES:

Rates Fringes

IRONWORKER.....\$ 38.77 28.15

Paid Holidays: New Year's Day, Memorial Day, July 4th, Labor Day, Thanksgiving Day & Christmas Day.

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KENOSHA, MILWAUKEE, OZAUKEE, RACINE, WALWORTH (N.E. 2/3), WASHINGTON, AND WAUKESHA COUNTIES

Rates Fringes

IRONWORKER.....\$ 40.57 28.40

Paid Holidays: New Year's Day, Memorial Day, July 4th, Labor Day, Thanksgiving Day & Christmas Day.

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ADAMS, COLUMBIA, CRAWFORD, DANE, DODGE, FLORENCE, FOREST, GRANT, GREENE, (Excluding S.E. tip), GREEN LAKE, IOWA, JEFFERSON, JUNEAU, LA CROSSE, LAFAYETTE, LANGLADE, MARATHON, MARQUETTE, MENOMINEE, MONROE, PORTAGE, RICHLAND, ROCK (Northern area, vicinity of Edgerton and Milton), SAUK, VERNON, WAUPACA, WAUSHARA, AND WOOD COUNTIES

Rates Fringes

IRONWORKER.....\$ 37.75 27.06

IRON0498-005 06/01/2019

GREEN (S.E. 1/3), ROCK (South of Edgerton and Milton), and WALWORTH (S.W. 1/3) COUNTIES:

<sup>\*</sup> IRON0008-003 06/01/2021

<sup>\*</sup> IRON0383-001 06/06/2021

	Rates	Fringes	
IRONWORKER	\$ 40.25	40.53	

IRON0512-008 06/03/2019

BARRON, BUFFALO, CHIPPEWA, CLARK, DUNN, EAU CLAIRE, JACKSON, PEPIN, PIERCE, POLK, RUSK, ST CROIX, TAYLOR, AND TREMPEALEAU COUNTIES

	Rates	Fringes
IRONWORKER	\$ 37.60	29.40
IRON0512-021 05/03/2021		

ASHLAND, BAYFIELD, BURNETT, DOUGLAS, IRON, LINCOLN, ONEIDA, PRICE, SAWYER, VILAS AND WASHBURN COUNTIES

	Rates	Fringes
IRONWORKER	\$ 35.09	31.80
LAB00113-002 06/01/2020		

#### MILWAUKEE AND WAUKESHA COUNTIES

	Rates	Fringes
LABORER		
Group	1\$ 30.05	22.26
Group	2\$ 30.20	22.26
Group	3\$ 30.40	22.26
Group	4\$ 30.55	22.26
Group	5\$ 30.70	22.26
Group	6\$ 26.54	22.26

#### LABORERS CLASSIFICATIONS

GROUP 1: General Laborer; Tree Trimmer; Conduit Layer; Demolition and Wrecking Laborer; Guard Rail, Fence, and Bridge Builder; Landscaper; Multiplate Culvert Assembler; Stone Handler; Bituminous Worker (Shoveler, Loader, and Utility Man); Batch Truck Dumper or Cement Handler; Bituminous Worker (Dumper, Ironer, Smoother, and Tamper); Concrete Handler

GROUP 2: Air Tool Operator; Joint Sawer and Filler

(Pavement); Vibrator or Tamper Operator (Mechanical Hand Operated); Chain Saw Operator; Demolition Burning Torch Laborer

GROUP 3: Bituminous Worker (Raker and Luteman); Formsetter (Curb, Sidewalk, and Pavement); Strike Off Man

GROUP 4: Line and Grade Specialist

GROUP 5: Blaster and Powderman

GROUP 6: Flagperson; traffic control person

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LAB00113-003 06/01/2020

#### OZAUKEE AND WASHINGTON COUNTIES

	ı	Rates	Fringes
LABORER			
Group	1\$	29.30	22.26
Group	2\$	29.40	22.26
Group	3\$	29.45	22.26
Group	4\$	29.65	22.26
Group	5\$	29.50	22.26
Group	6\$	26.39	22.26

#### LABORERS CLASSIFICATIONS

GROUP 1: General Laborer; Tree Trimmer; Conduit Layer; Demolition and Wrecking Laborer; Guard Rail, Fence, and Bridge Builder; Landscaper; Multiplate Culvert Assembler; Stone Handler; Bituminous Worker (Shoveler, Loader, and Utility Man); Batch Truck Dumper or Cement Handler; Bituminous Worker (Dumper, Ironer, Smoother, and Tamper); Concrete Handler

GROUP 2: Air Tool Operator; Joint Sawer and Filler (Pavement); Vibrator or Tamper Operator (Mechanical Hand Operated);

GROUP 3: Bituminous Worker (Raker and Luteman); Formsetter (Curb, Sidewalk, and Pavement); Strike Off Man

GROUP 4: Line and Grade Specialist

GROUP 5: Blaster; powderman

GROUP 6: Flagperson and Traffic Control Person

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#### LAB00113-011 06/01/2020

#### KENOSHA AND RACINE COUNTIES

	I	Rates	Fringes
LABORER			
Group	1\$	29.11	22.26
Group	2\$	29.26	22.26
Group	3\$	29.46	22.26
Group	4\$	29.43	22.26
Group	5\$	29.76	22.26
Group	6\$	26.25	22.26

#### LABORERS CLASSIFICATIONS:

GROUP 1: General laborer; Tree Trimmer; Conduit Layer; Demolition and Wrecking Laborer; Guard Rail, Fence, and Bridge Builder; Landscaper; Multiplate Culvert Assembler; Stone Handler; Bituminous Worker (Shoveler, Loader, and Utility Man); Batch Truck Dumper or Cement Handler; Bituminous worker (Dumper, Ironer, Smoother, and Tamper); Concrete Handler

GROUP 2: Air Tool Operator; Joint Sawer and Filler (Pavement); Vibrator or Tamper Operator (Mechanical Hand Operated); Chain Saw Operator; Demolition Burning Torch Laborer

GROUP 3: Bituminous Worker (Raker and Luteman); Formsetter (Curb, Sidewalk, and Pavement); Strike Off Man

GROUP 4: Line and Grade Specialist

GROUP 5: Blaster and Powderman

GROUP 6: Flagman; traffic control person

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#### LAB00140-002 06/01/2020

ADAMS, ASHLAND, BARRON, BAYFIELD, BROWN, BUFFALO, BURNETT, CALUMET, CHIPPEWA, CLARK, COLUMBIA, CRAWFORD, DODGE, DOOR, DOUGLAS, DUNN, EAU CLAIRE, FLORENCE, FOND DU LAC, FOREST, GRANT, GREEN, GREEN LAKE, IRON, JACKSON, JUNEAU, IOWA, JEFFERSON, KEWAUNEE, LA CROSSE, LAFAYETTE, LANGLADE, LINCOLN, MANITOWOC, MARATHON, MARINETTE, MARQUETTE, MENOMINEE, MONROE, OCONTO, ONEIDA, OUTAGAMIE, PEPIN, PIERCE, POLK, PORTAGE, PRICE,

RICHLAND, ROCK, RUSK, SAUK, SAWYER, SHAWANO, SHEBOYGAN, ST. CROIX, TAYLOR, TREMPEALEAU, VERNON, VILLAS, WALWORTH, WASHBURN, WAUPACA, WAUSHARA, WINNEBAGO, AND WOOD COUNTIES

	F	Rates	Fringes
LABORER			
Group	1\$	33.72	17.95
Group	2\$	33.82	17.95
Group	3\$	33.87	17.95
Group	4\$	34.07	17.95
Group	5\$	33.92	17.95
Group	6\$	30.35	17.95

#### LABORER CLASSIFICATIONS

GROUP 1: General Laborer; Tree Trimmer; Conduit Layer; Demolition and Wrecking Laborer; Guard Rail, Fence, and Bridge Builder; Landscaper; Multiplate Culvert Assembler; Stone Handler; Bitminous Worker (Shoveler, Loader, and Utility Man); Batch Truck Dumper or Cement Handler; Bituminous Worker (Dumper, Ironer, Smoother and Tamper); Concrete Handler

