

# HIGHWAY WORK PROPOSAL

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

Proposal Number: **016**

<u>STATE ID</u>	<u>FEDERAL ID</u>	<u>PROJECT DESCRIPTION</u>	<u>HIGHWAY</u>	<u>COUNTY</u>
2590-04-71	WISC 2025314	C Milwaukee, W Lisbon Avenue, W Burleigh St to N 100th St	LOC STR	Milwaukee

## 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: \$710,000.00 Payable to: Wisconsin Department of Transportation	Attach Proposal Guaranty on back of this PAGE.
Bid Submittal Date: February 11, 2025 Time (Local Time): 11:00 am	Firm Name, Address, City, State, Zip Code
Contract Completion Time October 31, 2026	<b>SAMPLE NOT FOR BIDDING PURPOSES</b>
Assigned Disadvantaged Business Enterprise Goal 10%	This contract is exempt from federal oversight.

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

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

Subscribed and sworn to before me this date \_\_\_\_\_

\_\_\_\_\_  
(Signature, Notary Public, State of Wisconsin)

\_\_\_\_\_  
(Bidder Signature)

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

\_\_\_\_\_  
(Print or Type Bidder Name)

\_\_\_\_\_  
(Date Commission Expires)

\_\_\_\_\_  
(Bidder Title)

Notary Seal

Type of Work:	For Department Use Only
Removals, Grading, Aggregate, Concrete Pavement, Asphalt Pavement, Curb and Gutter, Concrete Sidewalk, Storm Sewer, Erosion Control, Permanent Signing, Traffic Control, Pavement Marking, Lighting, Traffic Signals, Restoration.	
Notice of Award Dated	Date Guaranty Returned

**PLEASE ATTACH  
PROPOSAL GUARANTY HERE**

## **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.

## BID PREPARATION

### **Preparing the Proposal Schedule of Items**

#### **A. General**

- (1) Obtain bidding proposals as specified in section 102 of the standard specifications prior to 11:45 AM of the last business day preceding the letting. Submit bidding proposals using one of the following methods:
  1. Electronic bid on the internet.
  2. Electronic bid on a printout with accompanying diskette or CD ROM.
  3. Paper bid under a waiver of the electronic submittal requirements.
- (2) Bids submitted on a printout with accompanying diskette or CD ROM or paper bids submitted under a waiver of the electronic submittal requirements govern over bids submitted on the internet.
- (3) The department will provide bidding information through the department's web site at:

<https://wisconsin.gov/Pages/doing-business/contractors/hcci/bid-let.aspx>

The contractor is responsible for reviewing this web site for general notices as well as information regarding proposals in each letting. The department will also post special notices of all addenda to each proposal through this web site no later than 4:00 PM local time on the Thursday before the letting. Check the department's web site after 5:00 PM local time on the Thursday before the letting to ensure all addenda have been accounted for before preparing the bid. When bidding using methods 1 and 2 above, check the Bid Express™ on-line bidding exchange at <http://www.bidx.com/> after 5:00 PM local time on the Thursday before the letting to ensure that the latest schedule of items Expedite file (\*.ebs or \*.00x) is used to submit the final bid.

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

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

- (5) The department will address equipment and process failures, if the bidder can demonstrate that those failures were beyond their control.
- (6) Contractors are responsible for checking on the issuance of addenda and for obtaining the addenda. Notice of issuance of addenda is posted on the department's web site at:

<https://wisconsin.gov/Pages/doing-business/contractors/hcci/bid-let.aspx>

or by calling the department at (608) 266-1631. Addenda can ONLY be obtained from the department's web site listed above or by picking up the addenda at the Bureau of Highway Construction, 4th floor, 4822 Madison Yards Way, Madison, WI, during regular business hours.

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

**B. Submitting Electronic Bids****B.1 On the Internet**

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

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

- (1) Download the latest schedule of items from the Wisconsin pages of the Bid Express web site reflecting the latest addenda posted on the department's web site at:  
<https://wisconsindot.gov/Pages/doing-bus/contractors/hcci/bid-let.aspx>  
Use Expedite™ software to prepare and print the schedule of items. Provide a valid amount for all price fields. Follow instructions and review the help screens provided on the Bid Express™ web site to assure that the schedule of items is prepared properly.
- (2) Staple an 8 1/2 by 11 inch printout of the Expedite□□ generated schedule of items to the other proposal documents submitted to the department as a part of the bidder's sealed bid. As a separate submittal, not in the sealed bid envelop but due at the same time and place as the sealed bid, also provide the Expedite™ generated schedule of items on a 3 1/2 inch computer diskette or CD ROM. Label each diskette or CD ROM with the bidder's name, the 4 character department-assigned bidder identification code from the top of the bidding proposal, and a list of the proposal numbers included on that diskette or CD ROM as indicated in the following example:

**Bidder Name**

**BN00**

**Proposals: 1, 12, 14, & 22**

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

- (5) In addition to the reasons specified in section 102 of the standard specifications, proposals are irregular and the department may reject them for one or more of the following:
1. The check code printed on the bottom of the printout of the Expedite<sup>TM</sup> generated schedule of items is not the same on each page.
  2. The check code printed on the printout of the Expedite<sup>TM</sup> generated schedule of items is not the same as the check code for that proposal provided on the diskette or CD ROM.
  3. The diskette or CD ROM is not submitted at the time and place the department designates.

**B Waiver of Electronic Submittal**

- (1) The bidder may request a waiver of the electronic submittal requirements. Submit a written request for a waiver in lieu of bids submitted on the internet or on a printout with accompanying diskette or CD ROM. Use the waiver that was included with the paper bid document sent to the bidder or type up a waiver on the bidder's letterhead. The department will waive the electronic submittal requirements for a bidding entity (individual, partnership, joint venture, corporation, or limited liability company) for up to 4 individual proposals in a calendar year. The department may allow additional waivers for equipment malfunctions.
- (2) Submit a schedule of items on paper conforming to section 102 of the standard specifications. The department charges the bidder a \$75 administrative fee per proposal, payable at the time and place the department designates for receiving bids, to cover the costs of data entry. The department will accept a check or money order payable to: "Wisconsin, Dept. of Transportation."
- (3) In addition to the reasons specified in section 102 of the standard specifications, proposals are irregular and the department may reject them for one or more of the following:
  1. The bidder fails to provide the written request for waiver of the electronic submittal requirements.
  2. The bidder fails to pay the \$75 administrative fee before the time the department designates for the opening of bids unless the bidder requests on the waiver that they be billed for the \$75.
  3. The bidder exceeds 4 waivers of electronic submittal requirements within a calendar year.
- (4) In addition to the reasons specified in section 102 of the standard specifications, the department may refuse to issue bidding proposals for future contracts to a bidding entity that owes the department administrative fees for a waiver of electronic submittal requirements.

# PROPOSAL BID BOND

DT1303 1/2006

Wisconsin Department of Transportation

Proposal Number	Project Number	Letting Date
Name of Principal		
Name of Surety	State in Which Surety is Organized	

We, the above-named Principal and the above-named Surety, are held and firmly bound unto the State of Wisconsin in the sum equal to the Proposal Guaranty for the total bid submitted for the payment to be made; we jointly and severally bind ourselves, our heirs, executors, administrators, successors and assigns. The condition of this obligation is that the Principal has submitted a bid proposal to the State of Wisconsin acting through the Department of Transportation for the improvement designated by the Proposal Number and Letting Date indicated above.

If the Principal is awarded the contract and, within the time and manner required by law after the prescribed forms are presented for signature, enters into a written contract in accordance with the bid, and files the bond with the Department of Transportation to guarantee faithful performance and payment for labor and materials, as required by law, or if the Department of Transportation shall reject all bids for the work described, then this obligation shall be null and void; otherwise, it shall be and remain in full force and effect. In the event of failure of the Principal to enter into the contract or give the specified bond, the Principal shall pay to the Department of Transportation **within 10 business days of demand** a total equal to the Proposal Guaranty as liquidated damages; the liability of the Surety continues for the full amount of the obligation as stated until the obligation is paid in full.

The Surety, for value received, agrees that the obligations of it and its bond shall not be impaired or affected by any extension of time within which the Department of Transportation may accept the bid; and the Surety does waive notice of any such extension.

IN WITNESS, the Principal and Surety have agreed and have signed by their proper officers and have caused their corporate seals to be affixed this date: **(DATE MUST BE ENTERED)**

## PRINCIPAL

\_\_\_\_\_  
(Company Name) **(Affix Corporate Seal)**

\_\_\_\_\_  
(Signature and Title)

\_\_\_\_\_  
(Company Name)

\_\_\_\_\_  
(Signature and Title)

\_\_\_\_\_  
(Company Name)

\_\_\_\_\_  
(Signature and Title)

\_\_\_\_\_  
(Company Name)

\_\_\_\_\_  
(Signature and Title)

## NOTARY FOR PRINCIPAL

\_\_\_\_\_  
(Date)

State of Wisconsin )  
 ) ss.  
\_\_\_\_\_ County )

On the above date, this instrument was acknowledged before me by the named person(s).

\_\_\_\_\_  
(Signature, Notary Public, State of Wisconsin)

\_\_\_\_\_  
(Print or Type Name, Notary Public, State of Wisconsin)

\_\_\_\_\_  
(Date Commission Expires)

**Notary Seal**

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

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

## NOTARY FOR SURETY

\_\_\_\_\_  
(Date)

State of Wisconsin )  
 ) ss.  
\_\_\_\_\_ County )

On the above date, this instrument was acknowledged before me by the named person(s).

\_\_\_\_\_  
(Signature, Notary Public, State of Wisconsin)

\_\_\_\_\_  
(Print or Type Name, Notary Public, State of Wisconsin)

\_\_\_\_\_  
(Date Commission Expires)

**Notary Seal**

**IMPORTANT: A certified copy of Power of Attorney of the signatory agent must be attached to the bid bond.**

# CERTIFICATE OF ANNUAL BID BOND

DT1305 8/2003

Wisconsin Department of Transportation

Time Period Valid (From/To)	
Name of Surety	
Name of Contractor	
Certificate Holder	Wisconsin Department of Transportation

This is to certify that an annual bid bond issued by the above-named Surety is currently on file with the Wisconsin Department of Transportation.

This certificate is issued as a matter of information and conveys no rights upon the certificate holder and does not amend, extend or alter the coverage of the annual bid bond.

**Cancellation:** Should the above policy be cancelled before the expiration date, the issuing surety will give thirty (30) days written notice to the certificate holder indicated above.

\_\_\_\_\_  
(Signature of Authorized Contractor Representative)

\_\_\_\_\_  
(Date)

## LIST OF SUBCONTRACTORS

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

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

[illegible]

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

### Instructions for Certification

1. By signing and submitting this proposal, the prospective contractor is providing the certification set out below.
2. The inability of a person to provide the certification required below will not necessarily result in denial of participation in this covered transaction. The prospective contractor shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective contractor to furnish a certification or an explanation shall disqualify such person from participation in this transaction.
3. The certification in this clause is a material representation of fact upon which reliance was placed when the department determined to enter into this transaction. If it is later determined that the contractor knowingly rendered an erroneous certification in addition to other remedies available to the Federal Government the department may terminate this transaction for cause or default.
4. The prospective contractor shall provide immediate written notice to the department to whom this proposal is submitted if at any time the prospective contractor learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
5. The terms "covered transaction," "debarred," "suspended," "ineligible," "lower tier covered transaction," "participant," "person," "primary covered transaction," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of the rules implementing Executive Order 12549. You may contact the department to which this proposal is being submitted for assistance in obtaining a copy of those regulations.
6. The prospective contractor agrees by submitting this proposal that, should this contract be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department entering into this transaction.
7. The prospective contractor further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," which is included as an addendum to PR- 1273 - "Required Contract Provisions Federal Aid Construction Contracts," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.
8. The contractor may rely upon a certification of a prospective subcontractor/materials supplier that it is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A contractor may decide the method and frequency by which it determines the eligibility of its principals. Each contractor may, but is not required to, check the Disapproval List (telephone # 608/266/1631).

9. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of a contractor is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
10. Except for transactions authorized under paragraph 6 of these instructions, if a contractor in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department may terminate this transaction for cause or default.

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

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

## Special Provisions

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**SPECIAL PROVISIONS**

**1. General.**

Perform the work under this construction contract for Project 2590-04-71, C Milwaukee, W Lisbon Ave, W Burleigh St to N 100<sup>th</sup> St, Local Street, Milwaukee 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, 2025 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 (20240703)

**2. Scope of Work.**

The work under this contract shall consist of grading, base aggregate dense, concrete pavement, asphaltic pavement, storm sewer, sidewalk, curb and gutter, traffic signals, street lighting, pavement marking, signing, planting, 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 10 calendar days after the engineer issues a written notice to do so.

Provide the start date to the engineer in writing within a month after executing the contract but at least 14 calendar days before the preconstruction conference. Upon approval, the engineer will issue the notice to proceed within 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 commence work under this contract until the required traffic control devices and markings are in place and the engineer approves the installations.

Take special precautions to avoid damage to all existing utility facilities in the proximity of the construction area.

Do not impact the water booster station in the median east of N 76th Street; it must remain active throughout the project. At all times, provide access for city crews to the water booster station.

Existing trees and utility poles are to remain in place during construction unless otherwise noted in the plan.

Conduct an on-site visit prior to bidding to determine any special measures required for proper clearance between features for the paving and grading equipment.

**Expedited Work Schedule**

The contract time for completion is based on an expedited work schedule and may require extraordinary forces and equipment.

**Interim Completion and Liquidated Damages – Stage 2: October 31, 2025**

Complete stage 2 construction operations on West Lisbon Avenue to the stage necessary to reopen it to through traffic by October 31, 2025. Do not reopen until completing the following work: All stage 2 contract work except trees, shrubs, plants, and other landscaping.

If the contractor fails to complete the stage 2 work and reopen West Lisbon Avenue to traffic by October 31, 2025, the department will assess the contractor \$2,185 in interim liquidated damages for each calendar day the contract work remains incomplete beyond 12:01 AM on November 1, 2025. An entire calendar day will be charged for any period of time within a calendar day that the road remains closed beyond 12:01 AM.

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

### **Winter Shutdown**

Winter shutdown will commence when all contract work required for the interim completion date of October 31, 2025 has been completed. Do not resume work until April 1, 2026, unless approved by the engineer. Provide a start date in writing at least 14 days prior to the planned start of construction in 2026.

Upon approval the engineer will issue a notice to proceed within 10 days of the approved start date.

### **Contractor Coordination**

Coordinate the work according to standard spec 105.5.2.

Arrange and conduct weekly progress meetings. The contractor's superintendent or representative, designated materials representative, subcontractor's representatives for ongoing subcontract work or subcontract work expected to begin within the next three weeks shall attend. Provide and discuss the schedule and updates at the weekly progress meetings. Agenda items at the meeting shall include, but not be limited to, the following:

- Review of the contractor's and subcontractors' schedule. Indicate if the project is on, ahead or behind schedule. If behind indicate why, how much behind and how the project will get back on schedule.
- Utility conflicts and relocation schedule.
- Evaluation of progress to date.
- Outstanding Requests for Information (RFI's) or issues that may cause contract modifications.
- Shop drawing submittal status.
- Materials submittal status.
- Materials sampling and testing activities and results.
- Lane, road, and ramp closure schedules.
- Impacts to businesses and private properties.
- Impacts to bus routes, emergency services, postal services.
- Equipment status of orders and deliveries.

Obtain permission from the engineer a minimum of 48 hours prior to any construction schedule change.

### **Work Restrictions**

Comply with all local ordinances which apply to work operations, including those pertaining to work during night-time hours. Furnish any and all ordinance variances issued by the municipality or required permits to the engineer in writing three working days before performing such work. Night-time and weekend work will not be allowed without written approval from the engineer and the City of Milwaukee at least three days in advance of the planned work during night-time and weekend hours.

Do not store equipment, vehicles, or materials on adjacent streets beyond the project limits without specific approval from the engineer. Park and store equipment and material only at work sites approved by the engineer.

Complete all contract work in Stage 1 and Stage 2, as shown in the plans, excluding trees, shrubs, plants, and other landscaping prior to the interim completion date in 2025.

Add the following to standard spec 107.18 Environmental Protection:

Use equipment having vacuum or water-spray mechanisms to eliminate the dispersion of dust when performing roadway-cleaning operations. Provide suitable, self-contained particulate collectors, if vacuum equipment is used, to prevent discharge from collection bin into the atmosphere.

Store drums, buckets and other containers related to construction operations in a secure area to prevent vandalism, spills, and unwanted dumping. If an unfamiliar abandoned container is discovered on the project site, notify the WDNR at (800) 943-0003.

### **Protection of Endangered Bats (Tree Clearing) – Begin Project to Station 160+00**

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

Ensure all operators, employees, and subcontractors working in areas of known or presumed bat habitat are aware of environmental commitments and avoidance and minimization measures (AMMs) to protect both bats and their habitat.

Direct temporary lighting, if used, away from wooded areas during the bat active season April 1 to October 31, both dates inclusive.

The department has contracted with others and will perform the following operations after October 31 and prior to April 1:

- Cutting down and removing trees.

Contractor means and methods to remove additional trees will not be allowed. If it is determined that additional trees with a 3-inch or greater diameter at breast height (dbh) need to be removed beyond contractor means and methods, notify the engineer to coordinate with the WisDOT REC to determine if consultation with United States Fish and Wildlife Service (USFWS) is required. The contractor must be aware that the WisDOT REC and/or USFWS may not permit modifications.

### **Protection of Endangered Bats (Tree Clearing) – Station 160+00 to End Project**

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

Ensure all operators, employees, and subcontractors working in areas of known or presumed bat habitat are aware of environmental commitments and avoidance and minimization measures (AMMs) to protect both bats and their habitat.

Direct temporary lighting, if used, away from wooded areas during the bat active season April 1 to October 31, both dates inclusive.

To avoid adverse impacts upon the NLEBs, no tree clearing is allowed between April 1 and October 31, both dates inclusive. If the required tree clearing is not completed by March 31, the department will suspend all tree clearing and associated work directly impacted by clearing.

Tree clearing is limited to that which is specified in the plans. Contractor means and methods to remove additional trees will not be allowed. If it is determined that additional trees with a 3-inch or greater diameter at breast height (dbh) need to be removed beyond contractor means and methods, notify the engineer to coordinate with the WisDOT REC to determine if consultation with United States Fish and Wildlife Service (USFWS) is required. The contractor must be aware that the WisDOT REC and/or USFWS may not permit modifications.

Submit a schedule and description of clearing operations with the ECIP 14 days prior to any clearing operations. The department will determine, based on schedule and scope of work, what additional

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

#### **Tree Clearing – City of Milwaukee Notification**

Notify James Kringer, (414) 708-2428, of City of Milwaukee Forestry at least 14 days in advance of any tree clearing operations.

## **4. Traffic.**

### **A General**

#### **A.1 Traffic Control**

Undertake traffic control according to standard spec 643 and/or as approved by the engineer, except as hereinafter modified.

Conform to the construction staging as shown in the construction staging plans, unless the engineer approves modifications to the schedule in writing. Submit to the engineer for approval a detailed traffic control plan for any changes to the proposed traffic control detail as shown on the plans. Submit this plan ten days prior to the preconstruction conference.

Coordinate traffic requirements under this project with other adjacent department or local municipality projects. Contractor is responsible for implementing and coordinating with other contractors all traffic control shown in the plans. Modifications to the traffic control plan may be required by the engineer to be safe and consistent with adjacent work by others.

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

Provide proposed sequence of operations and methods of handling traffic. Submit revisions in traffic handling to the engineer for approval at least 48-hours in advance of making any changes in traffic operations.

Provide 24 hours-a-day availability of equipment and forces to expeditiously restore lights, signs, or other traffic control devices that are damaged or disturbed, in accord with standard spec 643.3.1(6). The cost to maintain and restore the above items shall be considered incidental to the item as bid and no additional payment will be made.

During all construction operations, maintain adequate turning provisions for vehicles, including buses and trucks, at the intersections that are to remain open.

Contractor to provide all posting of no parking restrictions, necessary to facilitate construction operations. Contact Cameron Potter at (414) 286-3276, three working days prior to the start of construction.

When an area of the roadway is temporarily closed to traffic, sign and delineate the portion of the roadway that is to remain open, according to Part 6 of the Manual on Uniform Traffic Control Devices (MUTCD), and the WisDOT manual titled "Guidelines for Construction, Maintenance, & Utility Operations".

Do not switch traffic to the next construction stage until all signing, pavement marking, traffic control devices for the stage are in place, conflicting pavement markings and signs are covered or removed, and as directed by the engineer.

#### **A.2 Traffic Control Signs PCMS**

Install Traffic Control Signs PCMS at the project ends to notify motorists of upcoming construction activities two weeks before the start of construction activities for Stages 1 and 3, and one week prior to beginning Stages 2 and 4 or prior to any detour. These timeframes may be adjusted by the engineer. Coordinate the locations of Traffic Control Signs PCMS with the engineer. Obtain acceptance from the engineer for all messages for all Traffic Control Signs PCMS.

#### **A.3 Signals and Lighting**

The project includes street lighting and traffic signals. Maintain existing traffic signals and functionality of the lighting system during the project with existing lighting or temporary lighting. Maintain existing traffic signals at each intersection until temporary traffic signals are in place and operating at that intersection.

Temporary signals shall include the relocation of street name signs at traffic signals to the temporary poles prior to removal of existing poles as directed by the engineer. The cost to relocate the street name signs at signalized intersections shall be considered incidental to item 643.5000, Traffic Control and no additional payment will be made.

## **B Construction Contact Information**

Designate an individual responsible for traffic control maintenance including access of local traffic, and 24-hour emergency traffic control repair. Provide the name and telephone number of this individual to the engineer.

Provide City of Milwaukee Police Department with a 24-hour emergency contact number for when traffic control maintenance is required.

In no case may any barricade, light, sign or other traffic control device be out of service for more than 2 hours. The cost to maintain and restore the above items is incidental to the bid item Traffic Control and no additional payment will be made.

Notify City of Milwaukee first responders (police, fire, EMS), Milwaukee County Sheriff's Department, engineer, Milwaukee Public Schools, garbage/recycling pick-up companies, and the post office a minimum of two weeks in advance of all traffic switches, lane closures, road closures, sidewalk closures, and detours. Notifications should be confirmed with all parties one week before implementation. Parties shall also be notified if a closure is cancelled.

Contacts for Milwaukee Public Schools are Mark Bethel, Manager of Construction, (414) 659-3857, [bethelmd@milwaukee.k12.wi.us](mailto:bethelmd@milwaukee.k12.wi.us), and Michelle Lenski, Department of Facilities & Maintenance, (414) 283-4702, [lenskimj@milwaukee.k12.wi.us](mailto:lenskimj@milwaukee.k12.wi.us).

Contact Milwaukee Fire Department Station 22, located at 8814 West Lisbon Avenue, a minimum of two weeks prior to construction, and throughout construction to coordinate work and fire department access.

## **C Vehicle Access**

All construction vehicles and equipment entering or leaving traffic lanes shall yield to through traffic.

Maintain emergency vehicular access at all times to roadways located within the project limits. In the event where emergency vehicles and equipment which provide fire, police, and rescue service for the public need access to properties, the contractor shall cooperate in accommodating emergency access.

Maintain vehicular access to all business and commercial properties at all times except as noted in the traffic control plans and specifications.

Provide access for mail service, utility meter reading and garbage pick-up.

## **D Driveway Construction/Access**

Local access to residences and businesses within the project area shall be maintained to the maximum extent possible. No residential or commercial drive approach shall be closed without sufficient notice given to the occupants of the premise to remove their vehicles prior to removal or closing of the drive approach access. Reasonable vehicular access (11' lane width on gravel, existing pavement, new pavement, or any combination thereof) to abutting residential locations shall be maintained at all times.

On-street parking will not be allowed within the work zone during construction.

Inform property owners at least 48 hours prior to removing a driveway approach that serves that property, including giving owners 48-hours to remove their vehicles prior to driveway removal or closing of the driveway approach access.

Driveway approach removal and replacement should be scheduled, so that the time lapse between the removal and replacement is:

- Seven days for normal strength concrete driveways.
- Three days for HES concrete driveways.
- 8 hours for SHES concrete driveways

Stage construction activities in order to maintain through vehicular access on West Lisbon Avenue according to the traffic control plans. The staging of work activities shall provide driveway access to local businesses at all times as specified below. Staging for driveway access shall include, but is not limited to, the following methods:

- Method A: HES Concrete Driveway  
Construct driveway with high early strength concrete (HES) on any day during the week and open to vehicular traffic on the third day after that. Contact property owners to make arrangements to pour driveways for access.
- Method B: Concrete Pavement Gap  
In order to provide continuous access to residential driveways pavement gaps or adequate bridging to support residents' vehicles shall be used. The access areas shall have ample width and length to accommodate turns from the residents' vehicles. Temporary vehicle access to the residential driveways may be provided with base aggregate as directed by the engineer. Include the cost for the base aggregate in the unit bid price for Base Aggregate Dense 1½-inch. Construct the pavement, curb and gutter and driveways at the pavement gaps with high early strength concrete (HES) and provide vehicular access of the paved portions soon after curing.
- Method C: Alternate Driveways  
Keep one driveway in place while the other is being constructed or open.
- Method D: Halves  
Construct driveway one half at a time.
- Method E: SHES Concrete Driveway  
Construct driveway with special high early strength concrete (SHES) on any day during the week and open to vehicular traffic on the next day after that. Contact property owners to make arrangements to pour driveways for access.

Driveway Construction Requirements:

ADDRESS	LOCATION	METHOD
9921 W Capitol Dr	103+06 Lt	A and D
9929 W Lisbon Ave	104+52 Rt	A and D
9921 W Capitol Dr	106+40 Lt	C
9857 W Lisbon Ave	106+37 Rt	B
9835 W Lisbon Ave	108+29 Rt	B
9810 W Lisbon Ave	109+35 Lt	B
9734 W Lisbon Ave	114+53 Lt	B
9333 W Lisbon Ave	126+50 and 126+92 Rt	A and C
9210 W Lisbon Ave	129+41 Lt	C
9210 W Lisbon Ave	14+79 'E' Lt	C
9201 W Lisbon Ave	131+94 Rt	A & D
9201 W Lisbon Ave	11+97 'E' Lt	A & D
3570 N 92nd St	14+75 'E' Rt	A & C
3570 N 92nd St	134+36 Lt	A & C
3800 N 92nd St	15+57 'E' Rt	B
9110 W Lisbon Ave	135+55 Lt	A, C, and D
9110 W Lisbon Ave	139+25 Lt	C
9034 W Lisbon Ave	140+10 Lt	A and C
9014 W Lisbon Ave	140+55 Lt	A and C
3609 N Tucker Pl	143+59 Lt	A and D
8814 W Lisbon Ave	147+54 Lt	D and E
8718 W Lisbon Ave	148+76 Lt	C

8712 W Lisbon Ave	150+09 Lt, 151+44 Lt, 11+00 'I'	A, C, and D
8520 W Lisbon Ave	157+02 Lt	C
8510 W Lisbon Ave	158+86 Lt	D
8436 W Lisbon Ave	159+38 Lt	A
8411 W Lisbon Ave	162+01 Rt	A
8401 W Lisbon Ave	12+02 'L' Lt	A and D
8341 W Lisbon Ave	11+55 'L' Rt, 165+08 Rt	A and C
3530 N 84th St	14+64 'L' Rt, 15+16'L' Rt	C
3441 N 84th St	14+85 'L' Lt	A and D
8340 W Lisbon Ave	164+91 Lt	C
8332 W Lisbon Ave	165+18 Lt	C
8325 W Lisbon Ave	165+42 Rt	C
8320 W Lisbon Ave	165+90 Lt	A
8302 W Lisbon Ave	165+91 Lt, 14+17'M' Lt	C
8221 W Lisbon Ave	170+19 Rt	B
8127 W Lisbon Ave	173+45 Lt	B
8000 W Lisbon Ave	178+91 Lt	B
7625 W Lisbon Ave	191+12 Rt, 10+68 'S' Rt	A and C
7602 W Lisbon Ave	191+85 Lt	C
7605 W Lisbon Ave	191+92 Rt	C
7515 W Lisbon Ave	194+64 Rt, 195+96 Rt	C
7505 W Lisbon Ave	196+62 Rt	B
3172 N 75th St	198+58 Rt	B
7425 W Lisbon Ave	199+31 Rt	B
7220 W Burleigh St	207+25 Rt	C
7210 W Burleigh St	208+18 Rt	B
7200 W Burleigh St	208+96 Rt	B
7170 W Burleigh St	209+24 Rt	A
7301 W Nash St	209+76 Lt	A and D
7127 W Lisbon Ave	213+15 Rt	A and D
7101 W Lisbon Ave	213+71 Rt	A and D
7110 W Lisbon Ave	214+26 Lt,	C
7110 W Lisbon Ave	215+20 Lt	A and D

#### **E Pedestrian Access**

Except where noted, keep all intersections accessible at all times, except during placing of concrete pavement and curing operations. Include any costs associated with staging operations at intersections that are to remain accessible at all times in the unit bid prices for Concrete Pavement, 8-Inch. Staging concrete paving operations in intersections will not be considered a pavement gap.

The sidewalk adjacent to the roadway pavement work must either remain in place through the duration and be replaced after, or be removed and replaced prior to undertaking the adjacent roadway pavement work to provide adequate pedestrian access while vehicular access to properties is restricted.

Maintain or provide where necessary, as directed by the engineer, pedestrian access to adjacent properties, businesses, recreation areas, and bus stops. Provide adequate temporary sidewalk and

bridging between the curb and the right-of-way line over freshly paved concrete or other obstructions on the sidewalk area at entrances to buildings or as directed by the engineer. The cost of bridging shall be included in the unit bid price for Concrete Sidewalk 5-Inch.

Removal and replacement of sidewalk should be scheduled, so that the time lapse between the removal and replacement is minimal. Provide temporary sidewalk, when deemed necessary, or when directed by the engineer.

Once concrete sidewalks are poured, take necessary precautions to preserve the condition of the new concrete items. Any pavement or sidewalk that is damaged shall be replaced at the contractor's expense.

The contractor may make other arrangements with individual businesses prior to construction. The arrangement must be in writing, signed by the contractor and business owner, and approved by the construction engineer.

## **F Definitions**

The following definitions shall apply to this contract:

### **Night-Time Periods**

- 9:00 PM to 7:00 AM Monday, Tuesday, Wednesday, Thursday, and Friday

### **Weekend Periods**

- 9:00 PM Friday to 7:00 AM Monday

## **G Traffic Control Description**

West Lisbon Avenue will be constructed in four stages, as listed below and as shown in the plans. Construct sidewalk and curb ramps as shown in the plans to provide for temporary pedestrian access. Complete landscape plantings and care cycles as indicated in the article Prosecution and Progress.

### **Stage 1 – Westbound Construction North 100<sup>th</sup> Street to North 86<sup>th</sup> Street**

At the beginning of Stage 1, construct a thin asphalt overlay on the eastbound lanes of West Lisbon Avenue from North 100<sup>th</sup> Street to North 84<sup>th</sup> Street. Keep West Lisbon Avenue open to two lanes of traffic westbound and one lane of traffic eastbound while placing the overlay.

To complete work on West Lisbon Avenue between the begin project limits and approximately Station 104+90 as shown in the plans, close West Lisbon Avenue to all traffic between North 100<sup>th</sup> Street and North 98<sup>th</sup> Street. A posted detour is not anticipated.

Construct crossovers as shown in the plans and place one lane of eastbound traffic and one lane of westbound traffic on the existing eastbound lanes of West Lisbon Avenue. Reconstruct the westbound side of West Lisbon Avenue. Complete all work on the westbound side except for landscape plantings. Place and cover the detour route signage for Stage 2 until detour signs are needed.

### **Stage 2 – Eastbound Construction North 100<sup>th</sup> Street to North 86<sup>th</sup> Street**

At the beginning of Stage 2, close eastbound West Lisbon Avenue from the begin project to North 86<sup>th</sup> Street. Place one lane of westbound traffic on the newly reconstructed westbound side of West Lisbon Avenue. Detour eastbound traffic via STH 190 (West Capitol Drive) and STH 175 (West Appleton Avenue). Reconstruct the eastbound side of West Lisbon Avenue. Complete all work on the eastbound side except for landscape plantings.

To facilitate storm sewer work on West Lisbon Avenue between North 76<sup>th</sup> Street and West Burleigh Street, close West Lisbon Avenue eastbound from North 76<sup>th</sup> Street to West Burleigh Street for a maximum of 7 calendar days. Construct the portions of storm sewer from North 76<sup>th</sup> Street to West Burleigh Street, and restore temporary pavement and other restoration, as shown in the plans. Construct this work while West Lisbon Avenue eastbound is detoured via STH 190 (West Capitol Drive) and STH 175 (West Appleton Avenue).

### **Stage 3 – Westbound Construction North 86<sup>th</sup> Street to West Burleigh Street**

At the beginning of Stage 3, construct a thin asphalt overlay on the eastbound lanes of West Lisbon Avenue from North 84<sup>th</sup> Street to West Burleigh Street. Keep West Lisbon Avenue open to two lanes of traffic westbound and one lane of traffic eastbound while placing the overlay.

Construct crossovers as shown in the plans and place one lane of eastbound traffic and one lane of westbound traffic on the existing eastbound lanes of West Lisbon Avenue. Reconstruct the

westbound side of West Lisbon Avenue. Complete all work on the westbound side. Maintain one lane of traffic on North 76th Street and West Burleigh Street in both directions at all times.

#### **Stage 4 – Eastbound Construction North 86<sup>th</sup> Street to West Burleigh Street**

At the beginning of Stage 4, close eastbound West Lisbon Avenue from North 86th St to the end project limits. Place one lane of westbound traffic on the newly reconstructed westbound side of West Lisbon Avenue. Detour eastbound traffic via STH 190 (West Capitol Drive) and STH 175 (West Appleton Avenue). Reconstruct the eastbound side of West Lisbon Avenue. Complete all work on the eastbound side. Maintain one lane of traffic on North 76th Street and West Burleigh Street in both directions at all times.

### **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 West Lisbon Avenue traffic and all adjoining side street traffic, and entirely clear the traveled way and shoulders of such portions of the highway of equipment, barricades, signs, lights, and any other material that might impede the free flow of traffic during the following holiday and special event periods:

- From noon Friday, May 23, 2025 to 6:00 AM Tuesday, May 27, 2025 for Memorial Day;
- From noon Thursday, July 3, 2025 to 6:00 AM Monday, July 7, 2025 for Independence Day;
- From noon Friday, August 29, 2025 to 6:00 AM Tuesday, September 2, 2025 for Labor Day;
- From noon Wednesday, November 26, 2025 to 6:00 AM Monday, December 1, 2025 for Thanksgiving;
- From noon Friday, May 22, 2026 to 6:00 AM Tuesday, May 26, 2026 for Memorial Day;
- From noon Thursday, July 2, 2026 to 6:00 AM Monday, July 6, 2026 for Independence Day;
- From noon Friday, September 4, 2026 to 6:00 AM Tuesday, September 8, 2026 for Labor Day;
- From noon Wednesday, November 25, 2026 to 6:00 AM Monday, November 30, 2026 for Thanksgiving.

stp-107-005 (20210113)

### **6. Utilities.**

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

The utility work plan includes additional detailed information regarding the location of known discontinued, relocated, or removed utility facilities. These can be requested from the department during the bid preparation process or from the project engineer after the contract has been awarded and executed.

Some of the utility work described below is dependent on prior work being performed by the contractor at a specific site. In such situations, provide the engineer and the affected utility a good faith notice of when the utility is to start work at the site. Provide this notice 14 to 16 calendar days in advance of when the prior work will be completed and the site will be available to the utility. Follow-up with a confirmation notice to the engineer and the utility not less than 3 working days before the site will be ready for the utility to begin its work.

Any utility facility locations (stations, offsets, elevations, depths) listed in this article are approximate.

stp-107-066 (20240703)

**AT&T Distribution** has underground lines running along W Lisbon Avenue from Station 100+00 to 109+30 and Station 138+88 to 163+35. They also have lines crossing W Lisbon Avenue at Station 138+88, 146+98, 152+50, 157+00, and 158+73. They also have underground lines running along N 84<sup>th</sup> Street from Station 14+00"L" – 16+00"L", N 76<sup>th</sup> Street from Station 10+00"T" – 20+00"T", and W Burleigh Street from Station 105+00"V" – 122+50"V".

Prior to Stage 1 construction, AT&T Distribution will pothole and verify facility depths at Station 155+42 and Station 162+93 and adjust facilities that are in conflict prior to construction.

Prior to Stage 2 construction, AT&T Distribution will discontinue their manhole at Station 163+27, remove the roof, break down walls, break up floor, and fill with slurry.

During construction, AT&T will adjust manholes at the following locations so that the roof is in subgrade:

- Station 138+87, 11' LT

- Station 146+89, 8' LT
- Station 152+48, 11' LT
- Station 157+10, 12' LT

Contact AT&T Distribution prior to removing the roadway at these manhole locations. AT&T Distribution will remove the frame and cover, plate the manhole opening and backfill with gravel. During grading operations, AT&T will complete any collar adjustments to match the final grade. AT&T will adjust the frame and cover, and tuck point.

AT&T Distribution duct packages are anticipated to contain transite (asbestos). When transite is discovered, contact AT&T Distribution. AT&T Distribution will subcontract the transite abatement to an on-call subcontractor. Any abatement work is anticipated to take 2 days.

AT&T Distribution's duct package to the fire station at Station 147+28 LT is co-located with the City of Milwaukee's CUC duct package, and the AT&T Distribution ducts are anticipated to include transite. Contact AT&T Distribution prior to working in the area of the ducts. AT&T's cables in the duct will need to remain active during the work. Use methods to remove the concrete encasement and keep the AT&T Distribution cables active. Sawing AT&T Distribution's ducts will not be allowed. Upon exposing AT&T Distribution's ducts, contact AT&T Distribution again and AT&T Distribution will subcontract the transite abatement to an on-call subcontractor. The abatement work is anticipated to take 2 days.

### **City of Milwaukee, Communications**

The City of Milwaukee Communications operates communications underground facilities within the project limits. Furnish and install fiber optic cable within City of Milwaukee City Underground Conduit as shown in the plans and in the bid items for this project. City of Milwaukee Communications will install and operate temporarily alternate or wireless communications prior to and during construction.

City of Milwaukee communications has active fiber optic cables from 8814 W Lisbon Avenue to W Burleigh Street. Systems served by fiber optic cables are to remain active during construction. For this portion of the project, install new conduit and fiber optic cable as part of the project prior to impacting and discontinuing the existing fiber optic cables. At 8814 W Lisbon Avenue, City forces will pull back fiber optic cables from this conduit so that the existing conduit may be attached to new conduit. All remaining materials in the conduit will be discontinued in place.

In addition to the utility facilities shown in the plans, City of Milwaukee communication has active fiber optic cables in conduit along the east side of N Ripon Place from W Lisbon Avenue to W Townsend Street. Prior to construction start, City forces will pull back fiber optic cables from this conduit. All remaining materials in the conduit will be discontinued in place.

City of Milwaukee has fiber optic cables in conduit and direct-buried from W Lisbon Avenue & N 76<sup>th</sup> Street to Milwaukee Water Works underground facility in the median at 7525 W Lisbon Avenue. These materials will need to remain active for the duration of the project. Placement of the signal pole in the median to the east of N 76<sup>th</sup> Street will require a Utility Line Opening in the area around the placement of the pole and coordination with City forces to move the cable out of conflict with the pole by moving cable slack while it is still active.

City of Milwaukee Communications has call boxes within the project limits that are in conflict with the project. Prior to the start of construction, the City will remove call boxes at the following locations:

- Southwest corner of W Lisbon Avenue & N 97<sup>th</sup> Street
- Southeast corner of W Lisbon Avenue and N 92<sup>nd</sup> Street
- Southeast corner of W Lisbon Avenue and N 88<sup>th</sup> Street
- Southeast corner of W Lisbon Avenue and N 84<sup>th</sup> Street
- Southwest corner of W Lisbon Avenue and N 78<sup>th</sup> Street

Contact Communication Dispatch at (414) 286-3686 prior to performing operations which disconnect or remove existing facilities to confirm the facilities are not active communications lines.

### **City of Milwaukee, CUC (City Underground Conduit)**

The City of Milwaukee CUC has facilities within the project limits. Construct, adjust, and remove CUC facilities as shown in the plans and in the bid items for this project.

The existing City of Milwaukee CUC duct package and the existing AT&T Distribution duct package to the fire station at Station 147+28 LT are co-located, and the AT&T Distribution ducts are anticipated to include transite (asbestos).

### **City of Milwaukee, Forestry**

The City of Milwaukee has irrigation within the existing medians throughout the project. All existing and new tap locations will be marked by the City with a blue stake prior to the start of construction. The City will relocate their taps within the project limits prior to each phase of construction. Water tap adjustments on W Lisbon Avenue from N 100<sup>th</sup> Street to N 84<sup>th</sup> Street will be completed by October 31, 2024. Water tap adjustments on W Lisbon Avenue from N 84<sup>th</sup> Street to W Burleigh Street are anticipated to take 35 working days and will be completed by October 31, 2025. The City of Milwaukee Forestry's water service for the medians will continue to function through 2025 from North 84<sup>th</sup> Street to West Burleigh Street. All signature beds from N 84<sup>th</sup> Street to W Burleigh Street will continue to be serviced.

### **City of Milwaukee, Sewers**

City of Milwaukee Sewers has sanitary sewer facilities within the project limits. Adjust sanitary sewer facilities as shown in the plans and in the bid items for the project.

### **City of Milwaukee, Water Works**

The City of Milwaukee has existing watermain running along W Lisbon Avenue from Station 101+21 – 215+18 LT and Station 102+61 – 215+18 RT. They also have underground lines crossing W Lisbon Avenue at Stations 102+67, 103+65, 110+99, 111+36, 126+08, 132+66, 138+92, 146+82, 157+04, 163+90, 171+93, 176+06, 179+20, 182+59, 186+52, 193+07, 201+28, 208+94, 211+47, and 212+46.

The City has existing watermain running along N 92<sup>nd</sup> Street from Station 10+00"E" – 17+09"E", N 84<sup>th</sup> Street from Station 11+16"L" – 16+00"L", N 76<sup>th</sup> Street from Station 10+00"T" – 20+00"T", and W Burleigh Street from Station 105+00"V" – 122+50"V".

In addition to the watermain facilities shown in plans, the following City water facilities exist:

- Water Valves:
  - Station 102+92, 31' RT
  - Station 168+12, 64' RT
  - Station 179+29, 37' LT
- Hydrant Valves:
  - Station 143+17, 38' RT
  - Station 153+69, 41' RT
  - Station 161+28, 26' LT
- Hydrants
  - N 98<sup>th</sup> Street 10+85"B" RT
- Water Main
  - East side of N 98<sup>th</sup> Street south of W Lisbon Avenue

The City of Milwaukee will replace lead service lines at the following locations:

- W Lisbon Avenue
  - Station 188+00 RT
  - Station 203+24 RT
  - Station 203+58 RT
  - Station 203+97 RT
  - Station 204+33 RT
  - Station 204+68 RT
  - Station 205+20 RT
  - Station 205+57 RT

- Station 205+93 RT
- Station 213+00
- Station 111+00"V"

The City of Milwaukee will relocate hydrants at the following locations:

- W Lisbon Avenue
  - Station 117+50 RT
  - Station 132+90 RT
  - Station 133+25 LT
  - Station 147+05 RT
  - Station 151+75 LT
  - Station 153+75 RT
  - Station 157+25 LT
  - Station 163+90 LT
  - Station 164+10 RT
  - Station 168+65 RT
  - Station 172+33 RT
  - Station 176+10 RT
  - Station 179+60 RT
  - Station 182+55 LT
  - Station 183+40 RT
  - Station 186+55 LT
  - Station 186+80 RT
  - Station 189+00 LT
  - Station 190+30 RT
  - Station 193+85 LT
  - Station 196+21 RT
  - Station 201+51 RT
  - Station 211+25 LT

The City of Milwaukee will install water main insulation at the following locations:

- W Lisbon Avenue:
  - Station 109+00 – 112+40 LT
  - Station 117+50 – 118+00 LT
  - Station 121+50 – 122+50 LT
  - Station 122+50 – 124+00 RT
  - Station 128+00 – 130+50 LT
  - Station 130+50 – 132+50 LT
  - Station 130+50 – 132+75 RT
  - Station 133+75 – 135+50 LT
  - Station 133+80 – 136+00 RT
  - Station 156+00 – 160+50 RT
  - Station 167+50 – 168+00 LT

- Station 168+00 – 168+50 RT
- Station 187+00 – 187+75 LT
- N 92<sup>nd</sup> Street:
  - Station 11+50 – 11+80 RT
  - Station 13+50 – 14+50 RT
  - Station 14+00 – 14+75 LT
- N 92<sup>nd</sup> Street NE Corner:
  - Station 1+40 – 1+90
- N 92<sup>nd</sup> Street NW Corner
  - Station 0+10 – 0+55
  - Station 1+25 – 1+75
- N 92<sup>nd</sup> Street SE Corner
  - Station 0+00 – 1+30
- N 92<sup>nd</sup> Street SW Corner
  - Station 1+50 – 2+00
- N 92<sup>nd</sup> Street Roundabout Center Circle
  - Station 0+50 – 2+50

The City of Milwaukee will replace lead service lines, relocate hydrants, and install water main insulation as noted above beginning March 15, 2025, and the work is anticipated to take 35 working days to complete. The portion of the work from North 100th Street to North 86th Street is anticipated to be completed by March 31, 2025.

Adjust water valve boxes and water manholes to match the new finished pavement elevations using bid items in the contract.

Install water main protection at drainage structures as shown in the plans using the project bid items.

**Crown Castle Fiber LLC** has underground lines crossing W Lisbon Avenue at Station 101+25. No conflicts are anticipated.

**Everstream** has underground lines running along W Lisbon Avenue from Station 133+30 – 138+50 LT and Station 138+54 – 219+22 RT. They also have crossings under W Lisbon Avenue at Stations 138+50, 147+00, and 189+35. Everstream also has underground lines running along the west side of N 77<sup>th</sup> Street from Station 11+20"S" – 13+27"S".

During construction, Everstream will relocate their existing handholes at the following locations that are in conflict

- Station 179+00
- Station 189+41
- Station 193+01
- Station 194+12
- Station 200+98

Contact Everstream before sidewalk work begins. Everstream's contractor will work alongside the roadway contractor upon hard surface removal to relocate facilities. Everstream anticipates this work will one working day to complete per location.

**MCI Communications** has underground lines running along W Lisbon Avenue from Stations 133+35 – 146+35 LT, 153+63 – 154+18 RT, and 154+18 – 154+95 LT. They also have underground lines crossing W Lisbon Avenue at Stations 141+19, 154+18, and 162+65. MCI Communications also has facilities that run along N 92<sup>nd</sup> Street from 10+18"E" – 14+02"E", and 14+45"E" – 17+05"E".

During construction, MCI Communications will adjust handholes at Station 162+89, 65' LT and Station 164+20, 64' LT. Contact MCI Communications before sidewalk work begins. MCI Communications anticipates this work will require one working day to complete.

**Milwaukee Metro Sewerage District** has a 42-inch line running along the south side of W Burleigh Street crossing W Lisbon Avenue. No conflicts are anticipated.

**Spectrum** has underground lines crossing W Lisbon Avenue at Stations 126+04, 146+35, and 146+56. They also have underground lines along the north side of W Lisbon Avenue from Station 213+32 – 216+28 LT. In addition, Spectrum has one overhead line that crosses W Lisbon Avenue from Station 216+28 – 216+74. No conflicts are anticipated.

**Verizon Wireless** has small cell towers along W Lisbon Avenue and N 92<sup>nd</sup> Street at Stations 16"E"+70, 140+80, 154+40, and 162+75.

At Station 16"E"+70, the concrete base is anticipated to be exposed, and Verizon Wireless will coordinate with the roadway contractor during construction.

At Station 140+80, the concrete base is anticipated to be exposed during grading, and Verizon Wireless will coordinate with the roadway contractor during construction and Verizon Wireless will replace the concrete base. A temporary pole is anticipated, and Verizon Wireless will install the pole.

At Station 154+40, the concrete base is anticipated to be exposed during grading, and Verizon Wireless will coordinate with the roadway contractor during construction and Verizon Wireless will replace the concrete base.

At Station 162+75, Verizon Wireless will decommission existing equipment on the pole prior to construction. They will place new facilities after the roundabout is completed.

Contact Verizon Wireless six weeks prior to when grading around the existing poles will occur. Verizon Wireless will need three weeks to place new bases and move poles.

**WE Energies – Electric** has underground electric lines running along W Lisbon Avenue from Stations 101+22 – 106+75 LT, 167+22 – 167+74 LT, 192+43 – 193+36 LT, and 212+63 – 216+19 LT. They also have underground lines crossing W Lisbon Avenue at Stations 102+51, 116+45, 133+21, 138+72, 147+03, 163+67, 182+88, 189+47, 193+48, 193+99, 212+83, and 213+82.

WE Energies – Electric has underground electric lines running along N 92<sup>nd</sup> Street from Station 10+00"E" – 17+09"E", N 84<sup>th</sup> Street from Station 11+16"L" – 16+00"L", N 76<sup>th</sup> Street from Station 10+00"T" – 20+00"T", and W Burleigh Street from Station 105+00"V" – 112+00"V".

WE Energies – Electric also has overhead facilities running along W Lisbon Avenue from Station 209+80 – 210+25 RT. They also have overhead facilities crossing W Lisbon Avenue at Station 213+45.

Prior to 2025 construction, WE Energies – Electric will lower their manholes at Station 106+50 and 133+00. They will also install protection on top of their existing duct package from their manhole at Station 133+00 to 25' south of the manhole. This work will take 40 working days prior to construction.

During 2025 construction, WE Energies – Electric will adjust seven manhole chimneys. This work is anticipated to take 14 working days to complete.

Prior to 2026 construction, WE Energies – Electric will make the following adjustments to their facilities:

- Relocate unoccupied duct packages running north & south from their manhole at Station 163+50.
- Lower facilities near Station 194+00.
- Lower manhole at Station 189+50.
- Rebuild the manhole roof at Station 163+75 to relocate the chimney out of the proposed curb line.

This work is anticipated to take 50 working days prior to construction to complete.

During 2026 construction, WE Energies – Electric will also adjust seven manhole chimneys. This work is anticipated to take 14 working days to complete.

Contact WE Energies – Electric prior to the work site being available for each location of relocation or adjustment work. Contact Tara Blecher, (414) 540-5784, before the cover adjustments are needed.

**WE Energies – Gas** has underground gas lines running along W Lisbon Avenue from Stations 103+67 – 132+74 RT, 106+90 – 132+11 LT, 133+39 – 192+47 LT, 135+00 – 193+00 RT, 195+82 – 206+10 RT, and 211+43 – 215+18 RT. They also have underground gas lines crossing W Lisbon Avenue at Stations 103+67, 106+89, 132+51, 133+23, 146+88, 182+90, 189+48, 193+52, 203+99, 211+67, and 212+57.

WE Energies – Gas has underground gas lines running along N 92<sup>nd</sup> Street from Station 10+00"E" – 17+09"E", N 84<sup>th</sup> Street from Station 10+00"L" – 16+00"L", N 76<sup>th</sup> Street from Station 10+00"T" – 20+00"T", and W Burleigh Street from Station 105+00"V" – 122+00"V".

WE Energies – Gas will install gas mains at the following locations prior to the start of roadway construction. All facilities are 36" deep unless otherwise noted:

- 4" & 2" PE Distribution Main:
  - W Lisbon Ave from N 91st Street to N 81<sup>st</sup> Street
  - Station 138+75 238'RT – Station 138+50 238'RT
  - Station 138+50 238'RT – Station 138+50 204'RT
  - Station 138+50 204'RT – Station 146+42 204'RT
  - Station 146+42 204'RT – Station 146+42 186'RT
  - Station 146+42 186'RT – Station 148+27 186' RT
  - Station 148+27 186' RT – Station 149+04 142' RT
  - Station 149+04 142' RT – Station 149+52 111' RT (42" depth curb to curb)
  - Station 149+24 51'RT – Station 149+25 55'RT
  - Station 149+25 55'RT – Station 153+03 54'RT
  - Station 153+03 54'RT – Station 153+03 82'RT
  - Station 153+03 82'RT – Station 153+03 85' RT
  - Station 153+03 85'RT – Station 153+19 85'RT
  - Station 153+03 85'RT – Station 153+62 71'RT
  - Station 153+63 71'RT – Station 153+65 51'RT
  - Station 153+63 51'RT – Station 155+00 51'RT
  - Station 155+00 51'RT – Station 156+70 53'RT
  - Station 156+70 53'RT – Station 156+70 69' RT
  - Station 156+70 69'RT – Station 156+70 77'RT
  - Station 156+70 77'RT – Station 156+92 87'RT
  - Station 156+70 69' RT – Station 157+20 69'RT (42" depth curb to curb)
  - Station 157+20 69'RT – Station 157+20 55'RT
  - Station 157+20 55'RT – Station 163+35 55 'RT
  - Station 164+32 53'RT – Station 166+00 53'RT
  - Station 166+00 53'RT – Station 167+75 54'RT
  - Station 167+75 54'RT – Station 167+75 65'RT
  - Station 167+75 65'RT – Station 167+75 69'RT
  - Station 167+75 69'RT – Station 167+90 69'RT
  - Station 167+75 65'RT – Station 168+30 65'RT
  - Station 168+30 65' RT – Station 168+30 54'RT
  - Station 168+30 54'RT – Station 171+11 53'RT
  - Station 171+11 53'RT – Station 171+34 59'RT
  - Station 171+34 59'RT – Station 171+34 73'RT
  - Station 171+34 73'RT – Station 171+34 92'RT
  - Station 171+34 92'RT – Station 171+58 92'RT
  - Station 171+34 73'RT – Station 172+30 73'RT
  - Station 172+30 73'RT – Station 172+30 54'RT
  - Station 172+30 54'RT – Station 175+36 54'RT

- Station 175+36 54'RT – Station 175+36 71'RT
- Station 175+36 71'RT – Station 175+36 80'RT
- Station 175+36 80'RT – Station 175+70 80'RT
- Station 175+36 71'RT – Station 176+20 64'RT
- Station 176+20 54'RT – Station 176+45 53'RT
- Station 176+45 53'RT – Station 176+45 43'RT
- Station 9+90 14'LT – Station 9+90 27'LT
- Station 9+90 27'LT – Station 10+20 27'LT
- Station 10+25 29'RT – Station 10+84 29'RT
- Station 10+84 29'RT – Station 10+97 33' RT
- Station 12+92 42'LT – Station 12+40 42'LT
- Station 12+40 42'LT (42" depth) – Station 12+21 42'LT
- Station 12+21 42'LT(42" depth) – Station 12+21 LT 7'LT
- Station 12+40 43'LT(42" depth) – 43' RT (42" depth) (Tee to Ell) (92<sup>nd</sup> Street Crossing) (48" depth curb to curb)
- Station 12+40 43'RT(42" depth) – Station 12+62 46'RT
- Station 155+65 57'LT – 113' LT
- Station 155+65 113'LT – Station 155+75 113'LT
- Station 155+65 57'LT – Station 162+85 57'LT
- Station 163+75 57'LT (48" depth) – Station 165+65 52'LT (36" depth)
- Station 165+65 52'LT – Station 167+74 56' LT (48" depth)
- Station 167+74 56' LT (48" depth) – Station 168+22 56'LT (54" depth)
- Station 168+22 56'LT (54" depth) – Station 168+75 56'LT (36" depth)
- Station 168+75 56'LT – Station 175+25 57'LT
- Station 175+25 57'LT – Station 175+78 57'LT (42" min depth curb to curb)
- Station 175+78 57'LT – Station 176+25 57' LT
- Station 176+25 57' LT – Station 182+50 57' LT
- Station 182+50 57' LT– Station 182+81 57' LT (42" min depth curb to curb)
- Station 182+81 57' LT – Station 183+17 56' LT (36" depth)
- Station 183+16 56' LT – Station 183+08 76' LT
- Station 183+08 76' LT – Station 182+95 69' LT (48" depth)
- Station 183+16 56' LT – Station 185+84' LT 57' LT
- Station 185+84' LT 57' – Station 185+78' LT 56' LT
- Station 185+78' LT 56' LT – Station 186+27' LT 92' LT (42" min depth curb to curb in N 78th Street)
- Station 186+27' LT 92' LT – Station 186+44' LT 57' LT
- Station 186+44' LT 57' LT – Station 189+15' 67'LT
- Station 189+15' 67'LT – Station 189+06' LT 79' LT
- Station 189+06' LT 79' LT – Station 189+18' LT 94' LT(Match)
- Station 189+15' 67'LT – Station 192+40' LT 57' LT
- Station 15+50 54'LT– Station 16+02 50'LT
- Station 16+02 50'LT– Station 17+77 54'LT

- Station 17+77 54'LT – Station 17+77 57'LT
- Station 14+23 42'LT– Station 14+52 32'LT
- Station 14+52 32'LT– 41'RT (42" min depth curb to curb in N 84th Street)
- Station 14+50 42'RT – Station 16+15 42'RT
- Station 13+84 42'RT (48"depth) – Station 14+50 42'RT
- 9921 W Capital Dr - Station 103+59 (42" depth min in road)
- Station 103+59 13'LT -68" AT proposed CUC
- Station 106+57 59'RT – 58'LT (42" depth)
- Station 106+55 58'LT – 106+93 58'LT
- Station 106+57 13'LT -80" AT proposed CUC
- Station 11+02 39'LT – 29'LT
- Station 11+02 29'LT – Station 10+80 29'LT
- Station 10+80 29'LT – 28'RT (42" depth in road)
- Station 10+80 29'RT – Station 11+02 29'RT
- Station 11+02 29'RT – 39'RT
- Station 116+87 59'RT – Station 116+87 56'RT
- Station 116+87 56'RT – Station 117+57 56'RT
- Station 117+57 56'RT – Station 117+57 59'RT
- Station 117+35 56'RT – 60" AT proposed storm sewer
- Station 117+57 56'RT – 68" AT proposed CU
- 6" PE Distribution Main and Service Replacement:
  - Station 127+35 42'RT – Station 129+50 40'RT
  - Station 129+50 40'RT – Station 131+00 40'RT
  - Station 131+00 40'RT – Station 131+50 41'RT
  - Station 131+50 41'RT– Station 132+44 41'RT
  - Station 132+38 41'RT – Station 132+85 62'RT
  - Station 132+85 62'RT – Station 132+85 72'RT
  - Station 131+53 42'RT – 56'LT 60" MIN IN ROAD
  - Station 131+53 15'LT -108" AT proposed CUC
  - Station 131+65 59'LT – Station 131+50 56'LT
  - Station 131+53 56'LT – Station 132+07 58'LT
  - Station 132+07 58'LT– Station 132+16 65'LT
  - Station 13+80E 52'LT – Station 14+03E 54'LT
  - Station 14+03E 52'LT – Station 14+27E 54'LT
  - Station 14+27E 54'LT – Station 14+27E 51'LT
  - Station 14+03E 52'LT – 54'RT 60" MIN IN ROAD
  - Station 14+03E 13' RT -96" AT proposed CUC
- 8" PE Distribution Main, 2" PE & 1 1/4" PE Main and Service Replacement:
  - Station 204+00 68'LT – Station 204+05 55'RT – 60" MIN IN ROAD
  - Station 204+02 18' LT - 84" AT proposed CUC
  - Station 214+20 35'RT – Station 214+20 40'RT

- Station 214+20 40'RT – Station 211+97 44'RT
- Station 108+68"V" 24'LT (42" depth) – Station 108+68"V" 41'RT (42" depth)
- Station 108+68"V" 24'LT (42" depth) – Station 109+65"V" 41'LT (42" depth)
- Station 109+65"V" 41'LT – 66' RT (42" depth min)
- Station 109+65"V" 66' RT – Station 111+75"V" 66' RT
- Station 109+65"V" 66' RT- 99' RT
- Station 109+18"V" 99' RT- Station 109+65"V" 66' RT-99' RT (42" depth min).

We Energies has multiple locations where valve box adjustments are required during time of construction.

- Location 1: Valve box V24448 located at 15.0 NN LL W Lisbon Ave – 2.0 E W LL N 98<sup>th</sup> St
- Location 2: Valve box V24453 located at 4.0 W E LL W Willis Pl – 3.0 N N LL W Lisbon Ave
- Location 3: Valve box V24480 located at 1.0 S S LL W Lisbon Ave – 3.0 W E LL N Willis Pl
- Location 4: Valve box V24444 located at 15.0 S S LL W Lisbon Ave - 6.0 E W LL N 92<sup>nd</sup> St
- Location 5: Valve box V24446 located at 1.0 S N LL W Lisbon Ave – 15.0 E E LL N 92<sup>nd</sup> St
- Location 6: Valve box V23668 located at 13.0 S S LL W Lisbon Ave – 1.0 E W LL 80TH ST
- Location 7: Valve box V07702 located at 17.0 E W LL N 79<sup>th</sup> St – 15 N S LL W Lisbon Ave
- Location 8: Valve box V07703 located at 15.0 N S LL W Lisbon Ave – 22.0 E W LL N 78<sup>th</sup> St
- Location 9: Valve box V07704 located at 15.0 N S LL W Lisbon Ave – 23.0 E W LL N 77<sup>th</sup> St
- Location 10: Valve box V07200 located at 18.0 NE SW COR LL W Lisbon Ave – 71.0 N S LL W Burleigh St
- Location 11: Valve box V07201 located at 1.0 W W LL W Lisbon Ave 13.0 N S LL W Burleigh St
- Location 12: Valve box V24597 located at 7.0 N N LL W Lisbon Ave – 2.0 W E LL N 87<sup>th</sup> St
- Location 13: Valve box V24453 located at 4.0 W E LL W WILLIS PL – 3.0 N N LL W Lisbon Ave
- Location 14: Valve box V24479 located at 50.0 S S LL W Lisbon Ave – 2.0 E W LL N 100<sup>th</sup> St

The abbreviations above are defined as:

- N-North
- E-East
- S-South
- W-West
- LL-Lot Line

For example, "15.0 NN LL" represents "15' north of north lot line".

The following We Energies gas facilities will be discontinued and left in place in the project area:

- W Lisbon Avenue
  - Station. 138+66 43'RT – Station. 138+66 81'RT
  - Station. 138+66 43'RT – Station. 142+00 41'RT
  - Station. 142+00 41'RT – Station. 146+50 41'RT
  - Station. 146+62 41'RT – Station. 146+62 76'RT
  - Station. 146+50 41'RT – Station. 148+70 41'RT
  - Station. 146+70 41'RT – Station. 148+70 70'RT
  - Station. 146+70 41'RT – Station. 153+17 41'RT

- Station. 153+17 41'RT – Station. 153+17 65'RT
- Station. 153+17 41'RT – Station. 156+92 43'RT
- Station. 156+92 43'RT – Station. 156+92 65'RT
- Station. 156+92 43'RT – Station. 160+00 43'RT
- Station. 160+00 43'RT – Station. 163+70 42'RT
- Station. 163+70 42'RT – Station. 163+70 65'RT
- Station. 163+70 42'RT – Station. 167+00 41'RT
- Station. 167+00 41'RT – Station. 167+90 44'RT
- Station. 167+90 44'RT – Station. 167+90 70'RT
- Station. 167+90 44'RT – Station. 171+00 42'RT
- Station. 171+00 42'RT – Station. 171+59 42'RT
- Station. 171+59 42'RT – Station. 171+59 60'RT
- Station. 171+59 42'RT – Station. 175+00 40'RT
- Station. 175+00 40'RT – Station. 175+69 45'RT
- Station. 175+69 45'RT – Station. 175+69 65'RT
- Station. 155+70 115'LT – Station. 156+00 42'LT
- Station. 156+00 42'LT – Station. 162+00 41'LT
- Station. 162+00 41'LT – Station. 163+66 41'LT
- Station. 163+66 41'LT – Station. 163+66 55'LT N 84th St
- Station. 163+66 41'LT – Station. 166+00 42'LT
- Station. 166+00 42'LT – Station. 170+00 41'LT
- Station. 170+00 41'LT – Station. 176+00 41'LT
- Station. 176+00 41'LT – Station. 181+00 40'LT
- Station. 181+00 40'LT – Station. 183+05 42'LT
- Station. 183+05 42'LT – Station. 183+05 56'LT N 79th St
- Station. 183+05 42'LT – Station. 185+00 43'LT
- Station. 185+00 43'LT – Station. 186+00 58'LT
- Station. 186+00 58'LT – Station. 186+00 78'LT N 78th St
- Station. 186+00 58'LT – Station. 188+00 42'LT
- Station. 188+00 42'LT – Station. 189+37 41'LT
- Station. 189+37 41'LT – Station. 189+37 90'LT N 77th St
- Station. 189+37 41'LT – Station. 191+00 39'LT
- Station. 191+00 39'LT – Station. 192+50 41'LT
- Station. 192+50 41'LT – Station. 192+50 72'LT N 76th St
- Station 15+50 57'LT – Station 17+77 57'LT
- N 77TH St
  - Station 12+13 12'LT – Station 12+59 12'LT
- N 78TH St
  - Station 12+29 12'LT – Station 12+62 11'LT
- N 79TH St
  - Station 12+00 7'RT – Station 12+36 10'RT

- N 84TH St
  - Station 13+77 25'RT – Station 14+63 26'RT
- N 97TH St
  - Station. 11+07 35'LT – 37'RT
- N 98TH St
  - Station. 11+08 35'LT – 35'RT
- W Lisbon Ave
  - Station.106+93 60RT – 58'RT
- W Lisbon Ave from N Willis Pl to N 92nd St
  - Station. 127+35 37'RT – Station 131+92 36'RT
  - Station. 132+50 80'RT – 124'LT N 92<sup>nd</sup> St Road Crossing
- W Lisbon Ave from N Willis Pl to N 92nd St) WEST BOUND
  - Station. 131+65 59'LT – Station 132+22 59'LT
- W Lisbon Ave Crossing (N 92<sup>nd</sup> St Stationing)
  - Station 12+24 52'LT– Station. 14+27 50'LT
- N 92nd St
  - Station. 14+13 50'LT – Station 54'RT
- W Lisbon Ave
  - Road crossing at Station 204+ 05
  - Station 211+97 20'RT – Station. 211+97 20'RT
  - Station 211+11 30'RT – 214+20 35'RT
- W Burleigh St
  - Station. 108+68 21'LT – Station 112+80 16'LT
- N 72nd St (W Burleigh St stationing)
  - Station. 109+18 20'LT – Station 109+18 100'RT

Any facilities not explicitly identified as being relocated and/or adjusted have been deemed by the utility to be not in conflict and will remain in place as-is.

Contact 1(800) 261-5325 for gas emergencies, to identify if gas facilities are live, and gas valve box adjustments.

Replace the second to last paragraph with “WE Energies requires a separate notice before the work site is anticipated to be available for each location of utility relocation and/or adjustment work.

WE Energies will complete all gas relocation work in the west portion of the project (N 100<sup>th</sup> Street to N 86<sup>th</sup> Street) first. This work will commence in December 2024. This west portion will require 90 working days and will be complete by April 1, 2025. WE Energies will then complete the east portion of the project (east of N 86<sup>th</sup> Street). This gas work will commence in April 2025. The east portion will require 90 working days and be complete by July 15, 2025.

**WE Energies – High Profile Gas** has underground gas lines running along the south side of West Capitol Drive near Station 100+00. No conflicts are anticipated.

## 7. Referenced Construction Specifications.

Construct the work enumerated below conforming to the Standard Specifications for Sewer and Water Construction in Wisconsin, latest edition and amendments (SSSW). If there is a discrepancy or conflict between the referenced specification and the standard specifications regarding contract administration, part 1 of the standard specifications governs.

Conform to the referenced construction specifications for the following:

Adjusting Sanitary Manholes

Construct the work enumerated below conforming to the City of Milwaukee specifications. If there is a discrepancy or conflict between the referenced specification and the standard specifications regarding contract administration, part 1 of the standard specifications governs.

Conform to the referenced construction specifications for the following:

Electrical Cable Type 2#2/1#4 AL.

stp-105-002 (20130615)

## **8. Information to Bidders, WPDES Transportation Construction General Permit (TCGP) for Storm Water Discharges.**

The department has obtained permit coverage through the Wisconsin Department of Natural Resources to discharge storm water associated with land disturbing construction activities under this contract. Conform to all permit requirements for the project.

This permit is the Wisconsin Pollutant Discharge Elimination System, Transportation Construction General Permit, (WPDES Permit No. WI-S066796-2). The permit can be found at:

<https://widnr.widen.net/s/s5mwp2gd7s/finalsignedwisdotcsgp>

A certificate of permit coverage is available from the regional office by contacting Mark Zapp, WisDOT Local Program Construction Project Manager at (414) 750-2645, [mark.zapp@dot.wi.gov](mailto:mark.zapp@dot.wi.gov). Post the permit certificate in a conspicuous place at the construction site.

stp-107-056 (20230629)

## **9. Erosion Control.**

*Supplement standard spec 107.20 with the following:*

Perform this work according to the requirements of standard spec 107.20 and as hereinafter supplemented.

Take adequate precautions to install and maintain necessary erosion and sediment control during grading and construction operations at curb and gutters, and at other locations as determined by the engineer. Protect storm drain inlets and manholes, as determined by the engineer, with a filter fabric meeting accepted design criteria, standards, and specifications. Maintain all erosion control measures until permanent vegetation is established or until the engineer determines the measure is no longer necessary.

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

Stockpile excess materials or spoils on upland areas away from wetlands, floodplains, and waterways. Immediately install perimeter silt fence protection around stockpiles. If stockpiled materials will be left for more than 14 days, install temporary seed or other temporary erosion control measures the engineer orders.

Re-apply topsoil on graded areas, as the engineer directs, immediately after the grading is completed within those areas. Sod topsoiled areas, as the engineer directs, within 5 days after placement of topsoil. If graded areas are left not completed and exposed for more than 14 days, seed those areas with temporary seed and mulch.

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, Mr. Ryan Pappas; WDNR Southeast Region Headquarters; 1027 W. St Paul Ave.; Milwaukee, WI 53233. 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.

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

### **Dewatering (Mechanical Pumping) for Bypass Water (sediment-free) Operations**

If dewatering bypass operations are required from one pipe structure to another downstream pipe structure or from the upstream to downstream end of a culvert and the bypass flow is not transporting sediments (sand, silt, and clay particles) from a tributary work site area, bypass pumping operations will be allowed provided that the department has been made aware of and approves operation. When pumping bypass flows, the discharge location will need to be stable and not produce any erosion from the discharge velocity that would cause release of sediment downstream. Dewatering is considered incidental to the contract.

### **Dewatering (Mechanical Pumping) for Treatment Water (sediment-laden) Operations**

If dewatering operations require pumping of water containing sediments (sand, silt, and clay particles), the discharge will not be allowed to leave the work site or discharge to a storm water conveyance system without sediment removal treatment. Do not allow any excavation for; structures, utilities, grading, maintaining drainage that requires dewatering (mechanical pumping) of water containing sediments (sand, silt, and clay particles) to leave the work site or discharge to a storm water conveyance system without sediment removal treatment.

Prior to each dewatering operation, submit to the department a separate ECIP amendment for sediment removal. Guidance on dewatering can be found on the Wisconsin DNR website located in the Storm Water Construction Technical Standards, Dewatering Code #1061,

[http://dnr.wi.gov/topic/stormwater/standards/const\\_standards.html](http://dnr.wi.gov/topic/stormwater/standards/const_standards.html).

Include reasoning, location, and schedule duration proposed for each operation. Per Code 1061, include all selection criteria: site assessment, dewatering practice selection, calculations, plans, specifications, operations, maintenance, and location of proposed treated water discharge. Provide a stabilized discharge area. If directing discharge towards or into an inlet structure, provide additional inlet protection for back-up protection. Dewatering is considered incidental to the contract.

### **Maintaining Drainage**

Maintain drainage at and through worksite during construction conforming to standard spec 107.20, 204.3.2.1(3), 205.3.3 and 520.3.1(2). Use existing storm sewers, existing culvert pipes, existing drainage channels, temporary culvert pipes, or temporary drainage channels to maintain existing surface and pipe drainage. Pumps may be required to drain the surface, pipe, and structure discharges during construction. Costs for furnishing, operating, and maintaining the pumps is considered incidental to the contract.

## **10. Notice to Contractor, Electronic Ticketing.**

*Replace standard spec 109.1.4.3 (1) with the following:*

(1) Submit an electronic ticket for each load of material for the following bid items:

- 405.0080 Concrete Pavement 8-Inch
- 415.2010 Concrete Truck Apron 12-inch
- 416.1725 Concrete Pavement Replacement SHES

Include the information as specified in 109.1.4.2 on each electronic ticket. If there is a failure in the electronic ticket system, provide a printed ticket for each load of material as a substitute for electronic tickets.

## **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. Station 149+80 to 151+80 from 60 feet LT of centerline to 180 feet LT of centerline.
2. Station 167+50 to 168+65 from 60 feet LT of centerline to 180 feet LT of centerline.
3. Station 191+70 to 193+40 from 60 feet RT of centerline to 180 feet RT of centerline.

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, Wisconsin Department of Transportation, 141 NW Barstow, Waukesha, WI 53187, (262) 548-6705.

stp-107-100 (20230113)

## **12. Notice to Contractor – City of Milwaukee Coordination.**

### **A. City of Milwaukee, Sewers**

City of Milwaukee Sewers has storm sewer facilities within the project limits. Construct, adjust, and remove storm sewer facilities as shown in the plans and in the bid items for the project.

City of Milwaukee Sewers will relay and line storm sewer on W Lisbon Avenue from N 76th Street to W Burleigh Street. This work is scheduled to be completed by May 16, 2025.

### **B. City of Milwaukee, Street Lighting**

The City of Milwaukee has street lighting facilities within the project limits.

The City of Milwaukee will construct new street lighting enclosures on North 97th Street and on North Ripon Place prior to construction.

The project includes areas of City-installed temporary overhead street lighting. This temporary overhead street lighting will be installed prior to construction. Some of the temporary overhead circuitry the City will be installing is high voltage series circuitry which the contractor will need to work cautiously and safely around. Contact City of Milwaukee Street Lighting prior to working in the vicinity of such installations to verify actual installation.

City of Milwaukee Street Lighting personnel will install poles and pull boxes before construction starts for two new street lighting enclosures and the installation of temporary overhead facilities for series circuitry crossing various locations along the project.

This project also includes contractor-installed temporary overhead street lighting throughout the project, in which the contractor is fully responsible to service and maintain during construction. The contractor is to be notified when there is any damage to temporary multiple street lighting during construction. The contractor will need to provide a 24-hour contact name and number to the City. Only the City of Milwaukee Street Lighting personnel will service and maintain the high voltage series circuitry that falls within the project.

Proposed temporary street lighting work is to be coordinated, scheduled and installed by the project contractor prior to roadway construction. The temporary overhead must be completed and energized prior to saw cutting or removal operations begin.

The City of Milwaukee street lighting will be making the final terminations (Cut-Ins) back into street lighting circuitry for both the temporary and permanent lighting, along with inspecting the contractor installed temporary and permanent street lighting facilities.

The electrical contractor will need to contact and provide a ten (10) working days notice to the City of Milwaukee Street Lighting Field Supervisors to schedule the Cut-In work.

The electrical contractor must have all of the temporary or permanent street lighting installed for the entire project and ready for Cut-In before the City of Milwaukee Street Lighting crews make final termination.

Some work locations have traffic signals attached to the street lighting facilities as shown in plans.

The proposed permanent street lighting work is to be coordinated, scheduled and installed by project contractor.

After the permanent underground is fully operational and is approved by the City of Milwaukee Street Lighting, then the temporary overhead removal work can be coordinated, and scheduled to be done by the project contractor. Remove temporary overhead lighting as shown in the plans, and leave in place temporary overhead lighting designated to be removed by the City of Milwaukee as shown in the plans.

Construction time required in working days is estimated to be 5 to 10 business days to make final termination (Cut-Ins) for temporary lighting, and 5 to 10 business days to make final termination (Cut-Ins) for permanent lighting.

The contractor shall contact and coordinate with the the City of Milwaukee Street Lighting Field Supervisor 5 to 7 working days before installing the fiber optic 12-ct cable to the adjacent pull boxes for the 3 street lighting enclosures, T53N, T42N, and T44N. This work will need to be coordinated to have the Street Lighting and City Communication crews take the fiber optic cable from the pull box and pull it into the enclosure cabinet or to a Hoffman box and make the fiber optic cable terminations inside immediately. The enclosures are at the following locations:

- T53N – 3965 N 100<sup>th</sup> St
- T42N – 3840 N 97<sup>th</sup> St
- T44N – 3409 N Ripon Pl

Contact Street Lighting Field Supervisor Neal Karweik at 414-708-4245 mobile, to coordinate with street lighting. Prior to construction, City of Milwaukee personnel will energize newly located permanent street lighting power distribution cabinets for street lighting temporary and permanent project use.

When the City of Milwaukee is furnishing materials for a project the contractor is responsible to contact by email the City of Milwaukee Project Manager to get the Inventory Transaction Report (ITR) which will provide the exact quantity of materials needed for pickup. In the email the contractor will need to provide a contact name and number of the individual who will be picking up the materials. Once the contractor has received the Inventory Transaction Report they are then responsible to contact the street lighting shop yard contact person four (4) working days before pickup request. The advance notice will allow the shop to gather the requested items for the contractor to pick up and sign for taking possession of the materials.

For general field questions regarding this utility contact City of Milwaukee Street Lighting Field Supervisor Neal Karweik at (414) 286-5943 office, or (414) 708-4245 mobile.

For general lighting design questions or providing the Inventory Transaction Report (ITR) for noted City furnished materials contact City of Milwaukee Street Lighting Project Manager Denis Kozelek by email at [dkozel@milwaukee.gov](mailto:dkozel@milwaukee.gov).

### **C. City of Milwaukee, Traffic Signals**

There are four existing signalized intersections within the limits of the project at the following intersections with West Lisbon Avenue:

North 92<sup>nd</sup> Street

North 84<sup>th</sup> Street

North 76<sup>th</sup> Street

West Burleigh Street

Existing pull boxes and signal bases will be discontinued by the City for removal by the contractor.

Install temporary overhead and temporary traffic signals as shown in the plans. Temporary overhead and traffic signals shall be installed prior to any pavement saw-cutting or excavation.

Furnish and install bases, PVC conduit, cabling, and polymer concrete pull boxes. All above ground signal work including installing traffic signal standards, monotube poles, monotube arms, traffic signals heads, signal cabinets, and any additional permanent traffic control equipment shall be furnished and installed by the contractor. Electrical service for all signals will be provided by the City of Milwaukee. The signal cabinet bases will be provided by the City of Milwaukee.

Prior to constructing signal monotube bases, perform a utility line opening (ULO) to determine location and elevation and potential conflicts with proposed work as directed by the engineer.

Traffic signal materials shall be installed on street lighting poles except where otherwise noted. Coordinate construction so street lighting installation does not impede traffic signal installation.

Provide a 30-working day advance notice to Mr. Rudy Gutierrez of the City of Milwaukee's Traffic Signal Field Operations at (414) 286-5941 office, or (414) 708-5148 mobile, to coordinate the installation of temporary traffic signal materials, signal retiming along detour routes, as well as any City traffic signal concerns.

Contact Scott Reinbacher at (414) 286-3232 or sreimb@milwaukee.gov with any questions or concerns regarding City of Milwaukee, Traffic Signals facilities.

### **13. Notice to Contractor – On Site Crushing.**

On-site crushing will not be allowed on this project.

### **14. Notice to Contractor – Tree and Planting Area Protection.**

#### **1. Sidewalk Construction**

A. When replacing walks adjacent to the following trees, a slip or thin form must be used. Additionally, soil disturbance in the tree border should be limited to not more than ¼" beyond the edge of the new walk.

Station 108+54N/S	Station 109+10N/S	Station 120+00N/S
Station 106+92S/S	Station 107+50S/S	Station 109+05S/S
Station 116+08S/S	Station 129+56S/S	Station 207+50S/S

B. Adjacent to the following trees, the new walk should be arced:

Station 107+35N/S	Station 108+06N/S	Station 112+42N/S
Station 115+02N/S	Station 116+00N/S	Station 118+32N/S
Station 118+76N/S	Station 120+98N/S	Station 121+94N/S
Station 122+95N/S	Station 123+35N/S	Station 124+35N/S
Station 127+56N/S	Station 137+13N/S	Station 137+52N/S
Station 138+23N/S	Station 139+62N/S	Station 140+92N/S
Station 141+93N/S	Station 142+50N/S	Station 142+99N/S
Station 144+96N/S	Station 145+44N/S	Station 169+22N/S
Station 170+26N/S	Station 172+00N/S	Station 177+75N/S
Station 178+20N/S	Station 180+07N/S	Station 197+94N/S
Station 188+27N/S		
Station 108+56S/S	Station 112+44S/S	Station 112+84S/S
Station 113+40S/S	Station 113+95S/S	Station 119+32S/S
Station 119+80S/S	Station 120+85S/S	Station 121+37S/S
Station 122+85S/S	Station 123+35S/S	Station 127+56S/S
Station 128+02S/S	Station 131+20S/S	Station 143+04S/S
Station 144+00S/S	Station 144+50S/S	Station 150+00S/S
Station 150+70S/S	Station 151+25S/S	Station 159+90S/S
Station 160+15S/S	Station 160+91S/S	Station 169+90S/S

Station 177+00S/S

Station 177+34S/S

Station 180+30S/S

Station 184+30S/S

Station 185+13S/S

Station 199+00S/S

Station 200+12S/S

Station 205+40S/S

When constructing the concrete bike lanes a 1/4" or thin form must be used when directed by the Urban Forestry Technician or engineer.

## **2 Carriage Walk Construction**

A When constructing or replacing carriage walks, roots shall not be cut by means of mechanical root cutting machines. If root removal is essential to carriage walk replacement, roots shall be manually cut with hand implements. Roots shall be removed not deeper than 9 inches below the finished grade of the new carriage walk.

## **3 General**

All cutting for the removal of sod and soil in order to establish a finished grade within 4 feet of existing trees must be done manually if necessary.

No construction equipment, cars, trucks, materials shall be parked or stored on any median or tree borders on this project or adjacent roadways.

Root foundations must remain adequate to withstand heavy windstorms.

Root systems of street trees shall not be cut for the installation of any type of cable by the contractor or city department. Contact the Forestry Division at (414) 708-2428 for directional boring specification.

Caution shall be used during the construction process to avoid damage to the roots, trunks, and branches of all street trees. Damage caused to any street tree or irrigation system will be repaired by the City of Milwaukee's Forestry Division and the costs of repair, rejuvenation, and/or value lost will be billed to the contractor or credited against the contract at the option of the city.

Debris, branches, wood stumping chips must be removed by the contractor so as not to impede the Forestry Division from maintaining the condition of the medians.

The Forestry Division will schedule lawn cutting on a 14-day cycle for the entire project.

At locations where the contractor has not complied with the forestry special requirements stated in the special provisions above, and the maximum clearance was exceeded or a thin form was not used, a minimum credit to the city of \$50.00 per location will be taken. The credit will increase in proportion to the excess distance beyond clearance allowed. The credit will be \$50.00 for each 2-inch increment or part thereof in excess of the initial clearance allowed. Any damage to the tree's structure totaling 15 percent of the trees value will be billed on a prorated basis. If, in the opinion of the City of Milwaukee's Forestry Division, the tree has been damaged to the point that it warrants removal, the credit that will be taken will be equal to \$100.00 per inch diameter of the tree. A field measurement will be taken to determine the tree size.

## **15. Notice to Contractor – Survey.**

Digital design file information/existing surface data, including design surface DTMs and/or coordinate system GPS information will not be available for this project.

All survey work necessary to stake out and construct all portions of this project will be measured and paid for under the staking bid item designated in this contract.

## **16. Notice to Contractor – Saw Cut Slurry.**

Saw cut slurry that may be generated as part of this contract shall be collected and actively managed. Take appropriate measures to prevent saw cut slurry from entering inlets, wetlands, waterways, and other natural areas.

**17. Notice to Contractor – Topsoil, Sod, and Fertilizer.**

Topsoil and sod are to be applied after sidewalk is constructed.

Fertilizer is to be applied to sod five days after sod is placed.

**18. Notice to Contractor – Milwaukee County Transit System.**

The Milwaukee County Transit System (MCTS) operates the following bus routes within and/or directly adjacent to the construction limits: Route 66 (W. Burleigh St.), Route 76 (N. 76th St.), and Route 92 (N. 92nd St.).

**Impacts to MCTS Routing**

Invite MCTS to all coordination meetings between the contractor, the department, local officials and business stakeholders to discuss the project schedule of operations including vehicular and pedestrian access during construction operations. Notify MCTS at least 10 business days prior to beginning project work to provide advance notice of potential service impacts.

**Impacts to MCTS Signs and Posts**

Notify MCTS of work impacting MCTS signs and posts in advance 5 or more business days. MCTS signs include “Bus Stop” and turn disc signs. MCTS signs are mounted on MCTS posts; and on assets owned by others including streetlights, traffic regulators, crosswalk and street signposts. MCTS shall be responsible for MCTS sign and post removal and installation, with the contractor granting access to MCTS personnel to perform such work. Signs stating “No Parking Bus Stop” are the under the ownership and responsibility of City of Milwaukee.