GROUP 2: Air Tool Operator; Joint Sawer and Filler (Pavement); Vibrator or Tamper Operator (Mechanical Hand Operated); Chain Saw Operator, Demolition Burning Torch Laborer

GROUP 3: Bituminous Worker (Raker and Luteman); Formsetter (Curb, Sidewalk and Pavement); Strike Off Man

GROUP 4: Line and Grade Secialist

GROUP 5: Blaster; powderman

GROUP 6: Flagperson; Traffic Control

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LAB00464-003 06/01/2020

DANE COUNTY

	Rates	Fringes
LABORER		
Group	1\$ 34.00	17.95
Group	2\$ 34.10	17.95
Group	3\$ 34.15	17.95

Group 4	\$ 34.35	17.95
Group 5	\$ 34.20	17.95
Group 6	\$ 30.35	17.95

#### LABORERS CLASSIFICATIONS:

GROUP 1: General Laborer; Tree Trimmer; Conduit Layer; Demolition and Wrecking Laborer; Guard Rail, Fence, and Bridge Builder; Landscaper; Multiplate Culvert Assembler; Stone Handler; Bituminous Worker (Shoveler, Loader, and Utility Man); Batch Truck Dumper or Cement Handler; Bituminious Worker (Dumper, Ironer, Smoother, and Tamper); Concrete Handler

GROUP 2: Air Tool Operator; Joint Sawer and Filler (Pavement); Vibrator or Tamper Operator (Mechanical Hand Operated); Chain Saw Operator; Demolition Burning Torch Laborer

GROUP 3: Bituminous Worker (Raker and Luteman); Formsetter (Curb, Sidewalk, and Pavement); Strike Off Man

GROUP 4: Line and Grade Specialist

GROUP 5: Blaster; Powderman

GROUP 6: Flagperson and Traffic Control Person

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PAIN0106-008 05/01/2017

ASHLAND, BAYFIELD, BURNETT, AND DOUGLAS COUNTIES

	I	Rates	Fringes
Painters:			
New:			
	Roller\$	30 33	17.27
•	Sandblast, Steel\$		17.27
Repaint	-		_, , _,
•	Roller\$	28.83	17.27
	Sandblast, Steel\$		17.27

PAIN0108-002 06/01/2019

RACINE COUNTY

Rates Fringes

Painters:

Brush, Roller		20.36 20.36
PAIN0259-002 05/01/2008		
BARRON, CHIPPEWA, DUNN, EAU CLAI SAWYER, ST. CROIX, AND WASHBURN		PIERCE, POLK, RUSK,
	Rates	Fringes
PAINTER		
PAIN0259-004 05/01/2015		
BUFFALO, CRAWFORD, JACKSON, LA C VERNON COUNTIES	ROSSE, MONRO	DE, TREMPEALEAU, AND
	Rates	Fringes
PAINTER	•	12.45
PAIN0781-002 06/01/2019		
JEFFERSON, MILWAUKEE, OZAUKEE, W	ASHINGTON, A	AND WAUKESHA COUNTIES
	Rates	Fringes
Painters:  Bridge  Brush  Spray & Sandblast	.\$ 32.95 .\$ 33.70	23.86 23.86 23.86
PAIN0802-002 06/01/2019		
COLUMBIA, DANE, DODGE, GRANT, GR ROCK, AND SAUK COUNTIES	EEN, IOWA, l	AFAYETTE, RICHLAND,
	Rates	Fringes
PAINTER Brush	.\$ 30.93	18.44
PREMIUM PAY: Structural Steel, Spray, Bridge hour.	es = \$1.00	ð additional per

#### PAIN0802-003 06/01/2019

ADAMS, BROWN, CALUMET, CLARK, DOOR, FOND DU LAC, FOREST, GREEN LAKE, IRON, JUNEAU, KEWAUNEE, LANGLADE, LINCOLN, MANITOWOC, MARATHON, MARINETTE, MARQUETTE, MENOMINEE, OCONTO, ONEIDA, OUTAGAMIE, PORTAGE, PRICE, SHAWANO, SHEBOYGAN, TAYLOR, VILAS, WAUSHARA, WAUPACA, WINNEBAGO, AND WOOD COUNTIES

	Rates	Fringes
PAINTER		18.58
PAIN0934-001 06/01/2017		
KENOSHA AND WALWORTH COUNTIES		
	Rates	Fringes
Painters:     Brush	\$ 34.74	18.95 18.95 18.95
FLORENCE COUNTY		
	Rates	Fringes
Painters:	\$ 25.76	13.33
PLAS0599-010 06/01/2017		
	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER Area 1	\$ 35.07 \$ 35.61 \$ 34.70 \$ 36.27	17.17 19.75 19.40 20.51 18.73 22.99

AREA 2: ADAMS, ASHLAND, BARRON, BROWN, BURNETT, CALUMET,

AREA 1: COUNTIES BAYFIELD, DOUGLAS, PRICE, SAWYER, AND WASHBURN

CHIPPEWA, CLARK, COLUMBIA, DODGE, DOOR, DUNN, FLORENCE, FOND DU LAC, FOREST, GREEN LAKE, IRON, JEFFERSON, KEWAUNEE, LANGLADE, LINCOLN, MANITOWOC, MARATHON, MARINETTE, MARQUETTE, MENOMINEE, OCONTO, ONEIDA, OUTAGAMIE, POLK, PORTAGE, RUSK, ST CROIX, SAUK, SHAWANO, SHEBOYGAN, TAYLOR, VILAS, WALWORTH, WAUPACA, WAUSHARA, WINNEBAGO, AND WOOD COUNTIES

AREA 3: BUFFALO, CRAWFORD, EAU CLAIRE, JACKSON, JUNEAU, LA CROSSE MONROE, PEPIN, PIERCE, RICHLAND, TREMPEALEAU, AND VERNON COUNTIES

AREA 4: MILWAUKEE, OZAUKEE, WASHINGTON, AND WAUKESHA COUNTIES

AREA 5: DANE, GRANT, GREEN, IOWA, LAFAYETTE, AND ROCK COUNTIES

AREA 6: KENOSHA AND RACINE COUNTIES

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\* TEAM0039-001 06/01/2021

1	Rates	Fringes
TRUCK DRIVER  1 & 2 Axles\$  3 or more Axles; Euclids, Dumptor & Articulated,	32.57	23.81
Truck Mechanic\$	32.72	23.81
WELL DRILLER\$	16.52	3.70

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

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Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other

health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

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The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of ""identifiers"" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

#### Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than ""SU"" or ""UAVG"" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

#### Survey Rate Identifiers

Classifications listed under the ""SU"" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

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#### WAGE DETERMINATION APPEALS PROCESS

- 1.) Has there been an initial decision in the matter? This can be:
- \* an existing published wage determination
- \* a survey underlying a wage determination
- \* a Wage and Hour Division letter setting forth a position on a wage determination matter
- \* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations Wage and Hour Division U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISION"

# NOTICE TO BIDDERS WAGE RATE DECISION

The wage rate decision of the Department of Labor which has been incorporated in these advertised specifications is incomplete in that the classifications may be omitted from the Department of Labor's decision.

Since the bidder is responsible, independently, for ascertaining area practice with respect to the necessity, or lack of necessity, for the use of these classifications in the prosecution of the work contemplated by this project, no inference may be drawn from the omission of these classifications concerning prevailing area practices relative to their use. Further, this omission will not, per se, be construed as establishing any governmental liability for increased labor cost if it is subsequently determined that such classifications are required.

There may be omissions and/or errors in the federal wage rates. The bidder is responsible for evaluating and determining the correct applicable rate.

If a project includes multiple types of construction (highway, bridge over navigable water, sanitary sewer and water main, building) and there is not a separate wage determination for this type of work included in the proposal, use the wage determination that is in the proposal.

If a project includes multiple types of construction, different wage rate determinations may be inserted into the contract (WI10/Highway = in all WisDOT highway contracts, WI15/Heavy = bridge over navigable water per USDOL and US Coast Guard designation, WI8/Heavy (Sewer & Water Line & Tunnel) = sanitary sewer and water main if the cost is more than 20% of the contract and/or at least \$1,000,000, and Building). If multiple wage rate determinations are inserted into the contract, use the classification in the wage determination for the work being done. Use WI15 wage rates when working on the bridge and/or structure from bank to bank. Use WI8 wage rates when working on any sanitary sewer or water main work. Use Building wage rates for all work done within the footprint of the building. Use WI10 wage rates for all other highway work in the contract and approaches to structures. For example, if a laborer is working within the footprint of a building, use the Laborer rate in the Building wage determination inserted in the contract. If a laborer is working on a bridge/structure within the banks, use the Laborer rate in the WI15/Heavy wage determination if inserted in the contract. If the laborer is working on the highway, use the Laborer rate in the WI10/Highway wage determination.





Page 1 of 13

**Proposal ID:** 20210914010 **Project(s):** 2260-08-70

Federal ID(s): WISC 2021479

**SECTION:** 0001 Contract Items

Proposal Line Number	Item ID  Description	Approximate Quantity and Units	Unit Price	Bid Amount
0002	201.0105 Clearing	4.000 STA	<u> </u>	<u> </u>
0004	201.0205 Grubbing	6.000 STA		
0006	204.0100 Removing Concrete Pavement	16,147.000 SY	<u> </u>	
8000	204.0110 Removing Asphaltic Surface	1,200.000 SY		
0010	204.0115 Removing Asphaltic Surface Butt Joints	198.000 SY		
0012	204.0150 Removing Curb & Gutter	1,191.000 LF		
0014	204.0155 Removing Concrete Sidewalk	1,782.000 SY		
0016	204.0170 Removing Fence	339.000 LF		
0018	204.0195 Removing Concrete Bases	19.000 EACH		·
0020	204.0210 Removing Manholes	2.000 EACH		·
0022	204.0220 Removing Inlets	8.000 EACH		·
0024	204.0245 Removing Storm Sewer (size) 10. 10- Inch	78.000 LF	·	
0026	204.0245 Removing Storm Sewer (size) 12. 12- Inch	152.000 LF	·	<del></del>
0028	204.0245 Removing Storm Sewer (size) 15. 15-Inch	57.000 LF	·	·
0030	204.0245 Removing Storm Sewer (size) 18. 18- Inch	122.000 LF	·	<u>.</u>





Page 2 of 13

Federal ID(s): WISC 2021479

**SECTION:** 0001 Contract Items

Proposal Line Number	Item ID  Description	Approximate Quantity and Units	Unit Price	Bid Amount
0032	204.0245 Removing Storm Sewer (size) 21. 21- Inch	15.000 LF	·	·
0034	204.0245 Removing Storm Sewer (size) 24. 24- Inch	16.000 LF	·	·
0036	204.0250 Abandoning Manholes	4.000 EACH	·	<u> </u>
0038	204.0260 Abandoning Inlets	14.000 EACH		<u> </u>
0040	204.0280 Sealing Pipes	8.000 EACH		<u> </u>
0042	204.0291.S Abandoning Sewer	55.000 CY		<u> </u>
0044	204.9060.S Removing (item description) 01. Removing Lighting Units	13.000 EACH		
0046	204.9105.S Removing (item description) 01. Traffic Signals STH 11 (Durand Ave) & S Memorial Dr	LS	LUMP SUM	·
0048	204.9105.S  Removing (item description) 02. Loop Detector Wire & Lead-In Cable STH 11 (Durand Ave) & S Memorial Dr	LS	LUMP SUM	·
0050	204.9165.S Removing (item description) 02. Landscaping Stone STA 160+48 to STA 161+62 RT	467.000 SF	·	
0052	205.0100 Excavation Common	21,337.000 CY		
0054	205.0501.S  Excavation, Hauling, and Disposal of Petroleum Contaminated Soil	2,653.000 TON	·	·
0056	210.2500 Backfill Structure Type B	18.000 TON	·	
0058	213.0100 Finishing Roadway (project) 01. 2260- 08-70	1.000 EACH	·	·





Page 3 of 13

Federal ID(s): WISC 2021479

**SECTION:** 0001 Contract Items

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0060	305.0120 Base Aggregate Dense 1 1/4-Inch	9,525.000 TON		
0062	310.0110 Base Aggregate Open-Graded	131.000 TON	·	<u>·</u> _
0064	312.0110 Select Crushed Material	21,605.000 TON	<u> </u>	<u> </u>
0066	415.0085 Concrete Pavement 8 1/2-Inch	16,957.000 SY	·	·
0068	415.0210 Concrete Pavement Gaps	12.000 EACH		·
0070	415.1085 Concrete Pavement HES 8 1/2-Inch	648.000 SY		
0072	415.4100 Concrete Pavement Joint Filling	21,263.000 SY		
0074	415.5110.S Concrete Pavement Joint Layout	LS	LUMP SUM	
0076	416.0160 Concrete Driveway 6-Inch	907.000 SY	<u> </u>	
0078	416.0610 Drilled Tie Bars	44.000 EACH		
0080	416.0620 Drilled Dowel Bars	163.000 EACH		
0082	455.0605 Tack Coat	78.000 GAL		
0084	460.2000 Incentive Density HMA Pavement	120.000 DOL	1.00000	120.00
0086	460.5223 HMA Pavement 3 LT 58-28 S	92.000 TON		<u> </u>
0088	460.5224 HMA Pavement 4 LT 58-28 S	94.000 TON		
0090	465.0105 Asphaltic Surface	196.000 TON		
0092	465.0125 Asphaltic Surface Temporary	68.000 TON		





Page 4 of 13

Federal ID(s): WISC 2021479

**SECTION:** 0001 Contract Items

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0094	520.8000 Concrete Collars for Pipe	2.000 EACH		
0096	601.0405 Concrete Curb & Gutter 18-Inch Type A	5,203.000 LF	·	·
0098	601.0407 Concrete Curb & Gutter 18-Inch Type D	417.000 LF		<u> </u>
0100	601.0409 Concrete Curb & Gutter 30-Inch Type A	1,115.000 LF		<u> </u>
0102	601.0411 Concrete Curb & Gutter 30-Inch Type D	64.000 LF		<u> </u>
0104	601.0600 Concrete Curb Pedestrian	474.000 LF		
0106	602.0410 Concrete Sidewalk 5-Inch	30,043.000 SF		
0108	602.0505 Curb Ramp Detectable Warning Field Yellow	360.000 SF	·	
0110	602.0605 Curb Ramp Detectable Warning Field Radial Yellow	26.000 SF		·
0112	602.1500 Concrete Steps	44.000 SF		
0114	608.0315 Storm Sewer Pipe Reinforced Concrete Class III 15-Inch	73.700 LF		
0116	608.0318 Storm Sewer Pipe Reinforced Concrete Class III 18-Inch	54.300 LF		·
0118	608.0412 Storm Sewer Pipe Reinforced Concrete Class IV 12-Inch	977.600 LF	·	·
0120	608.0415 Storm Sewer Pipe Reinforced Concrete Class IV 15-Inch	461.600 LF	·	·
0122	608.0418 Storm Sewer Pipe Reinforced Concrete Class IV 18-Inch	55.200 LF		







Page 5 of 13

Federal ID(s): WISC 2021479

**SECTION:** 0001 Contract Items

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0124	608.3012 Storm Sewer Pipe Class III-A 12-Inch	54.400 LF	·	
0126	608.3015 Storm Sewer Pipe Class III-A 15-Inch	74.500 LF		
0128	608.3018 Storm Sewer Pipe Class III-A 18-Inch	494.700 LF	<u>-</u>	
0130	608.3024 Storm Sewer Pipe Class III-A 24-Inch	375.500 LF	<u></u>	
0132	611.0420 Reconstructing Manholes	8.000 EACH		
0134	611.0530 Manhole Covers Type J	25.000 EACH		
0136	611.0535 Manhole Covers Type J-Special	9.000 EACH		
0138	611.0624 Inlet Covers Type H	50.000 EACH		
0140	611.1004 Catch Basins 4-FT Diameter	18.000 EACH		
0142	611.1005 Catch Basins 5-FT Diameter	1.000 EACH		
0144	611.1230 Catch Basins 2x3-FT	29.000 EACH		
0146	611.2004 Manholes 4-FT Diameter	13.000 EACH		
0148	611.2005 Manholes 5-FT Diameter	2.000 EACH		
0150	611.8110 Adjusting Manhole Covers	1.000 EACH		
0152	611.8115 Adjusting Inlet Covers	1.000 EACH		<u> </u>
0154	611.8120.S Cover Plates Temporary	2.000 EACH		
0156	612.0106 Pipe Underdrain 6-Inch	600.000 LF		