**Impacts to Bus Shelters**

Contractor work may require bus shelter(s) to be temporarily removed. MCTS will be responsible for the removal and reinstallation of bus shelters, with the contractor granting access to MCTS personnel for the purposes of reinstallation before new pavement opens to vehicular traffic. Notify MCTS in advance 10 business days for each site-specific bus shelter location.

**Non-detour Service Suspension at MCTS Bus Stops and Temporary Bus Stops**

Occasions may arise when work requires neither a detour nor the physical alteration of MCTS bus stop assets, but (for passenger safety) those occasions involved require MCTS to temporarily suspend service at a bus stop location. Notify MCTS in advance 5 business days of the site-specific occasion, and MCTS will sign appropriately to instruct passengers to board at a temporary bus stop. Notify MCTS upon completion of work. MCTS will resume service to any suspended bus stop locations when it is safe to do so.

**Temporary Bus Stops**

MCTS will designate temporary bus stop boarding locations using MCTS temporary signs. Temporary bus stops will be in existing right-of-way at ADA-accessible locations outside the project’s construction zone. MCTS is not requesting this project to provide temporary boarding pads.

**MCTS contacts:**

David Locher  
Milwaukee County Transit System  
1942 N. 17th St.  
Milwaukee, WI 53205  
Phone: (414) 343-1727  
[dlocher@mcts.org](mailto:dlocher@mcts.org)

Armond Sensabaugh  
Milwaukee County Transit System  
1942 N. 17th St.  
Milwaukee, WI 53205  
Phone: (414) 343-1728  
[asensabaugh@mcts.org](mailto:asensabaugh@mcts.org)

## **19. Coordination with Businesses and Residents.**

The contractor shall arrange and conduct a meeting between the contractor, the department, affected residents, local officials and business people to discuss the project schedule of operations including vehicular and pedestrian access during construction operations. Hold the first meeting at least one week before the start of work under this contract and hold one meeting per month thereafter. The contractor shall 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 two weeks' prior notice to the engineer to allow for these notifications.

stp-108-060 (20141107)

## **20. 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 9:00 PM until the following 7:00 AM, unless prior written approval is obtained from the engineer.

stp-107-001 (20060512)

Motorized equipment shall be operated in compliance with all applicable local, state, and federal laws and regulations relating to noise levels. All motorized construction equipment will be required to have mufflers constructed according to manufacturer's specifications, and it will be required that mufflers and exhaust systems be maintained in good working order, free from leaks or holes.

Upon request the City of Milwaukee's Department of Neighborhood Services (DNS), may issue a construction noise variance, to work outside of the hours listed above.

Department of Neighborhood Services  
4001 South 6<sup>th</sup> Street  
(414) 286-2268

## **21. Removing Poles, Item 204.9060.S.300.**

### **A Description**

This special provision describes removing existing concrete, aluminum, steel, and wood poles for the proper disposal of pole and miscellaneous materials. Perform the work according to standard spec 651.

### **B Materials**

Existing poles, including bracket arm(s), clamp(s), conduit, cabling, and any other equipment mounted to the poles.

### **C Construction**

Disconnect and strip all cables and wiring that are mounted on or inside the pole and carefully remove the bracket arm(s), and other non-street lighting materials from the pole. Then remove pole and backfill resulting hole according to standard spec 206.2.

### **Disposing of Materials**

Materials for Disposing of safely:

- Concrete, Aluminum, Steel, and Wood pole(s)
- Stone and brick
- Conduit and Cabling
- All other materials

## **D Measurement**

The department will measure Removing Poles as each individual pole, or stub removed that includes the removal of mounted equipment on the pole, 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
204.9060.S.300	Removing Poles	EACH

Payment is full compensation for disconnecting any necessary wiring, and removing the poles and equipment mounted on the poles, as well as disposal of materials.

## **22. Removing Aerial Cable, Item 204.9090.S.300.**

### **A Description**

The work under this item consists of removing temporary overhead service lines as shown on the plans; including all associated guy wires, anchors, and electrical wire; and removing materials from the site.

### **B (Vacant)**

### **C Construction**

Contractor shall properly dispose of materials off site.

### **D Measurement**

The department will measure Removing Aerial Cable by linear foot from pole to pole.

### **E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
204.9090.S.300	Removing Aerial Cable	LF

Payment is full compensation for all work and disposal of materials.

## **23. Coloring Concrete Custom, Item 405.0200.**

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

*Replace standard spec 405.2.1.1(1) with the following:*

- (1) Integrally color concrete using non-fading pigments conforming to ASTM C979.
  - For Milwaukee dark gray: use synthetic mineral-oxide pigments or colored water-reducing admixtures, color stable, free of carbon black, non-fading, and resistant to lime and other alkalis pigments, at a loading by weight of total cementitious material in the mix according to manufacturer recommendations. Match the concrete color in reasonably close conformance with Milwaukee dark gray color, which is similar to Federal Standard 595 - FS 26008.

*Replace standard spec 405.2.1.1(3) with the following:*

- (3) The department will accept the color based on comparison to color samples available for viewing along East Wells Street between North Broadway and North Van Buren Street in the City of Milwaukee.  
stp-405-020 (20190618)

## 24. Protection of Concrete.

*Supplement standard spec 415.3.14 as follows:*

Provide for a minimum of one concrete finisher to remain on the project site after final finishing of all concrete surfaces until such time as the concrete has hardened sufficiently to resist surface scarring caused by footprints, handprints, or any other type of imprint, malicious or otherwise. Finisher must actively and continuously patrol on foot the newly placed concrete and repair any damage to the surface that might be sustained as described above.

Include the cost for providing the finisher(s), the necessary equipment, and materials in the contract unit price for each concrete item.

## 25. Concrete Identification Stamping.

Stamp ends of all monolithic portland cement concrete surfaces with a stamp bearing the contractor's name and the year of construction. Make all letters 2-inches in height.

Include the cost of this work in the contract unit price for all concrete items and no additional payment will be made.

## 26. Concrete Pavement and Permeable Paver Blocks.

Prior to constructing concrete pavement at areas of permeable paver blocks, coordinate with the permeable paver blocks manufacturer and installer, as well as the engineer, to verify widths and fit of the permeable paver blocks with the adjacent concrete pavement. Discuss operations including excavation, storage and bedding layer placement and compaction, and placement of geogrid separator and permeable paver blocks. Make minor adjustments to the pavement width at the areas of permeable paver blocks as approved by the engineer. Any sawcuts or modifications to the concrete pavement to allow for appropriate fit of the permeable paver blocks will be incidental to the concrete pavement item.

## 27. Cold Patch, Item 495.1000.S.

### A Description

This special provision describes furnishing cold patch and filling potholes and other voids in existing pavement surfaces as the engineer directs.

### B Materials

Furnish a mixture of course aggregate, natural sand, and MC-250 bituminous material designed to have a workability range of 15-100° F without heating. Ensure that the mixture:

- Adheres to wet surfaces.
- Resists damage from water, salt, and deicing products.
- Requires no mixing or special handling before use.
- Supports traffic immediately after placement and compaction.

Conform to the following gradation:

SIEVE SIZE	PERCENT PASSING (by weight)
1/2-inch (12.5 mm)	100
3/8-inch (9.5 mm)	90 - 100
No. 4 (4.75 mm)	90 max
No. 8 (2.38 mm)	20 - 65
No. 200 (0.074 mm)	2 - 10
Bitumen	4.8 - 5.4

The department will accept cold patch based primarily on the engineer's visual inspection. The department may also test for gradation.

## C Construction

Stockpile cold patch on site on a smooth, firm, well-drained area cleared of vegetation and foreign material. Cover the stockpile and ensure that it is easily accessible. Replenish the stockpile throughout the project duration but limit the size at any given time to 10 tons on site unless the engineer approves otherwise. Dispose of unused material at project completion unless the engineer directs otherwise.

Place cold patch by hand. Remove ponded water and loose debris before placement. Compact flush with a tamper, roller, or vehicle tire after placement.

Refill patched areas as necessary to maintain a flush pavement surface until project completion.

## D Measurement

The department will measure Cold Patch by the ton, acceptably stockpiled on site.

## E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
495.1000.S	Cold Patch	TON

Payment is full compensation for providing and maintaining patches; for furnishing and replenishing stockpiled material on-site; and for disposing of excess material at project completion.

stp-495-010 (20160607)

## 28. Concrete Aggregates.

*Modify standard spec 501 as follows:*

### Size Requirements

*Supplement standard spec 501.2.7.4.1 with the following:*

Coarse aggregate for Concrete Grade A must consist entirely of size No. 1 when used in curb, curb and gutter, driveways, sidewalks or steps.

## 29. Concrete Sidewalk and Detectable Edge Tiles.

Where Detectable Edge Tiles will be placed in the concrete sidewalk, review the detectable edge tile layout with the planned joint spacing and locations with the engineer prior to constructing the sidewalk and placing the tiles.

Locate the transverse concrete sidewalk joints so they are at the edge of the detectable edge tiles. Locate expansion joints a minimum of 3 inches from the edge of the detectable edge tiles. Do not cut joints through the detectable edge tiles.

## 30. Concrete Sidewalk for Bike Lanes.

For concrete sidewalk constructed for bike lanes, construct the work according to standard spec 602, except saw the contraction joints according to standard spec 602.3.2.5.1(3)3. Confirm the sawcut depth and spacing with the engineer prior to placing the concrete sidewalk.

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

### A Description

This special provision describes providing and removing steel plates to cover and support pavement and traffic loading at manholes, inlets and similar structures.

### 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)

## 32. Topsoil.

*Replace standard spec 625.2 (1) with the following:*

- (1) Topsoil consists of loam, sandy loam, silt loam, silty clay loam, or clay loam humus-bearing soils adapted to sustain plant life, and ensure the topsoil consists of the following:

Topsoil Requirements	Minimum Range	Maximum Range
pH	6.0	8.0
Organic Matter*	5%	20%
Clay	5%	30%
Silt	10%	70%
Sand	10%	70%

\*Organic matter determined by loss on ignition test of samples oven dried to constant weight at 212 F (100 C).

*Add the following to standard spec 625.2:*

- (3) Furnish material that is free from large roots, sticks, weeds, brush, stones, litter, and waste products.
- (4) Do not furnish surface soils from ditch bottoms, drained ponds, and eroded areas, or soils which are supporting growth of NR 40 listed plants and noxious weeds or other undesirable vegetation.

*Replace standard spec 625.3.3 (3) with the following:*

- (3) Ensure that for the upper 2 inches, 100 percent of the material passes a one-inch sieve and at least 90 percent passes the No. 10 sieve.

SER-625-001 (20221007)

## 33. Fertilizer Type B

*Replace standard spec 629.2.1.3 with the following:*

- (1) Fertilizer Type B will conform to the following requirements:

Nitrogen, not less than 24% with 6% percent of the nitrogen being slow release.

Phosphorus, not less than 15%

Potash, not less than 9%

- (2) The total nitrogen, phosphorus, and potash shall equal at least 48 percent.

*Replace standard spec 629.3.1.3 with the following:*

<sup>(1)</sup> Apply fertilizer containing at least 48 percent total nitrogen, phosphorus, and potash at 5 pounds per 1,000 square feet unless otherwise directed by the engineer. For Fertilizer Type B that contains a different percentage of components, determine the new application rate by multiplying the specified rate by a dimensionless conversion factor determined as follows:

$$\text{Conversion Factor} = 48 / \text{New Percentage of Components}$$

*Replace standard spec 629.4(1):*

<sup>(1)</sup> The department will measure Fertilizer Type B, by the hundred pounds (CWT) acceptably completed, measured based on the application rate of 5 pounds per 1,000 square feet. The department will not measure fertilizer used for the bid items under 632. The measured quantity equals the number of hundred-weight (CWT) of material determined by multiplying the actual number of cwt. of material incorporated by the ratio of the actual percentage of fertilizer components used to 48 percent for Fertilizer Type B.

SER-629-001 (20230109)

#### **34. Landscape Planting Surveillance and Care Cycles.**

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.

stp-632-005 (20070510)

#### **35. Mulch for Bioswales.**

*Add the following to standard spec 632.2.6:*

Material used shall be shredded hardwood bark mulch

*Replace the first and second sentences of standard spec 632.3.9 with:*

Place 2" of mulch over the entire bioswale area as shown on plans.

#### **36. Signs Type II.**

*Furnish and install signs according to the plans and standard spec 637, except as follows:*

The contractor shall provide all necessary sign mounting hardware as shown in the detail drawings which includes but is not limited to 5/16" x 1 1/4" Stainless Steel Fender Washers, 5/16"-18 x 3/4" Stainless Steel Hex Head Bolt, 201 Stainless Steel Banding 3/4" x 0.20, Stainless Steel Flared Leg Sign Mount Bracket for 3/4" banding, 201 Stainless Steel Wing Seal (buckle) for 3/4" banding and one- or two-sided sign mounting Z-brackets that fit 2 3/8 inch post or approved equal.

The contractor shall affix the installation date sticker on back of sign in lower right corner. Stickers will be provided at pre-construction meeting or by the Inspector.

The contractor shall be responsible for recording the location, type, and installation date of the signage using the provided Sign Installation Log (L-101).

#### **37. Lamp, Ballast, LED, Switch Disposal by Contractor, Item 659.5000.S.**

##### **A Description**

This special provision describes the detachment and packaging of lamps, ballasts, LEDs, and mercury containing switches (e.g., overhead roadway lighting, underdeck bridge, wall packs, pedestrian signals,

traffic control stop lights and warning flashers, fluorescent bulbs, and thermostats) removed under this contract for disposal as hazardous materials.

For Lamp, Ballast, LED, Switch Disposal by Contractor, coordinate removal from the work site by the department's hazardous waste disposal vendor. Disposal will be billed to the department by the hazardous waste disposal vendor.

## **B Materials**

### **B.1 Disposal by Contractor**

Items removed under this contract will be considered the property of the department for waste generator identification. The contractor is responsible for coordinating with the department's hazardous waste vendor for disposal:

<https://wisconsindot.gov/Documents/doing-bus/eng-consultants/cnslt-rsrces/environment/hazwaste-contacts.pdf>

## **C Construction**

### **C.1 Removal**

Arrange for the de-energizing of luminaires after receiving approval from the engineer that the existing luminaires can be removed. Do not remove luminaires that cannot be replaced with proposed LED units and operational within the same workday. The new LED units need to be operational prior to sunset of the same workday.

Detach and remove luminaires and lamps from the existing traffic signal poles or respective structure. Avoid breaking fixtures whenever possible.

Lamps, ballasts, LED, and switches will become property of the department, and will be disposed of in an environmentally sound manner.

### **C.2 Packaging of Hazardous Materials**

Provide a secure, level location removed from the travelled way for storage of the material for disposal.

Pack intact fixtures in the packaging of the new lamps used to replace them, or packaging affording the equivalent protection. Place in full, closed stackable cartons.

Pile cartons no more than four high if palletized and secure cartons with shrink wrap to prevent shifting or falling of the loads. Clearly mark each pallet with the words "Universal Waste Lamps" or "Universal Waste Ballasts", the date, and the number of fixtures on each pallet.

Pack broken fixtures into (min.) 6 mil thick plastic bags and place inside sturdy cardboard boxes or the equivalent. Mark the outer packaging with the term "Broken Fixtures/Lamps", the date and the number of broken fixtures clearly marked on the box.

The hazardous waste vendor will not accept fixtures improperly packaged. The vendor will reject any fixtures not removed as part of a contract pay item or otherwise required under this contract.

Pack ballasts and mercury containing switches in appropriate containers.

### **C.3 Disposal by Contractor**

Complete the lamp and ballast inventory (<https://wisconsindot.gov/Documents/doing-bus/eng-consultants/cnslt-rsrces/environment/dotlampballastinventory.dotx>) and contact the hazardous waste vendor to coordinate pickup and disposal at a location specified by the contractor. Consolidate all pallets and boxes from one project at a single location. Contact the hazardous waste vendor to set up an appointment for pickup. The hazardous waste vendor requires a minimum of one week advance notice to schedule pickup.

## **D Measurement**

The department will measure Lamp, Ballast, LED, Switch Disposal by Contractor as each individual unit removed and received by the hazardous waste vendor, properly packaged and acceptably completed, matching the total number of units provided on the inventory form. The department will not measure broken fixtures that exceed a total of 10 percent of all fixtures to be disposed.

## **E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
659.5000.S	Lamp, Ballast, LED, Switch Disposal by Contractor	EACH

Payment is full compensation for detachment, handling, packaging, labeling and scheduling disposal with the hazardous waste vendor; and scrapping and disposal of all other materials.

stp-659-500 (20220628)

**38. Temporary Traffic Signals for Intersections, Lisbon at Burleigh, Item 661.0201.01;  
Temporary Traffic Signals for Intersections, Lisbon at 76th, Item 661.0201.02;  
Temporary Traffic Signals for Intersections, Lisbon at 84<sup>th</sup>, Item 661.0201.03;  
Temporary Traffic Signals for Intersections, Lisbon at 92<sup>nd</sup>, Item 661.0201.04.**

*Modify standard spec 661 with the following:*

**661.2.1 General**

The City of Milwaukee will furnish control cabinet, signal controller, NEMA monitor and incidentals to control cabinet.

The City of Milwaukee will provide the temporary electrical service for temporary traffic signals up to disconnect point.

All wood poles are paid for under the temporary street light item.

**39. Bedding Layer Permeable Pavers, Item SPV.0035.500.**

**A Description**

This special provision describes furnishing and installing bedding layer material in the permeable pavers

**B Materials**

The bedding layer shall be composed of washed crushed stone with no fines and with a porosity of 40%, meeting the requirements of ASTM C-33/AASHTO Size No. 57 Crushed Stone. The stone shall be clean, angular on all sides with no less than 90% fractured faces. Do not use rounded river gravel or fractured river gravel for any application. The required material gradation is as follows:

<u>Sieve Size<sup>1</sup></u>	<u>Percentage Passing by Weight</u>
3 Inch	100%
2 ½ Inch	90 – 100%
2 Inch	35 – 70%
1 ½ Inch	0 – 15%
¾ Inch	0 – 5%

<sup>1</sup> Size No. according to AASHTO M43.

**C Construction**

Bedding layer stone shall be placed and compacted as follows:

- Initial Course – Place a 2" lift of bedding layer stone directly on the Storage Layer Permeable Pavers. Thoroughly compact this initial course into the Storage Layer Permeable Pavers with a roller compactor.
- Consecutive Courses – Place consecutive courses of the bedding layer stone in 4"-6" maximum lifts and compact with a roller compactor. Use a 10,000 lb. vibratory plate compactor to finish to final grade with at least two passes in both the perpendicular and parallel directions. Compact the stone to a smooth plane surface to achieve intimate and positive contact between the legs of the permeable paver blocks and the compacted storage layer and the geogrid separator. There shall be no visible movement of the material once compacted and the base should be smooth when compaction is completed.

**D Measurement**

The department will measure Bedding Layer Permeable Pavers per cubic yards, acceptably completed.

## E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0035.500	Bedding Layer Permeable Pavers	CY

Payment is full compensation for furnishing and placing the bedding layer; and for furnishing all labor, tools, equipment, and incidentals necessary to complete the contract work.

## 40. Storage Layer Permeable Pavers, Item SPV.0035.501.

### A Description

This special provision describes the furnishing and installation of the storage layer for the permeable pavers.

### B Materials

The storage layer shall be composed of open graded, washed crushed stone with a porosity of 40% meeting the requirements of ASTM C-33/Size No. 2 Crushed Stone. The required material gradation is as follows:

<u>Sieve Size<sup>1</sup></u>	<u>Percentage Passing by Weight</u>
3 Inch	100%
2 ½ Inch	90 – 100%
2 Inch	35 – 70%
1 ½ Inch	0 – 15%
¾ Inch	0 – 5%

<sup>1</sup> Size No. according to AASHTO M43.

### C Construction

The native subgrade shall be compacted to a maximum of 95% Modified Proctor according to ASTM D 1557 before placing the stone layer. Place the stone in 4"-6" lifts and compact with a roller compactor. Use a 10,000 lb. vibratory plate compactor to finish to final grade with at least two passes in both the perpendicular and parallel directions. There shall be no visible movement of the material once compacted and the base should be smooth when compaction is completed. Allow the engineer to inspect the prepared stone and observe a proof roll test by a fully loaded dump truck. The base course shall be firm and non-yielding, compacted until it does not creep or weave in front of the roller or compacting vehicle. Reconstruct where deflection is greater than ½ inch.

### D Measurement

The department will measure Storage Layer Permeable Pavers by the cubic yard, acceptably completed.

### E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0035.501	Storage Layer Permeable Pavers	CY

Payment is full compensation for all work and materials necessary to install the storage layer.

## 41. Engineered Soil, Item SPV.0035.600.

### A Description

This special provision describes furnishing and placing engineered soil in bioswales.

### B Materials

Furnish Engineered Soil consisting of a mixture of sand and compost. The mix shall be designed to approximate the following percentages by volume.

Engineered Soil Components	Percentage Compost (by volume)
Sand	70
Compost	30

Compost for the Engineered Soil shall meet the requirements of the Wisconsin Department of Natural Resources' (WDNR) technical standard 1004, bioretention for infiltration and WDNR specifications 100, Compost.

#### **C Construction**

Place the engineered soil on a 4-Inch bedding layer and maintain a slope of approximately 3:1 for the engineered soil.

#### **D Measurement**

The department will measure Engineered Soil by the cubic yard, acceptably completed.

#### **E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0035.600	Engineered Soil	CY

Payment is full compensation for providing, mixing and placing the engineered soil in the bioswales.

### **42. Bedding Layer Bioswales, Item SPV.0035.601.**

#### **A Description**

This special provision describes furnishing and installing bedding layer material in the bioswales.

#### **B Materials**

Furnish bedding layer composed of 3/8-inch dry pea gravel.

#### **C Construction**

Place the bedding layer in a 4-inch layer under the engineered soil.

#### **D Measurement**

The department will measure Bedding Layer Bioswales by the cubic yard, acceptably completed.

#### **E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0035.601	Bedding Layer Bioswales	CY

Payment is full compensation for furnishing and placing the bedding layer; and for furnishing all labor, tools, equipment, and incidentals necessary to complete the contract work.

### **43. Storage Layer Bioswales, Item SPV.0035.602.**

#### **A Description**

This special provision describes the furnishing and installation of the storage layer for the bioswales.

#### **B Materials**

Furnish storage layer composed of 1-inch clean, washed stone, with 40% void ratio, in the bioswales. The stone shall be clean, angular on all sides with no less than 90% fractured faces. Do not use rounded river gravel or fractured river gravel for any application.

#### **C Construction**

Place 2-feet of storage layer at the bottom of the bioswales.

## D Measurement

The department will measure the Storage Layer Bioswales by the cubic yard, acceptably completed.

## E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0035.602	Storage Layer Bioswales	CY

Payment is full compensation for all work and materials necessary to install the storage layer.

## 44. Field Facilities Office Space, Item SPV.0060.001.

### 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), (8), and (10).

*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.

Equip the office as specified in standard spec 642.2.2.1 except delete paragraph (1) and (5) 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-four-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 NUMBER	DESCRIPTION	UNIT
SPV.0060.001	Field Facilities Office Space	EACH

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 (20240112)

#### **45. Utility Line Opening (ULO), Item SPV.0060.002.**

##### **A Description**

This special provision describes excavating to uncover utilities/infrastructure for the purpose of determining location and elevation and potential conflicts with proposed work as directed by the engineer. The location of existing utilities and infrastructure needed to complete the contract work shall be addressed independent of this provision. This item does not remove the contractor's obligation to locate utilities as required by state and federal law.

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

##### **C Construction**

Comply with s.182.0175 (2), Stats., with respect to precautions to be taken to avoid and prevent damage to utility facilities.

All ULO shall be directed by the engineer in writing. Notify the engineer and infrastructure/utility owner or their agents 3 working days in advance so that they may be present when excavation work commences.

Provide documentation to the engineer including coordinates/elevations or referenced to alignment/offset. Document the size and/or diameter, composition, and a description of each infrastructure/utility. Supply digital photographs of the uncovered infrastructure to the engineer in .jpeg format for future reference.

Backfill the excavation with suitable backfill, thoroughly compact, replace pavement over utility line opening trenches which are within the staged traffic area as directed by the engineer. Replace pavement and open to traffic within 24 hours of the excavation.

##### **D Measurement**

The department will measure ULO by each individual unit, acceptably completed. 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. ULO include a trench up to 10 feet long as measured at the trench bottom, and of any depth required to locate the intended utility.

##### **E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.002	Utility Line Opening (ULO)	EACH

Payment is full compensation for the excavation required to expose the utility line; measuring lateral and depth measurements of the utility line; providing required documentation of measurements to the engineer; backfilling with engineer approved material; compacting the backfill material; restoring the site; cleanup, and maintenance of ULO location during construction.

Existing pavement, concrete curb and gutter, and sidewalk removals necessary to facilitate utility line openings are not considered part of or paid for under ULO but are considered separate and measured and paid for separately as removal items. Granular backfill, pavement replacement material, concrete curb, gutter, and sidewalk items will also be considered separate from ULO and will be measured and paid for separately.

**46. Construction Staking Survey Project 2590-04-71, Item SPV.0060.003.**

**A Description**

This special provision describes providing all construction staking survey required to layout and construct the work. Conform to standard spec 650 and standard spec 105.6, and as follows.

*Replace standard spec 650.1 with the following:*

This section describes the contractor-performed construction staking required to establish the horizontal and vertical position for all aspects of construction including the following, as well as other staking necessary to construct the work under this contract:

- Storm sewer
- Subgrade
- Base
- Curb, gutter, curb and gutter
- Pavement
- Electrical installations
- Supplemental control
- Slope stakes
- Curb ramps
- Sidewalk
- Drainage structures
- Bioswales
- Permeable pavers
- Bike lanes
- Bike lane ramps
- Concrete islands, driveways, pedestrian curb, truck aprons
- Landscaping and planting elements
- Signing
- Street lighting (temporary and permanent)
- Traffic signals (temporary and permanent)
- Utilities
- CUC
- Conduit
- Water and sanitary adjustments
- Pavement markings (temporary and permanent)
- Traffic control items

**B (Vacant)**

**C Construction**

Perform all surveying required to construct the work under this contract as specified in standard spec 650. Include all other miscellaneous survey required to layout and construct all work under this contract. Obtain engineer's approval before performing all survey required to lay out and construct the work under this contract. The department will not perform any construction staking for this contract.

*Replace standard spec 105.6.1(2) with the following:*

The department will furnish data for the horizontal and vertical control points. Prosecute the work using these points for field control. The department is responsible for the accuracy of lines, slopes, and grades it provides. The engineer and contractor shall agree on the meaning of all stakes, measurements, and marks before the contractor begins work.

*Replace standard spec 650.3.1(3) with the following:*

Obtain or calculate the following from the plan information: horizontal and vertical control points, control point ties, benchmark data, grades, horizontal alignments, profiles, and elevations from plan information.

Reestablish, set additional, and maintain the horizontal and vertical control points and control point ties, as needed for bid items.

*Replace standard spec 650.3.1(4) with the following:*

Check horizontal and vertical information including but not limited to alignments, locations, elevations, and dimensions, that either the plans show or the engineer provides, for compatibility with existing field conditions. Conduct similar compatibility checks and accuracy checks of horizontal and vertical positions the contractor establishes in the field.

*Add the following to standard spec 650.3.1(5):*

Confirm with engineer before using global positioning or AMG methods to establish the following:

1. Concrete pavement vertical locations.
2. Curb, gutter, and curb and gutter vertical locations.
3. Storm Sewer layout horizontal or vertical locations, including structure centers, offsets, access openings, rim and invert elevations.

*Add the following to standard spec 650.3.1.1(2):*

This includes:

- Raw data files
- Digital stakeout reports
- Control check reports
- Supplemental control files (along with method used to establish coordinates and elevation)
- Calibration report

*Replace standard spec 650.3.1.2.1 with the following:*

Under the Construction Staking Survey Project bid item, the contractor may substitute AMG for conventional staking on all or part of the work, according to this special provision. Coordinate with the engineer throughout the course of construction to ensure that work performed using AMG conforms to the contract tolerances and that the methods employed conform to the contractor's AMG work plan and accepted industry standards. Revert to conventional staking methods for all or part of the work at any point during construction if AMG is producing unacceptable results.

*Replace standard spec 650.3.1.2.3.1 with the following:*

The department will not provide a contractor data packet for the project.

*Add the following to standard spec 650.3.1.2.5:*

<sup>(3)</sup> Record all subgrade elevation checks and submit a hard copy to the engineer within 24 hours or as requested by the engineer.

*Add the following to standard spec 650.3.11:*

<sup>(2)</sup> The street lighting poles and pull boxes / vaults are both stationed to the center with the conduit stationed at the ends. See drawing details for any additional information.

*Add the following to standard spec 650.3:*

### **650.3.16 Additional Staking**

For the following work, set and maintain construction stakes as necessary to achieve the required accuracy and to support the method of operations. Set additional construction stakes as necessary to establish location and grade including points where the alignment or grade changes, and at radii. Locate stakes to within 0.02 feet horizontally and establish elevations to within 0.01 feet vertically.

- Drainage structures
- Bioswales
- Permeable pavers
- Bike lanes
- Bike lane ramps

- Concrete islands, driveways, pedestrian curb, truck aprons
- Street lighting (temporary and permanent)
- Traffic signals (temporary and permanent)
- Utilities
- CUC
- Conduit
- Water and sanitary adjustments

For the following work, set and maintain construction stakes as necessary to achieve the required accuracy and to support the method of operations.

- Landscaping and planting elements
- Signing
- Pavement markings (temporary and permanent)
- Traffic control items

#### **D Measurement**

*Replace standard spec 650.4 with the following:*

The department will measure Construction Staking Survey Project as a single unit acceptably completed.

#### **E Payment**

*Replace standard spec 650.5 with the following:*

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.003	Construction Staking Survey Project 2590-04-71	EACH

The department will not make final payment for any staking item until the contractor submits survey notes and computations used to establish the required lines and grades to the engineer within 21 days of completing this work. The department will deduct from payments due the contractor for the additional costs specified in standard spec 105.6.

Payment for the Construction Staking bid items is full compensation for locating and setting construction stakes; for adjusting stakes to ensure compatibility with existing field conditions; and for relocating and resetting damaged or missing construction stakes.

### **47. Water Main Protection, Item SPV.0060.020.**

#### **A Description**

This special provision describes protecting existing water mains from newly constructed storm drainage facilities. No structures will be allowed over the existing water main or hydrant branch with less than 18" of vertical out-to-out clearance. Alternate drainage structures shall be used to provide minimum sewer-water clearances required by Wisconsin DNR.

#### **B Materials**

Contractor shall furnish and install materials as detailed on the construction plans and in the Construction section below.

#### **C Construction**

Construct drainage structure, located above and across an existing water main, by utilizing materials and joints that are water tight. For all catch basins and inlets that have less than 24" out-to-out of horizontal clearance, the following water main protections shall be made:

- The catch basins and inlets shall be altered to provide 18" of vertical clearance to the water mains or hydrant branches.
- The catch basins and inlets shall be wrapped with 2 layers of 8 mil polyethylene around the base and extending 1ft vertically on all sides of the drainage structure.

**D Measurement**

The department will measure Water Main Protection as each individual water main protection, 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.0060.020	Water Main Protection	EACH

Payment is full compensation for protecting existing water mains; and for all excavation, backfilling, disposal of surplus materials, restoration of the work site, and for furnishing all labor, equipment, materials, tools and incidentals necessary to complete the work.

**48. Inlet Covers Type MS 55, Item SPV.0060.024.****A Description**

This special provision describes providing work under these items according to the requirements of standard spec 611 and the details as shown on the plans.

**B Materials**

Furnish materials under these items according to the requirements of standard spec 611 and the details as shown on the plans.

**C Construction (Vacant)****D Measurement**

The department will measure Inlet Covers Type MS 55 by each unit, acceptably completed.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.024	Inlet Covers Type MS 55	EACH

Payment is full compensation for furnishing and installing the inlet covers including the frame and grate.

**49. Inlet Covers Type MS 57, Item SPV.0060.025.****A Description**

This special provision describes providing work under these items according to the requirements of standard spec 611 and the details as shown on the plans.

**B Materials**

Furnish materials under these items according to the requirements of standard spec 611 and the details as shown on the plans.

**C Construction (Vacant)****D Measurement**

The department will measure Inlet Covers Type MS 57 by each unit, acceptably completed.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.025	Inlet Covers Type MS 57	EACH

Payment is full compensation for furnishing and installing the inlet covers including the frame and grate.

**50. Manhole Covers Type MS-58A, Item SPV.0060.026.**

**A Description**

This special provision describes providing work under these items according to the requirements of standard spec 611 and the details as shown on the plans.

**B Materials**

Furnish materials under these items according to the requirements of standard spec 611 and the details as shown on the plans.

**C Construction (Vacant)**

**D Measurement**

The department will measure Manhole Covers Type MS-58A by each unit, acceptably completed.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.026	Manhole Covers Type MS-58A	EACH

Payment is full compensation for removing and salvaging the existing covers, providing new covers, including frames, lids, and for installing and adjusting each cover. Old covers removed shall be disposed of by the contractor.

**51. Curb Inlet Type 70A, Item SPV.0060.027.**

**A Description**

Perform work under these items according to the requirements of standard spec 611 and the details as shown on the plans.

**B Vacant**

**C Construction**

Take adequate measures to install and maintain necessary support under the Curb Inlet, Type 70A, during the paving operations.

**D Measurement**

The department will be measure Curb Inlet Type 70A Special 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.0060.027	Curb Inlet Type 70A	Each

Payment is full compensation for installing and furnishing all required materials. The cost of concrete base and modifications to the subgrade supporting the Curb Inlet Type 70A and rebar in the concrete curb head shall be included in the unit price for the item Curb Inlet Type 70A.

**52. Inlet Covers Temporary, Item SPV.0060.029.**

**A Description**

This special provision describes furnishing, installing, adjusting and removing temporary inlet covers on existing storm sewer structures at locations shown in the plans.

**B Materials**

Furnish inlet covers per the pertinent requirements of standard spec 611. Provide open grates for drainage.

## C Construction

Place the temporary inlet cover on the existing structure with the necessary adjustments per standard spec 611. Adjust and set the grade of the inlet cover to meet the final elevation of the temporary surface.

Remove the temporary inlet cover once no longer needed.

## D Measurement

The department will measure Inlet Covers Temporary as each individual temporary inlet cover, acceptably completed.

## E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.029	Inlet Covers Temporary	EACH

Payment is full compensation for furnishing temporary inlet covers, including frames, grates or lids; and for furnishing all other required materials and for installing, adjusting, and removing each cover. Upon removal, the temporary inlet cover becomes the property of the contractor.

## 53. Traffic Delineators Flexible, Item SPV.0060.030.

### A Description

This section describes furnishing and installing permanent traffic delineator posts and bases.

### B Materials

Furnish traffic delineator posts consisting of a modified T-shaped tubular post a minimum of 3 inches wide by 2 inches deep, with 0.125 inch (min.) walls. Furnish posts comprised of flat front and curved rear surfaces and sides. Posts shall be capable of sustaining a minimum of 10 direct wheel-over impacts at 60 MPH without damage to the post or reflective sheeting. Posts shall be constructed of UV-stabilized thermoplastic low-density polyethylene (LDPE). Furnish posts that are 28 inches in height and white in color. Post materials shall conform with the following specifications:

Property	ASTM Test	Results
Specific Gravity (min.)	D 1505	0.925
Hardness (min.)	D 2240	47D
Tensile Strength @ break, (min PSI)	D 638	2200
Tensile Elongation @ break , (min. %)	D 638	300
Dart Impact @ 23 degrees C, grams	D 1709	170
Cold Temp. Impact Test (-7° F)	FL/DOT	Pass

Posts shall have retro-reflective sheeting applied. The minimum reflective sheeting shall be two 3-inch wide wraps of sheeting yellow in color applied 2 inches down from the top of the post with a 4 inch gap between wraps.

Furnish base units with at least two plastic locking pins. Provide bases that are 1 pound (min.) in weight and white in color. Base materials shall be high-impact thermoplastic styrenic alloy conforming with the following specifications:

Property	ASTM Test	Results
Specific Gravity (min.)	D 792	1.02
Gardner Impact (min.)	N/A	160
Flexural Strength (min.)	D 790	5500

Provide a base designed to hold the post securely using locking pins, or other devices, to withstand a series of direct wheel impacts with speeds up to 65 mph. The locking pins shall be rust-proof plastic conforming with the same specifications as the base units.

## C Construction

On asphalt or concrete pavement surfaces, install the roadside concrete island traffic delineator assembly using four anchor bolts (min.) to the pavement surface per the manufacturer's specifications or as directed by the engineer. The anchor bolts shall be one-piece removable and reusable with finished hex head, integral washer, dual lead threads, and chamfered tip.

## D Measurement

The department will measure Traffic Delineators Flexible by each individual unit, including the post and base, 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.0060.030	Traffic Delineators Flexible	EACH

Payment is full compensation for furnishing and installing the posts, bases, and all associated hardware.

## 54. High Friction Traffic Marking White Bike Lane Arrow, Item SPV.0060.037; High Friction Traffic Marking White Bike Lane Symbol, Item SPV.0060.038.

### A Description

The contractor shall furnish and install white methyl methacrylate (MMA) resin with hardwearing aggregate and premium pigments to deliver a durable, highly visible and color stable bike lane symbols that meets the non-slip requirements needed for pedestrians, cyclists and vehicles at the locations shown on the plans, in conformance with the details, and the material specifications included herein.

### B Materials

The methyl methacrylate material shall be a two-part material. The composition is 98 parts of Component "A", homogeneously composed of pigment, filler, resins and anti-skid aggregate, and 2 parts of Component "B", liquid hardener. Part "B" shall be a benzoyl peroxide catalyst.

Use Color-Safe Pavement Marking with Anti-Skid Surface by Transpo Industries, CycleGrip MAXX by Ennis-Flint, or Roadzilla or an approved equal. Color "White". Use an MMA based resin system capable of retaining an aggregate topping under vehicular traffic conditions. Install Methyl Methacrylate (MMA) Two-Component Traffic Markings according to manufactures specifications and these special provisions.

The material shall comply to the following:

Property	Value	Test Method
Tensile Strength @ 7 days, psi, minimum	400	ASTM D 638
Hardness, Shore D, minimum	50	ASTM D 2240
Gel Time, minutes, minimum	10	ASTM D 2471
Cure Rate, hours, maximum	3	Film @ 75 degrees F
Water Absorption @ 24 hours, maximum	0.25% CELL	ASTM D 570

Aggregate: The aggregate shall be high friction crushed Bauxite, No. 1 Silica, or Phonolite or equivalent. Deliver the aggregate to the construction site in clearly labeled bags or sacks. The aggregate shall be clean, dry and free from foreign matter. Aggregate shall meet the following requirements:

Property	Value	Test Method
Hardness, minimum	7	Mohs Scale

Submittal: Submit certificates of compliance certifying that the products supplied under the contract conform to these specifications. Submit Application Instructions a minimum 72 hours prior to application.

## **C Construction**

**General:** Install Methyl Methacrylate (MMA) Two-Component Traffic Marking White Symbols according to manufactures specifications.

**Preparation:** Prepare surfaces so that they are clean, dry, and free of all dust, oil, debris and any other material that might interfere with the bond between the MMA based resin system and existing surfaces. Contaminates that might interfere with the proper adhesion of the material must be removed by sandblasting or shotblasting. The surface should be visibly dry, and the moisture content should be tested according to ASTM D4263 (modified to 2 hours). Concrete must be fully cured for a minimum of 28 days prior to installation. Surface contaminants such as curing agents, membranes, bond breakers or laitance shall not be mechanically removed prior to marking.

Protect utilities, drainage structures, curbs and any other structure within or adjacent to the treatment location against the application of the surface treatment materials. Cover and protect all existing pavement markings that are adjacent to the application surfaces as directed by the engineer.

Pre-treat joints greater than ¼ inches in width and depth with the MMA resin system specified herein or by using an alternative procedure proposed by the manufacturer and agreed upon by the engineer. Proceed with the MMA resin system installation once the product, in the pre-treated areas, has gelled or once the alternative procedure has been accomplished.

**Mix:** MMA traffic marking is made up of three components (resin, hardener, and aggregate) that must be mixed thoroughly for uniform curing and performance. Liquid components must be homogenously stirred in the original containers before mixing components A and the liquid BPO concentrate catalyst, called Part B. Thoroughly mix by weight, 2 parts of the liquid hardener (Part B) with 98 parts of Component A. Mixing must be done by using a static mix tube or impingement system just prior to spray gun application on the job site.

**Temperature:** Material, pavement surface and ambient air temperature must be between 40° F and 105° F, and at least 5° F above dew point prior to striping. Relative humidity must be less than 75%. Installing the materials on surfaces above 105° F can lead to improper cure and dirt pickup. Surface and ambient temperatures should be checked hourly at a minimum if weather conditions cause temperatures to fluctuate during the course of the striping operation. Please note that drying time will be increased when striping at low temperatures. Both the Part A and B must be mixed thoroughly prior to application by any of the various application techniques.

**Mixing and Application:** Follow the MMA resin technical data sheet for application details. This material should be readily applied to Portland cement concrete surfaces sprayed at a thickness of 30 mils, and no greater than 35 mils, when applied over green MMA pavement marking. This material should be readily applied to Portland cement concrete surfaces sprayed at a thickness of 45 mils when applied directly on cement concrete or HMA pavement.

**Curing:** Allow the MMA based resin system to cure according to manufacturer recommendations. Protect treated surfaces from traffic and environmental effects until the area has cured.

## **PERFORMANCE REQUIREMENTS**

The following guidelines shall be followed to ensure total understanding of what is expected in the application of any permanent pavement marking material on new pavement surfaces.

The pavement marking shall be uniform thickness across the entire cross section of the marking with well-defined edges. Heavy inner thickness and thin edges or vice-versa will not be accepted. Aggregate shall be spread uniformly over the entire marking. Beginning and ends of markings shall be clean cut and perpendicular to the centerline of the street.

Remove and replace methyl methacrylate that has foreign covering, discolored areas, improper adhesion, improper width, length, or thickness as verified by the engineer against the plans or this special provision. Remove and replace areas that present a ragged appearance, areas that do not present clear and sharply defined edges, and areas with abrupt unintended changes in alignment. Remove excessive dripping of marking material between markings and remove and replace any marking applied with a lack or excess of aggregate. Remove, to the satisfaction of the engineer, all pavement marking applied outside the scope or limits of this project. Removal and replacement of unsatisfactory pavement marking will be at the contractor's expense. The replaced Colored White surface treatment shall meet the requirements of this sub-article.

Remove and replace Colored White surface treatment that ravels, delaminates, or wears off within 90 days after placement, unless approved to remain in place by the engineer. The limits of removal and replacement shall be approved by the engineer.

**Lack of specified thickness:** The full unit price bid per unit (each) shall be withheld if lack of thickness is found at each bike lane arrow or symbol. Each bike lane arrow or symbol marking shall be checked a minimum of one time.

**Lack of specified width:** Payment shall be made with penalty being equal to 25% of the unit price bid per each for each ¼ inch of width lacking not to exceed 100% of the unit price bid.

**Improper adhesion:** The full unit price bid per item shall be withheld for each occurrence if improper adhesion is found.

**Deviation:** A marking that in the judgment of the engineer deviates from the specified layout by an unreasonable amount shall be replaced. The contractor shall be responsible for removal of the deviated marking material/repair of the pavement as designated by, and to the satisfaction of, the engineer at no additional compensation.

**Excessive Dripping between Symbols:** The full unit price bid item shall be penalized for the length of any open space between symbols that is not removed to the satisfaction of the engineer before leaving the project site that workday. Penalty shall be imposed upon the first occurrence and every occurrence thereafter.

**Warranty:** The MMA based resin system material shall be installed per plans and manufacturer specification. The engineer will notify the contractor within 48 hours of installation regarding any of the MMA based resin system material not installed per specification or to the satisfaction of the engineer. Non-conforming MMA based resin system material shall be removed at no charge to WisDOT and replaced with conforming product.

The warranty period in reference to the following points is to be 1 year from date of installation. Warranty of the following items shall be submitted in writing by the contractor or his installer prior to the pre-construction meeting.

- The MMA based resin system material will maintain its original color in the surface area throughout the 'warranty period' with the exception of natural weathering, tire and dirt deposits and abnormal markings applied after installation.
- Friction will achieve a minimum BPN of 60 according to ASTM E-303
- The MMA based resin system material will maintain its skid resistance qualities in 100% of its surface area to never fall below a BPN of 60 during the 'warranty period'.
- With the exception of structural cracking or excessive movement of the surface beneath, the MMA based resin system will not be subject to excessive cracking in its surface

## D Measurement

The department will measure High Friction Traffic Marking White Bike Lane Arrow and Bike Lane Symbol by EACH unit, acceptably completed. No deduction will be made for the areas occupied by manholes, inlets, drainage structures, pavement markings or by any public utility appurtenances within the area.

## E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.037	High Friction Traffic Marking White Bike Lane Arrow	EACH
SPV.0060.038	High Friction Traffic Marking White Bike Lane Symbol	EACH

Payment is full compensation for furnishing and installing all materials including any re-application or repair required under the Performance Requirements and Warranty as provided herein.

**55. High Friction Traffic Marking Bike Lane Green Two-Stage Queue Boxes, Item SPV.0060.039.**

**A Description**

The contractor shall furnish and install white methyl methacrylate (MMA) resin with hardwearing aggregate and premium pigments to deliver a durable, highly visible and color stable bike lane two-stage queue boxes that meets the non-slip requirements needed for pedestrians, cyclists and vehicles at the locations shown on the plans, in conformance with the details, and the material specifications included herein.

**B Materials**

The methyl methacrylate material shall be a two-part material. The composition is 98 parts of Component "A", homogeneously composed of pigment, filler, resins and anti-skid aggregate, and 2 parts of Component "B", liquid hardener. Part "B" shall be a benzoyl peroxide catalyst.

Use Color-Safe Pavement Marking with Anti-Skid Surface by Transpo Industries, CycleGrip MAXX by Ennis-Flint, or Roadzilla or an approved equal. Color "Bike Lane Green" or approved equivalent. Use an MMA based resin system capable of retaining an aggregate topping under vehicular traffic conditions. Install Methyl Methacrylate (MMA) Two-Component Traffic Markings according to manufactures specifications and these special provisions.

The material shall comply to the following:

Property	Value	Test Method
Tensile Strength @ 7 days, psi, minimum	400	ASTM D 638
Hardness, Shore D, minimum	50	ASTM D 2240
Gel Time, minutes, minimum	10	ASTM D 2471
Cure Rate, hours, maximum	3	Film @ 75 degrees F
Water Absorption @ 24 hours, maximum	0.25% CELL	ASTM D 570

Aggregate: The aggregate shall be high friction crushed Bauxite, No. 1 Silica, or Phonolite or equivalent. The aggregate will be delivered to the construction site in clearly labeled bags or sacks. The aggregate shall be clean, dry and free from foreign matter. Aggregate shall meet the following requirements:

Property	Value	Test Method
Hardness, minimum	7	Mohs Scale

Submittal: Submit certificates of compliance certifying that the products supplied under the contract conform to these specifications. Submit Application Instructions a minimum 72 hours prior to application.

**C Construction**

**General:** Install Methyl Methacrylate (MMA) Two-Component Traffic Marking green two stage queue boxes according to manufactures specifications.

**Preparation:** Prepare surfaces so that they are clean, dry, and free of all dust, oil, debris and any other material that might interfere with the bond between the MMA based resin system and existing surfaces. Contaminates that might interfere with the proper adhesion of the material must be removed by sandblasting or shotblasting. The surface should be visibly dry, and the moisture content should be tested according to ASTM D4263 (modified to 2 hours). Concrete must be fully cured for a minimum of 28 days prior to installation. Surface contaminants such as curing agents, membranes, bond breakers or laitance shall not be mechanically removed prior to marking.

Protect utilities, drainage structures, curbs and any other structure within or adjacent to the treatment location against the application of the surface treatment materials. Cover and protect all existing pavement markings that are adjacent to the application surfaces as directed by the engineer.

Pre-treat joints greater than ¼ inches in width and depth with the MMA resin system specified herein or by using an alternative procedure proposed by the manufacturer and agreed upon by the engineer. Proceed with the MMA resin system installation once the product, in the pre-treated areas, has gelled or once the alternative procedure has been accomplished.

**Mix:** MMA traffic marking is made up of three components (resin, hardener, and aggregate) that must be mixed thoroughly for uniform curing and performance. Liquid components must be homogenously stirred in the original containers before mixing components A and the liquid BPO concentrate catalyst, called Part B. Thoroughly mix by weight, 2 parts of the liquid hardener (Part B) with 98 parts of Component A. Mixing must be done by using a static mix tube or impingement system just prior to spray gun application on the job site.

**Temperature:** Material, pavement surface and ambient air temperature must be between 40° F and 105° F, and at least 5° F above dew point prior to striping. Relative humidity must be less than 75%. Installing the materials on surfaces above 105° F can lead to improper cure and dirt pickup. Surface and ambient temperatures should be checked hourly at a minimum if weather conditions cause temperatures to fluctuate during the course of the striping operation. Please note that drying time will be increased when striping at low temperatures. Both the Part A and B must be mixed thoroughly prior to application by any of the various application techniques.

**Mixing and Application:** Follow the MMA resin technical data sheet for application details. This material should be readily applied to Portland cement concrete surfaces sprayed at a thickness of 45 mils, and no greater than 50 mils.

**Curing:** Allow the MMA based resin system to cure according to manufacturer recommendations. Protect treated surfaces from traffic and environmental effects until the area has cured.

## PERFORMANCE REQUIREMENTS

The following guidelines shall be followed to ensure total understanding of what is expected in the application of any permanent pavement marking material on new pavement surfaces.

The pavement marking shall be uniform thickness across the entire cross section of the marking with well-defined edges. Heavy inner thickness and thin edges or vice-versa will not be accepted. Aggregate shall be spread uniformly over the entire marking. Beginning and ends of markings shall be clean cut and perpendicular to the centerline of the street.

Remove and replace methyl methacrylate that has foreign covering, discolored areas, improper adhesion, improper width, length, or thickness as verified by the engineer against the plans or this special provision. Remove and replace areas that present a ragged appearance, areas that do not present clear and sharply defined edges, and areas with abrupt unintended changes in alignment. Remove excessive dripping of marking material between markings and remove and replace any marking applied with a lack or excess of aggregate. Remove, to the satisfaction of the engineer, all pavement marking applied outside the scope or limits of this project. Removal and replacement of unsatisfactory pavement marking will be at the contractor's expense. The replaced Colored White surface treatment shall meet the requirements of this sub-article.

Remove and replace Colored White surface treatment that ravel, delaminates, or wears off within 90 days after placement, unless approved to remain in place by the engineer. The limits of removal and replacement shall be approved by the engineer.

**Lack of specified thickness:** The full unit price bid per unit (each) shall be withheld if lack of thickness is found at each bike lane arrow or symbol. Each bike two-stage queue box shall be checked a minimum of one time.

**Lack of specified width:** Payment shall be made with penalty being equal to 25% of the unit price bid per each for each ¼ inch of width lacking not to exceed 100% of the unit price bid.

**Improper adhesion:** The full unit price bid per item shall be withheld for each occurrence if improper adhesion is found.

**Deviation:** A marking that in the judgment of the engineer deviates from the specified layout by an unreasonable amount shall be replaced. The contractor shall be responsible for removal of the deviated marking material/repair of the pavement as designated by, and to the satisfaction of, the engineer at no additional compensation.

**Excessive Dripping between Symbols:** The full unit price bid item shall be penalized for the length of any open space between symbols that is not removed to the satisfaction of the engineer before leaving

the project site that workday. Penalty shall be imposed upon the first occurrence and every occurrence thereafter.

**Warranty:** The MMA based resin system material shall be installed per plans and manufacturer specification. The engineer will notify the contractor within 48 hours of installation regarding any of the MMA based resin system material not installed per specification or to the satisfaction of the engineer. Non-conforming MMA based resin system material shall be removed at no charge to WisDOT and replaced with conforming product.

The warranty period in reference to the following points is to be 1 year from date of installation. Warranty of the following items shall be submitted in writing by the contractor or his installer prior to the pre-construction meeting.

- The MMA based resin system material will maintain its original color in the surface area throughout the 'warranty period' with the exception of natural weathering, tire and dirt deposits and abnormal markings applied after installation.
- Friction will achieve a minimum BPN of 60 according to ASTM E-303.
- The MMA based resin system material will maintain its skid resistance qualities in 100% of its surface area to never fall below a BPN of 60 during the 'warranty period'.
- With the exception of structural cracking or excessive movement of the surface beneath, the MMA based resin system will not be subject to excessive cracking in its surface

#### **D Measurement**

The department will measure High Friction Traffic Marking Green Two-Stage Queue Boxes by EACH unit, acceptably completed. No deduction will be made for the areas occupied by manholes, inlets, drainage structures, pavement markings or by any public utility appurtenances within the area.

#### **E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.039	High Friction Traffic Marking Bike Lane Green Two-Stage Queue Boxes	EACH

Payment is full compensation for furnishing and installing all materials including any re-application or repair required under the Performance Requirements and Warranty as provided herein.

### **56. Marking Speed Table Chevron White, SPV.0060.040.**

#### **A Description**

This special provision describes furnishing and installing Marking Speed Table Chevron White as directed by the engineer, as shown on the drawings and as hereinafter provided.

Perform work under these items according to the requirements of standard spec 646 and the details as shown on the plans, with the exception of the differences noted here within.

#### **B Materials**

Furnish epoxy pavement marking and glass bead material according to the standard spec 646.

#### **C Construction**

Construction of pavement markings shall be according to manufacturer application and installation procedures, standard spec 646, and engineer.

All pavement marking areas shall be laid out by the contractor and then reviewed by the engineer. Approval of the marking layout shall be approved by the engineer prior to placement of material.

The contractor shall protect the pavement markings from damage and allow them to fully cure prior to allowing traffic to drive over markings. Any damage shall be corrected by the contractor at the contractor's expense.

#### **D Measurement**

The department will measure Marking Speed Table Chevron White as each full chevron, acceptably completed.

## **E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.040	Marking Speed Table Chevron White	EACH

Payment is full compensation for preparing the surface, furnishing and installing chevron marking materials; and for all incidentals necessary to complete the work.

## **57. Round Aluminum Sign Post System in Soft Surface 7-Foot, Item SPV.0060.050.**

### **A Description**

This special provision describes furnishing and installing sign post, post anchor and sign mounting hardware at the locations shown on the plans. All sign posts shall be round tubular aluminum and installed as shown in the plans.

### **B Materials**

Furnish a round aluminum 2" Schedule 40 6061-T6 Extruded Aluminum post with a length of 7 feet, a V-loc Soft-Soil 30" with cleanout bar post anchor for 2 3/8" round post (TAPCO SKU 034-00085, Traffic Safety Supply Company SKU DP00239, Custom Products Corporation Item RPORZVRB23VR2B or approved equal), 5/16" x 1 1/4" Stainless Steel Fender Washers and one- or two-sided sign mounting Z-brackets that fit 2 3/8 inch post or approved equal, as shown in plans.

### **C Construction**

Install Round Aluminum Sign Post System in Soft Surface as shown in plans.

### **D Measurement**

The department will measure Round Aluminum Sign Post System in Soft Surface 7-Foot by each unit, acceptably completed.

## **E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.050	Round Aluminum Sign Post System in Soft Surface 7-Foot	EACH

Payment is full compensation for furnishing and installing Round Aluminum Sign Post System in Soft Surface 7-Foot, post anchor and sign mounting hardware at the locations shown on the plans.

## **58. Round Aluminum Sign Post System in Soft Surface 10-Foot, Item SPV.0060.051.**

### **A Description**

This special provision describes furnishing and installing sign post, post anchor and sign mounting hardware at the locations shown on the plans. All sign posts shall be round tubular aluminum and installed as shown in the plans.

### **B Materials**

Furnish a round aluminum 2" Schedule 40 6061-T6 Extruded Aluminum post with a length of 10 feet, a V-loc Soft-Soil 30" with cleanout bar post anchor for 2 3/8" round post (TAPCO SKU 034-00085, Traffic Safety Supply Company SKU DP00239, Custom Products Corporation Item RPORZVRB23VR2B or approved equal), 5/16" x 1 1/4" Stainless Steel Fender Washers and one- or two-sided sign mounting Z-brackets that fit 2 3/8 inch post or approved equal, as shown in plans.

### **C Construction**

Install Round Aluminum Sign Post System in Soft Surface as shown in plans.

### **D Measurement**

The department will measure Round Aluminum Sign Post System in Soft Surface 10-Foot by each unit, acceptably completed.

## E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.051	Round Aluminum Sign Post System in Soft Surface 10-Foot	EACH

Payment is full compensation for furnishing and installing Round Aluminum Sign Post System in Soft Surface 10-Foot, post anchor and sign mounting hardware at the locations shown on the plans.

## 59. Round Aluminum Sign Post System in Soft Surface 11-Foot, Item SPV.0060.052.

### A Description

This special provision describes furnishing and installing sign post, post anchor and sign mounting hardware at the locations shown on the plans. All sign posts shall be round tubular aluminum and installed as shown in the plans.

### B Materials

Furnish a round aluminum 2" Schedule 40 6061-T6 Extruded Aluminum post with a length of 11 feet, a V-loc Soft-Soil 30" with cleanout bar post anchor for 2 3/8" round post (TAPCO SKU 034-00085, Traffic Safety Supply Company SKU DP00239, Custom Products Corporation Item RPORZVRB23VR2B or approved equal), 5/16" x 1 1/4" Stainless Steel Fender Washers and one- or two-sided sign mounting Z-brackets that fit 2 3/8 inch post or approved equal, as shown in plans.

### C Construction

Install Round Aluminum Sign Post System in Soft Surface as shown in plans.

### D Measurement

The department will measure Round Aluminum Sign Post System in Soft Surface 11-Foot by each unit, acceptably completed.

## E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.052	Round Aluminum Sign Post System in Soft Surface 11-Foot	EACH

Payment is full compensation for furnishing and installing Round Aluminum Sign Post System in Soft Surface 11-Foot, post anchor and sign mounting hardware at the locations shown on the plans.

## 60. Round Aluminum Sign Post System in Soft Surface 12-Foot, Item SPV.0060.053.

### A Description

This special provision describes furnishing and installing sign post, post anchor and sign mounting hardware at the locations shown on the plans. All sign posts shall be round tubular aluminum and installed as shown in the plans.

### B Materials

Furnish a round aluminum 2" Schedule 40 6061-T6 Extruded Aluminum post with a length of 12 feet, a V-loc Soft-Soil 30" with cleanout bar post anchor for 2 3/8" round post (TAPCO SKU 034-00085, Traffic Safety Supply Company SKU DP00239, Custom Products Corporation Item RPORZVRB23VR2B or approved equal), 5/16" x 1 1/4" Stainless Steel Fender Washers and one- or two-sided sign mounting Z-brackets that fit 2 3/8 inch post or approved equal, as shown in plans.

### C Construction

Install Round Aluminum Sign Post System in Soft Surface as shown in plans.

### D Measurement

The department will measure Round Aluminum Sign Post System in Soft Surface 12-Foot by each unit, acceptably completed.

## **E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.053	Round Aluminum Sign Post System in Soft Surface 12-Foot	EACH

Payment is full compensation for furnishing and installing Round Aluminum Sign Post System in Soft Surface 12-Foot, post anchor and sign mounting hardware at the locations shown on the plans.

## **61. Round Aluminum Sign Post System in Concrete Surface 7-Foot, Item SPV.0060.054.**

### **A Description**

This special provision describes furnishing and installing sign post, post anchor, anchoring cement and sign mounting hardware at the locations shown on the plans. All sign posts shall be round tubular aluminum and installed as shown in the plans.

### **B Materials**

Furnish a round aluminum 2-inch Schedule 40 6061-T6 Extruded Aluminum post with a length of 7 feet, a V-loc Concrete 8-inch post anchor for 2 3/8-inch round post (TAPCO SKU 037-00012B, Traffic Safety Supply Company SKU DP00241, Custom Products Corporation Item RPORZVR12382OR or approved equal), 5/16-inch x 1 1/4-inch Stainless Steel Fender Washers, one- or two-sided sign mounting Z-brackets that fit 2 3/8-inch post and pourable hydraulic cement for setting of concrete post anchor, as shown in plans.

### **C Construction**

Install Round Aluminum Sign Post System in Concrete Surface as shown in plans.

### **D Measurement**

The department will measure Round Aluminum Sign Post System in Concrete Surface 7-Foot by each unit, acceptably completed.

## **E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.054	Round Aluminum Sign Post System in Concrete Surface 7-Foot	EACH

Payment is full compensation for furnishing and installing Round Aluminum Sign Post System in Concrete Surface 7-Foot, post anchor, anchoring cement and sign mounting hardware at the locations shown on the plans.

## **62. Round Aluminum Sign Post System in Concrete Surface 10-Foot, Item SPV.0060.055.**

### **A Description**

This special provision describes furnishing and installing sign post, post anchor, anchoring cement and sign mounting hardware at the locations shown on the plans. All sign posts shall be round tubular aluminum and installed as shown in the plans.

### **B Materials**

Furnish a round aluminum 2-inch Schedule 40 6061-T6 Extruded Aluminum post with a length of 10 feet, a V-loc Concrete 8-inch post anchor for 2 3/8-inch round post (TAPCO SKU 037-00012B, Traffic Safety Supply Company SKU DP00241, Custom Products Corporation Item RPORZVR12382OR or approved equal), 5/16-inch x 1 1/4-inch Stainless Steel Fender Washers, one- or two-sided sign mounting Z-brackets that fit 2 3/8-inch post and pourable hydraulic cement for setting of concrete post anchor, as shown in plans.

### **C Construction**

Install Round Aluminum Sign Post System in Concrete Surface as shown in plans.

#### **D Measurement**

The department will measure Round Aluminum Sign Post System in Concrete Surface 10-Foot by each unit, acceptably completed.

#### **E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.055	Round Aluminum Sign Post System in Concrete Surface 10-Foot	EACH

Payment is full compensation for furnishing and installing Round Aluminum Sign Post System in Concrete Surface 10-Foot, post anchor, anchoring cement and sign mounting hardware at the locations shown on the plans.

### **63. Sign Mounting Hardware on Existing Pole (Concrete, Aluminum or Steel), Item SPV.0060.060.**

#### **A Description**

This special provision describes furnishing and installing Mounting Hardware on Existing Pole (concrete, aluminum or steel pole) with current City of Milwaukee practices.

#### **B Materials**

Furnish 201 Stainless Steel Banding  $\frac{3}{4}$ " x 0.20., Stainless Steel Flared Leg Sign Mount Bracket for  $\frac{3}{4}$ " banding, 201 Stainless Steel Wing Seal (buckle) for  $\frac{3}{4}$ " banding,  $\frac{5}{16}$ " x  $1\frac{1}{4}$ " Stainless Steel Fender Washers,  $\frac{5}{16}$ "-18 x  $\frac{3}{4}$ " Stainless Steel Hex Head Bolt.

#### **C Construction**

Install and orient Mounting Hardware on Existing Pole (Concrete, aluminum or steel) as shown on the plans.

#### **D Measurement**

The department will measure Sign Mounting Hardware on Existing Pole by each unit, acceptably completed.

#### **E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.060	Sign Mounting Hardware on Existing Pole (Concrete, Aluminum or Steel)	EACH

Payment is full compensation for furnishing and installing Sign Mounting Hardware on Existing Pole (concrete, aluminum or steel pole).

### **64. Street Name Sign Mounting Hardware on Mast Arm, Item SPV.0060.061.**

#### **A Description**

This special provision describes providing furnishing and installing Mounting Hardware on Mast Arm with current City of Milwaukee practices.

#### **B Materials**

Furnish 201 Stainless Steel Banding  $\frac{3}{4}$ " x 0.20., Stainless Steel Flared Leg Sign Mount Bracket for  $\frac{3}{4}$ " banding, 201 Stainless Steel Wing Seal (buckle) for  $\frac{3}{4}$ " banding,  $\frac{5}{16}$ " x  $1\frac{1}{4}$ " Stainless Steel Fender Washers,  $\frac{5}{16}$ "-18 x  $\frac{3}{4}$ " Stainless Steel Hex Head Bolt.

#### **C Construction**

Install and orient Mounting Hardware on Mast Arm as shown on the plans.

#### **D Measurement**

The department will measure Street Name Sign Mounting Hardware on Mast Arm by each unit, acceptably completed.

## E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.061	Street Name Sign Mounting Hardware on Mast Arm	EACH

Payment is full compensation for furnishing and installing Street Name Sign Mounting Hardware on Mast Arm.

## 65. Street Name Sign Mounting Hardware on Existing Pole (Concrete, Aluminum, Steel or Wood), Item SPV.0060.062.

### A Description

This special provision describes providing furnishing and installing Street Name Mounting Hardware on Existing Pole (concrete, aluminum, steel or wood pole) with current City of Milwaukee practices.

### B Materials

Furnish Street Name Sign Wing L-Bracket, 201 Stainless Steel Banding  $\frac{3}{4}$ " x 0.20., 201 Stainless Steel Wing Seal (buckle) for  $\frac{3}{4}$ " banding.

### C Construction

Install and orient Mounting Hardware on Existing Pole (Concrete, Aluminum, Steel or Wood) as shown on the plans.

### D Measurement

The department will measure Street Name Sign Mounting Hardware on Existing Pole (Concrete, Aluminum, Steel or Wood) by each unit, acceptably completed.

## E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.062	Street Name Sign Mounting Hardware on Existing Pole (Concrete, Aluminum, Steel or Wood)	EACH

Payment is full compensation for furnishing and installing Street Name Mounting Hardware on Existing Pole (concrete, aluminum, steel or wood pole).

## 66. Remove Sign Post Assembly and Type II Signage, Item SPV.0060.065.

### A Description

This special provision describes removing 2 3/8" round post, sign post anchor and Type II signage according to the plans.

### B (Vacant)

### C Construction

Remove 2 3/8" sign post, sign post anchor and signage as shown on the plans. Keep the signs attached to the poles, and stockpile signs and poles for pick up by the City of Milwaukee. Contact the Sign Shop Manager at (414) 286-5965 at least three business days in advance to coordinate pick-up.

### D Measurement

The department will measure Remove Sign Post Assembly and Type II Signage by each unit, acceptably completed.

## E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.065	Remove Sign Post Assembly and Type II Signage	EACH

Payment is full compensation for removing 2 3/8" round post, sign post anchor and Type II signage.

**67. Temporary No Parking Signs, Item SPV.0060.080.**

**A Description**

This special provision describes providing, installing, maintaining, and removing Temporary No Parking signs.

**B Materials**

Furnish materials under this item according to the details as shown on the plans.

Temporary No Parking signs shall be fabricated using 18"x24" 4mm white corrugated (polypropylene twinwall) plastic sign base to print R7-1 regulation; use R7-1D, R7-1L or R7-1R where necessary. Provide a 0.4-inch thick base with a 0.035-inch wall thickness and 0.4-inch cell size. Prepare the sign base as the sheeting manufacturer recommends.

Sign shall be affixed to using 9-gauge galvanized electric fence wire.

**C Construction**

Install Temporary No Parking Signs according to the plans. Plan changes must be approved by a City of Milwaukee Traffic Engineer.

Any No Parking signage attached to city street trees shall be of a temporary method (nails or spikes are not allowed).

Please contact Mr. Cameron Potter at (414) 286-3276, with questions.

**D Measurement**

The department will measure Temporary No Parking Signs by each unit, acceptably completed.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.080	Temporary No Parking Signs	EACH

Payment is full compensation for providing, installing, maintaining, and removing Temporary No Parking signs.

**68. Adjusting Sanitary Manholes, Item SPV.0060.100.**

**A Description**

This work includes adjusting sanitary manholes to an elevation as determined by the engineer as well as installing frame and cover, internal frame/chimney seal, according to the Standard Specifications for Sewer and Water Construction in Wisconsin, latest edition and amendments (SSSW).

Add or remove masonry adjusting rings as needed. This item applies to structures to be lowered less than 6 inches or raised less than 12 inches.

**B Materials**

**B.1 Adjusting Rings**

Adjustment rings shall be concrete with steel reinforcement in conformance with ASTM C-478. Precast concrete rings shall have an inside diameter to match the manhole opening, be not less than 2 inches nor more than 6 inches high, and have a wall thickness of 6 inches unless otherwise specified. The rings shall contain a minimum of one No. 2 reinforcing rod centered within the ring. Do not use any cracked or broken rings. The top of precast manhole cones shall be set a maximum of 18 inches lower than established grade in unimproved areas, with the top of the manhole cover being ringed up flush with the existing ground. The minimum number of adjusting rings shall be one 2-inch ring. The maximum height of adjusting rings shall be 8 inches in paved areas. All joints between the adjusting rings shall be filled with grout or mortar, including between the cone and the adjusting ring and the adjusting ring and the frame. Rings shall be grooved to receive a step.

## **B.2 Manhole Seal**

Furnish new Cretex, NPC Flexrib, or approved equal internal frame/chimney Seal, as shown in the plans. The seal shall meet the material requirements of section 8.42.3 and the performance requirements of section 8.42.4 of the SSSW.

## **C Construction**

### **C.1 General**

The location of existing sanitary manholes to be adjusted is indicated on the plans. Adjust these items as shown in the plans. Reconstruct manholes as necessary so that the frames and cover when placed will be at the established required grade; remove the existing frame and cover. Any temporary adjustment (wood) shims shall be removed and backfilled with grout or mortar prior to installing the seal. Install seals according to the manufacturer's recommended installation procedures. Furnish and use Backfill Slurry in the manhole excavation area to existing surface or to appropriate depth for pavement restoration. Salvage the existing frame and cover.

### **C.2 Surface Preparation**

Remove manhole cover and power wire brush the lower 3 inches of the manhole frame to remove any loose rust or scale and repair any imperfections by either grinding smooth or filling with mortar. A smooth, clean sealing surface is required. Realign the casting if it is offset more than approximately 2 inches from the chimney. Remove all loose and protruding mortar and brick from the upper 7-Inch chimney and clean surface by power wire brushing. Provide a 4-Inch wide sealing surface starting 2 inches down from the bottom of the frame.

All sealing surfaces must be circular, reasonably smooth, clean and free of any loose material or excessive voids. If such a surface does not exist for the bottom of the sleeve to seal against, use one-component, quick-set, high strength, non-shrink, polymer modified patching mortar which has been formulated for vertical or overhead use. If the bottom of the sleeve is to seal against the top of an eccentric (straight side) cone and an inadequately high vertical surface does not exist, contact the manufacturer to obtain details to build the required vertical surface.

Use caulk to fill minor irregularities in the bottom sealing surface. The caulk shall be a butyl rubber caulk conforming to AASHTO M 198, Type B. Apply a single bead of the caulk to the center portion of the lower sealing surface of the sleeve.

Any flaws in the manhole frame, such as minor cracks, pits or protrusions, shall be repaired by either filling with mortar or grinding smooth.

## **D Measurement**

The department will measure Adjusting Sanitary Manholes as a unit per each adjustment, 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.0060.100	Adjusting Sanitary Manholes	EACH

Payment is full compensation for furnishing and installing all materials including adjusting rings, masonry, and internal frame/chimney seals; for salvaging, storing, and reinstalling the existing frame and cover; for excavating, backfilling, and compacting; for disposing of surplus materials; and for cleaning out and restoring the structure.

## **69. Internal Sanitary Manhole Seals, Item SPV.0060.104.**

### **A Description**

The work under this item consists of furnishing and installing internal manhole chimney seals for each sanitary manhole identified on the plans.

### **B Material**

The contractor shall furnish and install frame-to-chimney seals on all sanitary manholes within the limits of this contract. The seals shall be as specified in the *Standard Specification for Sewer and Water Construction in Wisconsin (Sixth Edition with addendum) Chapter 8.42.0*.

## C Construction Methods

The inside diameter of the manhole frame and the manhole chimney shall be field measured, and a determination as to whether the inside face of the frame is vertical or tapered shall be made in order to obtain the proper size and shape rubber seal.

Internal rubber chimney seals shall be installed no sooner than 24 hours following chimney back plastering.

The surfaces against which the sleeve is to be compressed shall be circular, clean, reasonably smooth and free of any loose materials and excessive voids. Any flaws in these surfaces shall be repaired with the approved low-shrink mortar or ground smooth. A bead of butyl rubber caulk conforming to AASHTO M-198 Type B shall be applied to the lower sealing surface of sleeve.

The seal shall be installed according to the manufacturer's instructions.

## D Method of Measurement

The item Install Sanitary Manhole Seals, furnished and installed at the locations indicated on the plans, will be measured and paid for as units in place and accepted according to the contract.

## E Basis of Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.104	Internal Sanitary Manhole Seals	EACH

Internal Sanitary Manhole Seals, measured as provided above, will be paid for at the contract unit price each, for the furnishing and installing internal rubber chimney seals and for all labor, tools, equipment and incidentals necessary to complete the work for each sanitary manhole.

## 70. **Adjusting Water Valve Boxes, Item SPV.0060.190; Adjusting Water Manholes, Item SPV.0060.191.**

### A Description

This special provision describes adjusting, protecting, and maintaining accessibility, for the duration of the paving project, to all City of Milwaukee water service boxes, water valve boxes, and water manhole frames and lids located within the project limits.

### B Materials

All material for the adjustment of these facilities shall meet City of Milwaukee specifications and will be provided by the City of Milwaukee by contacting Kevin Zagrodnik, Milwaukee Water Works, at (414) 708-7033 (or Syreeta Woodley, Milwaukee Water Works at (414) 286-6302). Milwaukee Water Works Distribution General Contact Number is (414) 286-3710.

If there is contractor damage, the materials must still be provided by the City of Milwaukee, however, in this case, the contractor will be charged for all materials.

Materials furnished by the City of Milwaukee and not used on the project shall be stockpiled for pick-up by Milwaukee Water Works. Contact Milwaukee Water Works at least three business days in advance for pick-up.

### C Construction

The contractor, or authorized project representative, shall contact Milwaukee Water Works prior to the start of construction. The city will locate, mark, inspect and repair all water service boxes, water valve boxes, and water manhole frames and lids within the limits of the project prior to commencement of work on the project.

All water service boxes, water valve boxes, and water manhole frames and lids within the project limits shall be adjusted to proposed elevations by the contractor using materials meeting city specifications.

Throughout the duration of the project, the contractor must ensure that all water service boxes, water valve boxes, and water manholes are adequately located and identified by blue paint, and that at all times, all water appurtenances remain accessible for operation by city forces. Exercise caution working adjacent to water facilities to avoid damage and ensure accessibility.

Upon completion of the contract, the city will inspect all water facilities to ensure the water boxes and manholes are clean, properly aligned, and accessible. The contractor shall be responsible to make identified repairs and adjustments, and if any repairs or adjustments are made by the city, the cost will be charged to the contractor.

#### **D Measurement**

The department will measure Adjusting Water Boxes and Adjusting Water Manholes as each individual unit, acceptably completed.

#### **E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.190	Adjusting Water Valve Boxes	EACH
SPV.0060.191	Adjusting Water Manholes	EACH

Payment is full compensation for all excavation, backfilling, disposal of surplus materials, water box or water manhole adjustments, water box or water manhole clean-out, and restoration of the work site; and for furnishing all labor, tools, equipment, and incidentals necessary to complete the work.

### **71. Install City Precast Controller Base, Item SPV.0060.201.**

#### **A Description**

This special provision describes the installation of precast controller bases furnished by the City of Milwaukee, for traffic signal control cabinets as shown on the plans.

#### **B Materials**

The 36"x21.25"x20" pre-cast concrete foundation for traffic signal cabinets P1 and P2 will be furnished by the City of Milwaukee. The contractor shall contact Mr. Rudy Gutierrez, Electrical Services Manager (414) 286-5941-office, (414) 708-5148-mobile; or the Electrical Services Dispatcher at (414) 286-3687 to coordinate pickup of the concrete foundation at the City of Milwaukee Electrical Services headquarters located at 1540 West Canal Street Milwaukee, WI 53233.

#### **C Construction**

Install concrete traffic cabinet bases according to the plans. Plan changes must be approved by a City of Milwaukee Electric Services Manager or Traffic Engineer. The primary contacts are Mr. Rudy Gutierrez, Electrical Services Manager (414) 286-5941-office, (414) 708-5148-mobile.

#### **D Measurement**

The department will measure Install City Precast Controller Base as each individual unit, acceptably completed.

#### **E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.201	Install City Precast Controller Base	EACH

Payment is full compensation for installing city furnished controller base; for excavation, backfilling and disposal of surplus material.

### **72. ATC Controller and Cabinet Installed, Item SPV.0060.205.**

#### **A Description**

Furnish and install an ATC Traffic Signal Controller and NEMA TS2 Type 1 Traffic Signal Control Cabinet.

#### **B Materials**

Furnish equipment and assemble the cabinet conforming to the latest revision of NEMA Standards Publication TS 2-2003, Traffic Controller Assemblies with NTCIP requirements, National Electrical Manufacturers Association, hereinafter called NEMA TS2 Standard.

The cabinet shall be designed for TS2 Type 1 operation and shall conform to the design shown in DWG TF5016TWI02.

All equipment, materials, and cabinet features shall be the same type, make, and model on all cabinets delivered under any one order.

Furnish an Econolite Cobalt-C shelf mount controller with the latest ASC/3 software installed.

Furnish any equipment and materials not specifically described but required in order to perform the intended functions in the cabinet.

## **C Construction**

Conform all work to the Wisconsin State Electrical Code (WSEC). Conform all work to standard spec 651, as supplemented or modified in this specification.

### **C.1 Definitions**

Vendor – the firm under contract with the City of Milwaukee for furnishing the fully equipped and operational traffic signal cabinet.

Construction contractor – the firm under contract with the City of Milwaukee or another agency to construct a roadway facility. The construction contractor will install the traffic signal cabinet or may designate a subcontractor, such as an electrical subcontractor, to represent them with regards to the signal cabinet installation

Owner – City of Milwaukee

Manufacturer – the firm that builds or produces the traffic signal equipment other than the cabinet. For example, the “controller manufacturer”

### **C.2 Terminal Facility**

Fully wire the terminal facility with sixteen load switch sockets: eight phases of vehicular, four phases of pedestrian, and four phases of overlap operation; eight flash transfer relay sockets; one flasher socket; and two terminal facility Bus Interface Unit (BIU) rack slots. The use of printed circuit boards is not acceptable on the terminal facility, except printed circuit boards are acceptable for the BIU interface with the load bay. Position the 16 load switch sockets in two horizontal rows of eight sockets each. Support the load switches and flasher by a bracket or shelf extending at least three inches from the terminal facility.

Label all terminals, load switches, and flash transfer relay sockets. Label reference designators by silk-screening on the front and rear of the terminal facility to match drawing designations.

Provide rack mounted BIU's. Provide a dual-row, 64-pin female DIN 41612 Type B connector for each BIU rack position. Provide card guides for both edges of the BIU. Terminal and facilities BIU mounting shall be an integral part of the terminal facility.

Provide a 16-channel, 8-position, TS2 detector rack, with an integrally mounted BIU mounting. Racks shall be addressable. Power a detector rack by the cabinet power supply. Fasten the loop detector rack towards the left side of the lower shelf.

For BIU rack connectors, provide pre-wired address pins or jumper plugs corresponding to the requirements of the NEMA TS2 Standard. The address pins or jumper plugs shall control the BIU mode of operation. BIUs shall be capable of being interchanged with no additional programming.

For the terminal facility, contain all field wires within one or two rows of horizontally-mounted heavy duty terminal blocks. Terminate all field output circuits on an unfused terminal block with a minimum rating of 10 amps. Use mechanical connector lugs rated for copper wire.

Angle the lower section of the terminal block out from the back of the cabinet at approximately a 45 degree angle.

Identify all field input/output (I/O) terminals by permanent alphanumeric labels. All labels shall use standard nomenclature per the NEMA TS2 Standard.

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

Wire field terminal blocks to use three positions per vehicle or overlap phase (green, yellow, red).

Wire one RC network in parallel with each flash transfer relay coil.

Permanently label all logic-level, NEMA-controller and MMU input and output terminations on the terminal facility. Identity the function of each terminal position on the cabinet drawings.

Terminal blocks for DC signal interfacing shall have a number 6-32 x 7/32 inch screw as minimum.

Functions to be terminated shall be as specified in the listing of Input/Output Terminals in Section 5 of the NEMA TS2 Standard.

Conform all terminal facility and cabinet wiring to the WSEC. The green/walk, yellow, and red/don't walk load switch outputs shall be minimum 16 gauge wire. The MMU (other than AC power), controller I/O, and logic ground shall be minimum 22 gauge wire. All wire colors shall be consistent.

### **C.3 Vehicle Detection Interface Panel**

Provide a 16-position interface panel. Interface panel shall allow for the connection of 16 independent field loops. The panels shall have barrier strip type terminals using 8-32 screws and be rated for 20 inch pounds of torque. Provide a ground bus terminal between each loop pair terminal to provide a termination for the loop lead-in cable ground wire. Secure the interface panels to a mounting plate attached to the left interior side wall of the cabinet. The panel shall also include inputs for up to 4 preempts.

Provide a cable consisting of 20 AWG twisted pair wires to enable connection to and from the interface panel to a detector rack. The twisted pair wires shall be color-coded wires. Provide a cable of sufficient length to allow the detector rack to be placed on either shelf.

Identify all termination points by a unique number silk screened on the panel.

### **C.4 Conductors and Cabling**

All conductors in the cabinet shall be copper 22 AWG or larger. All 14 AWG and smaller wire shall conform to MIL-W-16878/1, Type B, 600V, 19-strand tinned copper. The wire shall have a minimum of 0.010 inches thick PVC insulation without clear nylon jacket and rated to 105 degrees Celsius. All 12 AWG and larger wire shall be UL or NRTL listed THHN/THWN 90 degrees Celsius, 600V, 0.020 inches thick PVC insulation, and clear nylon jacketed.

Provide controller and MMU cables of sufficient length to allow the units to be placed on either cabinet shelf in the operating mode. Connecting cables shall be sleeved in a braided nylon mesh. Exposed tie-wraps and interwoven cables are unacceptable.

Provide the cabinet configuration with up to 6 SDLC 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. Secure all connecting cables and wire runs by mechanical clamps. Stick-on type clamps are not acceptable.

Pre-wire the terminal facility for a Type 16 MMU.

All wiring shall be neat in appearance. Stow excess cable behind the terminal facility or below the shelves in order to allow easy access to the terminal facility and cabinet components. All cabinet wiring shall be continuous from its point of origin to its termination point. Butt type connections/splices are not acceptable.

Wire the grounding system in the cabinet into three separate circuits: AC Neutral, Earth Ground, and Logic Ground.

Optoisolate all pedestrian pushbutton inputs from the field to the controller through the BIU and operate at 12 VAC.

Hook or loop all wire, size 16 AWG or smaller, at solder joints around the eyelet or terminal block post prior to soldering to ensure circuit integrity. Lap joint soldering is not acceptable.

### **C.5 Cabinet Switches**

The above switches shall function as follows:

Off: Signals Dark

Signal: Signals On and operating as follows:

Auto

Hand

Flash: Signals Flash

Signals Flash

Normal: Signals Normal

Signals Advance by use of hand control

Provide manual detector switches. Provide four pedestrian detector switches. The switches shall be spring loaded and automatically return to the center position. Wire the pedestrian switches to the T&F BIU slot 1. The switches shall operate as follows:

<u>Position</u>	<u>Function</u>
Up	Detector Disabled
Center	Detector Enabled
Down	Detector Called

### **C.6 Bus Bar**

Provide a minimum 20-position neutral bus bar capable of connecting three #12 AWG wires per position.

### **C.7 Circuit Breakers**

House in the power panel the following vertically mounted, single pole, 120 volts AC, 60 Hertz circuit breakers, with the ON position being up:

- One 30-amp signal breaker. This breaker shall supply power for all cabinet functions not powered through one of the other breakers or fuses listed below. Streetlights will be powered from outside the cabinet in the meter breaker pedestal. This breaker shall feed a signal bus supplied through a solid state bus relay and a radio interference line filter. The bus relay, in all cases, shall be a solid state contactor and shall not be jack mounted. Breakers shall be thermal magnetic type, UL or NRTL listed, with a minimum of 22,000 amp interrupting capacity.
- One 15-amp auxiliary breaker. This breaker shall supply power to the fan and heater.
- One 10-amp breaker. This breaker shall supply power for control equipment: controller, MMU, and cabinet power supply.
- One 20-amp circuit breaker for future use.

Power the cabinet light through the GFI fuse, not a circuit breaker.

### **C.8 Radio Interference Suppressor**

Equip each control cabinet with a single radio interference suppressor (RIS) of sufficient ampere rating to handle the load requirements. Install the RIS at the input power point. The RIS shall minimize interference in both the broadcast and the aircraft frequencies, and shall provide a maximum attenuation of 50 DB over a frequency range from 200 KHZ to 75 MHZ, when used in connection with normal installations. The RIS shall be hermetically sealed in a substantial metal case filled with a suitable insulating compound. The terminals shall be nickel-plated brass studs of sufficient external length to provide space to connect two #8 AWG wires and shall be so mounted that they cannot be turned in the case. Ungrounded terminals shall be properly insulated from each other, and shall maintain a surface leakage distance of not less than 6.35 mm between any exposed current conductor and any other metallic parts. The terminals shall have an insulation factor of 100-200 megaohms dependent upon external conditions. The RIS shall be rated at minimum 50 amperes. Design the RIS for operation on 115 VAC +/- 10%, 60HZ, single-phase circuits, and to meet the standards of UL or a NRTL and Radio Manufacturer's Association.