Page 6 of 13

Federal ID(s): WISC 2021479

**SECTION:** 0001 Contract Items

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0158	612.0404 Pipe Underdrain Wrapped 4-Inch	60.000 LF	·	·
0160	619.1000 Mobilization	1.000 EACH	·	<u> </u>
0162	620.0200 Concrete Median Blunt Nose	64.000 SF	·	·
0164	620.0300 Concrete Median Sloped Nose	286.000 SF		
0166	624.0100 Water	670.000 MGAL		
0168	625.0100 Topsoil	2,536.000 SY		
0170	628.1905 Mobilizations Erosion Control	5.000 EACH	<u></u> .	
0172	628.1910 Mobilizations Emergency Erosion Control	5.000 EACH	<u></u>	
0174	628.7005 Inlet Protection Type A	53.000 EACH	<u></u> .	
0176	628.7010 Inlet Protection Type B	6.000 EACH	<u></u>	
0178	628.7015 Inlet Protection Type C	81.000 EACH		
0180	628.7560 Tracking Pads	9.000 EACH		
0182	629.0210 Fertilizer Type B	1.670 CWT		
0184	631.0300 Sod Water	57.150 MGAL		
0186	631.1000 Sod Lawn	2,536.000 SY	<u></u>	<u> </u>
0188	632.0101 Trees (species) (size) (root) 01. Armstrong Freeman Maple, 2.5" Cal., B&B	6.000 EACH	<u>-</u>	·







Page 7 of 13

Federal ID(s): WISC 2021479

**SECTION:** 0001 Contract Items

Proposal Line Number	Item ID  Description	Approximate Quantity and Units	Unit Price	Bid Amount
0190	632.0101 Trees (species) (size) (root) 02. Frontier Hybrid Elm, 2.5" Cal., B&B	2.000 EACH	·	
0192	632.0101 Trees (species) (size) (root) 03. American Sentry Linden, 2.5" Cal., B&B	2.000 EACH	·	·
0194	632.9101 Landscape Planting Surveillance and Care Cycles	10.000 EACH		·
0196	634.0618 Posts Wood 4x6-Inch X 18-FT	6.000 EACH		·
0198	634.0814 Posts Tubular Steel 2x2-Inch X 14-FT	45.000 EACH		
0200	637.2210 Signs Type II Reflective H	344.940 SF	·	·
0202	637.2215 Signs Type II Reflective H Folding	31.080 SF		
0204	637.2230 Signs Type II Reflective F	45.250 SF		
0206	638.2102 Moving Signs Type II	6.000 EACH	·	·
0208	638.2602 Removing Signs Type II	38.000 EACH	·	·
0210	638.3000 Removing Small Sign Supports	23.000 EACH	·	·
0212	643.0300 Traffic Control Drums	35,725.000 DAY		
0214	643.0410 Traffic Control Barricades Type II	950.000 DAY	·	<u> </u>
0216	643.0420 Traffic Control Barricades Type III	9,966.000 DAY		·
0218	643.0500 Traffic Control Flexible Tubular Marker Posts	277.000 EACH		





Page 8 of 13

Federal ID(s): WISC 2021479

**SECTION:** 0001 Contract Items

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0220	643.0600 Traffic Control Flexible Tubular Marker Bases	277.000 EACH		
0222	643.0705 Traffic Control Warning Lights Type A	20,920.000 DAY	·	
0224	643.0715 Traffic Control Warning Lights Type C	4,113.000 DAY		
0226	643.0900 Traffic Control Signs	20,175.000 DAY		
0228	643.1050 Traffic Control Signs PCMS	30.000 DAY		
0230	643.1070 Traffic Control Cones 42-Inch	7,840.000 DAY		
0232	643.5000 Traffic Control	1.000 EACH		
0234	644.1601 Temporary Pedestrian Curb Ramp	28.000 DAY		
0236	644.1810 Temporary Pedestrian Barricade	484.000 LF		
0238	645.0111 Geotextile Type DF Schedule A	269.000 SY		
0240	646.1020 Marking Line Epoxy 4-Inch	8,090.000 LF		
0242	646.5020 Marking Arrow Epoxy	13.000 EACH		
0244	646.6120 Marking Stop Line Epoxy 18-Inch	307.000 LF		
0246	646.7120 Marking Diagonal Epoxy 12-Inch	28.000 LF		
0248	646.7420 Marking Crosswalk Epoxy Transverse Line 6-Inch	1,636.000 LF	·	·
0250	646.8120 Marking Curb Epoxy	54.000 LF	·	<u> </u>





Page 9 of 13

Federal ID(s): WISC 2021479

**SECTION:** 0001 Contract Items

Proposal Line Number	Item ID  Description	Approximate Quantity and Units	Unit Price	Bid Amount
0252	646.8220 Marking Island Nose Epoxy	3.000 EACH		<u> </u>
0254	646.9000 Marking Removal Line 4-Inch	137.000 LF		<u> </u>
0256	646.9100 Marking Removal Line 8-Inch	36.000 LF	·	
0258	646.9200 Marking Removal Line Wide	19.000 LF	·	
0260	649.0105 Temporary Marking Line Paint 4-Inch	3,204.000 LF		
0262	649.0150 Temporary Marking Line Removable Tape 4-Inch	16,191.000 LF		·
0264	649.0250 Temporary Marking Line Removable Tape 8-Inch	835.000 LF	·	·
0266	649.0550 Temporary Marking Arrow Removable Tape	4.000 EACH		·
0268	649.0850 Temporary Marking Stop Line Removable Tape 18-Inch	88.000 LF	·	·
0270	649.0960 Temporary Marking Removable Mask Out Tape 6-Inch	762.000 LF		
0272	649.0970 Temporary Marking Removable Mask Out Tape 10-Inch	130.000 LF		
0274	650.4000 Construction Staking Storm Sewer	63.000 EACH		
0276	650.4500 Construction Staking Subgrade	2,502.000 LF		
0278	650.5500 Construction Staking Curb Gutter and Curb & Gutter	6,799.000 LF	·	·
0280	650.7000 Construction Staking Concrete Pavement	2,587.000 LF	·	·





Page 10 of 13

Federal ID(s): WISC 2021479

**SECTION:** 0001 Contract Items

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0282	650.8500 Construction Staking Electrical Installations (project) 01. 2260-08-70	LS	LUMP SUM	·
0284	650.9000 Construction Staking Curb Ramps	38.000 EACH		
0286	650.9910 Construction Staking Supplemental Control (project) 01. 2260-08-70	LS	LUMP SUM	<del></del>
0288	650.9920 Construction Staking Slope Stakes	2,794.000 LF		·
0290	652.0225 Conduit Rigid Nonmetallic Schedule 40 2-Inch	2,524.000 LF	·	
0292	652.0235 Conduit Rigid Nonmetallic Schedule 40 3-Inch	895.000 LF	·	·
0294	652.0605 Conduit Special 2-Inch	595.000 LF		
0296	653.0140 Pull Boxes Steel 24x42-Inch	10.000 EACH	·	
0298	653.0905 Removing Pull Boxes	34.000 EACH	·	
0300	654.0101 Concrete Bases Type 1	2.000 EACH		
0302	654.0105 Concrete Bases Type 5	22.000 EACH		
0304	654.0120 Concrete Bases Type 10-Special	4.000 EACH		
0306	654.0217 Concrete Control Cabinet Bases Type 9 Special	1.000 EACH	:	
0308	655.0230 Cable Traffic Signal 5-14 AWG	745.000 LF		
0310	655.0240 Cable Traffic Signal 7-14 AWG	362.000 LF		