### **C.9 Bus Relay**

Provide a normally-open, 60 amp, solid state relay.

### **C.10 Surge Protector**

Install a plug-in type EDCO SHA-1250, or Atlantic/Pacific approved equal, surge protector across the load terminal of the 10-amp circuit breaker. Install a General Electric Varistor, catalog #V130PA20A, at the load terminals of the circuit breaker from the hot line to the grounded current carrying neutral conductor

### **C.11 Power receptacles**

Mount a 120 VAC 20 amp, NEMA 5-20R GFCI convenience outlet at each of these two locations:

- On the interior right side wall above the power panel. The outlet shall be fully operational and fuse protected.
- Near the power panel where it will not interfere with power panel maintenance. This outlet is to be wired by field installation personnel.

## **C.12 Suppressors and RC Network**

Provide a suppressor for each 120 VAC circuit that serves an inductive device, such as a fan motor or a mechanical relay, to protect the controller's solid state devices from excessive voltage surges. Such suppressors shall be in addition to the surge protector at the input power point. Wire one RC network in parallel with each inductive device.

## **C.13 Auxiliary Devices**

### **C.13.1 Load Switches**

Provide 16 solid state load switches conforming to the requirements of section 6.2 of the NEMA TS2 Standard.

### **C.13.2 Flashers**

Provide one solid state flasher conforming to the requirements of section 6.3 of the NEMA TS2 Standard.

### **C.13.3 Flash Transfer Relays**

Provide 4 flash transfer relays conforming to the requirements of section 6.4 of the NEMA TS2 Standard.

### **C.13.4 Inductive Loop Detector Units**

Provide 8 inductive loop detector units conforming to the requirements of section 6.5 of the NEMA TS2 Standard for 2-channel, rack mount detector units, type C.

### **C.13.5 Cabinet Power Supply**

Provide one cabinet power supply with each cabinet conforming to the requirements of section 5.3.5 of the NEMA TS2 Standard. Provide LED indicators for the 12 VDC, 12 VAC, and 24 VDC outputs. Provide jack plugs on the front panel for access to the +24 VDC for test purposes.

## **C.14 Bus Interface Units (BIU)**

Provide three BIUs conforming to the requirements of section 8 of the NEMA TS2 Standard.

Provide two BIUs with the main panel and one BIU with one of the detector racks.

## **C.15 Malfunction Management Unit (MMU)**

Provide one shelf-mountable, 16 channel, solid-state MMU with Ethernet capability. The MMU shall meet the requirements of Section 4 of the NEMA TS2 Standard. The MMU shall be an Eberle Design Inc. Model MMU2-16LE or preapproved equal.

The MMU shall be capable of the following:

- Detecting simultaneously active inputs of Green (Walk), Yellow, or Red (Don't Walk) on the same channel.
- Determining if the field signal input states detected as active or inactive by the MMU correspond with the data provided by the Controller Unit.
- Monitoring an optional external watchdog output from a Controller Unit or other external cabinet device.
- Monitoring an intersection with up to four approaches using the Flashing Yellow Arrow (for protected/permissive left and right turn movements).
- Event logging for the following; AC Line log, Prior/Previous Faults log, and Monitor Reset Log. All log entries shall include a date and time stamp.
- All monitor functions shall be capable of being programmed through the front panel, without the need for computers or special programs cards.
- 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 MMU shall have an LCD display that allows for viewing of log files and field indications, as well as the viewing and setting of date and time and configuration parameters.

## **C.16 Documentation**

### **C.16.1 Cabinet Intersection Wiring Diagrams**

For each individual cabinet ordered, within 10 calendar days after receipt of the procurement order, furnish to the City of Milwaukee's electrical lead electrician two sets of 22X34-inch detailed printed cabinet intersection wiring diagrams for information only.

At the time of the cabinet delivery, furnish to the City of Milwaukee's electrical lead electrician two sets of printed 22X34-inch cabinet intersection wiring diagrams and one set of .dgn CAD files per cabinet. Printing the 22X34-inch sheet in smaller sizes is not acceptable. Leave a third drawing in the signal cabinet. After cabinet acceptance is complete, if any cabinet wiring changes were made, revise the cabinet wiring diagrams, leave one drawing in the signal cabinet, and furnish to the City of Milwaukee's electrical lead electrician two sets of as-built printed cabinet wiring diagrams and one set of as-built .dgn CAD files per cabinet. If no changes were made from time of cabinet delivery, notify the City of Milwaukee's lead electrical technician in writing.

### **C.16.2 Manuals**

At the time of the cabinet delivery, furnish to the City of Milwaukee's electrical lead electrician one set of installation, operations, and maintenance manuals per cabinet including each type of equipment in the cabinet. The manuals shall as a minimum include the following information: a) table of contents, b) operating procedure, c) step-by-step maintenance and trouble-shooting information for the entire assembly, d) schematic diagrams, e) pictorial diagrams of parts locations, f) itemized parts lists with parts numbers, g) theory of operation, and h) maintenance checklists.

The itemized parts lists shall include the manufacturer's name and parts number for all components (such as IC, diodes, switches, relays, etc.) used. The list shall include cross-references to parts numbers of other manufacturers who make the same replacement parts.

For each of the traffic signal controller and MMU, in addition to the above manual requirements, furnish one reference manual for the processor and components proposed to perform the controller and MMU functions. Include a complete set of schematics for the controller, MMU, and any auxiliary circuit boards either in the reference manual or in a separate volume. In addition, furnish a written narrative describing the controller and MMU operation and front panel configuration, and a conceptual flow chart illustrating the control logic for comparison with these specifications. The narrative shall include a discussion of any limitation or exceptions to the performance described in these specifications, and a discussion of any control capabilities provided in addition to that required in these specifications.

### **C.17 Cabinet Delivery**

The construction contractor will provide the traffic signal specifications and plans, including the sequence of operation, to the vendor. The vendor shall determine the required cabinet equipment and assembly requirements from the plans and specifications and provide the owner a list of procurement items. The contractor will order the procurement items. The City of Milwaukee will provide the signal timing to the vendor a minimum of two weeks before the scheduled cabinet delivery date.

For cabinets to be installed in the field by the construction contractor, provide the list of procurement items to the City of Milwaukee a minimum of 60 days before the cabinet is scheduled to be installed in the field. The vendor is responsible for coordinating with the project construction contractor to determine the scheduled cabinet installation date. Cabinets shall be completed, delivered, and accepted within 50 calendar days after the initiation of the procurement request. The City of Milwaukee reserves the right to require up to five cabinets per month to be completed, delivered, and accepted.

If the City of Milwaukee makes a modification to any cabinet order before the entire cabinet is completely built in the vendor's shop, the delivery time does not change. If the owner accepts a vendor requested cabinet order or other modification at any time, the delivery time does not change. All cabinet modifications will be made without additional cost to the owner, except if an additional equipment item is added that is under procurement contract, the established price in the procurement contract will be paid the vendor.

Deliver cabinets to City of Milwaukee Electrical Services headquarters located at 1540 West Canal Street Milwaukee, WI 53233. Final wiring/terminations in all cabinets that are to be city owned will be performed by city forces. Coordinate final cabinet wiring with the City of Milwaukee's Traffic Signal Field Operations unit.

Delivery will be received by the owner. Schedule the delivery directly with the construction contractor. The vendor is responsible for arranging the unloading of the cabinet. Notify the electrical shop of the intent to deliver a minimum of two business days ahead of the desired delivery time. The owner will provide the vendor a list of names, phone numbers, and email addresses for contact information.

The vendor is notified that delivery times and schedules may be changed or delayed at any time for any reason. The vendor may be required to store completed cabinets at their facility for extended periods of time.

### **C.18 Acceptance Testing**

Complete on-site traffic signal acceptance testing in the presence of the owner. The acceptance testing will occur after the signal cabinet is fully installed at the project intersection by the construction contractor and before the traffic signal is turned on. The construction contractor and the owner will determine the time for the acceptance testing. In addition to the cabinet as specified in this specification, add-on accessory items, traffic signal interconnect, system communication, and closed loop system operation are included in the acceptance testing.

Provide an IMSA certified Traffic Signal Bench Technician, Level II, or an IMSA certified Traffic Signal Field Technician, Level II, with a minimum of three years' experience in construction and operation of traffic signal cabinets similar to the cabinets specified in this specification. Alternatively, provide a technician or electrician with a minimum of three years experience in construction and operation of traffic signal cabinets similar to the cabinets specified in this specification. The technician shall be on-site during the entire acceptance testing and shall be capable and equipped to make in-field revisions / repairs to the signal cabinet to conform to this specification.

Upon successful completion of the acceptance testing as determined by the owner, a 30-day conditional acceptance of the signal cabinet will be provided to the vendor. Should the cabinet within the 30-day conditional acceptance period fail to perform in any way as determined by the owner, the vendor shall repair the cabinet to bring it into conformance with this specification and the acceptance testing shall be repeated. Repair times shall conform to the warranty service response times in this specification. The acceptance testing shall be repeated. Upon successful completion of the retesting, a new 30-day conditional acceptance period shall begin. After the signal cabinet runs 30 days without failure, the cabinet will be fully accepted by the owner.

The vendor will be allowed up to two 30-day conditional acceptance periods. If the cabinet fails during the second 30-day period, an entirely new cabinet shall be furnished and made operational in the field by the vendor at no cost to the owner and a new acceptance testing procedure shall begin. Cabinet replacement times shall conform to the warranty service response times in this specification. The original cabinet becomes the property of the vendor.

The owner reserves the right to perform its own tests on the traffic signal cabinet at any time using the owner's control equipment. Should an individual traffic signal cabinet be found to not meet the requirements of these specifications, the vendor shall pick up the traffic signal cabinet from the owner or from the field, perform at their shop repairs / revisions as necessary to bring the traffic signal cabinet into conformance with these specifications, and deliver the repaired / revised traffic signal cabinet back to the designated location, all at no additional cost to the City of Milwaukee.

### **C.19 Certification**

Provide a written certification with the cabinet delivery that the equipment meets the requirements of the plans and specifications and will fully run the sequence of operation and the signal timing, including closed loop system operation if applicable. The certification shall be on the vendor's company letterhead, shall be addressed to both the City of Milwaukee and the construction contractor, and shall be signed by a company officer authorized to legally obligate the company.

### **C.20 Warranty**

The warranty shall start upon delivery of the cabinet and all supplied equipment to the owner designated location. Provide a warranty and guarantee statement which stipulates that the cabinet and all supplied equipment, including add-on accessory items, to be, individually and as a cabinet system, free from defects in materials and workmanship for a period of at least one year from the date of final cabinet acceptance in the field, or in the case of a cabinet that is to be delivered to the owner for use by the owner, from the date of delivery of an accepted cabinet to the owner. All warranty beyond the one year construction bond needs to be from the manufacturer or vendor. Final cabinet acceptance in the field is after a successful 30-day conditional acceptance period is completed. Delivery of a cabinet for testing does not constitute acceptance of the cabinet. Turn over to the City of Milwaukee warranties and guarantees that are offered by the manufacturer as a customary trade practice. Name the City of Milwaukee as the obligee on all manufacturers' warranties and guarantees. Shipping costs, both to the factory or an Authorized Repair Depot, and return, shall be paid by the vendor.

The warranty shall provide for full repair or replacement, as determined by the owner, of the failed item or cabinet system, including removal and making the item or system fully operational in the cabinet, at no cost to the owner. Vendor warranty service response times after notification by the owner:

- 4 hours to have qualified service personnel on site at the intersection.
- 12 hours to have the signal safely operational, including all phases and enough detection to run the intersection phasing (minimum 8 detectors).
- 48 hours on business days to restore the signal to full original operations.

If a malfunction in the controller unit, MMU, module, or any auxiliary equipment occurs during the warranty period, the vendor shall, within 24 hours after notification (excluding Saturday and Sunday), furnish and make fully operational in the cabinet, an identical, programmed, controller unit, MMU, module, or auxiliary equipment, for use while the warranted unit is being repaired or replaced. The isolation of any malfunction during the warranty period shall be the responsibility of the vendor.

The City of Milwaukee reserves the right to make repairs to malfunctioning cabinets and equipment that are under warranty, up to and including complete replacement of the cabinet, when in the owner's determination the safety of the traveling public is best served. Such repair work will not in any way void or limit the vendor's warranty and guarantee specified above. The owner will notify the vendor in writing of the repair.

The vendor shall within five business days after notification replace, at the electrical shop, all cabinets, equipment, and supplies used by the owner in making repairs, with new parts meeting the requirements of this specification.

If any cabinet has three or more equipment or cabinet system failures, resulting from poor workmanship, within the first six months of operation after owner acceptance, an entirely new cabinet exactly matching the existing cabinet shall be furnished and made fully operational by the vendor at no additional cost to the owner. Any traffic control, including but not limited to signing, channelizing devices, temporary signals, police control, and flaggers, that becomes necessary as determined by the owner in order to safely replace the cabinet is the full responsibility of the vendor. The original cabinet becomes the property of the vendor.

Provide, at no additional cost, firmware/software maintenance, problem resolution phone technical support, problem resolution technical support in the supplier's facility, firmware/software patches, and firmware/software upgrades for a minimum of three years. The lead for technical support and primary owner contact for support shall be a qualified person employed by the vendor's local office who is personally familiar with the owner's software and signal operations. Help desks and manufacturer's representatives may be utilized by the lead technical support person as resources but are not acceptable for lead technical support.

Maintain an inventory of the firmware/software version on each controller provided. Notify the City of Milwaukee's electrical shop supervisor or lead electrician in writing when a firmware/software patch or upgrade is available. The owner will direct the vendor when to load the patch or upgrade for each controller. Load the patch or upgrade and provide a usable copy of the patch or upgrade to the owner. Alternatively, when requested by the owner, provide the patch or upgrade to the owner for installation by the owner.

#### **D Measurement**

The department will measure ATC Controller and Cabinet Installed as each unit of work, in place and accepted.

#### **E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.205	ATC Controller and Cabinet Installed	EACH

Payment is full compensation for furnishing and installing the traffic signal controller and control cabinet; for furnishing and installing all other items necessary (such as, wire nuts, splice kits and/or connectors, tape, insulating varnish, ground lug fasteners, etc.) to make the proposed system complete from the source of supply to the most remote unit and for clean-up and waste disposal.

**73. Fiber Optic Patch Panel, Item SPV.0060.212.**

**A Description**

Furnish and install a fiber optic patch panel according to the following standards.

**B Materials**

Furnish a Fiber Optic Patch Panel with cable lengths as specified in the plans. The patch panel shall have 6 steps, 12 count single-mode OS2 fiber, ST connectors, and a pigtail end. The cable shall be for indoor or outdoor use and shall be riser cable. The body of the patch panel shall be black in color. No pull kit should be pre-installed.

**C Construction**

Have a certified fiber optic technician perform work for fiber optic terminations, splicing and testing. Have a certified fiber optic technician supervise all fiber optic cable installation. Test the panel and demonstrate that all equipment is operational to the inspector. Ensure termination does not exceed attenuation limits specified in standard spec 678.3.4.

**D Measurement**

The department will measure this item by each unit, acceptably completed.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.212	Fiber Optic Patch Panel	EACH

Payment is full compensation for furnishing and installing fiber optic patch panel and for testing the equipment.

**74. Ethernet Switch, Item SPV.0060.213.**

**A Description**

Furnish and install an Ethernet switch according to the following standards.

**B Materials**

Furnish an Ethernet Switch with a compatible power supply.

Environmental: This equipment shall meet the NEMA environmental, power and surge ratings as set forth in NEMA TS2 specifications.

Mounting: This equipment must be DIN Rail mountable.

Interfaces: This equipment must support a minimum of 12 Ethernet interfaces, with a minimum of three being shared or dedicated SFP interfaces for pluggable optical connections and support for PoE+ on four or more interfaces.

Management: This equipment must be a managed switch with the ability to support 802.1Q VLAN Tagging, 802.1D Spanning Tree Protocol, and 802.1p Quality of Service. Multicast, broadcast, and flooding storm control should be features.

LEDs: This equipment must have a power input status LED, a ring status LED, and LEDs showing the port link and speed status per port.

Memory: This equipment must have a minimum of 128MB of DRAM, and a minimum of 16MB of flash memory

**C Construction**

Install Ethernet switch into field cabinet. Connect switch to the devices as directed by the engineer. Contact Scott Reinbacher at (414) 286-3232 for more information.

**D Measurement**

The department will measure this item by each unit, acceptably completed.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.213	Ethernet Switch	EACH

Payment is full compensation for furnishing and installing Ethernet switch and making necessary connections.

**75. Fiber Optic Patch Cords, Item SPV.0060.214.****A Description**

Furnish and install patch cords.

**B Materials**

Furnish single mode LC-ST duplex fiber cable with segmented boot.

**C Construction**

Install patch cords following standard spec 678.

**D Measurement**

The department will measure this item by each unit, acceptably completed.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.214	Fiber Optic Patch Cords	EACH

Payment is full compensation for furnishing and installing fiber optic patch cords.

**76. Electrical Service Pedestal, Item SPV.0060.215.****A Description**

Install meter breaker pedestal.

**B Materials**

Furnish 240/480V meter breaker pedestal conforming to state standard Spec 656.2.3., except do not supply service.

**C Construction**

Install service pedestal at location shown in plans. Install grounding electrodes as required by local utility, and install appropriate grounding conductors. Contact Mr. Rudy Gutierrez, Electrical Services Manager (414) 286-5941-office, (414) 708-5148-mobile when pedestal will be ready for service with two working days notice.

**D Measurement**

The department will measure this item by each unit, acceptably completed.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.215	Electrical Service Pedestal	EACH

Payment is full compensation for furnishing and installing meter breaker pedestal.

**77. EVP 1 Direction Detector, Item SPV.0060.218.**

**A Description**

Furnish and install an Emergency Vehicle Preemption (EVP) 1 Channel 1 Direction Infrared Detector.

**B Materials**

Furnish a 1 Channel 1 Direction Infrared Detector.

**C Construction**

Install detector as shown in the plans and according to manufacturer's recommendations.

**D Measurement**

The department will measure this item by each unit, acceptably completed.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.218	EVP 1 Direction Detector	EACH

Payment is full compensation for furnishing and installing the EVP detector.

**78. EVP Phase Selector Card 4 Channel, Item SPV.0060.221.**

**A Description**

Furnish and install an Emergency Vehicle Preemption (EVP) Phase Selector Card 4 Channel.

**B Materials**

Furnish a 4 channel phase selector card. The selector card shall be capable of functioning with a GPS radio unit as well as infrared system detectors simultaneously.

**C Construction**

Install phase selector card into the appropriate slot in the controller cabinet and make all necessary wiring connections to EVP detectors.

**D Measurement**

The department will measure this item by each unit, acceptably completed.

**E Basis of Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.221	EVP Phase Selector Card 4 Channel	EACH

Payment is full compensation for furnishing and installing the phase selector card; making necessary connections.

**79. EVP Confirmation Light, Item SPV.0060.223.**

**A Description**

Furnish and install an Emergency Vehicle Preemption (EVP) Confirmation Light Assembly.

**B Materials**

Furnish a typical confirmation light assembly and LED flood light.

**C Construction**

Install confirmation lights as described in the plans.

**D Measurement**

The department will measure this item by each unit, acceptably completed.

## E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.223	EVP Confirmation Light	EACH

Payment is full compensation for furnishing and installing the EVP confirmation light assembly.

## 80. Vehicular Video Detection System – 2 Cameras, Item SPV.0060.224.

### 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 as shown in the plans, including but not limited to cameras, processors, video monitor, mounting hardware, and power cable.

### B Materials

This specification sets forth the requirements for a system that detects vehicles on a roadway and provides detection outputs to a traffic signal controller. The materials shall also include all brackets, risers, mounting hardware, cable, terminations, interface panels, and all other incidentals for the installation of the equipment. This equipment shall meet the NEMA environmental, power and surge ratings as set forth in NEMA TS2 specifications.

The video detection system shall include two video detectors with a high definition camera of at least 720p resolution with a 10x optical zoom with real time iris and shutter speed control by the integrated processor. The faceplate shall be glass with a hydrophilic coating on the exterior and with an indium tin oxide heater applied to the inner surface.

All communications to the video sensor shall be broadband-over-power via three conductor cable. No coaxial cable shall be used. The system shall not include a cellular data plan.

The video detection system shall include an interface panel that manages communication between sensors, remote access to the sensors, and the cabinet itself. The interface panel shall provide connection points for four video sensors. Each sensor connection shall have a power switch and a resettable fuse. All communications to the detection system shall be to a single IP address. The interface panel shall weigh less than 3 pounds.

All incidental mountings required for pole or mast arm mounted units to install the detector are included in this item.

### C Construction

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

In the event, at installation or turn on date, a noticeable obstruction is present in line with the detection zone(s), the contractor shall be obligated to advise the engineer before setting the zone.

All cables associated with the video detection system shall be routed to the controller. Each lead shall be appropriately marked as to which street or avenue it is associated. Provide 6 feet of cable slack.

The video detection system, as shown in the traffic signal plans, shall be complete, in place, tested, and in full operation.

### D Measurement

The department will measure this item by each unit, acceptably completed.

## E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.224	Vehicular Video Detection System – 2 Cameras	EACH

Payment is full compensation for furnishing and installing video detection system; making necessary connections; and testing video detection.

**81. Remove Pole and Wire, Item SPV.0060.244.**

**A Description**

Remove pole and fill hole. Remove all traffic signal wires from cabinet to pole.

**B Materials**

Furnish sufficient soil to fill the hole left by pole

**C Construction**

Remove pole and fill hole to match surroundings. Properly dispose of removed wire.

**D Measurement**

The department will measure this item by each unit, acceptably completed.

**E Basis of Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.244	Remove Pole and Wire	EACH

Payment is full compensation for removing and disposing of pole; filling hole with soil.

**82. Voice Instruction Audible Pushbutton, Item SPV.0060.268.**

**A Description**

Furnish and install a Voice Instruction Audible Pushbutton.

**B Materials**

The Voice Instruction Audible Pushbutton shall be a 2-wire pushbutton that meets ADA requirements. The pushbutton shall be capable of providing audio cues with sound emanating from both the front and back of the unit. Sound shall be synchronized between units and automatically adjust to ambient sound levels. Changing settings and firmware updates shall be done wirelessly over Bluetooth. The switch operating life shall be greater than 20 million operations. The pushbutton station shall have an MUTCD compliant sign on its faceplate.

**C Construction**

Install a Voice Instruction Audible Pushbutton as shown on plans. Follow requirements outlined in MUTCD Section 4E.9 through 4E.12. Pushbutton plates and related signage should provide the direction of travel with a single or double arrow as required and shall be properly focused upon installation.

**D Measurement**

The department will measure both items by each unit, acceptably completed.

**E Basis of Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.268	Voice Instruction Audible Pushbutton	EACH

Payment is full compensation for furnishing and installing voice instruction audible pushbutton; focusing arrows.

**83. Voice Instruction Audible Control Unit, Item SPV.0060.269.**

**A Description**

Furnish and install a Voice Instruction Audible Control Unit.

**B Materials**

The Voice Instruction Audible Control Unit shall be a rack mount card able to be used in a 300 series cabinet. An interconnect panel shall provide enough connection for 16 or more pushbuttons. The panel

shall have a separate power supply connection. No polarity requirement shall be needed for the pushbuttons. The control unit shall have LCD display showing status information. Setup shall be performable via Ethernet or Wi-Fi using a PC or by using an app. Any connection option should allow access to setup and configuration of the control unit and any attached voice instruction audible pushbutton.

#### **C Construction**

Install a Voice Instruction Audible Control Unit into the controller cabinet's detector rack. Mount the panel to the side of the cabinet in the side panel access. Terminate all pushbutton connections to the panel. Complete setup of the system and demonstrate the pushbuttons are correctly wired and configured.

#### **D Measurement**

The department will measure both items by each unit, acceptably completed.

#### **E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.269	Voice Instruction Audible Control Unit	EACH

Payment is full compensation for furnishing and installing voice instruction audible control unit; making necessary connections; and configuring the system.

### **84. Remove Traffic Signal Face, Item SPV.0060.278.**

#### **A Description**

Remove traffic signal face according to current City of Milwaukee standards.

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

#### **C Construction**

Remove signal equipment according to current City of Milwaukee Standards.

Stockpile removed traffic signal faces for pick-up by the City of Milwaukee Electrical Services. Contact Mr. Rudy Gutierrez, Electrical Services Manager, (414) 286-5941 office, (414) 708-5148 mobile, at least three business days in advance to coordinate pick-up.

#### **D Measurement**

The department will measure this item by each unit, acceptably completed.

#### **E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.278	Remove Traffic Signal Face	EACH

Payment is for full compensation for removing traffic signal face.

### **85. Pull Boxes 13-Inch x 24-Inch x 24-Inch, Item SPV.0060.302.**

#### **A Description**

This special provision describes providing and installing Pull Boxes which are a fiberglass/polymer concrete at the locations shown on the plans according to current Wisconsin Department of Transportation Standard Specification Section 653.

#### **B Materials**

Furnish Pull Box (Fiberglass/polymer concrete) of rectangular composite enclosure with Tier 15 Rating (15,000 lb. Design Load) and (22,500 lb. Test Load), and nominal 13" wide x 24" long and 24" total depth, flared wall. Cover shall be Tier 15 Rating (15,000 lb. Design Load) and (22,500 lb. Test Load), bolted cover with logo "Street Lighting" and use Penta bolts to secure cover. The pull box listed and labeled by (UL) or other Nationally Recognized Testing Laboratory.

### **C Construction**

Conform to standard spec 673.3 and City of Milwaukee standards. The pull box installation covers the excavation, 12-inches of crushed stone, end bell connectors for conduit connection, backfilling and for disposing of surplus material. Rigid nonmetallic PVC bell end connectors are to be use when connecting conduit to the pull box.

### **D Measurement**

The department will measure Pull Boxes 13-Inch x 24-Inch x 24-Inch by each unit, acceptably completed.

### **E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.302	Pull Boxes 13-Inch x 24-Inch x 24-Inch	EACH

Payment is full compensation for providing and installing all materials including pull boxes, covers, bolts, washers, caulking; for excavating, bedding, backfilling, and restoration of ground to original condition including sand, aggregate, concrete, or other required materials; and for disposing of surplus materials.

## **86. Pull Boxes 17-Inch x 30-Inch x 24-Inch, Item SPV.0060.303.**

### **A Description**

This special provision describes furnishing and installing Fiberglass/Polymer Concrete Pull Box at the locations shown on the plans according to standard spec 653.

### **B Materials**

Furnish fiberglass/polymer concrete pull box of rectangular composite enclosure with Tier 15 Rating (15,000 lb. Design Load) and (22,500 lb. Test Load), and nominal 17" wide x 30" long and 24" total depth, flared wall style #CHB173024 as by Highline Products or #B12173024A as by Hubbell Power Systems or approved equal. Cover shall be Tier 15 Rating (15,000 lb. Design Load) and (22,500 lb. Test Load), bolted cover with logo " Street Lighting" #CHC1730HL1 as by Highline Products or #C12173002A41 as by Hubbell Power Systems, or approved equal. The pull box shall be listed and labeled by (UL) or other Nationally Recognized Testing Laboratory.

### **C Construction**

Conform to standard spec 673.3 and City of Milwaukee standards. The pull box shall be installed on 12-inches of crushed stone, set flush with grade and backfilled.

### **D Measurement**

The department will measure Pull Boxes 17-Inch x 30-Inch x 24-Inch by each unit, acceptably completed.

### **E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.303	Pull Boxes 17-Inch x 30-Inch x 24-Inch	EACH

Payment is full compensation for furnishing and installing all materials, including pull box, crushed aggregate, for excavation, backfill, for disposing of surplus material.

## **87. 40-FT Wood Pole, Item SPV.0060.324.**

### **A Description**

This special provision describes furnishing and installing wood poles for temporary lighting as shown on plans and according to requirements of the plans, specifications and contract. All necessary miscellaneous hardware and materials needed to complete the installation of the wood poles are considered incidental. After the projects are completed some wood poles will remain in place that have only the series circuitry overhead cables attached. These wood poles will become the property of the City of Milwaukee Street Lighting.

## B Materials

Furnish a Class 4 wood poles conforming to the American Standard Specifications and Dimensions for Wood Poles (ANSI O5.1.) unless the engineer specifies otherwise.

### Shaving

All poles shall be machine shaved the entire length.

### Gaining and Drilling

Poles shall be slab gained from the top of the pole to a point 48" below the top of the pole. 1st and 2nd gains are to be drilled with a 11/16 "diameter drill. 1st gain 8" from the top of the pole and 2nd gain 24" below 1st gain.

### Incising

All poles shall be incised throughout that portion of the pole surface terminating one foot above and two feet below the standard ground line per A.W.P.A. Specifications #C8-73.

### Treatment

According to the requirements and recommendations of AWWA Standard C1 and the applicable AWWA Commodity Standards. Do not use Creosote for treatment.

### Inspection and Acceptance

An independent inspection agency to check the poles shall be inspected per A.W.P.A. Specifications #M2-83. A certified copy of the test report must be delivered with each load shipped.

### A.W.P.A. Designations

Reference to A.W.P.A. designation shall mean the latest revision of the particular A.W.P.A. specification and/or test procedure in effect at time this bid is let for the item/product described herein.

### Pea Gravel

The pea gravel must consist of particles from natural gravel deposits and shall be composed of clean, hard, tough, durable pebbles free from adherent coatings, soft, flat, or elongated particles, and organic or other deteriorative matter. The following limits apply to deteriorative substances in the pea gravel.

Chert	not over 4% by weight
Coal	not over ½% by weight
Clay lump and friable particles	not over ½% by weight
Soft fragments	not over 1% by weight
Any combination of the above	not over 4% by weight
Flat, elongated or laminated pcs.	Not over 10% by weight

(Flat and elongated particles are those having a length more than five times the average thickness)

Grading requirements of the pea gravel are as follows:

Passing 3/8-inch sieve	95% to 100%
Passing No.4 sieve	25% to 50%
Passing No.8 sieve	0% to 5%

Each unit will require approximately 0.25 cubic yard of pea gravel.

### Grounding Electrode and Conductor

Furnish and install an approved 5/8-Inch diameter x 8-foot-long copper clad grounding electrode per NEC, WSEC, and local utility codes. Run a single unbroken length of stranded bare #6 copper wire from the grounding electrode to the top of wood pole leaving a 2-foot coil. Make the electrical connection between the grounding electrode conductor and grounding electrode by the exothermic weld method.

## **C Construction**

Wood Poles shall be installed to an embedment depth of 6 foot for a 40 ft. pole, and according to plan details. The holes can be bored, hydro-vac, or hand dug but all shall be cylindrical. If any part of the hole is within three feet of a buried utility, the holes must be hand dug or hydro-vac. No other method of setting poles is acceptable. The poles should be blocked and or raked as noted on the construction drawings.

In some cases, the poles are to be installed in areas of concrete walk. Prior to concrete removal, the concrete is to be saw cut to such size to allow for adequate room for pole and cable installation. Saw cutting for removal should be rectangular in shape. The contractor will be responsible for disposing all debris from excavation and sidewalk removal. The spoils are not to be used as backfill.

There is to be a minimum of a 6-inch bed of tamped pea gravel as a base for the pole. The area around the pole is to be backfilled with pea gravel and be tamped every 12 inches and filled to finished grade.

There will be no extras for these materials, which include such items as hardware, clevises, yokes, and all other materials and devices needed to fully complete the job in a neat and orderly fashion.

All fasteners used to attach items to wood poles will be of the appropriate strength steel which has been hot dipped galvanized.

No cable will be directly attached to any pole. Clevises, yokes and other overhead hardware must be used.

## **D Measurement**

The department will measure 40-FT Wood Pole by each pole, 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.0060.324	40-FT Wood Pole	EACH

Payment is full compensation for furnishing, shipping to the site, excavating, and placement of the pole.

## **88. Inline 5A Fast Acting Fuse with Holder, Item SPV.0060.334.**

### **A Description**

This section describes materials, general requirements, personnel qualifications, construction methods, and testing requirements used to perform electrical connections/splices required.

All work shall be according to standard spec 651.

### **B Materials**

#### **B.1**

Furnish materials conforming to the WSEC, consisting of chapter comm. 16 of the WEC combined with the NEC.

#### **B.2**

All materials furnished under this contract for street lighting installation are subject to approval by the City of Milwaukee street lighting engineer. A prototype maybe requested for submittal by the engineer with a cable sample installed and spliced for approval prior to field installation.

#### **B.3**

The contractor shall furnish a complete list of materials to be furnished and used for street lighting. Such list shall include names and addresses of manufactures, together with catalog numbers, certificates of compliance, specifications, and other product information requests by the engineer. The list shall be submitted within 10 calendar days of execution of contract. No material shall be incorporated into the lighting system prior to the written approval of the engineer. Approval does not change the intent of the specifications. The contractor shall not substitute or make changes in material without resubmitting for approval

Use either the KLM-5 Bussmann Limitron Fast Acting Fuse housed in 1-Pole Midget Fuse Holder HEB-AA Bussmann 10A 600V with 2A0600 Bussmann insulator fuse boot or else an equal fuse assembly compatible with internal raceway of light unit.

## **C Construction**

### **C.1 General Requirements**

Work under items related to the street lighting system shall conform to the National Electrical Code (NEC), 2020 Edition, or the latest edition adopted by the State of Wisconsin, Wisconsin Department of Commerce Chapter Comm 16 (Electrical) State of Wisconsin electrical code, City of Milwaukee code, and these special provisions and good electrical practices. The contractor shall not take advantage of lack of details in plans or these specifications where to do so would conflict with the applicable code and standards.

### **C.2 Personnel Qualifications**

An electrician holding all appropriate licenses (including City of Milwaukee Licenses) shall supervise all work done referring to the street lighting system. All splices shall be made by an electrician. For the purposes of this contract, an electrician is a person who served a four year apprenticeship and passed state exams.

### **C.3 Splices**

The contractor shall perform water tight connections at pole's handhole with materials listed or equal on Street Lighting Standard Details 142. Conductor runs shall be continuous between pole locations, and no splicing of conductors outside the pull box will be allowed. The water tight splices shall reside in the pull box and above the wiring coils called for in Street Lighting Standard Details 145. The 2#12UF with ground cable (per luminaire) shall be brought to the pole hand hole where it will be spliced with the riser cable to the light fixture. See luminaire specification for information on the installation of an in-line watertight fuse holder installed in-line with the hot conductor that leads to the luminaire and accessible in pole at the hand hole.

### **C.4 In Service Distribution Systems**

The contractor shall not make splices to any underground connections or to any existing distribution system. As indicated on plans, underground splices and connections to existing underground circuitry will be completed by city electricians.

### **C.5 Testing**

After the city makes preliminary acceptance of the street lighting system, it shall be monitored by the City of Milwaukee, Street Lighting Electrical Services during a 60-calendar day operational "burn in". Final acceptance of the lighting system will be based on its meeting standard operational criteria as stated in these specifications. The contractor shall be responsible for all necessary repairs and adjustments to the lighting system to meet standard operational criteria.

## **D Measurement**

The department will measure this item Inline 5A Fast Acting Fuse with Holder by the each (EACH) unit of measure. This covers the fuse, holder, and insulated boot in the hand hole of the light pole, and the incidental waterproof connections.

## **E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.334	Inline 5A Fast Acting Fuse with Holder	EACH

Payment is full compensation for furnishing and installing inline fuse holder assemblies and for disposing of surplus material.

## **89. Submersible Multitap 3-Port Pre-Insulated Connector, Item SPV.0060.342; Submersible Multitap 4-Port Pre-Insulated Connector, Item SPV.0060.343.**

### **A Description**

This section describes materials, general requirements, personnel qualifications, construction methods, and testing requirements used to perform electrical connections/splices required.

All work shall be according to standard spec 651.

### **B Materials**

## **B.1**

Furnish materials conforming to the WSEC, consisting of chapter comm. 16 of the WEC combined with the NEC.

## **B.2**

All materials furnished under this contract for street lighting installation are subject to approval by the City of Milwaukee street lighting engineer. A prototype maybe requested for submittal by the engineer with a cable sample installed and spliced for approval prior to field installation.

## **B.3**

The contractor shall furnish a complete list of materials to be furnished and used for street lighting. Such list shall include names and addresses of manufactures, together with catalog numbers, certificates of compliance, specifications, and other product information requests by the engineer. The list shall be submitted within 10 calendar days of execution of contract. No material shall be incorporated into the lighting system prior to the written approval of the engineer. Approval does not change the intent of the specifications. The contractor shall not substitute or make changes in material without resubmitting for approval.

Use either the Polaris Edge (ISPB2) or Morris Product submersible insulated connector or else an equal connector that is 3, or 4 Port Pre-Insulated, that is designed for use in below grade boxes, direct burial, and submersible. The Conductors Range from #2/0 - #14 Rated for 600 Volts Dual Rated for CU. or AL.

## **C Construction**

### **C.1 General Requirements**

Work under items related to the street lighting system shall conform to the National Electrical Code (NEC), 2020 Edition, or the latest edition adopted by the State of Wisconsin, Wisconsin Department of Commerce Chapter Comm 16 (Electrical) State of Wisconsin electrical code, City of Milwaukee code, and these special provisions and good electrical practices. The contractor shall not take advantage of lack of details in plans or these specifications where to do so would conflict with the applicable code and standards.

### **C.2 Personnel Qualifications**

An electrician holding all appropriate licenses (including City of Milwaukee Licenses) shall supervise all work done referring to the street lighting system. All splices shall be made by an electrician. For the purposes of this contract, an electrician is a person who served a four year apprenticeship and passed state exams.

### **C.3 Splices**

The contractor shall perform water tight splicing in a pull box. Conductor runs shall be continuous between pole locations, and no splicing of conductors outside the pull box will be allowed. The water tight splices shall reside in the pull box and above the 3 foot wiring coils. The 2#12UF with ground cable (per luminaire) shall be brought to the pole hand hole where it will be spliced with the riser cable to the light fixture. An in-line watertight fuse holder needs to be installed in-line with the hot conductor that leads to the luminaire and should be accessible in pole at the hand hole. Oxide inhibitor (OX4) or equivalent shall be applied on all splice's points.

Contractor is to bundle circuit conductors together and identify circuit at every split point.

Hand hole splices if needed should be completed using a multi-tap connector. The connector should be rated for 600 volts, conductor range #1/0 through #14 AL-CU, have a insulating cover rated at 105 degrees Celsius, and meet or exceed ANSI 119.4 Class A specifications for reliability.

### **C.4 In Service Distribution Systems**

The contractor shall not make splices to any underground connections or to any existing distribution system. As indicated on plans, underground splices and connections to existing underground circuitry will be completed by city electricians.

### **C.5 Testing**

After the city makes preliminary acceptance of the street lighting system, it shall be monitored by the City of Milwaukee, Street Lighting Electrical Services during a 60-calendar day operational "burn in". Final acceptance of the lighting system will be based on its meeting standard operational criteria as stated in

these specifications. The contractor shall be responsible for all necessary repairs and adjustments to the lighting system to meet standard operational criteria.

#### **D Measurement**

The department will measure the item Submersible Multitap Pre-Insulated Connectors as each splice location as one unit. The department will measure this item Submersible Multitap Pre-Insulated Connectors by the each (EACH) unit of measure. This covers both of the Submersible Multitap 3-Port and 4-Port Pre-Insulated Connectors in the pull box.

#### **E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.342	Submersible Multitap 3-Port Pre-Insulated Connector	EACH
SPV.0060.343	Submersible Multitap 4-Port Pre-Insulated Connector	EACH

Payment is full compensation for furnishing labor, equipment, coordination and all materials such as the multi-port submersible insulated connectors, anti-oxidant for wire connections, and incidentals necessary to complete the work to make operational one luminaire.

### **90. Luminaire Arms Single Member 6 FT. WP Mount, Item SPV.0060.346.**

#### **A Description**

This special provision describes providing and installation of the following material as shown in plans and according to the following.

#### **B Materials**

Furnish 6 ft. Aluminum Mounting Bracket – The aluminum bracket shall be fabricated from 2" aluminum pipe schedule 80. It shall have a 27" rise, and a 9" straight end section that is suited for use with a slip fit luminaire. Wire-The wire shall be copper 2#12 UF with ground wire. One wire shall be black, the other shall be white. The ground wire shall be grounded to fixture. The cable shall conform to NEC Article 339.

Fabricated per City of Milwaukee City Spec. and drawing C-81-27.

#### **C Construction**

Mounting height - The height to light center shall be 26' unless otherwise specified on the drawing or indicated in the field by the engineer. The bracket shall be attached to the wood pole with two 3/8"x 3" long) galvanized wood lag bolts, and one 5/8"x (10" to 12" long) galvanized through bolt with galvanized washers and nut.

#### **D Measurement**

The department will measure Luminaire Arms Single Member 6 FT. WP Mount by each unit, acceptably completed.

#### **E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.346	Luminaire Arms Single Member 6 FT. WP Mount	EACH

Payment is full compensation for the bracket arm, and all connections.

### **91. Equipment Grounding Electrode, Item SPV.0060.353.**

#### **A Description**

Furnish and install grounding protection to provide personnel and equipment protection against faults, surge currents and lightning transients.

This installation is only for locations with direct buried poles, or bolt down poles on old existing concrete light bases.

Note, that this item is not to be installed in pull boxes directly connected to WisDot Type 1, 2, 5 and 6 Bases that have been installed with the project. These WisDOT bases have their own ground rods installed with them.

## B Materials

Ground Rod – Use ground rods meeting the requirement of UL-467. Ground rods must be made of copper-clad steel with a nominal diameter of 5/8 inches. Ground rod sections must be a minimum of 8 feet in length and manufactured for the sole purpose of providing electrical grounding.

Grounding Conductors – Use 7 strand #6 AWG copper insulated (green) conductor for electrical protection ground. The grounding conductor shall be continuous without splices from the grounding electrode through the handhole grounding clip of the pole and of minimum length to make connection.

Mechanical bonding – Provide connection to the grounding electrode using G5 acorn ground clamp. Apply an anti-oxidant compound to all mechanical connections.

## C Construction

Provide a ground rod assembly driven into the earth at a single point (single point ground). Licensed electrician to install the primary ground rod assembly in an electrical pull box so that the top four inches are accessible for inspection, resistance testing, and maintenance.

## D Measurement

The department will measure Equipment Grounding Electrode item by the each (EACH) unit of measure.

## E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.353	Equipment Grounding Electrode	EACH

Payment is full compensation for the grounding electrode and all connections, including furnishing equipment and all materials incidentals that are necessary to complete the work.

## 92. Luminaire Utility 2LED2 Temporary, Item SPV.0060.371.

### A Description

Furnish and install temporary street lighting fixtures according to current City of Milwaukee Electrical methods as shown in Typical Installation section and National Electrical Code standards. All work shall be according to standard spec 651 and latest City of Milwaukee specifications.

### B Materials

**TABLE 1A Luminaire Utility Specification**

	<b>Luminaire 90W LED (Type II distribution)</b>
Factory set input power (Watt)	90 ± 1%
# of LED	≥ 40
NEMA Label	2LED2 (for Type II)
Max. Dimension	23.25" (D) * 4.38" (H) *11"(W)
EPA (sq. ft.)	≤ 0.53
Weight	≤ 12.2 lbs
BUG Rating	B3-U0-G3
Min. Efficacy (lumen/Watt)	117
Min. Delivered Lumens	10,618

Technical Specifications: All features below shall be incorporated into the equipment and all items shall be furnished and installed into a complete unit ready for operation.

- **Type:** The luminaires shall be designed so it can efficiently produce uniform illumination according to I.E.S. Type II, III and V light distribution according to the lighting plan and Table 1A.
- **Housing:** The housing and door shall be rugged, high quality, cast aluminum for maximum strength, durability and lasting beauty. All castings shall be free from pits, blowholes, or other irregularities. All edges are to be free from burrs. The housing shall have an integral leveling pad or other suitable means for quick, easy and proper positioning of the luminaire.
- **Door:** The door shall be hinged and easily opened for routine maintenance. All component parts shall be easily accessible with the lower housing opened. Tool-less entry is required.
- **Leveling:** A Bubble level is to be located inside the electrical compartment for easy leveling at installation.
- **Hinges:** Hinges shall be so constructed and designed to accurately position the door and assure a positive locking with the housing. The hinges shall be provided with a safety catch to prevent the accidental disengagement of the door during servicing.
- **Finish:** The entire housing shall be polyester powder-coated for durability and corrosion resistance. Rigorous five-stage pre-treating and painting process shall yield a finish that achieves a scribe creepage rating of 8 (per ASTM D1654) after over 5000 hours exposure to salt fog chamber (operated per ASTM B117).
- **Color:** The luminaire shall be grey in color unless otherwise specified.

#### A. LED/OPTICAL ASSEMBLY:

The LED module is to be enclosed and sealed with a borosilicate Prismatic Glass optical assembly. The combination shall be NEMA IP66 rated for dust and water resistant. The L70, per IES TM-21, must be greater or equal to 60,000 hours of operation time at 25°C. The color temperature is to be 3,000K CCT.

#### B. POWER SUPPLY:

- The Electronic driver must have an expected life of 60,000 hours at a 25°C ambient. It is to be rated at 240 volts, 60Hz. A driver with multiple input voltages can be supplied as long as it can operate at 240 volts.
- The luminaire is to be equipped with a field adjustable output wattage selector and dimmable driver for output dimming. The field adjustable wattage chart shall be attached on the inside of the door opening
- **ENERGY EFFICIENCY:** The luminaire is to be DLC certified for energy efficiency.

#### C. SURGE PROTECTION:

A surge protector which provides a minimum of 20kV/10 kA protection as per IEEE/ANSI C62.41 Category C is to be included. There shall be a visual indicator showing the surge protector is operational.

**D. TERMINAL BLOCK:** A heavy duty terminal block shall be provided which will accept wire sizes up to #6 A.W.G. The terminal block shall be compatible with either aluminum or copper wire.

**E. MOUNTING:** Mast arm mount is adjustable for arms from 1-1/4" to 2" (1-5/8" to 2-3/8" O.D.) diameter. Provide 2 bolts clamping mechanism with 3G vibration rating per ANSI C136.

**F. HARDWARE:** All nuts, bolts, latches, etc. furnished with the luminaire shall be fabricated from stainless steel or non-ferrous materials.

**G. PHOTOCONTROL:** Luminaire shall be supplied with 7-pin NEMA socket and shorting cap.

### C Construction

Install lighting fixture as shown in the plans. The lighting fixture is to be installed at 0 degree to the horizon. Remove the fixture after it is no longer in use.

### D Measurement

The department will measure Luminaire Utility 2LED2 Temporary by each unit acceptably completed.

### E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.371	Luminaire Utility 2LED2 Temporary	EACH

Payment is full compensation for furnishing labor, equipment, coordination, removal and disposal, and all materials and incidentals necessary to complete the work.

### 93. Luminaire Utility 2LED2, Item SPV.0060.375.

#### A Description

Furnish and install street lighting fixture according to current City of Milwaukee Electrical methods as shown in Typical Installation section and National Electrical Code standards. All work shall be according to standard spec 651 and latest City of Milwaukee specifications.

#### B Materials

**TABLE 1A Luminaire Utility Specification**

	<b>Luminaire 90W LED (Type II distribution)</b>
Factory set input power (Watt)	90 ± 1%
# of LED	≥ 40
NEMA Label	2LED2 (for Type II)
Max. Dimension	23.25" (D) * 4.38" (H) *11"(W)
EPA (sq. ft.)	≤ 0.53
Weight	≤ 12.2 lbs
BUG Rating	B3-U0-G3
Min. Efficacy (lumen/Watt)	117
Min. Delivered Lumens	10,618

Technical Specifications: All features below shall be incorporated into the equipment and all items shall be furnished and installed into a complete unit ready for operation.

- **Type:** The luminaires shall be designed so it can efficiently produce uniform illumination according to I.E.S. Type II, III and V light distribution according to the lighting plan and Table 1A.
- **Housing:** The housing and door shall be rugged, high quality, cast aluminum for maximum strength, durability and lasting beauty. All castings shall be free from pits, blowholes, or other irregularities. All edges are to be free from burrs. The housing shall have an integral leveling pad or other suitable means for quick, easy and proper positioning of the luminaire.
- **Door:** The door shall be hinged and easily opened for routine maintenance. All component parts shall be easily accessible with the lower housing opened. Tool-less entry is required.
- **Leveling:** A Bubble level is to be located inside the electrical compartment for easy leveling at installation.
- **Hinges:** Hinges shall be so constructed and designed to accurately position the door and assure a positive locking with the housing. The hinges shall be provided with a safety catch to prevent the accidental disengagement of the door during servicing.
- **Finish:** The entire housing shall be polyester powder-coated for durability and corrosion resistance. Rigorous five-stage pre-treating and painting process shall yield a finish that achieves a scribe creepage rating of 8 (per ASTM D1654) after over 5000 hours exposure to salt fog chamber (operated per ASTM B117).
- **Color:** The luminaire shall be grey in color unless otherwise specified.
- **Label:** There shall be a NEMA label (see Table 1A) clearly visible at 30 feet height attached to the door of the luminaire. In addition, the luminaire complete model number and manufacturing date shall be indicated inside the housing.
- **Smart Inventory and Maintenance:** Each luminaire should be uniquely identifiable by having a QR Code on each luminaire for app scanning to access the luminaire specification and configuration,

in addition to the geographical location at point of installation. The app should be free of charge to purchaser for the lifetime of the luminaire.

- Sensor Ready: The luminaire is to be equipped with D4i driver and Zhaga socket in protective cap for future sensor installation.

#### A. LED/OPTICAL ASSEMBLY:

The LED module is to be enclosed and sealed with a borosilicate Prismatic Glass optical assembly. The combination shall be NEMA IP66 rated for dust and water resistant. The L70, per IES TM-21, must be greater or equal to 60,000 hours of operation time at 25°C. The color temperature is to be 3,000K CCT.

#### B. POWER SUPPLY:

- The Electronic driver must have an expected life of 60,000 hours at a 25°C ambient. It is to be rated at 240 volts, 60Hz. A driver with multiple input voltages can be supplied as long as it can operate at 240 volts.
- The luminaire is to be equipped with a field adjustable output wattage selector and dimmable driver for output dimming. The field adjustable wattage chart shall be attached on the inside of the door opening
- ENERGY EFFICIENCY: The luminaire is to be DLC certified for energy efficiency.

#### C. SURGE PROTECTION:

A surge protector which provides a minimum of 20kV/10 kA protection as per IEEE/ANSI C62.41 Category C is to be included. There shall be a visual indicator showing the surge protector is operational.

D. TERMINAL BLOCK: A heavy duty terminal block shall be provided which will accept wire sizes up to #6 A.W.G. The terminal block shall be compatible with either aluminum or copper wire.

E. MOUNTING: Mast arm mount is adjustable for arms from 1-1/4" to 2" (1-5/8" to 2-3/8" O.D.) diameter. Provide 2 bolts clamping mechanism with 3G vibration rating per ANSI C136.

F. HARDWARE: All nuts, bolts, latches, etc. furnished with the luminaire shall be fabricated from stainless steel or non-ferrous materials.

G. PHOTOCONTROL: Luminaire shall be supplied with 7-pin NEMA socket and shorting cap.

WARRANTY: The contractor and/or the manufacturer warrants that goods sold hereunder will be merchantable quality, will conform to applicable specifications, drawings designs, samples or descriptions, will be free from defects in material and workmanship and will be fit for the particular purpose intended by City of Milwaukee.

- This warranty will remain in effect for 10 years from date of acceptance.
- Under this provision, the manufacturer agrees to repair or replace within a reasonable time, any part, feature or product found to be defective during the warranty period at no cost to the city.

### C Construction

Install lighting fixture on the six-foot or eight-foot mounting bracket on the pole according to current City of Milwaukee standards. The lighting fixture is to be installed at 0 degree to the horizon. Contractor is responsible to scan the QR code of each fixture with mobile cellphone with the Signify app at point of installation. Details will be provided by Street Lighting field office.

### D Measurement

The department will measure Luminaire Utility 2LED2 by each unit acceptably completed.

### E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.375	Luminaire Utility 2LED2	EACH

Payment is full compensation for furnishing labor, equipment, coordination and all materials and incidentals necessary to complete the work.

#### **94. Adjusting CUC Manhole Cover, Item SPV.0060.400.**

##### **A Description**

This special provision describes adjusting the existing chimney of the block, precast, or brick round manholes; furnishing, installing and removing protection of the cables in the manhole during adjustment operations. Perform work according to the standard specifications, the provisions of the article Adjusting Manhole Covers, as shown on the plans, and as hereinafter specified.

##### **B Materials**

Furnish and install materials that conform to the requirements of standard spec 519. Salvage and reinstall existing covers on the manholes. The city will supply covers designated for replacement. Contractor shall contact Karen Rogney at (414) 286-3242 to obtain the "Castings Requisitions Form" required to obtain the covers. Contractor shall contact Ricardo Lopez, Inventory Clerk at (414) 286-6123 prior to obtaining the frames and lids from the DPW Field Headquarters at 3850 N. 35<sup>th</sup> St. Contractor must have the "Castings Requisitions Form" in hand in order to obtain the castings.

##### **C Construction**

Report any pre-existing problems to Mr. Curt Campagna, CUC Manhole Maintenance Manager at (414) 286-5967 three working days in advance of any construction on manholes.

Before removing the pavement around the manhole, the contractor shall place a ¾-inch plywood cover or equal over existing active Street Lighting, Traffic Control, Communications or private vendor electrical cables. This cover shall be properly supported to/at the manhole floor.

Break out and remove pavement around manhole. Remove existing covers and store and secure them properly. Any damaged, lost, or stolen covers shall be the responsibility of the contractor and shall be replaced at contractor's expense.

Remove existing chimney to surface of concrete roof slab. If manhole does not have an existing concrete roof slab, remove sufficient chimney as to provide adequate corbel to fit new cast iron frame and cover.

Adjust manhole cover to proposed grade using bricks or concrete rings as necessary. Completely underpin entire flange area of manhole frame with mortar, bricks and/or concrete rings. Remove wedges/shims. Fill voids with grout. Do not back plaster inside walls.

After completion of paving, remove the temporary ¾-inch plywood cover or equal which is over the existing electrical cables in the manhole as mentioned above.

Notify Mr. Campagna three (3) working days in advance of completion of each manhole adjustment, for inspection and acceptance of work performed. The contractor will receive no payment until the above work is approved by City Underground Conduits.

##### **D Measurement**

The department will measure Adjusting CUC Manhole Cover by the Each 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.0060.400	Adjusting CUC Manhole Cover	EACH

Payment is full compensation for furnishing all required materials, exclusive of frames, grates, or lids available and designated for adjusting; for removing, reinstalling and adjusting the covers; and for furnishing all labor, tools, equipment and incidentals necessary for adjusting each cover, complete according to the requirements of the plans and contract. Covers to be adjusted and which are rendered unfit for use by the contractor through the contractor's operations will be replaced by the contractor in kind at the contractor's own cost and expense.

#### **95. 4' Diameter Manhole Type CUC, Item SPV.0060.401.**

##### **A Description**

The work under this special provision consists of a 4'-0" round precast concrete manhole for the City of Milwaukee Underground Conduit Section at locations shown in the plans, according to standard spec 301, 611 and 501, and as hereinafter provided.

## B Materials

Concrete and steel reinforcement shall conform to ASTM specification: C478 (latest edition), except that the single cage circumferential reinforcement in all vertical walls shall consist of lines of #6 steel wire spaced 3" horizontally and lines of #10 steel wire spaced 8" vertically located in the center of the wall.

Two lifting inserts for 1-1/2" diameter lifting eyes in the wall of the base and all other riser sections except the top cap section.

Up to four 7/8" diameter galvanized steel 1-11/16" pulling-in eyes in the wall of the base section directly across from each duct entrance.

Four 5/8" diameter plastic threaded cable rack bolt inserts in the wall of the riser section.

A continuous circumferential butyl rubber gasket on the wall joint of the base and riser section when manhole is being assembled at job site.

The number of pulling-in eyes and/or cable rack bolt inserts may vary. Additionally, the size, location, shape and number of duct entrances and/or knock-out area may vary. Unit price of manhole shall not vary for number of openings, pulling-in eyes and/or rack bolt inserts.

The city will supply a frame and lid for the manhole. Contractor shall contact Mr. Ricardo Lopez, Inventory Clerk at (414) 286-6123 prior to obtaining the frame and lid from the DPW Headquarters at 3850 N. 35th St. Contractor must have the "Casting Requisition Form" which shall be supplied by the city.

To obtain the "Casting Requisition Form" and/or for any questions on materials, contact Ms. Karen Rogney at (414) 286-3243.

## C Construction

4' Diameter Manholes Type CUC shall be installed according to standard spec 611.3.

Install the top of the roof deck at a standard depth of 18" below finished grade where possible. A minimum depth of 12" from finished grade to the top of the roof deck must be maintained.

## D Measurement

The department will measure 4' Diameter Manhole Type CUC by each individual manhole, acceptably completed.

## E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.401	4' Diameter Manhole Type CUC	EACH

Payment is full compensation for all excavation work and disposal of material; for, furnishing and installing all materials, including bricks, and coarse aggregate, bedding and backfilling, concrete forms, concrete placement, appurtenances, and backfilling.

## 96. 5' Diameter "Doghouse" Manhole Type CUC, Item SPV.0060.412.

### A Description

The work under this item consists of a 5'-0" diameter precast concrete "doghouse" manhole for the City of Milwaukee Underground Conduit Section at locations shown in the plans, according to standard spec 301, 611 and 501, and as hereinafter provided. This work includes providing and placing PVC pipe and associated fittings, cement encasement, and other appurtenances to extend existing conduit as required to provide a complete and fully functional communications manhole unit.

### B Materials

#### B.1 Manhole

Furnish and install a 5-ft diameter precast concrete "doghouse" manhole. Concrete and steel reinforcement shall conform to ASTM specification: C478 (latest edition), except that the two cages of circumferential reinforcement in all vertical walls shall consist of lines of #6 steel wire spaced 3" horizontally and lines of #10 steel wire spaced 8" vertically both located in the center of the wall, and #6 hoop rebar centered in the wall 3" above the window knock-outs.

Two lifting inserts for 1-1/2" diameter lifting eyes shall be cast in the wall of the base and all other riser sections except the top cap section.

Up to four 7/8" diameter galvanized steel 1-11/16" pulling-in eyes shall be cast in the wall of the base section directly across from each duct entrance.

Four 5/8" diameter plastic threaded cable rack bolt inserts shall be cast in the wall of the riser section.

A continuous circumferential butyl rubber gasket shall be supplied, to be laid on the wall joint of the base and riser section when manhole is being assembled at job site.

The number of pulling-in eyes and/or cable rack bolt inserts may vary. Additionally, the size, location, shape and number of duct entrances and/or knock-out area may vary. Unit price of manhole shall not vary for number of openings, pulling-in eyes and/or rack bolt inserts.

Field verify window depth and locations prior to ordering manhole.

The city will supply a frame and lid for the manhole. Contractor shall contact Mr. Ricardo Lopez, Inventory Clerk at (414) 286-6123 prior to obtaining the frame and lid from the DPW Headquarters at 3850 N. 35th St. Contractor must have the "Casting Requisition Form" which shall be supplied by the city.

## **B.2 Conduit**

Furnish and install DB\_60 polyvinyl chloride (PVC) conduit. Conduit will be accepted on the basis of a Manufacturer's Certificate of Compliance and WISDOT field inspection upon delivery to a project.

Manufacturers of PVC Conduit DB-60 shall request evaluation and approval of their products by filing with the department's Research Supervisor, Bureau of Highway Construction, a certificate setting forth the name or brand of pipe to be furnished, the specified type, category, grade and PVC plastic cell classifications. The certificate shall have attached a certified test report from an approved independent testing laboratory showing specific results of tests performed on each diameter conduit to be furnished conforming to all requirements of these specifications. The conduit tested shall be randomly selected for test by the independent testing laboratory as being representative of that manufacturer's conduit. The manufacturer of the conduit shall also submit with the certification, a guarantee that all conduit furnished be of the same quality and composition and conform to the specification requirements as tested by the independent laboratory, as long as the manufacturer continues to furnish materials for WISDOT projects.

PVC conduit and fittings shall conform to the requirements of Standard Specifications for Smooth-Wall Poly (Vinyl Chloride) (PVC) Conduit and Fittings for Underground Installation, ASTM Designation: F512 (latest edition).

## **B.3 Concrete**

The type of concrete mix to be used to encase the ducts will be:

Type I or Type IL Cement	280 lbs
Fly Ash	100 lbs
Sharp Torpedo Sand	3100 lbs
Water	35 lbs
Chryso Air 260 or approved equal	2.0 ozs
Chryso Plast 209 or approved equal	7.0 ozs
Air	5%

Mix the materials to provide an approximate 3-inch slump.

## **B.4 Slurry Backfill**

Aggregate slurry backfill consists of No. 1 concrete aggregate Class 'C' concrete mix with the cement deleted.

Fly Ash (Class C)	75 lbs.
Concrete Sand (Damp)	1830 lbs.
No. 1 Concrete Aggregate	1830 lbs.

Mix with water to inundate the aggregate sufficiently to provide an approximate 3-inch slump. Deposit the mix directly from a concrete transit mix truck.

For any questions on materials, contact Ms. Karen Rogney at (414) 286-3243.

## **C Construction**

### **C.1 Manhole**

Install the bottom section of the manhole while avoiding damage to the live active cables. The excavation may need to be widened to slide the bottom under the existing cables. After the bottom section of the manhole has been set, the existing cables need to be placed within the window openings, splice cases and/or coils placed back into the manhole.

Exercise extreme care in the handling of working cables within the excavation. When cables need to be moved, particularly lead sheathed cables, move cables slowly and gradually. Avoid sharp kinks that may damage the inner core of the cables and the sheath.

Complete the “doghouse” manhole installation without any damage or service disruption to the existing cables.

Install 5-ft Diameter “Doghouse” Manholes Type CUC Installed over Conduit according to standard spec 611.3. Install the top of the roof deck at a standard depth of 18” below finished grade where possible. A minimum depth of 12” from finished grade to the top of the roof deck must be maintained.

### **C.2 Placing Duct**

All ducts shall be inspected before placing to see that the bores are clean and free from mud, sand, etc. Only ducts with a smooth bore, free from burrs, rough projections etc. shall be used. Where burrs or other rough areas likely to damage cable are found in the duct, they shall be smoothed off by rasping or scraping.

All existing ducts shall be extended into the new manhole structure unless otherwise noted on the plan. Split PVC duct should be used on ducts containing cables. The split duct shall be installed per manufactures recommendations using tape and reinforced with plastic straps to produce a rigid, stable unit.

All ducts shall terminate on the inside wall of the manhole. Install a standard end bell fitting flush with the wall on all duct access points.

Where trace wires are present, reconnect and extend trace with #10 copper wire extended two feet past the inside wall of the manhole.

### **C.3 Concreting**

Begin concreting after conduit has been laid and the trench and duct have been inspected. The minimum concrete encasement of the ducts is 3 inches on the top, 2 inches on the sides, and 3 inches on the bottom. After placing, the concrete shall be puddled with a splicing bar or similar tool so that complete duct encasement is accomplished. Wood braces used to keep the conduit from floating shall be removed before the concrete sets completely and the resultant encasement voids filled with concrete.

Allow the concrete encasement to set for a minimum of 6 hours before backfilling is commenced.

### **C.4 Slurry Backfill**

Commence backfilling immediately after the duct has been inspected, approved and has set to withstand the load.

An aggregate slurry as specified shall be used to backfill all concrete encased conduit. The trench shall be slurry backfilled to the proposed or existing subgrade. The mix shall be deposited in the trench directly from a concrete transit mix truck.

## **D Measurement**

The department will measure 5' Diameter “Doghouse” Manhole Type CUC by the each individual manhole, 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.0060.412	5' Diameter “Doghouse” Manhole Type CUC	EACH

Payment is full compensation for all excavation work and disposal of material; for, furnishing and installing all materials, including precast manhole, conduit, conduit fittings, end bells, bricks, and coarse aggregate, bedding, concrete forms, concrete placement, appurtenances, and backfilling.

## **97. Removing CUC Manhole, Item SPV.0060.420.**

### **A Description**

This special provision describes removing various manholes for the City of Milwaukee Underground Conduit department at locations shown in the plans, according to standard spec 204. Removal means removal of the existing structure and any necessary conduit alterations required.

### **B (Vacant)**

### **C Construction**

#### **C.1 General Requirements**

Complete all operations necessary to remove the existing structure and that might endanger the new construction before constructing new work.

Manholes designated for removal and subsequent reconstruction will ordinarily contain working cables which must be maintained during the course of this phase of work. Protective measures against damage must be observed when handling and working around these cables.

#### **C.2 Frame and Cover Removal**

Remove the frame and cover on all manholes designated for removal. If the castings are to be salvaged as directed in the plans, exercise caution with frames embedded in concrete so unnecessary damage to the frame does not occur during the process of breaking concrete. Remove all mortar and concrete from the frame. Store salvaged castings at location approved of by the engineer.

#### **C.3 Protection of Cables**

Extreme care must be exercised in the handling of working cables in manholes or exposed conduit package areas while removal work is going on. Cables may carry high voltage that may be life threatening.

No cable removed from its racks and spanning the manhole opening is to be permitted to sag appreciably from its own weight across such opening. Provide temporary supports for all cables. When cables need to be moved, particularly lead sheathed cables, move cables slowly and bend gradually. Avoid sharp kinks that may damage inner core of cables and the sheath. Cables must be left as stationary as is practicable after the cables have been temporarily located. Exercise care if further shifting is required while construction work progresses and if needed, re-support. Guard against damage to the exposed cables by falling objects such as tools, equipment and debris. Avoid stepping on cables. Do not use cables to support any objects during the course of the construction work.

Promptly notify Mr. Brian Pawlak at (414) 286-5970 work / (414) 708-2118 cell, of any visible cable defects discovered at the time the cable is exposed. Report any signs of abrasion, sheath rupture, kinking in the cable or evidence of sheath cracks.

The contractor will be held liable for all damage due to carelessness and to neglect and is responsible for protecting and safeguarding cables. All damage will be repaired at the contractor's expense.

#### **C.4 Removing Existing Structure**

After removal of the castings and protecting and supporting the cables, carefully remove the manhole roof, walls, floor and all hardware. No portion of the existing structure is to remain. The increase in the size of the excavation will be determined by the size of the manhole to be reconstructed as indicated in the detail plans. Remove all waste material accumulated by the removal of the existing structure from the work site. No part of this waste material can be used as backfill material.

#### **C.5 Conduit Alterations**

Break back by hand sections of cement encased conduit to facilitate excavation for the new proposed structure. Hand chip concrete away for the existing pipes. Carefully remove pipes from around the cables. Hand chip enough concrete away from the pipes to allow for the coupling of split ducts on to the ends of the pipes. Protect exposed pipe ends and existing cables from damage.

## **D Measurement**

The department will measure Removing CUC Manhole by each unit, acceptably completed.

## **E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.420	Removing CUC Manhole	EACH

Payment is full compensation for breaking down and removing structure; conduit alterations; for providing cable protection; for hauling and disposing of materials.

## **98. Installing Conduit Into Existing Manhole, Item SPV.0060.425.**

### **A Description**

This special provision describes providing locating existing conduit system manholes and installing new conduit into those manholes at the locations shown on the plans. The contractor shall verify existing conduit manhole locations with the City of Milwaukee, and shall maintain any existing conductors, fibers, and conduit paths without interruption or damage. Repair and restoration of all disturbed areas resulting from the work shall be according to the pertinent provisions of the standard specifications, and as hereinafter provided.

### **B Materials**

Furnish conduit, as provided and paid for under other items in this contract. All materials shall conform to the pertinent provisions of the standard specifications unless otherwise noted.

### **C Construction**

Carefully expose the outside of the existing structure without disturbing any existing conduits or cabling.

Drill the appropriate sized hole in a concrete structure or saw and remove full sections of block or bricks from the existing structure for the entering of conduit at a location within the structure that will not disturb the existing cabling and will not hinder the installation of new cabling within the installed conduit. This work may include the removal of the existing abandoned conduit from the structure to allow for the installation of the new conduits as indicated on the plans.

Fill any void area between the drilled hole and conduit with an engineer-approved filling material to protect against conduit movement and entry of fill material into the structure.

Carefully tamp backfill into place.

All disturbed areas shall be repaired and restored in kind.

### **D Measurement**

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

### **E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.425	Installing Conduit Into Existing Manhole	EACH

Payment is full compensation for drilling holes; sawing; removing blocks; removing bricks; removing abandoned conduit; furnishing and installing all materials, including bricks, and coarse aggregate; for excavation, bedding and backfilling, including any sand or other required materials; furnishing and placing topsoil, fertilizer, seed, and mulch in disturbed areas; for disposal of surplus materials; for making inspections.

**99. Sawing Concrete-Encased Duct Package, Item SPV.0060.426.**

**A Description**

The work under this provision consists of full depth sawing of cement encased multiple duct conduit below grade; preparing sawed conduit ends to accept adaptor couplings needed to allow transition of new PVC conduit from existing clay, fiber or PVC conduit.

**B (Vacant)**

**C Construction**

**C.1 Equipment**

Use ring saw or concrete cutting chainsaw for all full-depth cuts. Use diamond blades. The contractor may use a high speed 16" construction saw on duct systems with less than 4-ducts when approved by the engineer.

**C.2 Sawing Encasement**

Carefully expose the outside of the existing cement encasement. The contractor is to verify that the conduit lines are free of all cabling. Saw a full depth transverse cut through the encasement. Saw straight cuts with the surface remaining vertical over its full depth. Hand chip concrete away from sawed conduit duct ends to allow transition fittings to be placed over the ends. The exposed conduit will be protected from damage. Any damaged conduit ends will be the responsibility of the contractor and will require a resaw at the contractor's expense.

**D Measurement**

The department will measure Sawing Concrete-Encased Duct Package by the unit. Up to 6 conduits per cement encasement will be considered a single unit.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.426	Sawing Concrete-Encased Duct Package	EACH

Payment is full compensation for sawing concrete encased duct packages full depth and for furnishing all labor, tools, equipment, or other related material: for disposal of surplus materials: and for inspections, sawing, hand chipping and removal of the conduit.

**100. CUC Manhole Drain, Item SPV.0060.490.**

**A Description**

This special provision describes providing and installing a drain in a CUC manhole.

**B Materials**

Furnish a coated cast iron combined drain with backwater valve, pit type, bronze swing-check assembly, vertical inlet grate and spigot connection, as shown in the plans. The pipe size shall be 4-inch. Dimensions shall be as shown in the plans.

**C Construction**

Construct the drain in the CUC manhole wall as shown in the plans.

**D Measurement**

The department will measure CUC Manhole Drain by each drain, 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.0060.490	CUC Manhole Drain	EACH

Payment is full compensation for furnishing and installing the CUC manhole drain.

The CUC Manhole will be paid separately under contract items.

**101. 8-Inch Dia Overflow Standpipe with Dome Grate, Item SPV.0060.600.**

**A Description**

This special provision describes installation of 8-Inch Diameter Overflow Standpipe with Dome Grate in the bioswales.

**B Materials**

Furnish and install 8-Inch Dia. Standpipes with Dome Grate in the bioswales. The standpipes shall be Schedule 35 PVC, and conform to the requirements of ASTM D3034. The dome grates, which slide on the stand pipe, shall be beehive type.

**C Construction**

Construct 8-Inch Dia. Overflow Standpipes in the bioswales as shown in the plans. Connect the overflow standpipe to the pipe underdrain 6-inch or to storm sewer pipe via a cored connection. Install beehive type dome grate on top of the standpipe.

**D Measurement**

The department will measure the 8-Inch Dia. Overflow Standpipe with Dome Grate by each unit, acceptably completed.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.600	8-Inch Dia Overflow Standpipe with Dome Grate	EACH

Payment is full compensation for constructing the standpipes and domes as shown on the plans including pipe coring and connections, and installing all tees, wyes, fittings, caps and ends.

**102. Informational Sign Post, Item SPV.0060.601.**

**A Description**

This special provision describes the installation of informational sign posts at various locations determined by the engineer.

Informational signs describing the function of the bioswales and permeable pavers will be installed on the posts by others.

**B Materials**

Furnish 10' smooth black post with 2-3/8" outer diameter, black decorative finial that fits a 2-3/8" dia. Post, a set of two black sign mounting Z-brackets that fits a 2-3/8" dia. post and a V-loc post anchor for loose soil that fits a 2-3/8" dia. post.

**C Construction**

Install the post approximately 4-feet into the ground at locations directed by the engineer.

**D Measurement**

The department will measure the Informational Sign Posts by each unit, acceptably completed.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.601	Informational Sign Post	EACH

Payment is full compensation for installing the Informational Sign Posts.

**103. 6-Inch Cleanout, Item SPV.0060.602.**

**A Description**

This special provision describes the 6-Inch Cleanouts located in the bioswales.

**B Materials**

Furnish Schedule 35 PVC conforming to the requirements of ASTM D3034.

**C Construction**

The work shall include but is not limited to furnishing and installing all pipe, tees, wyes, fittings necessary to construct the cleanout as indicated on the plans. Securely connect sections of PVC pipe with solvent-cemented or gasketed joints.

**D Measurement**

The department will measure the 6-Inch Cleanout bid items by each, 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.0060.602	6-Inch Cleanout	EACH

Payment is full compensation for installing the 6-Inch Cleanouts including all necessary tees, wyes, fittings, caps and ends.

**104. Inlet Covers Type Beehive, Item SPV.0060.604.**

**A Description**

This special provision describes providing beehive inlet covers according to standard spec 611.

**B Materials**

Furnish beehive inlet covers conforming to standard spec 611.2 and as shown in the plans.

**C Construction**

Use construction methods according to standard spec 611.3.

**D Measurement**

The department will measure Inlet Covers Type Beehive by each unit, acceptably completed.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.604	Inlet Covers Type Beehive	EACH

Payment is full compensation for furnishing and installing the inlet cover frame and grate according to standard spec 611.5.

105. Arrowwood Viburnum 3 Gallon, Item SPV.0060.620;  
 Catmint Nepeta 'Blue Wonder' 1 Gallon, Item SPV.0060.621;  
 Daylilies 'Stella D'Oro' 1 Gallon, Item SPV.0060.622;  
 Diablo Ninebark 3 Gallon, Item SPV.0060.623;  
 Diervilla Lonicera 2 Gallon, Item SPV.0060.624;  
 False Indigo 'Midnight Prairie Blue Eyes' 1 Gallon, Item SPV.0060.625;  
 Gro Low Sumac 2 Gallon, Item SPV.0060.626;  
 Joe Pye Weed 'Gateway' 1 Gallon, Item SPV.0060.627;  
 Karl Foerster Grass 1 Gallon, Item SPV.0060.628;  
 Little Bluestem Grass 'Blue Heaven' 1 Gallon, Item SPV.0060.629;  
 Little Bluestem Grass 'Carousel' 1 Gallon, Item SPV.0060.630;  
 Panicum Grass 'Apache Rose' 1 Gallon, Item SPV.0060.631;  
 Panicum Grass 'Heavy Metal' 1 Gallon, Item SPV.0060.632;  
 Panicum Grass 'Red Sunset' 1 Gallon, Item SPV.0060.633;  
 Purple Coneflower 'Magnus' 1 Gallon, Item SPV.0060.634;  
 Purple Pavement Roses Rugosa 2 Gallon, Item SPV.0060.635;  
 Red Twigged Dogwood 3 Gallon, Item SPV.0060.636;  
 Little Bluestem Grass 'The Blues' 1 Gallon, Item SPV.0060.637;  
 Panicum Grass 'Northwind' 1 Gallon, Item SPV.0060.638;  
 Prairie Dropseed 1 Gallon, Item SPV.0060.639;  
 Autumn Moor Grass 1 Gallon, Item SPV.0060.640.

#### A Description

This special provision describes providing planting plants of the species, varieties, and sizes specified; and includes furnishing all necessary materials, excavating plant holes, salvaging topsoil, transplanting, backfilling, mulching, watering, heeling in, disposal of surplus and waste materials, and necessary care and required replacements pending acceptance, at the locations shown on the plans according to standard spec 632, and as hereinafter provided.

#### B Materials

Furnish material that is according to the pertinent requirements of standard spec 632.

#### C Construction

Construction shall conform to the requirements of standard spec 632.3.

#### D Measurement

The department will measure plants by each unit, acceptably completed.

#### E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.620	Arrowwood Viburnum 3 Gallon	EACH
SPV.0060.621	Catmint Nepeta 'Blue Wonder' 1 Gallon	EACH
SPV.0060.622	Daylilies 'Stella D'Oro' 1 Gallon	EACH
SPV.0060.623	Diablo Ninebark 3 Gallon	EACH
SPV.0060.624	Diervilla Lonicera 2 Gallon	EACH
SPV.0060.625	False Indigo 'Midnight Prairie Blue Eyes' 1 Gallon	EACH
SPV.0060.626	Gro Low Sumac 2 Gallon	EACH
SPV.0060.627	Joe Pye Weed 'Gateway' 1 Gallon	EACH
SPV.0060.628	Karl Foerster Grass 1 Gallon	EACH
SPV.0060.629	Little Bluestem Grass 'Blue Heaven' 1 Gallon	EACH
SPV.0060.630	Little Bluestem Grass 'Carousel' 1 Gallon	EACH
SPV.0060.631	Panicum Grass 'Apache Rose' 1 Gallon	EACH
SPV.0060.632	Panicum Grass 'Heavy Metal' 1 Gallon	EACH
SPV.0060.633	Panicum Grass 'Red Sunset' 1 Gallon	EACH

SPV.0060.634	Purple Coneflower 'Magnus' 1 Gallon	EACH
SPV.0060.635	Purple Pavement Roses Rugosa 2 Gallon	EACH
SPV.0060.636	Red Twigged Dogwood 3 Gallon	EACH
SPV.0060.637	Little Bluestem Grass 'The Blues' 1 Gallon	EACH
SPV.0060.638	Panicum Grass 'Northwind' 1 Gallon	EACH
SPV.0060.639	Prairie Dropseed 1 Gallon	EACH
SPV.0060.640	Autumn Moor Grass 1 Gallon	EACH

Payment is full compensation for providing, transporting, handling, storing, placing, and replacing plant materials; for excavating all plant holes, salvaging topsoil, mixing and backfilling; for providing and applying required mulch for bioswales (as described in these specials and on the plans); and for disposing of all excess and waste materials.

**106. Concrete Curb & Gutter Integral 19-Inch, Item SPV.0090.010;  
Concrete Curb & Gutter Integral 31-Inch, Item SPV.0090.011.**

**A Description**

This special provision describes constructing integral concrete curb and gutter.

**B Materials**

Furnish materials according to standard spec 601.2.

**C Construction**

Construct integral concrete curb and gutter according to standard spec 601.3.

**D Measurement**

The department will measure the curb and gutter items under this article by the linear foot, acceptably completed, according to standard spec 601.4.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.010	Concrete Curb & Gutter Integral 19-Inch	LF
SPV.0090.011	Concrete Curb & Gutter Integral 31-Inch	LF

Payment is full compensation according to standard spec 601.5.

**107. Reconnecting Existing Pipes, Item SPV.0090.020.**

**A Description**

This special provision describes reconnecting existing private connections and sump pump connections to structures or pipe, new or existing.

**B Materials**

Furnish unperforated pipe and connections that are according to standard spec 612.2.6.

Furnish concrete according to standard spec 501 for concrete collar.

**C Construction**

Identify all private laterals in existing structures prior to that structure's removal. Remove existing private lateral pipes to the next good joint within the right-of-way and replace in-kind. Verify that positive drainage is achieved when connecting to the new inlet or curb outlet structure. The contractor will be allowed to salvage any structurally sound pipe that was removed with prior approval by the engineer. Connect the existing pipes to the new pipes with the appropriate coupling, concrete collar or by means approved by the engineer. Construct pipe opening a minimum of 6" below top of structure.

## D Measurement

The department will measure Reconnecting Existing Pipes connections by the linear foot, acceptably completed.

## E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.020	Reconnecting Existing Pipes	LF

Payment is full compensation for furnishing and installing the Reconnect Existing Pipes, pipe, concrete collars and connections, storing salvaged materials, and all incidentals to complete the work.

## 108. Storm Sewer PVC 12-Inch, Item SPV.0090.021.

### A Description

This special provision describes the construction of 12-inch PVC storm sewer pipe according to standard spec 608 and as shown in the plans.

### B Materials

*Add the following to standard spec 608.2:*

Furnish PVC pipe. Storm sewer pipe will be accepted on the basis of a Manufacturer's Certificate of Compliance and the engineer's field inspection upon delivery.

Manufacturers of PVC pipe shall request evaluation and approval of their products by filing with the department's Bureau of Technical Services, a certificate setting forth the name or brand of pipe to be furnished, the specified type, category, grade, and PVC plastic cell classification. The certificate shall have attached a certified test report from an approved independent testing laboratory showing specific results of tests performed on each diameter pipe to be furnished conforming to all requirements of these specifications. The pipes tested shall be randomly selected for test by the independent testing laboratory as being representative of that manufacturer's pipe. The manufacturer of the pipe shall also submit with the certification a guarantee that all pipe furnished is of the same quality and composition and conforms to the specification requirements as tested by the independent laboratory, as long as the manufacturer continue to furnish materials for WisDOT projects.

PVC pipes and fittings shall conform to the requirements of standard specification for PVC Sewer Pipe with a smooth interior, smooth exterior, and fittings, ASTM Designation: F949. Joint connections shall include gaskets as recommended by the manufacturer.

### C Construction

*Add the following to standard spec 608.3:*

Trench width shall be according to standard practice for underground installation of flexible thermoplastic sewer pipe, ASTM Designation D 2321. Minimum trench width shall be not less than a greater of either the pipe outside diameter plus 16 inches or the pipe outside diameter times 1.25 plus 12 inches.

Seal joints for sewer pipe to be soil tight to AASHTO Standard Specifications for Highway Bridges, section 26.4.2(e).

Protect all storm sewer pipes until final acceptance of the work. Replace all pipes that are damaged either through the construction operations or due to contractor failure to properly protect the same, in kind at contractor expense.

Backfill all trenches and excavations immediately after the sewers have been constructed therein. Use backfilling material that is according to the requirements for granular backfill, standard spec 209, except that all such materials placed around the pipe and to 6 inches above the pipe shall pass a 25 mm sieve.

## D Measurement

The department will measure Storm Sewer PVC 12-Inch by the linear foot, acceptably completed.

## E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
-------------	-------------	------

Payment is full compensation for providing storm sewer; for excavating; for providing and removing sheeting and shoring; for constructing the foundation; for sealing joints; for couplings and connections to drainage structures; for backfilling; for cleaning out; and for restoring the site.

#### **109. Marking Stop Line Epoxy 24-Inch, Item SPV.0090.038.**

##### **A Description**

This special provision describes furnishing and installing Marking Stop Line Epoxy 24-Inch as directed by the engineer, as shown on the drawings and as hereinafter provided.

Perform work under these items according to the requirements of standard spec 646 and the details as shown on the plans, with the exception of the differences noted here within.

##### **B Materials**

Furnish epoxy pavement marking and glass bead material according to the standard spec 646.

##### **C Construction**

Construction of pavement markings shall be according to manufacturer application and installation procedures, standard spec 646, and the engineer.

All pavement marking areas shall be laid out by the contractor and then reviewed by the engineer. Approval of the marking layout shall be approved by the engineer prior to placement of material.

The contractor shall protect the pavement markings from damage and allow them to fully cure prior to allowing traffic to drive over markings. Any damage shall be corrected by the contractor at the contractor's expense.

##### **D Measurement**

The department will measure Marking Stop Line Epoxy 24-Inch by the linear foot, acceptably completed.

##### **E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.038	Marking Stop Line Epoxy 24-Inch	LF

Payment is full compensation for preparing the surface, furnishing, and installing all materials.

#### **110. Marking Crosswalk Epoxy 12-Inch, Item SPV.0090.039.**

##### **A Description**

This special provision describes furnishing and installing Marking Crosswalk Epoxy 12-Inch as directed by the engineer, as shown on the drawings and as hereinafter provided.

Perform work under these items according to the requirements of standard spec 646 and the details as shown on the plans, with the exception of the differences noted here within.

##### **B Materials**

Furnish epoxy pavement marking and glass bead material according to the standard spec 646.

##### **C Construction**

Construction of pavement markings shall be according to manufacturer application and installation procedures, standard spec 646, and engineer.

All pavement marking areas shall be laid out by the contractor and then reviewed by the engineer. Approval of the marking layout shall be approved by the engineer prior to placement of material.

The contractor shall protect the pavement markings from damage and allow them to fully cure prior to allowing traffic to drive over markings. Any damage shall be corrected by the contractor at the contractor's expense.

## **D Measurement**

The department will measure Marking Crosswalk Epoxy 12-Inch by the linear foot, acceptably completed.

## **E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.039	Marking Crosswalk Epoxy 12-Inch	LF

Payment is full compensation for preparing the surface, furnishing, and installing all materials.