Page 11 of 13

Federal ID(s): WISC 2021479

**SECTION:** 0001 Contract Items

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0312	655.0260 Cable Traffic Signal 12-14 AWG	773.000 LF		
0314	655.0290 Cable Traffic Signal 21-14 AWG	380.000 LF		
0316	655.0320 Cable Type UF 2-10 AWG Grounded	571.000 LF		
0318	655.0515 Electrical Wire Traffic Signals 10 AWG	861.000 LF		
0320	655.0610 Electrical Wire Lighting 12 AWG	3,816.000 LF		
0322	655.0635 Electrical Wire Lighting 2 AWG	16,151.000 LF		
0324	656.0200 Electrical Service Meter Breaker Pedestal (location) 01. STH 11 (Durand Ave) & S Memorial Dr	LS	LUMP SUM	
0326	657.0100 Pedestal Bases	2.000 EACH		
0328	657.0255 Transformer Bases Breakaway 11 1/2- Inch Bolt Circle	22.000 EACH	·	·
0330	657.0322 Poles Type 5-Aluminum	22.000 EACH		
0332	657.0352 Poles Type 10-Special	4.000 EACH		
0334	657.0425 Traffic Signal Standards Aluminum 15-FT	2.000 EACH		
0336	657.0541 Monotube Arms 40-FT-Special	2.000 EACH		
0338	657.0546 Monotube Arms 45-FT-Special	2.000 EACH		
0340	657.0610 Luminaire Arms Single Member 4 1/2- Inch Clamp 6-FT	27.000 EACH	·	





Page 12 of 13

Federal ID(s): WISC 2021479

**SECTION:** 0001 Contract Items

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0342	657.0815 Luminaire Arms Steel 15-FT	4.000 EACH	<u> </u>	<u> </u>
0344	658.0173 Traffic Signal Face 3S 12-Inch	12.000 EACH		
0346	658.0174 Traffic Signal Face 4S 12-Inch	8.000 EACH		
0348	658.0416 Pedestrian Signal Face 16-Inch	8.000 EACH		
0350	658.0500 Pedestrian Push Buttons	8.000 EACH		
0352	658.5069 Signal Mounting Hardware (location) 01. STH 11 (Durand Ave) & S Memorial Dr	LS	LUMP SUM	·
0354	659.1125 Luminaires Utility LED C	4.000 EACH		
0356	690.0150 Sawing Asphalt	1,850.000 LF		
0358	690.0250 Sawing Concrete	863.000 LF		
0360	715.0415 Incentive Strength Concrete Pavement	5,282.000 DOL	1.00000	5,282.00
0362	715.0710 Optimized Aggregate Gradation Incentive	16,520.000 DOL	1.00000	16,520.00
0364	740.0440 Incentive IRI Ride	11,290.000 DOL	1.00000	11,290.00
0366	ASP.1T0A On-the-Job Training Apprentice at \$5.00/HR	1,200.000 HRS	5.00000	6,000.00
0368	ASP.1T0G On-the-Job Training Graduate at \$5.00/HR	2,280.000 HRS	5.00000	11,400.00
0370	SPV.0035 Special 01. Coloring Concrete Custom Red	145.000 CY		
0372	SPV.0060 Special 01. Standard LED Luminaires	27.000 EACH		



Page 13 of 13

**Proposal ID:** 20210914010 **Project(s):** 2260-08-70

Federal ID(s): WISC 2021479

**SECTION:** 0001 Contract Items

Alt Set ID: Alt Mbr ID:

Proposal Line Number	Item ID  Description	Approximate Quantity and Units	Unit Price	Bid Amount
0374	SPV.0060 Special 02. Traffic Signal Controller & Cabinet STH 11 (Durand Ave) & S Memorial Dr	1.000 EACH	·	<u> </u>
0376	SPV.0060 Special 03. Furnish and Install Ethernet Radio STH 11 (Durand Ave) & S Memorial Dr	1.000 EACH	·	·
0378	SPV.0060 Special 04. Catch Basins 8-FT Diameter	2.000 EACH		
0380	SPV.0060 Special 05. Field Facilities Office Space	1.000 EACH		
0382	SPV.0060 Special 06. Utility Line Opening	10.000 EACH		
0384	SPV.0090 Special 01. Marking Contrast Epoxy 4- Inch	1,250.000 LF	·	
0386	SPV.0090 Special 02. Marking Contrast Epoxy 8- Inch	1,186.000 LF		·
0388	SPV.0105 Special 01. Video Vehicle Detection System STH 11 (Durand Ave) & S Memorial Dr	LS	LUMP SUM	·
0390	SPV.0165 Special 01. Wall Modular Block Gravity Landscape	58.000 SF		
0392	SPV.0170 Special 01. Proof Rolling	30.000 STA		<u> </u>
0394	SPV.0180 Special 01. Shredded Hardwood Bark Mulch	20.000 SY	·	·
0396	SPV.0195 Special 01. Management of Solid Waste	104.000 TON		<u> </u>
	Section: 000	)1	Total:	

ction: 0001 Total: \_\_\_\_\_.\_\_\_

Total Bid: \_\_\_\_\_.

# PLEASE ATTACH ADDENDA HERE



## **Wisconsin Department of Transportation**

September 2, 2021

**Division of Transportation Systems Development** 

Bureau of Project Development 4822 Madison Yards Way, 4<sup>th</sup> Floor South Madison, WI 53705

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

## **NOTICE TO ALL CONTRACTORS:**

Proposal #10: 2260-08-70, WISC 2021479

**Durand Avenue, City of Racine** 

**Kearney Ave to East of Memorial Drive** 

**STH 11** 

**Racine County** 

## Letting of September 14, 2021

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

### **Schedule of Items:**

	Added Bid Item Quantitie	s			
Bid Item	Item Description	Unit	Old Quantity	Revised Quantity	Proposal Total
204.0185	Removing Masonry	CY	0	9	9

## **Plan Sheets:**

Revised Plan Sheets			
Plan Sheet	Plan Sheet Title (brief description of changes to sheet)		
49	Storm Sewer – added existing underground box culvert		
154	Miscellaneous Quantities – added bid item for removing underground box culvert		
197	Plan & Profile – added existing underground box culvert		

#### Schedule of Items

Attached, dated September 2, 2021, are the revised Schedule of Items Page 13.

#### **Plan Sheets**

The following  $8\frac{1}{2}$  x 11-inch sheets are attached and made part of the plans for this proposal: Revised: 49, 154, and 197.

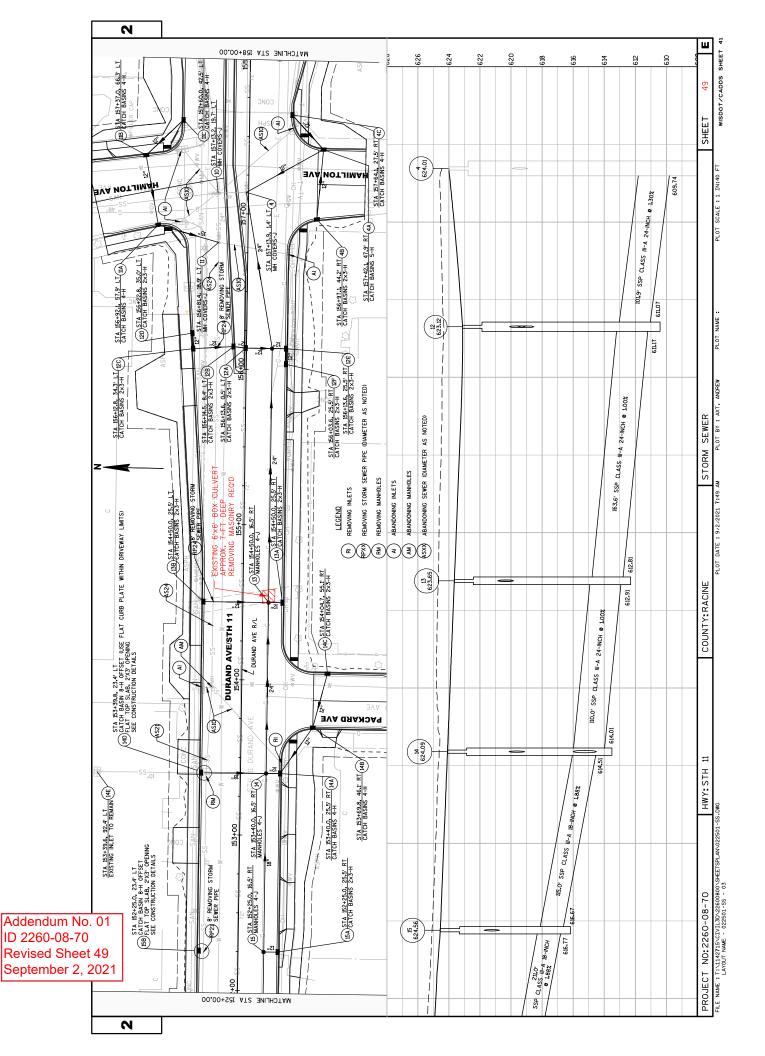
The responsibility for notifying potential subcontractors and suppliers of these changes remains with the prime contractor.

Sincerely,

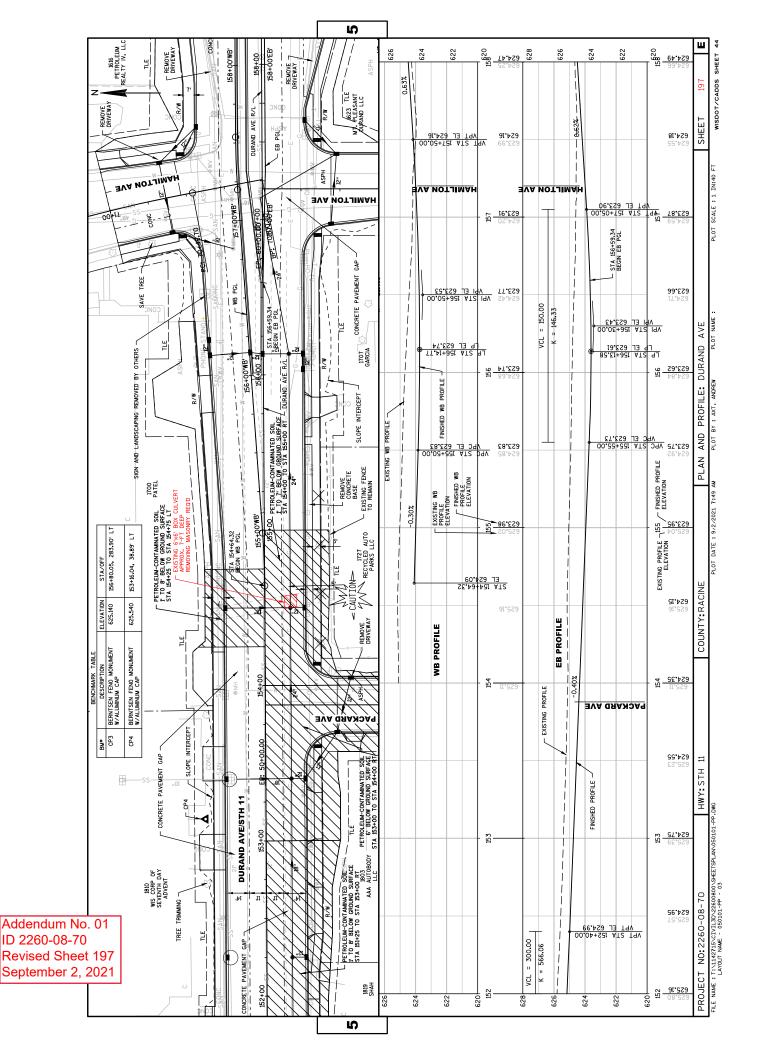
## Mike Coleman

Proposal Development Specialist Proposal Management Section

**END OF ADDENDUM** 



endum No 260-08-70 sed Shee ember 2,																
t 154					CLEA	CLEARING & GRUBBING	BING									
			CATEGORY 5	STAGE ROADWAY	VAY STATION	TO STATION	LOCATION	201.0105 CLEARING 0 STA	201.0205 GRUBBING STA							
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							TOTAL 0010	4	9							
						REMOVALS										
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			+	TOTAL 0010	16,147	1,200	198	1,191	1,782	339	6	1	467			
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PROJECT NO: 2260-08-70		HWY: STH 11	COUNTY: RACINE	RACINE	- Ca	MISCELLA	MISCELLANEOUS QUANTITIES	ANTITIES		TOIG	TO IN THE PROPERTY OF THE PROP			SHEET NO:	10: 154	EET NO: 154 E





09/02/2021 12:07:02



# Proposal Schedule of Items

Page 1 of 14

Federal ID(s): WISC 2021479

SECTION: 0001 Contract Items

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0002	201.0105 Clearing	4.000 STA		
0004	201.0205 Grubbing	6.000 STA		
0006	204.0100 Removing Concrete Pavement	16,147.000 SY		
0008	204.0110 Removing Asphaltic Surface	1,200.000 SY		
0010	204.0115 Removing Asphaltic Surface Butt Joints	198.000 SY		<u></u>
0012	204.0150 Removing Curb & Gutter	1,191.000 LF		
0014	204.0155 Removing Concrete Sidewalk	1,782.000 SY		
0016	204.0170 Removing Fence	339.000 LF		
0018	204.0195 Removing Concrete Bases	19.000 EACH		
0020	204.0210 Removing Manholes	2.000 EACH		
0022	204.0220 Removing Inlets	8.000 EACH		
0024	204.0245 Removing Storm Sewer (size) 10. 10-Inch	78.000 LF		·
0026	204.0245 Removing Storm Sewer (size) 12. 12-Inch	152.000 LF		·
0028	204.0245 Removing Storm Sewer (size) 15. 15-Inch	57.000 LF		
0030	204.0245 Removing Storm Sewer (size) 18. 18- Inch	122.000 LF		





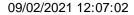
Page 2 of 14

Federal ID(s): WISC 2021479

SECTION: 0001 Contract Items

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0032	204.0245 Removing Storm Sewer (size) 21. 21-Inch	15.000 LF		·
0034	204.0245 Removing Storm Sewer (size) 24. 24-Inch	16.000 LF		
0036	204.0250 Abandoning Manholes	4.000 EACH		
0038	204.0260 Abandoning Inlets	14.000 EACH		
0040	204.0280 Sealing Pipes	8.000 EACH		
0042	204.0291.S Abandoning Sewer	55.000 CY		
0044	204.9060.S  Removing (item description) 01.  Removing Lighting Units	13.000 EACH		·
0046	204.9105.S Removing (item description) 01. Traffic Signals STH 11 (Durand Ave) & S Memorial Dr	LS	LUMP SUM	·
0048	204.9105.S  Removing (item description) 02. Loop Detector Wire & Lead-In Cable STH 11 (Durand Ave) & S Memorial Dr	LS	LUMP SUM	·
0050	204.9165.S Removing (item description) 02. Landscaping Stone STA 160+48 to STA 161+62 RT	467.000 SF		·
0052	205.0100 Excavation Common	21,337.000 CY		
0054	205.0501.S  Excavation, Hauling, and Disposal of Petroleum Contaminated Soil	2,653.000 TON		<u> </u>
0056	210.2500 Backfill Structure Type B	18.000 TON		
0058	213.0100 Finishing Roadway (project) 01. 2260- 08-70	1.000 EACH	·	