## **111. Marking Line Epoxy Block Style 12-inch, SPV.0090.040.**

### **A Description**

This special provision describes furnishing and installing Marking Crosswalk Epoxy Block Style 12-inch White as directed by the engineer, as shown on the drawings and as hereinafter provided.

Perform work under these items according to the requirements of standard spec 646 and the details as shown on the plans, with the exception of the differences noted here within.

### **B Materials**

Furnish epoxy pavement marking and glass bead material according to the standard spec 646.

### **C Construction**

Construction of pavement markings shall be according to manufacturer application and installation procedures, standard spec 646, and engineer.

All pavement marking areas shall be laid out by the contractor and then reviewed by the engineer. Approval of the marking layout shall be approved by the engineer prior to placement of material.

The contractor shall protect the pavement markings from damage and allow them to fully cure prior to allowing traffic to drive over markings. Any damage shall be corrected by the contractor at the contractor's expense.

## **D Measurement**

The department will measure Marking Line Epoxy Block Style 12-inch White by the linear foot, acceptably completed.

## **E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.040	Marking Line Epoxy Block Style 12-inch	LF

Payment shall be according to standard spec 646.5.

## **112. Install Fiber Optic Cable Outdoor Plant 144-CT Contractor Supplied, Item SPV.0090.200.**

### **A Description**

This special provision describes furnishing and installing fiber optic cable.

### **B Materials**

Furnish ultra low loss single mode loose tube OS2 fiber cable suitable for outdoor installation. Each fiber shall be color coded with a maximum 12 fibers per color coded polyethylene buffer tube jacket. Color coding shall not cause microbending or fibers to stick to each other. The cable shall have a fully water blocked core. Cable shall be armored for rodent resistance.

Furnish a pull rope for use during installation of the fiber cable. The pull rope shall be rated for 1,800 lbs or greater of pull strength.

Furnish 1" protective subduct with nominal inner diameter of 1.03", nominal outer diameter of 1.31", and a weight of 14 pounds per 100' length. Furnish materials to rack subduct cable at manholes.

### **C Construction**

Install and perform testing of the fiber optic cable according to standard spec 678.3.

### **D Measurement**

The department will measure Fiber Optic Cable Outdoor Plant 144-Ct Contractor Supplied by the linear foot, acceptably completed.

### **E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.200	Install Fiber Optic Cable Outdoor Plant 144-CT Contractor Supplied	LF

Payment is full compensation for furnishing and installing fiber optic cable including all hardware and fittings necessary to install the fiber optic cable.

## **113. Install Fiber Optic Cable Outdoor Plant 12-CT Contractor Supplied, Item SPV.0090.202.**

### **A Description**

This special provision describes furnishing and installing fiber optic cable.

### **B Materials**

Furnish ultra low loss single mode loose tube OS2 fiber cable suitable for outdoor installation. Each fiber shall be color coded with a maximum 12 fibers per color coded polyethylene buffer tube jacket. Color coding shall not cause microbending or fibers to stick to each other. The cable shall have a fully water blocked core. Cable shall be armored for rodent resistance.

Furnish a pull rope for use during installation of the fiber cable. The pull rope shall be rated for 1,800 lbs or greater of pull strength.

Furnish 1" protective subduct with nominal inner diameter of 1.03", nominal outer diameter of 1.31", and a weight of 14 pounds per 100' length. Furnish materials to rack subduct cable at manholes.

### **C Construction**

Install and perform testing of the fiber optic cable according to standard spec 678.3.

### **D Measurement**

The department will measure Fiber Optic Cable Outdoor Plant 12-Ct Contractor Supplied by the linear foot, acceptably completed.

### **E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.202	Install Fiber Optic Cable Outdoor Plant 12-CT Contractor Supplied	LF

Payment is full compensation for furnishing and installing fiber optic cable including all hardware and fittings necessary to install the fiber optic cable.

## **114. City Furnished Electrical Cable Type 1#8 AWG 5kV Concentric, Item SPV.0090.300.**

### **A Description**

The work under this item is for installation of the following material as shown in plans and according to the following. All work shall be according to standard spec 651.

### **B Materials**

Supplied by the City of Milwaukee per City Spec.

Contractor responsible to contact Street Lighting Shop Yard Contact Person Shop four working days before with the exact number or linear footage of materials needed. The advance notice will allow the

shop to gather the requested items for the contractor to pick up and sign for taking possession of the materials.

The contractor will be responsible for the materials that they take possession of and for the returning any unused materials back to the shop in good condition. If any materials come back damaged or broken the contractor will be responsible for replacing the broken or damaged item.

Street Lighting Shop Yard Contact Person:

Neal Karweik – (414) 286-5943 office / (414) 708-4245 cell

All the materials must be picked up all at one time.

The Street Lighting Shop Yard hours for picking up materials is from 8:00 AM to 2:00 PM Monday through Friday.

Contractor must be out of the shop yard by 2:00 PM NO LATER.

### **C Construction**

Installation of 1#8 Concentric cable for 2200V constant current circuit in buried conduit.

Termination of cable by City of Milwaukee Street Lighting.

### **D Measurement**

The department will measure City Furnished Electrical Cable Type 1#8 AWG 5kV Concentric by the linear foot, acceptably completed.

### **E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.300	City Furnished Electrical Cable Type 1#8 AWG 5kV Concentric	LF

Payment is full compensation for installation.

## **115. Electrical Cable Type 2#2/1#4 AL., Item SPV.0090.304.**

### **A Description**

Furnish and install service cable according to current City of Milwaukee specifications.

Electrical methods and National Electrical Code standards. All work shall be according to standard spec 651.

### **B Materials**

2#2/1#4 Triplex ASCR (Aluminum conductor steel reinforced)

Unless otherwise specified, the cable to be furnished shall comply with the manufacture and test requirements of the Insulated Cable Engineers Association (ICEA) specifications No S-61-402, NEMA WC5, and No S-66-524 NEMA WC7, latest revisions.

2 #2 stranded aluminum wires with 3/64 polyethylene insulation 7 strands

1 #4 bare neutral, 6 strands of Aluminum conductors around a steel messenger, ASCR 6/1

### **B.2 Voltage**

Voltage of 600 volts phase-to-phase or less and at conductor temperatures not to exceed 75°C for polyethylene insulated conductors or 90°C for crosslinked polyethylene (XLP) insulated conductors.

### **B.3 Specifications**

Service drop cable meets or exceeds the following ASTM specifications:

- B-230 Aluminum Wire, 1350-H19 for Electrical Purposes.
- B-231 Aluminum Conductors, Concentric-Lay-Stranded.
- B-232 Aluminum Conductors, Concentric-Lay-Stranded, Coated Steel Reinforced (ACSR).
- B-399 Stranded 6201-T81 Aluminum Alloy Conductors.

- B-901 Compressed Round Stranded Aluminum Conductors Using Single Input Wire.

#### B.4 Insulated Conductors

All Aluminum conductors are concentrically stranded and shall be Class A or Class B 3% compressed 1350-H19 aluminum. Solid conductors shall be H16 temper.

#### B.5 Insulation

Shall be 600V either black extruded high molecular weight polyethylene (PE) or black extruded crosslinked polyethylene (XLP). Insulation shall be a nominal 45 mils thickness.

#### B.6 Bare Neutral Messenger

Neutral messengers are concentrically stranded 6201, AAC, or ACSR. Cable meets or exceeds all applicable requirements of ANSI/ICEA S-76-474. The direction of lay of the outer layer is right hand.

#### B.7 Protection of Ends

Before shipment, the ends of all wire and cable shall be carefully sealed to protect the insulation from moisture. Both ends of the wire and cable shall be accessible for testing, but shall be covered and protected from injury.

#### B.8 Lengths

Ten percent of the reels of any one item may be shipped in random length of not less 50% of the specified nominal length. This tolerance is permitted so that the cable manufacturers may avoid brazing together lengths of copper conductor. All conductors shall be free from brazes or splices.

#### B.9 Service Drop Cable Schedule

Triplex Service Drop 600 Volt PE or XLP ACSR reduced size neutral messenger.

CITY OF MILWAUKEE P/N	CODE WORD	SIZE AWG	NO# WIRE	INSUL (INS)	BARE NTRL SIZE AWG	BARE NTRL NO# WIRE	REEL LNG (FT)	WGHT LBS/ 1000' ALUM	WEIGHT LBS/ 1000' CABLE
3400-032	Cockle 2	7	0.045	4	6/1	1800'	163	227	
3400-034	Strombus	4	7	0.045	6	6/1	1500'	103	154
3400-036	Voluta 6*	7	0.045	6	6/1	2200'	73	116	

\* ACSR Full Size Neutral Messenger

#### C Construction

The cable shall be installed to supply power, usually from a pole-mounted transformer, to the user's service head where connection to the service entrance cable is made. All splices must be completed by the contractor unless otherwise designated on plans.

#### D Measurement

The department will measure Electrical Cable Type 2#2/1#4 AL. by the linear foot, acceptably completed.

#### E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.304	Electrical Cable Type 2#2/1#4 AL.	LF

Payment is full compensation for furnishing and installing, debris removal, and restoration.

- 116. Electrical Cable Type 3#2/1#8 XLP, Item SPV.0090.308;  
Electrical Cable Type 4#8/1#8 XLP, Item SPV.0090.321;  
Electrical Cable Type 4#6/1#8 XLP, Item SPV.0090.322;  
Electrical Cable Type 4#2/1#8 XLP, Item SPV.0090.324.**

#### A Description

This special provision describes furnishing and installing XLP electrical service cable.

## B Materials

### B.1.1.

Unless otherwise specified, the cable to be furnished shall comply with the manufacture and test requirements of the Insulated Cable Engineers Association (ICEA) Specification No. S-61-402, NEMA WC5, latest revision.

### B.1.2. Conductors

The conductors shall be of soft round annealed uncoated stranded copper conductor per ASTM B-3, ASTM B-8, and UL Standard UL-44. Conductors No. 8 A.W.G. or larger shall be stranded. Conductors smaller than No. 8 A.W.G. shall be solid unless otherwise specified. Stranding must meet the requirements of ASTM B8, Class B.

### B.2. Insulation

#### B.2.1. 600V

The insulation for cable rated 600V shall be cross XLPE thermosetting chemically crosslinked polyethylene insulation according to industry standard ICEA Pub. No. S-95-658/Nema WC-70 (2009), latest revision, and shall be a nominal 45 mils. thickness. Insulation shall meet the ANSI/ASTM D2220-74 (latest revision) accelerated water absorption requirements and -30°C (-22°F) cold bend test with a separator applied between the stranded conductor and insulation to facilitate cable stripping. The outside diameter of the insulating covering must be circular and extruded concentrically over the conductor.

#### B.2.2. Nominal Thickness

The nominal insulation thickness around each individual conductor shall be not less than 90% of the thickness specified in the schedule.

#### B.2.3. Color Code

The insulation compound which covers each conductor making up a cable shall be color coded in conformance with the N.E.M.A. Color Code Standard, unless otherwise specified; however, printed color designations as in I.3.2 or I.3.3. will not be acceptable under this specification (see schedule). Individual cable will be black, white, red, gray and green.

### B.3. Marking

#### B.3.1.

Identification for each conductor must be provided by colors according to I.M.S.A. Standards. The outer insulation must be marked with the following information at a minimum: conductor size (AWG), 600V, XLPE, USE-2, manufacturer's name, date of manufacture. All markings must be a minimum of 1/8 inch in height. Marking shall be at approximately 2 foot intervals. A sequential footage marking must be located on the opposite side of the jacket. All marking must be perfectly legible with permanent white ink.

### B.4. Round Cable

#### B.4.1

This cable shall consist of stranded, uncoated, conductors each concentrically encased with a cross linked polyethylene USE-2 rubber insulation.

#### B.4.2 Inspection and Tests

Each length of the individual insulated conductor and completed cable shall comply with all requirements of I.C.E.A. Standards S-61-402. Sampling and Test Methods shall be according to Part 6. A certified report of the tests made on the cable to show compliance with this specification may be required prior to shipment. If requested, a sample of the cable covered by the report shall also be submitted.

### POWER, CABLE SCHEDULES FOR SPECIFICATION

	3#2/1#8		4#8/1#8	
Size of Conductor	#2	#8	#8	#8
Number of Conductors	3	1	4	1

	<b>3#2/1#8</b>		<b>4#8/1#8</b>	
<b>Number of Wires in Conductor</b>	7	7	7	7
<b>Type of Insulation</b>	3 Cross-Linked Polyethylene (XLPE)	1 Cross-Linked Polyethylene (XLPE)	4 Cross-Linked Polyethylene (XLPE)	1 Cross-Linked Polyethylene (XLPE)
<b>Insulation Thickness</b>	60 mils	60 mils	60 mils	60 mils
<b>Insulation Voltage Rating</b>	600 volt	600 volt	600 volt	600 volt
<b>Insulation Color Code</b>	1-black (hot) 1-white (neutral) 1-red (hot)	1-green (ground)	1-black (hot) 1-white (neutral) 1-red (hot) 1-gray (neutral)	1-green (ground)
<b>Non-Hydroscopic Fill</b>	None		None	
<b>Jacket Thickness</b>	None		None	

	<b>4#6/1#8</b>		<b>4#2/1#8</b>	
<b>Size of Conductor</b>	#6	#8	#2	#8
<b>Number of Conductors</b>	4	1	4	1
<b>Number of Wires in Conductor</b>	7	7	7	7
<b>Type of Insulation</b>	4 Cross-Linked Polyethylene (XLPE)	1 Cross-Linked Polyethylene (XLPE)	4 Cross-Linked Polyethylene (XLPE)	1 Cross-Linked Polyethylene (XLPE)
<b>Insulation Thickness</b>	60 mils	60 mils	60 mils	60 mils
<b>Insulation Voltage Rating</b>	600 volt	600 volt	600 volt	600 volt
<b>Insulation Color Code</b>	1-black (hot) 1-white (neutral) 1-red (hot) 1-gray (neutral)	1-green (ground)	1-black (hot) 1-white (neutral) 1-red (hot) 1-gray (neutral)	1-green (ground)
<b>Non-hydroscopic Fill</b>	None		None	

	<b>4#6/1#8</b>	<b>4#2/1#8</b>
<b>Jacket Thickness</b>	None	None

All conductors shall be uncoated annealed soft copper.

### C Construction

The cable shall be installed in conduit as indicated on plans. Splices are not allowed in conduit or directly underground. Do not leave wire or cable ends uncovered or submerged in water. The cable length can be rejected by an engineer if it is observed to have exposed or submerged ends. Cover tape with a liberal coating of varnish or sealant providing protection from oil, moisture, and corrosion. Identify cable in each pullbox at the line side with a fade resistant tag.

### D Measurement

The department will measure Electrical Cable Type (Description) by the linear foot. acceptably completed.

### E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.308	Electrical Cable Type 3#2/1#8 XLP	LF
SPV.0090.321	Electrical Cable Type 4#8/1#8 XLP	LF
SPV.0090.322	Electrical Cable Type 4#6/1#8 XLP	LF
SPV.0090.324	Electrical Cable Type 4#2/1#8 XLP	LF

Payment is full compensation for furnishing and installing Electrical Cable Type (Description).

## 117. Liquidtight Flexible Nonmetallic 1-1/2-Inch Conduit, Item SPV.0090.319

### A Description

This special provision describes furnishing and installing Liquidtight flexible nonmetallic conduit for street lighting according to standard spec 652, and as shown in the plan details. All work shall be according to standard spec 651.

### B Materials

The Liquidtight flexible nonmetallic conduit shall be Type LFNC-B. The conduit shall be nonconductive, noncorrosive to oil, acid, ozone, and alkaline. The conduit shall have a smooth inner surface with integral reinforcement within the conduit wall.

The flexible nonmetallic conduit shall be UL listed for use as indicated in Article 356 of the latest NEC, and for outdoor use and sunlight resistant.

The fittings and adapters shall be of the same manufacturer as the conduit.

### C Construction

Install the fittings, adapters, and conduit in conjunction with street lighting. Install per the manufacturer's instructions and as shown on the plans.

### D Measurement

The department will measure Liquidtight Flexible Nonmetallic 1-1/2-Inch Conduit per size by the linear foot of conduit installed, acceptably completed.

### E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.319	Liquidtight Flexible Nonmetallic 1-1/2-Inch Conduit	LF

Payment is full compensation for furnishing and installing the conduit, including the connectors.

118. 1-Duct Conduit, Cement Encased, 4-inch Rigid Nonmetallic Conduit DB-60, Item SPV.0090.401;  
2-Duct Conduit, Cement Encased, 4-inch Rigid Nonmetallic Conduit DB-60, Item SPV.0090.402;  
3-Duct Conduit, Cement Encased, 4-inch Rigid Nonmetallic Conduit DB-60, Item SPV.0090.403;  
4-Duct Conduit, Cement Encased, 4-inch Rigid Nonmetallic Conduit DB-60, Item SPV.0090.404;  
6-Duct Conduit, Cement Encased, 4-inch Rigid Nonmetallic Conduit DB-60, Item SPV.0090.406;  
6-Duct Conduit, Cement Encased, 3-Inch Rigid Nonmetallic Conduit DB-60, Item SPV.0090.480.

#### **A Description**

This special provision describes furnishing and installing cement encased multiple duct conduit packages below grade as shown on the plans and as hereinafter described.

#### **B Materials**

##### **B.1 Conduit**

Furnish and install DB-60 polyvinyl chloride (PVC) conduit. Conduit will be accepted on the basis of a Manufacturer's Certificate of Compliance and WisDOT field inspection upon delivery to the project.

PVC conduit and fittings shall conform to the requirements of Standard Specifications for Smooth-Wall Poly (Vinyl Chloride) (PVC) Conduit and Fittings for Underground Installation, ASTM Designation: F512 (latest edition).

##### **B.2 Conduit Spacers**

Furnish and install nonmetallic interlocking base spacers and intermediate spacers that provide a 1-1/2" vertical and 1-1/2" horizontal separation between PVC pipes. The base spacers shall provide a 3" vertical separation from the trench bed to the bottom of the PVC pipes.

##### **B.3 Conduit Bed**

Furnish and install a minimum 2" conduit bed of stone chips or crushed stone screenings conforming to the following:

###### **3/8 Inch Crushed Stone Chips**

Sieve Sizes	% Passing by Weight
-------------	---------------------

1/2"	100
------	-----

3/8"	90-100
------	--------

No. 8	0-15
-------	------

No. 30	0-3
--------	-----

###### **Crushed Stone Screenings**

Sieve Sizes	% Passing by Weight
-------------	---------------------

1/2"	100
------	-----

No. 4	75-100
-------	--------

No. 100	10-25
---------	-------

##### **B.4 Concrete**

The type of concrete mix to be used to encase the ducts will be:

Type I or Type IL Cement	280 lbs
--------------------------	---------

Fly Ash	100 lbs
---------	---------

Sharp Torpedo Sand	3100 lbs
--------------------	----------

Water	35 gals
Chryso Air 260 or approved equal	2.0 ozs
Chryso Plast 209 or approved equal	7.0 ozs
Air	5%

Mix the materials to provide an approximate 3 inch slump

### B.5 Slurry Backfill

Aggregate slurry backfill consists of No. 1 concrete aggregate Class 'C' concrete mix with the cement deleted.

Fly Ash (Class C)	75 lbs.
Concrete Sand (Damp)	1830 lbs.
No. 1 Concrete Aggregate	1830 lbs.

Mix the materials with water to inundate the aggregate sufficiently to provide an approximate 3 inch slump. Deposit the mix in the trench directly from a concrete transit mix truck.

### B.6 Pull Rope

Pull rope specifications will be:

- Flat construction (7/16" to 5/8" wide)
- 100% woven aramid fiber (may include tracer wire)
- 1500 lbs. Minimum pull strength prelubricated
- sequential footage markings for location

For any questions on materials, contact Ms. Karen Roney at (414) 286-3243.

## C Construction

### C.1 Excavation

The excavation shall have the minimum or maximum dimensions shown on the plans and as follows:

<b>Number of Ducts Wide</b>	<b>Minimum (Inches)</b>	<b>Maximum (Inches)</b>
1	8 1/2	11
2	14 5/8	17 1/8
3	20 3/4	23 1/4.
4	26 7/8	29 3/8
5	33	35 1/2
6	39 1/8	41 5/8
7	45 1/4	47 3/4
8	51 3/8	53 7/8

These minimum and maximum trench widths apply to standard 4-inch PVC electrical duct only. When required, the excavation may be widened for the handling and placing of materials.

Sheath and brace open-cut trenches as required by code and as necessary to maintain safety. The cost of furnishing, placing and removing of sheathing and bracing shall be included in the unit bid for the work.

The dimensions of the excavation will be governed by the number, configuration and the grade (cover) to which the conduit is to be installed as shown on the plan. The walls of the excavation shall be clean and true.

Prior to excavating trenches, expose the existing manhole and conduit lines. The object of this is to permit adjustments in line and grade to avoid special construction methods. Protect the exposed manhole and conduit from damage.

Lay the conduit at a depth so that sufficient protection from damage is provided. Allowable covers shall be as follows:

The standard cover for mainline conduit is 39 inches and the minimum cover acceptable is 28 inches.

Maintain the standard cover wherever possible and any deviation less than the minimum cover requires the approval of the engineer.

Grade the trench to have a minimum pitch of 3 inches per 100 feet. When an obstruction is encountered in the trench and it is necessary to excavate a deeper trench than would otherwise be required, in order to obtain drainage, refer the matter to the engineer to determine whether the extra excavation should be made.

In grading a trench for mainline conduit, there are three general practices for direction of pitch.

- (a) When grading a trench in a street with a level grade, the high point of the trench bottom should ordinarily be centered between manholes and pitched downward equally toward each manhole.
- (b) Where the street slopes in one direction, locate the high point of the trench bottom approximately 30 feet from the end wall of the higher manhole and grade toward both manholes.
- (c) Where a steep grade is encountered, grade the trench at the minimum pitch from the end wall of the higher manhole to a point 20 feet plus or minus toward the lower manhole. From this point, follow the street grade at the standard cover to a point 20 feet plus or minimum away from the end wall of the lower manhole. From this point, the remainder of the section shall be laid at the normal pitch.

After the rough excavation is completed, prepare the bottom of the trench to receive the conduit. Bring the duct bed to the final grade by grading uniformly from the high point to the low or drainage points. Use stone chips or crushed stone screenings to grade the trench. The duct bed shall be a minimum of 2" in depth.

## **C.2 Placing of Duct**

Proceed with placing the ducts as soon as the duct bed has been completed. Inspect all ducts before placing to see that the bores are clean and free from mud, sand, etc. Use only ducts with a smooth bore, free from burrs, rough projections etc. Smooth off burrs or other rough areas likely to damage cable are found in the duct by rasping or scraping.

Place the duct on base spacers with the ends staggered so no two couplings are adjacent. This may be accomplished by the use of the short lengths in stock or cutting back full length sections to the desired lengths. If cut pieces are used, place the cut end at the manhole. Locate the base spacers within 2 feet of the end of each duct and one base spacer located in the middle of the duct.

Use full length pieces for the balance of the conduit line.

Formations of two ducts or more in height are to be carried forward in full formation, that is, as each tier of 20 foot lengths is laid, the next higher tier of ducts shall then be placed on the intermediate spacers. Place these intermediate spacers on top of the base spacers located within 2 feet from each duct end and one in the middle of each duct. Place the intermediate spacers and ducts for the remaining tiers. Glue each length into the adjoining coupling. A twist and push on the duct being placed will suffice for a water tight joint. Exercise caution in the driving operation, so that neither the coupling nor the duct will be split or damaged in any way. After the full formation has been completed, place wood trench and duct bracing on the ducts to prevent shifting or floating while the concrete envelope is being placed and during driving operation.

This procedure shall be followed with succeeding lengths, providing spacers at the proper intervals, until sufficient trench footage of completed formation has been placed and is ready to receive concrete encasement.

The terminating point for mainline conduit will be the inside manhole wall. Install a standard end bell fitting flush with the wall on all duct access points.

Install a #10 copper tracer wire along and above the centerline of the duct for encasement in the concrete. The wire shall be 4 feet longer than the run of conduit and be at least 2 feet long at each access point.

Install a pull rope in each run of conduit, as laid. The rope shall be 4 feet longer than the run of conduit and shall be doubled back at least 2 feet at each raceway access point. Anchor the pull rope at each access point in a manner acceptable to the engineer.

### **C.3 Concreting**

Begin concreting after sufficient conduit has been laid and the trench and duct have been inspected. The minimum concrete encasement of the ducts is 3 inches on the top, 2 inches on the sides, and 3 inches on the bottom. After placing, puddle the concrete with a splicing bar or similar tool so that complete duct encasement is accomplished. Remove wood braces used to keep the conduit from floating before the concrete sets completely and the resultant encasement voids filled with concrete.

Allow the concrete encasement to set for a minimum of 6 hours before backfilling is commenced.

### **C.4 Slurry Backfill**

Commence backfilling of the conduit immediately after the duct has been inspected, approved and has set to withstand the load.

An aggregate slurry as specified shall be used to backfill the concrete encased conduit. The trench shall be backfilled to the proposed or existing subgrade. The mix shall be deposited in the trench directly from a concrete transit mix truck.

### **D Measurement**

The department will measure 1-Duct, 2-Duct, 3-Duct, 4-duct, and 6-Duct Cement Encased, 4-Inch Rigid Non-Metallic Conduit DB-60, and 6-Duct Conduit, Cement Encased, 3-Inch Rigid Nonmetallic Conduit DB-60, by the linear foot, acceptably installed. The measured quantity will equal the linear feet of encased duct, based on the distance along the centerline of duct between ends of conduit. City of Milwaukee will have final acceptance.

### **E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.401	1-Duct Conduit, Cement Encased, 4-Inch Rigid Nonmetallic Conduit DB-60	LF
SPV.0090.402	2-Duct Conduit, Cement Encased, 4-Inch Rigid Nonmetallic Conduit DB-60	LF
SPV.0090.403	3-Duct Conduit, Cement Encased, 4-Inch Rigid Nonmetallic Conduit DB-60	LF
SPV.0090.404	4-Duct Conduit, Cement Encased, 4-Inch Rigid Nonmetallic Conduit DB-60	LF
SPV.0090.406	6-Duct Conduit, Cement Encased, 4-Inch Rigid Nonmetallic Conduit DB-60	LF
SPV.0060.480	6-Duct Conduit, Cement Encased, 3-Inch Rigid Nonmetallic Conduit DB-60	LF

Payment is full compensation for furnishing the conduit, conduit bodies, conduit fittings, conduit spacers, end caps and trace wire; for excavating, bedding, encasement and backfilling including any concrete, stone, aggregate slurry, bracing, or other related materials; for disposing of surplus materials; and for making inspections, and for installing the conduit.

## **119. Storm Sewer PVC 4-Inch, Item SPV.0090.490.**

### **A Description**

This special provision describes the construction of 4-inch PVC storm sewer pipe as shown in the plans.

### **B Materials**

Use materials conforming to Chapter 8.10 of the Standard Specifications for Sewer and Water Construction in Wisconsin (SSSW), 6th Edition and amendments, and supplemented as follows:

Provide Class C bedding material meeting the requirements of Section 3.2.6 of the SSSW.

Provide SDR 35 PVC storm sewer pipe meeting ASTM D3034 standards. Storm sewer pipe will be accepted on the basis of a Manufacturer's Certificate of Compliance and the engineer's field inspection upon delivery.

Provide sewer pipe compression joint sealers and couplings from Fernco, PIPECONX, or approved equal.

Provide granular backfill according to the standard specifications.

### **C Construction**

Use construction methods conforming to standard spec 608.

Construct bedding according to the requirements of the SSSW.

Connect the pipe to CUC manhole drains and storm sewer structures by using storm sewer compression joint sealers and couplings.

### **D Measurement**

The department will measure Storm Sewer PVC 4-Inch by the linear foot, acceptably completed.

### **E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.490	Storm Sewer PVC 4-Inch	LF

Payment is full compensation for providing storm sewer; for excavating; for providing and removing sheeting and shoring; for constructing the foundation; for bedding; for sealing joints; for couplings and connections to drainage structures; for backfilling; for cleaning out; and for restoring the site.

## **120. Detectable Edge Tiles, Item SPV.0165.020.**

### **A Description**

This special provision describes providing and constructing tactile directional indicator detectable edge tiles in concrete sidewalk.

### **B Materials**

Furnish wet-set, replaceable, cast iron tactile directional indicator plates from Advantage Tactile, a Division of SureWerx, Elgin, IL, 60123, (844) 697-2920, [www.advantagetactile.com](http://www.advantagetactile.com), or Neenah Foundry, Neenah, WI 54956, (920) 725-7000, [www.groupnei.com](http://www.groupnei.com), or approved equal, conforming to the following requirements.

- Gray cast iron, ASTM A48, Class 30 minimum
- Uncoated natural patina
- Size 12" wide x 12" long, or 12" wide x 24" long
- Raised elongated bar spacing 3.0", bar length 10.75"
- ISO 23599 compliant
- Integral anchors

Castings shall be sound, free from pouring faults, cracks, blowholes and other defects.

Furnish wedge tiles or radial tiles for use in curves, conforming to manufacturer requirements.

Submit manufacturer's literature describing products, installation procedures, and routine maintenance to the engineer. Submit shop drawings to the engineer prior to procuring the tiles.

Submit one sample tile that shows bar size and spacing to the engineer. Submit complete test reports to qualify that materials proposed for use are in compliance with requirements and meet or exceed the properties indicated in the specifications.

Manufacturer's Warranty: The tiles shall be warranted in writing for a period of 10 years from date of substantial completion. The warranty shall include factory defects, breakage, and deformation.

### **C Construction**

Coordinate with the engineer and tile manufacturer so that the surfaces being prepared and fabricated to receive the plates are constructed correctly and adequately for plate installation. Review manufacturer drawings and instructions with the engineer prior to the construction.

Embed (wet-set) detectable edge tiles in plastic concrete according to manufacturer-recommended procedures. Do not install on hardened concrete. Stringline or use other engineer-approved methods to install the tiles in straight lines or arcs. The top level of the plate, not including the raised elongated bars, is to be flush with the adjacent concrete.

Do not field cut plates except as allowed by the manufacturer. Smooth the edges of filed cuts.

Anchor the tiles per manufacturer instructions.

#### **D Measurement**

The department will measure Detectable Edge Tiles by the square foot, acceptably completed.

#### **E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0165.020	Detectable Edge Tiles	SF

Payment is full compensation for providing and installing detectable edge tiles of the specified configuration and color, including hardware and anchoring.

The underlying concrete sidewalk will be paid separately under contract bid items.

### **121. High Friction Traffic Marking Green Bike Lane Panel, Item SPV.0165.040.**

#### **A Description**

The contractor shall furnish and install white methyl methacrylate (MMA) resin with hardwearing aggregate and premium pigments to deliver a durable, highly visible and color stable bike lane panel that meets the non-slip requirements needed for pedestrians, cyclists and vehicles at the locations shown on the plans, in conformance with the details, and the material specifications included herein.

#### **B Materials**

The methyl methacrylate material shall be a two-part material. The composition is 98 parts of Component "A", homogeneously composed of pigment, filler, resins and anti-skid aggregate, and 2 parts of Component "B", liquid hardener. Part "B" shall be a benzoyl peroxide catalyst.

Use Color-Safe Pavement Marking with Anti-Skid Surface by Transpo Industries, CycleGrip MAXX by Ennis-Flint, or Roadzilla or an approved equal. Color "bike lane green" or approved equivalent. Use an MMA based resin system capable of retaining an aggregate topping under vehicular traffic conditions. Install Methyl Methacrylate (MMA) Two-Component Traffic Markings according to manufactures specifications and these special provisions.

The material shall comply to the following:

Property	Value	Test Method
Tensile Strength @ 7 days, psi, minimum	400	ASTM D 638
Hardness, Shore D, minimum	50	ASTM D 2240
Gel Time, minutes, minimum	10	ASTM D 2471
Cure Rate, hours, maximum	3	Film @ 75 degrees F
Water Absorption @ 24 hours, maximum	0.25% CELL	ASTM D 570

Aggregate: The aggregate shall be high friction crushed Bauxite, No. 1 Silica, or Phonolite or equivalent. Deliver the aggregate to the construction site in clearly labeled bags or sacks. The aggregate shall be clean, dry and free from foreign matter. Aggregate shall meet the following requirements:

Property	Value	Test Method
Hardness, minimum	7	Mohs Scale

Submittal: Submit certificates of compliance certifying that the products supplied under the contract conform to these specifications. Submit Application Instructions a minimum 72 hours prior to application.

## C Construction

**General:** Install Methyl Methacrylate (MMA) Two-Component Traffic Marking green bike lane panels according to manufactures specifications.

**Preparation:** Prepare surfaces so that they are clean, dry, and free of all dust, oil, debris and any other material that might interfere with the bond between the MMA based resin system and existing surfaces. Contaminates that might interfere with the proper adhesion of the material must be removed by sandblasting or shotblasting. The surface should be visibly dry, and the moisture content should be tested according to ASTM D4263 (modified to 2 hours). Concrete must be fully cured for a minimum of 28 days prior to installation. Surface contaminants such as curing agents, membranes, bond breakers or laitance shall not be mechanically removed prior to marking.

Protect utilities, drainage structures, curbs and any other structure within or adjacent to the treatment location against the application of the surface treatment materials. Cover and protect all existing pavement markings that are adjacent to the application surfaces as directed by the engineer.

Pre-treat joints greater than ¼ inches in width and depth with the MMA resin system specified herein or by using an alternative procedure proposed by the manufacturer and agreed upon by the engineer. Proceed with the MMA resin system installation once the product, in the pre-treated areas, has gelled or once the alternative procedure has been accomplished.

**Mix:** MMA traffic marking is made up of three components (resin, hardener, and aggregate) that must be mixed thoroughly for uniform curing and performance. Liquid components must be homogenously stirred in the original containers before mixing components A and the liquid BPO concentrate catalyst, called Part B. Thoroughly mix by weight, 2 parts of the liquid hardener (Part B) with 98 parts of Component A. Mixing must be done by using a static mix tube or impingement system just prior to spray gun application on the job site.

**Temperature:** Material, pavement surface and ambient air temperature must be between 40° F and 105° F, and at least 5° F above dew point prior to striping. Relative humidity must be less than 75%. Installing the materials on surfaces above 105° F can lead to improper cure and dirt pickup. Surface and ambient temperatures should be checked hourly at a minimum if weather conditions cause temperatures to fluctuate during the course of the striping operation. Please note that drying time will be increased when striping at low temperatures. Both the Part A and B must be mixed thoroughly prior to application by any of the various application techniques.

**Mixing and Application:** Follow the MMA resin technical data sheet for application details. This material should be readily applied to Portland cement concrete and HMA surfaces sprayed at a thickness of 45 mils, and no greater than 50 mils.

**Curing:** Allow the MMA based resin system to cure according to manufacturer recommendations. Protect treated surfaces from traffic and environmental effects until the area has cured.

## PERFORMANCE REQUIREMENTS

The following guidelines shall be followed to ensure total understanding of what is expected in the application of any permanent pavement marking material on new pavement surfaces.

The pavement marking shall be uniform thickness across the entire cross section of the marking with well-defined edges. Heavy inner thickness and thin edges or vice-versa will not be accepted. Aggregate shall be spread uniformly over the entire marking. Beginning and ends of markings shall be clean cut and perpendicular to the centerline of the street.

Remove and replace methyl methacrylate that has foreign covering, discolored areas, improper adhesion, improper width, length, or thickness as verified by the engineer against the plans or this special provision. Remove and replace areas that present a ragged appearance, areas that do not present clear and sharply defined edges, and areas with abrupt unintended changes in alignment. Remove excessive dripping of marking material between markings and remove and replace any marking applied with a lack or excess of aggregate. Remove, to the satisfaction of the engineer, all pavement marking applied

outside the scope or limits of this project. Removal and replacement of unsatisfactory pavement marking will be at the contractor's expense. The replaced Colored White surface treatment shall meet the requirements of this sub-article.

Remove and replace Colored White surface treatment that ravels, delaminates, or wears off within 90 days after placement, unless approved to remain in place by the engineer. The limits of removal and replacement shall be approved by the engineer.

**Lack of specified thickness:** The full unit price bid per unit (each) shall be withheld if lack of thickness is found at each bike lane arrow or symbol. Each bike lane arrow or symbol marking shall be checked a minimum of one time.

**Lack of specified width:** Payment shall be made with penalty being equal to 25% of the unit price bid per each for each ¼ inch of width lacking not to exceed 100% of the unit price bid.

**Improper adhesion:** The full unit price bid per item shall be withheld for each occurrence if improper adhesion is found.

**Deviation:** A marking that in the judgment of the engineer deviates from the specified layout by an unreasonable amount shall be replaced. The contractor shall be responsible for removal of the deviated marking material/repair of the pavement as designated by, and to the satisfaction of, the engineer at no additional compensation.

**Excessive Dripping between Symbols:** The full unit price bid item shall be penalized for the length of any open space between symbols that is not removed to the satisfaction of the engineer before leaving the project site that workday. Penalty shall be imposed upon the first occurrence and every occurrence thereafter.

**Warranty:** The MMA based resin system material shall be installed per plans and manufacturer specification. The engineer will notify the contractor within 48 hours of installation regarding any of the MMA based resin system material not installed per specification or to the satisfaction of the engineer. Non-conforming MMA based resin system material shall be removed at no charge to WisDOT and replaced with conforming product.

The warranty period in reference to the following points is to be 1 year from date of installation. Warranty of the following items shall be submitted in writing by the contractor or his installer prior to the pre-construction meeting.

- The MMA based resin system material will maintain its original color in the surface area throughout the 'warranty period' with the exception of natural weathering, tire and dirt deposits and abnormal markings applied after installation.
- Friction will achieve a minimum BPN of 60 according to ASTM E-303.
- The MMA based resin system material will maintain its skid resistance qualities in 100% of its surface area to never fall below a BPN of 60 during the 'warranty period'.
- With the exception of structural cracking or excessive movement of the surface beneath, the MMA based resin system will not be subject to excessive cracking in its surface.

## D Measurement

The department will measure High Friction Traffic Marking Green Bike Lane Panel by the square foot, acceptably completed. No deduction will be made for the areas occupied by manholes, inlets, drainage structures, pavement markings or by any public utility appurtenances within the area.

## E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0165.040	High Friction Traffic Marking Green Bike Lane Panel	SF

Payment is full compensation for furnishing and installing all materials including any re-application or repair required under the Performance Requirements and Warranty as provided herein.

**122. Concrete Pavement Joint Sealing, Item SPV.0180.010.**

**A Description**

This special provision describes providing minimum requirements for preparing the pavement joints or cracks and furnishing and installing the sealant. Seal all expansion, hand-formed, and sawed joints in the pavement. Also, seal all bond or construction joints.

**B Materials**

Furnish joint sealer that complies with the requirements of ASTM Designation D 3405. Joint sealer shall be composed of a mixture of materials that will form a resilient and adhesive compound capable of effectively sealing joints in concrete against the infiltration of moisture and foreign material throughout repeated cycles of expansion and contraction with temperature changes and shall be of a mixture that will not flow from the joints or be picked up by vehicle tires at summer temperatures. The material must be capable of being brought to a uniform pouring consistency suitable for completely filling the joints without inclusion of large air holes or discontinuities.

The joint sealer shall be elastic type but poured, and it shall be melted by indirect heat in suitable equipment provided with positive temperature control and mechanical agitation. The material shall not be damaged when heated to the temperature required for satisfactory pouring.

**C Construction**

Prior to the installation of the joint sealer, clean the pavement joint or crack of all foreign material. Completely remove the slurry resulting from the sawing operations from the joint by blowing it clean with compressed air (using a minimum air pressure of 80 psi).

Only apply the joint sealer when the atmospheric and concrete temperatures are both above 40° F.

**D Measurement**

The department will measure Concrete Pavement Joint Sealing 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.0180.010	Concrete Pavement Joint Sealing	SY

Payment is full compensation for furnishing and placing the joint sealant; cleaning the pavement joints and cracks.

**123. Concrete Driveway SHES 8-Inch, Item SPV.0180.011.**

**A Description**

This special provision describes constructing concrete driveways using special high early strength concrete at the locations shown in the plans, or as directed by the engineer.

**B Materials**

Provide concrete that conforms to the requirements for special high early strength concrete according to standard spec 416.2.1 and standard spec 416.2.4.

**C Construction**

Construct according to the requirements of standard spec 602.3.

**D Measurement**

The department will measure Concrete Driveway SHES 8-Inch 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.0180.011	Concrete Driveway SHES 8-Inch	SY

Payment is full compensation according to standard spec 602.5.2.

## **124. Permeable Paver Blocks, Item SPV.0180.500.**

### **A Description**

This special provision describes furnishing and installing Permeable Paver Blocks within the project as shown on the plans and application of salt barrier to the permeable pavers.

### **B Materials**

Furnish Permeable Articulating Concrete Blocks (P-ACB) which are premanufactured of individual concrete blocks with specific stormwater runoff and storage capacities. The paver blocks shall be of Rose color and have a salt barrier. The blocks shall be 12" long x 12" wide x 5.65" high. The blocks shall be constructed of closed cell blocks with an arched storage chamber for additional stormwater runoff.

Each P-ACB shall incorporate interlocking surfaces that prevent lateral displacement of the blocks. The interlocking surfaces shall not protrude beyond the perimeter of the blocks to such an extent that they reduce the flexibility or articulating capability of the system.

The design of the P-ACB shall be capable of supporting AASHTO H-25 and HS-25 truck loading. The blocks shall be analyzed as unreinforced concrete arches supporting a uniform truck tire load with impact per AASHTO standards.

The salt barrier shall be clear, solvent-based formula that penetrates and reacts chemically within the capillaries of the concrete. The sealant protects against moisture penetration, spalling, freeze-thaw damage, deicing salts, efflorescence, and chemical erosion. It also protects surfaces from most chemicals, dirt, acids, alkali, and airborne pollutants while making those surfaces easier to clean.

Submit to the engineer all manufacturer's performance research results and calculations in support of the permeable articulating concrete blocks P-ACB system and geotextile proposed for use. Furnish to the engineer all manufacturer's specifications, literature, and installation drawings of the P-ACB.

### **C Construction**

Blocks shall be hand-placed or mechanically installed with the use of a clamping or suction lifting device. Individual blocks in the P-ACB shall be staggered, beveled, and interlocked for enhanced stability. Each row of blocks shall be laterally offset by one-half block width from the adjacent row so that any given block is interlocked to four other blocks (two in the row above and two in the row below). Six adjacent blocks shall also surround each block.

The P-ACB shall be placed on the geogrid separator to produce a smooth plane surface. No individual block within the plane of placed articulating concrete mats shall protrude more than one-quarter of an inch.

To allow for some future settling of the paver blocks, it is recommended that the final surface elevation of the blocks be 1/8" higher than the adjacent concrete pavement.