Page 3 of 14

Federal ID(s): WISC 2021479

SECTION: 0001 Contract Items

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0060	305.0120 Base Aggregate Dense 1 1/4-Inch	9,525.000 TON		
0062	310.0110 Base Aggregate Open-Graded	131.000 TON		
0064	312.0110 Select Crushed Material	21,605.000 TON		
0066	415.0085 Concrete Pavement 8 1/2-Inch	16,957.000 SY		
0068	415.0210 Concrete Pavement Gaps	12.000 EACH		
0070	415.1085 Concrete Pavement HES 8 1/2-Inch	648.000 SY		
0072	415.4100 Concrete Pavement Joint Filling	21,263.000 SY		
0074	415.5110.S Concrete Pavement Joint Layout	LS	LUMP SUM	
0076	416.0160 Concrete Driveway 6-Inch	907.000 SY		
0078	416.0610 Drilled Tie Bars	44.000 EACH		
0800	416.0620 Drilled Dowel Bars	163.000 EACH		
0082	455.0605 Tack Coat	78.000 GAL		
0084	460.2000 Incentive Density HMA Pavement	120.000 DOL	1.00000	120.00
0086	460.5223 HMA Pavement 3 LT 58-28 S	92.000 TON		
0088	460.5224 HMA Pavement 4 LT 58-28 S	94.000 TON		
0090	465.0105 Asphaltic Surface	196.000 TON		
0092	465.0125 Asphaltic Surface Temporary	68.000 TON		





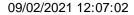
Page 4 of 14

Federal ID(s): WISC 2021479

SECTION: 0001 Contract Items

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0094	520.8000 Concrete Collars for Pipe	2.000 EACH		
0096	601.0405 Concrete Curb & Gutter 18-Inch Type A	5,203.000 LF		
0098	601.0407 Concrete Curb & Gutter 18-Inch Type D	417.000 LF	<u> </u>	
0100	601.0409 Concrete Curb & Gutter 30-Inch Type A	1,115.000 LF	·	
0102	601.0411 Concrete Curb & Gutter 30-Inch Type D	64.000 LF	·	
0104	601.0600 Concrete Curb Pedestrian	474.000 LF	·	
0106	602.0410 Concrete Sidewalk 5-Inch	30,043.000 SF	·	
0108	602.0505 Curb Ramp Detectable Warning Field Yellow	360.000 SF		
0110	602.0605 Curb Ramp Detectable Warning Field Radial Yellow	26.000 SF		·
0112	602.1500 Concrete Steps	44.000 SF		
0114	608.0315 Storm Sewer Pipe Reinforced Concrete Class III 15-Inch	73.700 LF		
0116	608.0318 Storm Sewer Pipe Reinforced Concrete Class III 18-Inch	54.300 LF		
0118	608.0412 Storm Sewer Pipe Reinforced Concrete Class IV 12-Inch	977.600 LF		
0120	608.0415 Storm Sewer Pipe Reinforced Concrete Class IV 15-Inch	461.600 LF		·
0122	608.0418 Storm Sewer Pipe Reinforced Concrete Class IV 18-Inch	55.200 LF		







Page 5 of 14

Federal ID(s): WISC 2021479

SECTION: 0001 Contract Items

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0124	608.3012 Storm Sewer Pipe Class III-A 12-Inch	54.400 LF		
0126	608.3015 Storm Sewer Pipe Class III-A 15-Inch	74.500 LF		
0128	608.3018 Storm Sewer Pipe Class III-A 18-Inch	494.700 LF		
0130	608.3024 Storm Sewer Pipe Class III-A 24-Inch	375.500 LF		
0132	611.0420 Reconstructing Manholes	8.000 EACH		
0134	611.0530 Manhole Covers Type J	25.000 EACH	•	
0136	611.0535 Manhole Covers Type J-Special	9.000 EACH		
0138	611.0624 Inlet Covers Type H	50.000 EACH		
0140	611.1004 Catch Basins 4-FT Diameter	18.000 EACH		
0142	611.1005 Catch Basins 5-FT Diameter	1.000 EACH		
0144	611.1230 Catch Basins 2x3-FT	29.000 EACH		
0146	611.2004 Manholes 4-FT Diameter	13.000 EACH		
0148	611.2005 Manholes 5-FT Diameter	2.000 EACH		
0150	611.8110 Adjusting Manhole Covers	1.000 EACH		
0152	611.8115 Adjusting Inlet Covers	1.000 EACH		
0154	611.8120.S Cover Plates Temporary	2.000 EACH		
0156	612.0106 Pipe Underdrain 6-Inch	600.000 LF		





Page 6 of 14

Federal ID(s): WISC 2021479

SECTION: 0001 Contract Items

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0158	612.0404 Pipe Underdrain Wrapped 4-Inch	60.000 LF		
0160	619.1000 Mobilization	1.000 EACH		
0162	620.0200 Concrete Median Blunt Nose	64.000 SF		
0164	620.0300 Concrete Median Sloped Nose	286.000 SF		
0166	624.0100 Water	670.000 MGAL		<u></u>
0168	625.0100 Topsoil	2,536.000 SY		
0170	628.1905 Mobilizations Erosion Control	5.000 EACH		
0172	628.1910 Mobilizations Emergency Erosion Control	5.000 EACH		
0174	628.7005 Inlet Protection Type A	53.000 EACH		
0176	628.7010 Inlet Protection Type B	6.000 EACH		
0178	628.7015 Inlet Protection Type C	81.000 EACH		
0180	628.7560 Tracking Pads	9.000 EACH		
0182	629.0210 Fertilizer Type B	1.670 CWT		
0184	631.0300 Sod Water	57.150 MGAL		
0186	631.1000 Sod Lawn	2,536.000 SY		
0188	632.0101 Trees (species) (size) (root) 01. Armstrong Freeman Maple, 2.5" Cal., B&B	6.000 EACH		





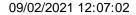
Page 7 of 14

Federal ID(s): WISC 2021479

SECTION: 0001 Contract Items

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0190	632.0101 Trees (species) (size) (root) 02. Frontier Hybrid Elm, 2.5" Cal., B&B	2.000 EACH	·	
0192	632.0101 Trees (species) (size) (root) 03. American Sentry Linden, 2.5" Cal., B&B	2.000 EACH		
0194	632.9101 Landscape Planting Surveillance and Care Cycles	10.000 EACH		
0196	634.0618 Posts Wood 4x6-Inch X 18-FT	6.000 EACH		
0198	634.0814 Posts Tubular Steel 2x2-Inch X 14-FT	45.000 EACH		
0200	637.2210 Signs Type II Reflective H	344.940 SF		
0202	637.2215 Signs Type II Reflective H Folding	31.080 SF		
0204	637.2230 Signs Type II Reflective F	45.250 SF		
0206	638.2102 Moving Signs Type II	6.000 EACH		
0208	638.2602 Removing Signs Type II	38.000 EACH		
0210	638.3000 Removing Small Sign Supports	23.000 EACH		
0212	643.0300 Traffic Control Drums	35,725.000 DAY		
0214	643.0410 Traffic Control Barricades Type II	950.000 DAY		
0216	643.0420 Traffic Control Barricades Type III	9,966.000 DAY		
0218	643.0500 Traffic Control Flexible Tubular Marker Posts	277.000 EACH		







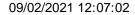
Page 8 of 14

Federal ID(s): WISC 2021479

SECTION: 0001 Contract Items

Proposal Line Number	Item ID  Description	Approximate Quantity and Units	Unit Price	Bid Amount
0220	643.0600 Traffic Control Flexible Tubular Marker Bases	277.000 EACH	·	·
0222	643.0705 Traffic Control Warning Lights Type A	20,920.000 DAY		·
0224	643.0715 Traffic Control Warning Lights Type C	4,113.000 DAY		
0226	643.0900 Traffic Control Signs	20,175.000 DAY		
0228	643.1050 Traffic Control Signs PCMS	30.000 DAY		
0230	643.1070 Traffic Control Cones 42-Inch	7,840.000 DAY		
0232	643.5000 Traffic Control	1.000 EACH		
0234	644.1601 Temporary Pedestrian Curb Ramp	28.000 DAY		
0236	644.1810 Temporary Pedestrian Barricade	484.000 LF		
0238	645.0111 Geotextile Type DF Schedule A	269.000 SY		
0240	646.1020 Marking Line Epoxy 4-Inch	8,090.000 LF		
0242	646.5020 Marking Arrow Epoxy	13.000 EACH		
0244	646.6120 Marking Stop Line Epoxy 18-Inch	307.000 LF		
0246	646.7120 Marking Diagonal Epoxy 12-Inch	28.000 LF		
0248	646.7420 Marking Crosswalk Epoxy Transverse Line 6-Inch	1,636.000 LF		
0250	646.8120 Marking Curb Epoxy	54.000 LF		







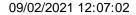
Page 9 of 14

Federal ID(s): WISC 2021479

SECTION: 0001 Contract Items

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0252	646.8220 Marking Island Nose Epoxy	3.000 EACH		
0254	646.9000 Marking Removal Line 4-Inch	137.000 LF		
0256	646.9100 Marking Removal Line 8-Inch	36.000 LF		
0258	646.9200 Marking Removal Line Wide	19.000 LF	·	
0260	649.0105 Temporary Marking Line Paint 4-Inch	3,204.000 LF		
0262	649.0150 Temporary Marking Line Removable Tape 4-Inch	16,191.000 LF		
0264	649.0250 Temporary Marking Line Removable Tape 8-Inch	835.000 LF	·	
0266	649.0550 Temporary Marking Arrow Removable Tape	4.000 EACH	·	
0268	649.0850 Temporary Marking Stop Line Removable Tape 18-Inch	88.000 LF	·	
0270	649.0960 Temporary Marking Removable Mask Out Tape 6-Inch	762.000 LF	·	
0272	649.0970 Temporary Marking Removable Mask Out Tape 10-Inch	130.000 LF	·	·
0274	650.4000 Construction Staking Storm Sewer	63.000 EACH		
0276	650.4500 Construction Staking Subgrade	2,502.000 LF		
0278	650.5500 Construction Staking Curb Gutter and Curb & Gutter	6,799.000 LF		
0280	650.7000 Construction Staking Concrete Pavement	2,587.000 LF	·	







Page 10 of 14

Federal ID(s): WISC 2021479

SECTION: 0001 Contract Items

Proposal Line Number	Item ID  Description	Approximate Quantity and Units	Unit Price	Bid Amount
0282	650.8500 Construction Staking Electrical Installations (project) 01. 2260-08-70	LS	LUMP SUM	·
0284	650.9000 Construction Staking Curb Ramps	38.000 EACH	·	·
0286	650.9910 Construction Staking Supplemental Control (project) 01. 2260-08-70	LS	LUMP SUM	
0288	650.9920 Construction Staking Slope Stakes	2,794.000 LF		
0290	652.0225 Conduit Rigid Nonmetallic Schedule 40 2-Inch	2,524.000 LF	<u></u>	·
0292	652.0235 Conduit Rigid Nonmetallic Schedule 40 3-Inch	895.000 LF		
0294	652.0605 Conduit Special 2-Inch	595.000 LF	·	
0296	653.0140 Pull Boxes Steel 24x42-Inch	10.000 EACH		
0298	653.0905 Removing Pull Boxes	34.000 EACH	·	
0300	654.0101 Concrete Bases Type 1	2.000 EACH		
0302	654.0105 Concrete Bases Type 5	22.000 EACH		
0304	654.0120 Concrete Bases Type 10-Special	4.000 EACH		
0306	654.0217 Concrete Control Cabinet Bases Type 9 Special	1.000 EACH		·
0308	655.0230 Cable Traffic Signal 5-14 AWG	745.000 LF		
0310	655.0240 Cable Traffic Signal 7-14 AWG	362.000 LF		







Page 11 of 14

Federal ID(s): WISC 2021479

SECTION: 0001 Contract Items

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0312	655.0260 Cable Traffic Signal 12-14 AWG	773.000 LF		
0314	655.0290 Cable Traffic Signal 21-14 AWG	380.000 LF		
0316	655.0320 Cable Type UF 2-10 AWG Grounded	571.000 LF	<u>-</u>	
0318	655.0515 Electrical Wire Traffic Signals 10 AWG	861.000 LF	<u></u>	·
0320	655.0610 Electrical Wire Lighting 12 AWG	3,816.000 LF		·
0322	655.0635 Electrical Wire Lighting 2 AWG	16,151.000 LF		
0324	656.0200 Electrical Service Meter Breaker Pedestal (location) 01. STH 11 (Durand Ave) & S Memorial Dr	LS	LUMP SUM	
0326	657.0100 Pedestal Bases	2.000 EACH		
0328	657.0255 Transformer Bases Breakaway 11 1/2- Inch Bolt Circle	22.000 EACH		·
0330	657.0322 Poles Type 5-Aluminum	22.000 EACH		
0332	657.0352 Poles Type 10-Special	4.000 EACH		
0334	657.0425 Traffic Signal Standards Aluminum 15-FT	2.000 EACH		
0336	657.0541 Monotube Arms 40-FT-Special	2.000 EACH	<u></u>	·
0338	657.0546 Monotube Arms 45-FT-Special	2.000 EACH		
0340	657.0610 Luminaire Arms Single Member 4 1/2- Inch Clamp 6-FT	27.000 EACH		·





Page 12 of 14

Federal ID(s): WISC 2021479

SECTION: 0001 Contract Items

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0342	657.0815 Luminaire Arms Steel 15-FT	4.000 EACH		
0344	658.0173 Traffic Signal Face 3S 12-Inch	12.000 EACH		
0346	658.0174 Traffic Signal Face 4S 12-Inch	8.000 EACH		
0348	658.0416 Pedestrian Signal Face 16-Inch	8.000 EACH	·	·
0350	658.0500 Pedestrian Push Buttons	8.000 EACH		
0352	658.5069 Signal Mounting Hardware (location) 01. STH 11 (Durand Ave) & S Memorial Dr	LS	LUMP SUM	
0354	659.1125 Luminaires Utility LED C	4.000 EACH		·
0356	690.0150 Sawing Asphalt	1,850.000 LF		
0358	690.0250 Sawing Concrete	863.000 LF	·	·
0360	715.0415 Incentive Strength Concrete Pavement	5,282.000 DOL	1.00000	5,282.00
0362	715.0710 Optimized Aggregate Gradation Incentive	16,520.000 DOL	1.00000	16,520.00
0364	740.0440 Incentive IRI Ride	11,290.000 DOL	1.00000	11,290.00
0366	ASP.1T0A On-the-Job Training Apprentice at \$5.00/HR	1,200.000 HRS	5.00000	6,000.00
0368	ASP.1T0G On-the-Job Training Graduate at \$5.00/HR	2,280.000 HRS	5.00000	11,400.00
0370	SPV.0035 Special 01. Coloring Concrete Custom Red	145.000 CY		
0372	SPV.0060 Special 01. Standard LED Luminaires	27.000 EACH		



Page 13 of 14

Federal ID(s): WISC 2021479

SECTION: 0001 Contract Items

Proposal Line Number	Item ID  Description	Approximate Quantity and Units	Unit Price	Bid Amount
0374	SPV.0060 Special 02. Traffic Signal Controller & Cabinet STH 11 (Durand Ave) & S Memorial Dr	1.000 EACH	·	
0376	SPV.0060 Special 03. Furnish and Install Ethernet Radio STH 11 (Durand Ave) & S Memorial Dr	1.000 EACH		·
0378	SPV.0060 Special 04. Catch Basins 8-FT Diameter	2.000 EACH		
0380	SPV.0060 Special 05. Field Facilities Office Space	1.000 EACH		
0382	SPV.0060 Special 06. Utility Line Opening	10.000 EACH		
0384	SPV.0090 Special 01. Marking Contrast Epoxy 4- Inch	1,250.000 LF		
0386	SPV.0090 Special 02. Marking Contrast Epoxy 8- Inch	1,186.000 LF	·	
0388	SPV.0105 Special 01. Video Vehicle Detection System STH 11 (Durand Ave) & S Memorial Dr	LS	LUMP SUM	
0390	SPV.0165 Special 01. Wall Modular Block Gravity Landscape	58.000 SF	·	
0392	SPV.0170 Special 01. Proof Rolling	30.000 STA	·	·
0394	SPV.0180 Special 01. Shredded Hardwood Bark Mulch	20.000 SY		
0396	SPV.0195 Special 01. Management of Solid Waste	104.000 TON		
0398	204.0185 Removing Masonry	9.000 CY		
	Section: 00	01	Total:	·

Total Bid:	