Backfilling of the joints between the P-ACB with rock chips or sand is not required and shall not be done or included in the project.

Infiltration Performance: The P-ACB will only be accepted when accompanied by documented third party infiltration performance characteristics based on ASTM C1701/C1701M-09, or C1781. The infiltration rate shall be no less than 1,000 inches per hour on an outdoor working surface, with typical base material utilized for the test. The contractor shall submit third party infiltration performance testing results to Solomon Bekele of the DPW Environmental Engineering Section at [sbekel@milwaukee.gov](mailto:sbekel@milwaukee.gov).

Salt barrier shall be applied to the paver blocks to seal, protect and extend the life of concrete blocks from the damaging effects of salt and de-icing chemicals without affecting the finished look.

### **D Measurement**

The department will measure Permeable Paver Blocks 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.0180.500	Permeable Paver Blocks	SY

Payment is full compensation for all work and materials necessary to install permeable paver blocks. The cost of the salt barrier and its application and infiltration performance testing is incidental and included in the cost of the Permeable Paver Blocks.

**125. Geomembrane Barrier, Item SPV.0180.501.**

**A Description**

This special provision describes furnishing and installing, per manufacturer's recommendations, a Geomembrane Barrier at locations indicated in the plans.

**B Materials**

Geomembrane Barrier shall be 100% post-consumer high density polyethylene (HDPE). The liner shall be a minimum of 0.040 inches (1.016 mm) thick and come in a minimum 72-inch wide roll. At the end of rolls or when joining two pieces of membrane together provide silicone sealant or other approved method per manufacturer's recommendation to be used to create permanent water tight seams. Geomembrane Barrier shall be DeepRoot Green Infrastructure, LLC, Duraskrim K30B by Viaflex, or approved equal.

**C Construction**

Install geomembrane to completely surround and encapsulate the permeable paver system on four sides to provide protection from water migration into the adjacent areas and as shown on the plans.

The work shall include but is not limited to preparing areas to receive geomembrane barrier per Manufacturer's recommendation and furnishing and installing geomembrane barrier to provide a watertight barrier between the permeable paver system and the surrounding roadway base and native soil, etc., as shown on the plans, and any other materials and labor to complete the work.

Install geomembrane barrier as indicated on shop drawings, per plans, and according to manufacturer's installation instructions. Use specified material widths required for project conditions. Where material requires seaming at the end of the roll, overlap geomembrane a minimum of 6" (150mm), using manufacturer approved silicone sealant or other approved method. Where material requires seaming to create a larger sheet-like material, overlap geomembrane a minimum 6" (150mm) and seal using a manufacturer approved silicone sealant or other approved method. Ensure consistent seal across entire seam. All seams shall be permanent and water tight.

**D Measurement**

The department will measure Geomembrane Barrier by the square yard, acceptably completed.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0180.501	Geomembrane Barrier	SY

Payment is full compensation for furnishing and installing the geomembrane barrier.

**126. Geogrid Separator, Item SPV.0180.502.**

**A Description**

This special provision describes furnishing and installing geogrid separator under the permeable pavers as shown on the plans.

## B Materials

The geogrid shall have the following properties:

MECHANICAL PROPERTIES	TEST METHOD	UNIT	MINIMUM AVERAGE ROLL VALUE	
Tensile Strength (at ultimate)	ASTM D6637	lbs/ft (kN/m)	850 (12.4)	1300 (19.0)
Tensile Strength (at 2% strain)	ASTM D6637	lbs/ft (kN/m)	280 (4.1)	450 (6.6)
Tensile Strength (at 5% strain)	ASTM D6637	lbs/ft (kN/m)	580 (8.5)	920 (13.4)
Junction Efficiency	ASTM D7737	%	93	
Flexural Rigidity	ASTM D7748	mg-cm	250,000	
Aperture Stability	ASTM D7864	m-N/deg	0.32	
Resistance to Installation Damage		% SC/%SW/%GP	95 / 93/ 89	
Resistance to Long Term Degradation	EPA 9090	%	100	
Resistance to UV Degradation	ASTM D4355	%	100	

## C Construction

Install Geogrid Separator as indicated on shop drawings, per plans, and according to manufacturer's installation instructions. The bedding layer shall be clear of all debris, properly leveled and compacted before placing the geogrid separator. The grids should be rolled out, cut to length, thus eliminating field connections and laid at the proper elevation, location and orientation. Geogrids shall be laid in the direction of main reinforcement. After rolling out, the geogrid should be tensioned by hand until it is taut, free of wrinkles, and lying flat. Adjacent geogrid rolls may be butted together side-by-side without overlap. Splices in the main reinforcement direction should be avoided.

Certain fill placement procedures may require the reinforcement to be held in place by stakes, sandbags, or fills. A razor blade, sharp knife or scissors may be used to cut the geogrid. Fill placement should follow the standard practice. Care should be taken to prevent wrinkles and/or slippage of reinforcement during fill placement and spreading.

## D Measurement

The department will measure Geogrid Separator per 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.0180.502	Geogrid Separator	SY

Payment is full compensation for all work and materials necessary to install geogrid separator.

## 127. Geosynthetic Fabric, Item SPV.0180.503.

### A Description

This special provision describes furnishing and installing geosynthetic fabric above the native subgrade as shown on the plans.

### B Materials

Provide geosynthetic fabric consisting of a high strength, high water flow, woven monofilament or multifilament geotextile. The fabric shall have the following properties:

PROPERTY	GUIDANCE DOCUMENT / TEST METHOD	UNIT	DESIGN / CALIBRATION VALUE	
			MD	CD
Cyclic Tensile Modulus @ 2% Permanent Strain: $J_{cyclic}$ (MARV)	ASTM D7556	lbs/ft (kN/m)	54,406 (794)	72,907 (1064)
Interaction Coefficient: $C_i^5$			0.89	
Pore Pressure Dissipation Ratio <sup>2</sup>			1.6	
Average Dynamic Filtration Pore Size	ASTM D6767	microns	$O_{95}$ - 392 $O_{85}$ - 328 $O_{60}$ - 245 $O_{50}$ - 195	
Tensile Strength (at 2% strain)	ASTM D4595	lbs/ft (kN/m)	600 (8.8)	1,020 (14.9)
Tensile Strength (at 5% strain)			1,800 (26.3)	2256 (32.9)
<b>INDEX PROPERTIES</b>	<b>TEST METHOD</b>	<b>UNIT</b>	<b>MAXIMUM ROLL VALUE</b>	
Apparent Opening Size (AOS)	ASTM D4751	U.S. Sieve (mm)	40 (0.425)	
			<b>MINIMUM AVERAGE ROLL VALUE</b>	
Hydraulic Flow Rate	ASTM D4491	gal/min/ft <sup>2</sup> (l/min/m <sup>2</sup> )	75 (3056)	
Permittivity	ASTM D4491	sec <sup>-1</sup>	0.9	
			<b>MINIMUM TEST VALUE</b>	
UV Resistance (at 500 hours)	ASTM D4355	% strength retained	90	

### C Construction

Place the geosynthetic fabric flat on the native subgrade. The fabric shall be free of wrinkles and shall overlap a minimum of 12 inches. Scarify or mechanically scratch the native subgrade before placing the fabric.

### D Measurement

The department will measure Geosynthetic Fabric 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.0180.503	Geosynthetic Fabric	SY

Payment is full compensation for all work and materials necessary to install the geosynthetic fabric, including preparing the subgrade area before installation.

## 128. Cobblestones, Item SPV.0180.600.

### A Description

This special provision describes the furnishing and installation of cobblestones in the bioswales at the curb openings and around the 8-Inch Dia Overflow Standpipes.

### B Materials

The cobblestones shall be Wisconsin Granite Field Stone Boulders 4-6 inch round.

## C Construction

Place cobblestones behind the curb cut to the toe of the slope as shown in plans. Place cobblestones around the 8-Inch Dia Overflow Standpipes in approximately 2 feet radius and stacked to the top of the standpipes as shown in the plans.

## D Measurement

The department will measure Cobblestones 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.0180.600	Cobblestones	SY

Payment is full compensation for all work and materials necessary to install cobblestones.

## 129. Excavation, Hauling, and Disposal of PAH Contaminated Soil, Item SPV.0195.001.

### A Description

#### A.1 General

This special provision describes excavating, loading, hauling, and disposing of polycyclic aromatic hydrocarbon (PAH)-contaminated soil at a DNR approved landfill facility. The closest DNR approved landfill facilities are:

Waste Management Orchard Ridge Landfill  
W124 N9355 Boundary Road  
Menomonee Falls, WI 53051  
(262) 253-8626

GFL Environmental Emerald Park Landfill  
W124 S10629 124th Street  
Muskego, WI 53150  
(414) 529-1360

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

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

The department completed testing for soil contamination for locations within this project where excavation is required. Testing indicated that PAHs-contaminated soil is present at the following location where excavation is required, as shown on the plans:

- W. Lisbon Ave. Station 146+60 to 147+40, from reference line to 85' left of reference line, from 1' below ground surface (bgs) to 6' bgs. Soil contains PAHs and must be managed. Approximately 640 cubic yards (approximately 1090 tons at an estimated 1.7 tons per cubic yard) of soil will be excavated from this location.
- W. Lisbon Ave. Station 147+40 to 148+30, from reference line to project limits left, from 1' bgs to maximum excavation depth. Soil contains PAHs and must be managed. Approximately 600 cubic yards (approximately 1020 tons at an estimated 1.7 tons per cubic yard) of soil will be excavated from this location.
- W. Burleigh St. Station 113+50 to 114+00, from reference line to project limits right, from 17' bgs to maximum excavation depth. Soil contains PAHs and must be managed. Approximately 1 cubic yards (approximately 1.7 tons at an estimated 1.7 tons per cubic yard) of soil will be excavated from this location. PAH impacted groundwater was encountered surrounding the contaminated soil.

Directly load soil excavated by the project at the above locations into trucks that will transport the soil to a WDNR-licensed landfill facility for treatment and disposal.

If contaminated soils are encountered elsewhere on the project, terminate excavation activities in the area and notify the engineer. If dewatering is required at the above locations, conduct the dewatering according to Section C below.

The excavation management plan for this project has been designed to minimize the offsite treatment or disposal of contaminated material. 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 near this project, contact:

Name: Mr. Andrew Malsom  
Address: 141 NW Barstow Street, PO Box 798, Waukesha, WI 53187-0798  
Phone: (262) 548-6705  
Fax: (262) 548-6891  
E-mail: [Andrew.Malsom@dot.wi.gov](mailto:Andrew.Malsom@dot.wi.gov)

### **A.3 Coordination**

Coordinate work under this contract with the environment consultant:

Consultant: Ramboll  
Address: 234 W. Florida Street, Fifth Floor, Milwaukee, WI 53204  
Contact: Mr. Mark Walter, PE  
Phone: (608) 220-2480  
E-mail: [Mark.Walter@ramboll.com](mailto:Mark.Walter@ramboll.com)

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 landfill 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 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 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 landfill 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 landfill 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 PAHs. Site workers taking part in activities that will result in the reasonable probability of exposure to safety and health hazards associated with hazardous materials shall have completed health and safety training that meets the Occupational Safety and Health Administration (OSHA) requirements for Hazardous Waste Operations and Emergency Response (HAZWOPER), as provided in 29 CFR 1910.120.

Prepare a site-specific Health and Safety Plan, and develop, delineate, and enforce the health and safety exclusion zones for each contaminated site location as required by 29 CFR 1910.120. Submit the site-specific health and safety plan and written documentation of 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 landfill disposal. 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 15 cubic yards excavated.

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

If dewatering is required in areas of known contamination, water generated from dewatering activities will likely contain PAHs. Such water may be discharged to the storm sewer or surface water with WDNR approval under a Wisconsin Pollution Discharge Elimination System (WPDES) General Permit, or to the sanitary sewer or at the treatment facility with approval from the local wastewater utility. Pretreatment may be required prior to discharge.

Contractor shall meet all applicable requirements, including the control of suspended solids. Perform all necessary monitoring to document compliance with requirements. Furnish, install, operate, maintain, disassemble, and remove treatment equipment necessary to comply with 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 the 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 Excavation, Hauling, and Disposal of PAH-Contaminated Soil in tons of contaminated soil, accepted by the landfill facility as documented by weight tickets generated by the landfill facility.

## **E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0195.001	Excavation, Hauling, and Disposal of PAH Contaminated Soil	TON

Payment is full compensation for excavating, segregating, loading, hauling, and disposal 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. Management and disposal of contaminated water is considered incidental to other bid items in the contract. The department will not pay directly for management and disposal/treatment of contaminated water.

### **130. Excavation, Hauling, and Disposal of Petroleum Contaminated Soil, Item SPV.0195.002.**

#### **A Description**

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

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

Waste Management Orchard Ridge Landfill  
W124 N9355 Boundary Road  
Menomonee Falls, WI 53051  
(262) 253-8626

GFL Environmental Emerald Park Landfill  
W124 S10629 124th Street  
Muskego, WI 53150  
(414) 529-1360

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

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

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

- W. Lisbon Ave. Station 194+80 to 195+90, from reference line to project limits right, from 1' below ground surface (bgs) to 6' bgs. Soil contains petroleum volatile organic compounds (PVOCs) and lead and must be managed. Approximately 490 cubic yards (approximately 830 tons at an estimated 1.7 tons per cubic yard) of soil will be excavated from this location.
- W. Lisbon Ave. Station 213+50 to 214+50, from reference line to project limits left, from 4' bgs to 10' bgs. Soil contains PVOCs and must be managed. Approximately 1 cubic yards (approximately 1.7 tons at an estimated 1.7 tons per cubic yard) of soil will be excavated from this location.
- W. Lisbon Ave. Station 214+50 to 215+50, from reference line to project limits left, from 1' bgs to maximum excavation depth. Soil contains PVOCs and lead and must be managed. Approximately 1 cubic yards (approximately 1.7 tons at an estimated 1.7 tons per cubic yard) of soil will be excavated from this location.

Directly load soil excavated by the project at the above locations into trucks that will transport the soil to a WDNR-licensed bioremediation or landfill facility for treatment and disposal.

If contaminated soils are encountered elsewhere on the project, terminate excavation activities in the area and notify the engineer. If dewatering is required at the above locations, conduct the dewatering according to Section C below.

The excavation management plan for this project has been designed to minimize the offsite treatment or disposal of contaminated material. 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 near this project, contact:

Name: Mr. Andrew Malsom  
Address: 141 NW Barstow Street, PO Box 798, Waukesha, WI 53187-0798  
Phone: (262) 548-6705  
Fax: (262) 548-6891  
E-mail: [Andrew.Malsom@dot.wi.gov](mailto:Andrew.Malsom@dot.wi.gov)

### **A.3 Coordination**

Coordinate work under this contract with the environment consultant:

Consultant: Ramboll  
Address: 234 W. Florida Street, Fifth Floor, Milwaukee, WI 53204  
Contact: Mr. Mark Walter, PE  
Phone: (608) 220-2480  
Fax: (414) 837-3608  
E-mail: [Mark.Walter@ramboll.com](mailto:Mark.Walter@ramboll.com)

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 or landfill 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 or 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 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 or landfill 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 or landfill 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 PVOCs. Site workers taking part in activities that will result in the reasonable probability of exposure to safety and health hazards associated with hazardous materials shall have completed health and safety training that meets the Occupational Safety and Health Administration (OSHA) requirements for Hazardous Waste Operations and Emergency Response (HAZWOPER), as provided in 29 CFR 1910.120.

Prepare a site-specific Health and Safety Plan, and develop, delineate, and enforce the health and safety exclusion zones for each contaminated site location as required by 29 CFR 1910.120. Submit the site-specific health and safety plan and written documentation of 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 or landfill disposal. 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 15 cubic yards excavated.

Directly load and haul soils designated by the environmental consultant for offsite bioremediation or landfill disposal to the DNR approved bioremediation or landfill facility. Use loading and hauling practices

that are appropriate to prevent any spills or releases of contaminated soils or residues. Before transport, sufficiently dewater soils designated for off-site bioremediation or landfill disposal so as not to contain free liquids.

If dewatering is required in areas of known contamination, water generated from dewatering activities will likely contain PVOCs and metals. Such water may be discharged to the storm sewer or surface water with WDNR approval under a Wisconsin Pollution Discharge Elimination System (WPDES) General Permit, or to the sanitary sewer or at the treatment facility with approval of the local wastewater treatment utility. Pretreatment may be required prior to discharge.

Contractor shall meet all applicable requirements, including the control of suspended solids. Perform all necessary monitoring to document compliance with requirements. Furnish, install, operate, maintain, disassemble, and remove treatment equipment necessary to comply with 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 the 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 Excavation, Hauling, and Disposal of Petroleum-Contaminated Soil in tons of contaminated soil, accepted by the bioremediation or landfill facility as documented by weight tickets generated by the bioremediation or landfill facility.

#### **E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0195.002	Excavation, Hauling, and Disposal of Petroleum Contaminated Soil	TON

Payment is full compensation for excavating, segregating, loading, hauling, and disposal 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. Management and disposal of contaminated water is considered incidental to other bid items in the contract. The department will not pay directly for management and disposal/treatment of contaminated water.

### **131. Excavation, Hauling, and Disposal of Lead Contaminated Soil, Item SPV.0195.003.**

#### **A Description**

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

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

Waste Management Orchard Ridge Landfill  
W124 N9355 Boundary Road  
Menomonee Falls, WI 53051  
(262) 253-8626

GFL Environmental Emerald Park Landfill  
W124 S10629 124th Street  
Muskego, WI 53150  
(414) 529-1360

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

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

The department completed testing for soil contamination for locations within this project where excavation is required. Testing indicated that lead-contaminated soil is present at the following location where excavation is required, as shown on the plans:

Area bound by line from W. Lisbon Ave. Station 213+50 reference line to project limits left, W. Lisbon Ave. reference line from Station 212+50 to 213+50, line from W. Lisbon Ave. Station 212+50 reference line to 60' left of reference line, W. Burleigh St. reference line from Station 112+80 to 113+50, and line from W. Burleigh St. Station 113+50 reference line to project limits right, from 12' bgs to 16' bgs. Soil contains lead and must be managed. Approximately 1 cubic yards (approximately 1.7 tons at an estimated 1.7 tons per cubic yard) of soil will be excavated from this location.

Directly load soil excavated by the project at the above locations into trucks that will transport the soil to a WDNR-licensed landfill facility for treatment and disposal.

If contaminated soils are encountered elsewhere on the project, terminate excavation activities in the area and notify the engineer. If dewatering is required at the above locations, conduct the dewatering according to Section C below.

The excavation management plan for this project has been designed to minimize the offsite treatment or disposal of contaminated material. 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 near this project, contact:

Name: Mr. Andrew Malsom  
Address: 141 NW Barstow Street, PO Box 798, Waukesha, WI 53187-0798  
Phone: (262) 548-6705  
Fax: (262) 548-6891  
E-mail: [Andrew.Malsom@dot.wi.gov](mailto:Andrew.Malsom@dot.wi.gov)

## **A.3 Coordination**

Coordinate work under this contract with the environment consultant:

Consultant: Ramboll  
Address: 234 W. Florida Street, Fifth Floor, Milwaukee, WI 53204  
Contact: Mr. Mark Walter, PE  
Phone: (608) 220-2480  
E-mail: [Mark.Walter@ramboll.com](mailto:Mark.Walter@ramboll.com)

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 landfill 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 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 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 landfill 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 landfill 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 lead. Site workers taking part in activities that will result in the reasonable probability of exposure to safety and health hazards associated with hazardous materials shall have completed health and safety training that meets the Occupational Safety and Health Administration (OSHA) requirements for Hazardous Waste Operations and Emergency Response (HAZWOPER), as provided in 29 CFR 1910.120.

Prepare a site-specific Health and Safety Plan, and develop, delineate, and enforce the health and safety exclusion zones for each contaminated site location as required by 29 CFR 1910.120. Submit the site-specific health and safety plan and written documentation of 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 landfill disposal. 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 15 cubic yards excavated.

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

If dewatering is required in areas of known contamination, water generated from dewatering activities will likely contain lead. Such water may be discharged to the storm sewer or surface water with WDNR approval under a Wisconsin Pollution Discharge Elimination System (WPDES) General Permit, or to the sanitary sewer or at the treatment facility with approval from the local wastewater utility. Pretreatment may be required prior to discharge.

Contractor shall meet all applicable requirements, including the control of suspended solids. Perform all necessary monitoring to document compliance with requirements. Furnish, install, operate, maintain, disassemble, and remove treatment equipment necessary to comply with 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 the 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 Excavation, Hauling, and Disposal of Lead-Contaminated Soil in tons of contaminated soil, accepted by the landfill facility as documented by weight tickets generated by the landfill facility.

### **E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0195.003	Excavation, Hauling, and Disposal of Lead Contaminated Soil	TON

Payment is full compensation for excavating, segregating, loading, hauling, and disposal 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. Management and disposal of contaminated water is considered incidental to other bid items in the contract. The department will not pay directly for management and disposal/treatment of contaminated water.

## **ADDITIONAL SPECIAL PROVISION 1 (ASP 1) HIGHWAY CONSTRUCTION SKILLS TRAINING (HCST) 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 include: 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).

The Wisconsin Department of Transportation OJT program was originally established in 1995. Highway Construction Skills Training (HCST) was previously known as Transportation Alliance for New Solutions (TrANS) and underwent a name change in early 2023. HCST is an industry driven plan of services to address the outreach, preparation, placement and retention of women, minorities, and disadvantaged persons as laborers and apprentices in the highway skilled trades. Candidate preparation and contractor coordination services (OJT Supportive Services) are provided by contracted community-based organizations.

### **I. BASIC CONCEPTS**

Training reimbursements to employing contractors for new placements, rehires or advancement to apprenticeship of Highway Construction Skills Training (HCST) graduates and employing eligible trainees in qualifying trades will be made as follows:

- 1) **On-the-Job Training, Item ASP.1T0G, ASP 1 HCST Graduate.** At the rate of \$5.00 per hour on Federal-aid projects when HCST graduates are initially hired, or seasonally rehired, as unskilled laborers or equivalent.  
Eligibility and Duration: To the employing contractor, for up to 2,000 hours or two years, whichever comes first from the point of initial hire as a HCST placement.  
Contract Goal: To maintain the intent of the Equal Employment Opportunity program, it is a goal that   18   HCST Graduate(s) be utilized for   17280   hours 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 HCST Program is subsequently entered into an apprenticeship contract in a qualifying trade.  
Eligibility and Duration: To the employing contractor, for the length of time that the HCST graduate is in apprenticeship status.  
Contract Goal: To maintain the intent of the Equal Employment Opportunity program, it is a goal that   7   HCST Apprentice(s) be utilized for   5600   hours on this contract.
- 3) The maximum duration of reimbursement is two years as a HCST graduate plus time in apprentice status.
- 4) If a HCST 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 Department of Transportation Labor Development Specialist at the phone number listed below.

- 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 HCST 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 HCST 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 HCST 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 HCST 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).

*NOTE: 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 page 2 Dated January 2012 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 HCST graduate or a HCST apprentice. The compliance specialists utilize the information on the Certified Payrolls to track the hours accumulated by HCST Graduates and HCST 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. HCST 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. HCST 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 ensure that this training special provision is made applicable to such subcontract. Training and upgrading of minorities and women toward journey workers status is a primary objective of this training special provision. Accordingly, the contractor shall make every effort to enroll minority trainees and women (e.g., by conducting systematic and direct recruitment through public and private sources likely to yield minority trainees and women trainees); to the extent such persons are available within a reasonable area of recruitment. The contractor will be given an opportunity and will be responsible for demonstrating the steps that they have taken in pursuance thereof, prior to determination as to whether the contractor is in compliance with this training

special provision. This training commitment is not intended, and shall not be used, to discriminate against any applicant for training, whether a member of a minority group or not. No employee shall be employed as a trainee in any classification in which they have successfully completed a training course leading to journey workers status or in which they have been employed as a journey worker. The contractor should satisfy this requirement by including appropriate questions in the employee application or by other suitable means. Regardless of the method used, the contractor's records should document the findings in each case.

## **V. APPRENTICESHIP TRAINING**

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

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

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

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

The contractor and subcontractor shall maintain records to demonstrate compliance with these apprenticeship requirements. Reasonable exemptions and modifications to and from any or all of these requirements will be determined by the Wisconsin Department of Transportation-Office of Business Opportunity & Equity Compliance (OBOEC). A request for an exemption or modification, with justification, shall be made in writing, addressed to WisDOT OBOEC - Labor Development, 141 NW Barstow Street, Suite 411, PO Box 798, Waukesha, WI 53187.

## **VI. PROGRAM CONTACTS**

Marguerite (Maggie) Givings, Labor Development Specialist

[Marguerite.Givings@dot.wi.gov](mailto:Marguerite.Givings@dot.wi.gov) | 608-789-7876

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## 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) The Commitment to Subcontract to DBE (Form DT1506 or digital submittal), Attachments A, and Good Faith Effort Documentation (Form DT1202) will be submitted as described in Section 2.
- (2) Any change to DBE Commitments thereafter must follow modification of DBE subcontracting commitment as described in Section 9.
- (3) 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.
- (4) 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: <http://wisconsindot.gov/Pages/doing-bus/civil-rights/dbe/default.aspx>

## 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) must be submitted at the time of bid (Tuesday) by all prime contractors.
- Attachments A OR quotes from all DBEs included in the Commitment must be submitted at bid (Tuesday) **OR**
- Within one-hour following bid submittal by ALL prime contractors via eSubmit (Tuesday).
- If only DBE quotes were submitted, all remaining signed Attachments A must be submitted within 24-hours of bid closing via eSubmit (Wednesday).
- If the assigned DBE contract goal is not met, Documentation of Good Faith Effort (Form DT1202) and supporting documentation must be submitted within 24-hours of bid closing (Wednesday) via eSubmit. [Instructions for eSubmit.](#)

**\*\*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.**

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.

### 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](mailto: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](mailto:DBE_Alert@dot.wi.gov)
- ii. Acceptable outreach tools include SBN (Small Business Network, see Appendix C): <https://www.bidx.com/wi/main>, 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:
  - i. 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.
    - a. 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.
    - b. Additional evaluation - Evaluation of DBE quotes with tied bid items. 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.

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).

Additional resources for demonstrating and tracking good faith effort can be found on the “Contracting with a DBE” webpage in the [ASP-3 and Good Faith Effort Guidance](#) section.

#### 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: <http://wisconsindot.gov/Documents/doing-bus/civil-rights/dbe/dbe-ucp-directory.xlsx>
- 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](mailto: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) A regular dealer is a firm that owns, operates, or maintains a store, warehouse, or other establishment in which the materials, supplies, articles or equipment of the general character described by the specifications

and required under the contract are bought, kept in stock, and regularly sold or leased to the public in the usual course of business.

- (2) If the materials or supplies are purchased from a DBE regular dealer, count **60%** percent of the cost of the materials or supplies toward DBE goals.
- (3) At a minimum, a regular dealer must meet the following criteria to be counted for DBE credit:
  - i. The DBE firm must be an established, regular business that engages, as its principal business and under its own name, in the purchase and sale or lease of the products in question.
  - ii. The DBE firm must both own and operate distribution equipment for the product--bulk items such as petroleum products, steel, cement, gravel, stone, or asphalt. If some of the distribution equipment is leased, the lease agreement must accompany the DBE Commitment form for evaluation of the dealer's control before the DBE office approves the DBE credit.
- (4) 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?
- (5) 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.
  - i. To ensure that the appropriate credit is assigned, follow the procedure below:
    - a. When DBE suppliers are contracted for bulk supply or commodity purchases, an invoice or bill-of-sale that includes names of the contractor and the DBE supplier should be submitted to the DBE Office via eSubmit (preferred during letting) or the DBE\_Alert email box. The supply/commodity credit may be applied during the federal fiscal year (October- September) in which the purchase was made.
    - b. When the contractor intends to apply the credit to a particular project, submit a copy of the original invoice, documentation of the calculations for supplies/commodities to be used on the project, and an Attachment A. Indicate on the Attachment A:
      - c. This supply/commodity is in the prime's inventory or pre-paid in case of commodities
      - d. The full value of the original invoice submitted to the DBE Office, above in (1)
      - e. The amount of material or product used on this project
      - f. Fuel estimate listed on Attachment A will be recorded as a deduction from the full fuel purchase amount shown on the invoice
  - ii. DBE Office Process (Applies only to bulk purchases)
    - a. Supply/Commodity commitment is received
    - b. Engineer verifies amount listed on invoice and enters the full amount into spreadsheet
    - c. The amount of credit applied for each project is updated on the spreadsheet until the bulk purchase is exhausted
    - d. Engineer informs contractor when full amount of bulk purchase has been applied

**c. Brokers, Transaction Expeditors, Packagers, Manufacturers' Representatives**

- (1) No portion of the cost of the materials, supplies, services themselves will count for DBE credit. However, WisDOT will evaluate the fees or commissions charged when a prime purchases materials, supplies, or services from a DBE certified firm which is neither a manufacturer nor a regular dealer, namely: brokers, packagers, manufacturers' representatives, or other persons who arrange or expedite transactions.
- (2) Brokerage fees 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:
    - a. 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](mailto: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](mailto: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](mailto: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
- DBE truckers need to be added to the DBE commitment once. If the DBE trucker is on the initial commitment (DT1506/E1506) there is no requirement to submit another Attachment A for that trucker for that contract.

### 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.
- d. Offsite Hauling – when DBE truck will haul between a pit and plant or location other than the construction site associated with the commitment
  - (1) Indicate Offsite Hauling on Attachment A
  - (2) Discuss offsite hauling at weekly progress meetings with Project Engineer (PE)
  - (3) PE conducts spot checks of pits/plants to verify DBE truck is hauling and/or verifying hauling log
  - (4) Prime should be prepared to submit haul tickets, plant/pit tickets, timecards, and other pertinent documentation if requested by PE or DBE Office

## 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

A joint venture is an association of a DBE firm and one or more other firms to carry out a single, for-profit business enterprise, for which the parties combine their property, capital, efforts, skills and knowledge, and in which the DBE is responsible for a distinct, clearly defined portion of the work of the contract and whose share in the capital contribution, control, management, risks, and profits of the joint venture are commensurate with its ownership interest. If a DBE performs as a participant in a joint venture, the Department will only credit 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.

## 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.
  - (1) DBE credit may only be awarded to a non-DBE mentor firm for using its own protégé firm for less than one half of its goal on any contract; and
  - (2) Not award DBE credit to a non-DBE mentor firm for using its own protégé firm for more than every other contract performed by the protégé firm.
- c. A DBE protégé firm may be eligible for conditional NAICS code extension for training with the mentor. Request permission from the DBE Office- Certification area.
- d. 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.

Prior to Bid Opening- this discussion should happen as early as possible (WisDOT advertisements are released weeks prior to each Let)

1. Determine DBE subcontractor's interest in quoting
2. 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.
3. Assess their interest and experience in the road construction industry by asking questions such as:
  - Have you competed for other WisDOT contracts? Ratio of competed/to wins
  - Have you performed on any transportation industry contracts (locally or with other states)?
  - What the largest contract you've completed?
  - Have you worked in the industry: apprentice, journeyman, safety, inspection etc.?
  - Does this project fit into your schedule? Are you working on any contracts now?
  - Have you reviewed a copy of the plans? Are you comfortable performing within the scope and quantity considerations of this contract?
  - What region do you work in? Home base?
  - Which line items are you considering?
  - Have you read/are you familiar with WisDOT Standard Specifications? Construction Material Manual?
  - 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 formatting requirement)*

#### DBE Solicitation - [Month] [Day], [Year] WisDOT Bid Letting

Attention all DBEs. [Prime Contractor] is actively seeking your quote for the [Month][Day], [Year] Bid Letting. [Prime Contractor] is considering bidding on the projects listed on page 2 as a prime contractor. Please see page 2 for instructions and the sub-contractable opportunities for each proposal.

**Does [Prime Contractor] accept quotes in areas we might self-perform?** Yes, we do! We support this federal rule and (if needed) we consider areas we might self-perform an opportunity to provide in the field assistance and training if we award your quote.

**Where can DBEs find the plans, specifications & addenda?** Please visit [Prime Contractor's] plan room [LINK] or on WisDOT's Highway Construction Contract Information HCCI website: [Wisconsin Department of Transportation Highway Construction Contract Information \(wisconsindot.gov\)](https://wisconsindot.gov/HighwayConstructionContractInformation). This same website can be checked for the contract status.

**What should your quote include?** All the costs required to complete the items you propose to perform including labor, equipment, material, and related bonding or insurance. The quote should also note items that you are DBE certified to perform, tied items, and any special terms. Please use page 2 as your cover sheet for your quote.

**Do you have a question regarding bonding, credit, insurance, equipment, or supplies/materials?** We welcome all DBE questions! Please call [Prime Contractor] and ask to speak with [Contact]. [Prime Contractor] can provide basic information as well as a referral to a trusted industry partner for insurance and bonding needs.

#### **When are quotes due?**

**[Month] [Day], [Year] at [Time].** We accept quotes via SBN, email, or fax. Please make every effort to have your quotes in by this time or earlier. Quality check your quote so it includes the correct letting date, project ID, proposal number, unit price and extension.

**Who can DBEs contact for questions, information, clarification or for a quote evaluation?** [Project Manager Name] [Phone] [Email]. If you are quoting [Prime Contractor] for the first time, we encourage you to come meet with us in person to discuss the project. Our office hours are 7:30 a.m. – 5:00 p.m. On bid day, we are in the office by 6:30 a.m.

#### **Why partner with [Prime Contractor]?**

DBE partnership is a core part of [Prime Contractor's] mission. Including DBEs at the beginning of each project is essential in the success of each project. We consider DBEs to be important industry partners who bring dedication and knowledge at various stages during construction. We are proud to be an industry leader with our DBE partnership. Your success as a DBE is our success.

**Sample Contractor Solicitation Letter Page 2***(This sample is provided as a guide, not a formatting requirement)***REQUEST FOR QUOTE****[Prime Contractor]****Letting Date: [Month] [Day], [Year]****Project IDs: 1234-56-00 (Proposal #1) & 1234-01-78 (Proposal #6)**

Please check all that apply:

- ☐ Yes, we will be quoting the projects & items listed below
- ☐ No, we are not interested in quoting on the letting or its items referenced below
- ☐ Please take our name off your monthly DBE contact list
- ☐ We have questions about quoting this letting. Please have someone contact me at this number:

Prime Contractor Contact: \_\_\_\_\_

DBE: \_\_\_\_\_

Phone: \_\_\_\_\_

Fax: \_\_\_\_\_

Email: \_\_\_\_\_

**Please circle the proposals and items you will be quoting below and contact us with any questions**

<b>Proposal County</b>	<b>1 Dane County</b>	<b>6 Crawford County</b>
<b>Clearing &amp; Grubbing</b>	<b>X</b>	<b>X</b>
<b>Dump Truck Hauling</b>	<b>X</b>	<b>X</b>
<b>Curb/Gutter/Sidewalk</b>	<b>X</b>	
<b>Erosion Control Items</b>		<b>X</b>
<b>Excavation</b>	<b>X</b>	<b>X</b>
<b>Pavement Marking</b>		<b>X</b>
<b>Traffic Control</b>	<b>X</b>	
<b>Sawing</b>	<b>X</b>	<b>X</b>
<b>QMP, Base</b>		<b>X</b>
<b>Pipe Underdrain</b>	<b>X</b>	
<b>Landscape</b>		<b>X</b>
<b>Beam Guard</b>	<b>X</b>	
<b>Electrical</b>	<b>X</b>	
<b>Signs/Posts/Markers</b>		<b>X</b>
<b>Survey/Staking</b>		<b>X</b>

Again, please make every effort to have your quotes into our office by **time deadline** prior to the letting date.

## Sample Contractor Solicitation Email - Simplified

*(This sample is provided as a guide, not a formatting requirement)*

### ATTENTION DBEs

- [Prime Contractor] specializes in municipal projects in the XX Region(s)
- We have successfully competed for and completed XX WisDOT projects over the past XX years
- Consider [Prime Contractor] your partner on WisDOT Projects

[Prime Contractor] is seeking your subcontractor quote for the XX/XX/20XX WisDOT bid letting on the below projects:

Project	Proposal	County	Region
1234-56-00	2	Dane	SW
1234-01-78	6	Crawford	SW

- Please review the attachments **[attach Solicitation Letter]** and respond with your intent to quote (or not) along with the work items you are interested in performing and respond via fax or email by date. The quote should note items that you are DBE certified to perform, tied items, and any special terms. Please include labor, equipment, material, and related bonding or insurance.
- If you have any questions regarding bonding, credit, insurance, equipment and/or materials/supplies, please feel free to call [Prime Contractor] and ask for [Contact]. **(Include if your company is willing to answer these types of DBE questions)**
- Plans and Specifications can be found: **WisDOT HCCI Website: List webpage where plans are located**
- If you do choose to quote, please make every effort to have your quote into our office by time and date. Make sure the correct letting date, project number, unit price and extension are included in your quote.
- Should you have questions regarding the mentioned project, please call our office at (414) 555-5555 and we will direct you to the correct estimator/project manager.  
Our office hours are 7:30 a.m. - 5:00 p.m.

**Thank you – we look forward to working with your company on this project!**

Prime Contractor  
Project Manager  
Direct: 414-555-5555  
Cell: 414-555-5556

## Sample Contractor Solicitation Email to **non-DBE** WisDOT Subcontractors - Simplified

*(This sample is provided as a guide, not a formatting requirement)*

### **ATTENTION WisDOT SUBCONTRACTORS**

[Prime Contractor] is considering bidding on the below projects for the XX/XX/20XX WisDOT Bid Letting:

Project	Proposal	County	Region	DBE Goal
1234-56-00	2	Dodge	SW	6.00%
1234-01-78	11	Adams	NC	3.00%
1234-00-99	20	Buffalo	NW	5.00%
1234-00-98	33	Portage	NC	6.00%

The above projects have DBE goals and [Prime Contractor] is committed to DBE inclusion with every project. As such, we are requesting:

- All WisDOT Subcontractors to **solicit and utilize** DBEs in your quotes.
- DBE participation can be achieved through purchasing materials from DBE suppliers, using DBE subcontractors and/or DBE trucking firms or any combination of these.
- If there is an opportunity to untie an item in your quote so a DBE can be utilized, please look for those opportunities as well.
- Your quote will be evaluated based on the amount of DBE participation your company is able to provide when compared to other quotes for the same work.

If you do choose to quote, please make every effort to have your quote into our office by **time and date**. Please submit all quotes to [Email]. Make sure the correct letting date, project number, unit price and extension are included in your quote.

Should you have questions regarding the mentioned project, the Project Manager contact is: [Name] [Phone Number] [Email]

**Thank you for utilizing DBEs who are trusted industry partners with WisDOT projects.**

Prime Contractor

Project Manager

Direct: 414-555-5555

Cell: 414-555-5556

## 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-qualified and certified small and disadvantaged businesses.
  - c. Advertise to small and disadvantaged businesses more efficiently and cost effectively.
  - d. Document your interactions with subs/DBEs by producing an Outreach Report (may be accepted as proof of DBE outreach at the discretion of each agency).

The Small Business Network help small businesses learn more about opportunities, compete more effectively, network with other contractors and subcontractors, and win more jobs. The DBE will provide free SBN accounts to DBEs when requested. Use [DBE\\_Alert@dot.wi.gov](mailto:DBE_Alert@dot.wi.gov) to request an account. **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 per-item basis as well.
  - b. Create an unsolicited sub-quote that lists the items from a proposal that you want to quote, include pricing, terms and conditions, and send it to selected prime/plan holder.
  - c. Add attachments to a sub-quote.
  - d. Add unsolicited work items to sub-quotes that you are responding to.
5. Easy Access to Valuable Information
  - a. Receive a confirmation that your sub-quote was opened by a prime.
  - b. View Bid Tab Analysis data from past bids, including the high, average and low prices of items.
  - c. View important notices and publications from DOT targeted to small and disadvantaged businesses.
6. Accessing Small Business Network for WisDOT contracting opportunities
  - a. If you are a contractor not yet subscribing to the Bid Express service, go to [www.bidx.com](http://www.bidx.com) and select "Order Bid Express." The Small Business Network is a part of the Bid Express Basic Service.

## 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 or 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 – Initial Review

DT1202	Examples	Rating	OBOEC Feedback
<b>Solicitation Documentation</b>	<p>Identify all reasonable and available activities performed to solicit the interest of all certified DBEs who have capacity and ability to perform work on the project.</p> <p><i>Such as: Updated solicitation letter and email, timely solicitation, and follow-up, and/or utilized various methods to communicate solicitation (ex: letter, email, publication, posting and/or website)</i></p>		
<b>Selected Work Items Documentation</b>	<p>All work items are broken out into economically feasible units to facilitate DBE participation.</p> <p><i>Such as: Selected work items are specific to each proposal and clearly identified in all solicitation(s)</i></p>		
<b>Documentation of Project Information provided to Interested DBEs</b>	<p>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.</p> <p><i>Such as: Project information is clearly identified in all solicitation(s)</i></p>		
<b>Documentation of Negotiation with Interested DBEs</b>	<p>Provide sufficient evidence demonstrating that good faith negotiations took place during the bid letting.</p> <p><i>Such as: Documented attempts with DBEs or on behalf of DBEs to increase DBE participation</i></p>		
<b>Documentation of Sound Reason for Rejecting DBEs</b>	<p>Provide sufficient evidence demonstrating that DBEs are rejected for sound reasons.</p> <p><i>Such as: Detailed and thoughtful analysis that considers both the percentage and dollar difference when rejecting a DBE including past performance, relevant business experience and stability, safety record, business ethic and integrity, technical capacity, and other tangible factors.</i></p>		
<b>Documentation of Assistance to Interested DBEs- bonding, credit, insurance, equipment, supplies/materials</b>	<p>Documented assistance in both solicitation(s) and outreach to DBEs.</p>		
<b>Documentation of Outreach to Minority, Women, and Community organizations and other DBE Business Development Support</b>	<p>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 participation in activities that support DBE business development.</p> <p><i>Such as: Variety of activities that translate into meaningful DBE participation</i></p>		
<b>Documentation of other GFE activities</b>	<p><i>Such as: Used DT1202 Excel Workbook, Diversity &amp; Inclusion company policy, Mentor-Protégé participant, awarded neutral DBE after bid submission, included company GFE overview/strategy information and/or company website highlights DBE opportunities and participation</i></p>		
<b>Overall Demonstration of GFE</b>			

**GFE EVALUATION RATING LEGEND – PHASE 1 – Initial Review**

Documentation provided by bidder is evaluated and rated on the rubric. Bidders should include activities characterized by the following types of effort:

**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

**GFE EVALUATION – PHASE 2 – Team Review****GFE Team completes:**

- Review of activities included on the rubric
- Review of the intent to award and sound reasoning 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 constitute final GFE determination

**Rating Scale:**

- **GFE Approval:**  
**Bona Fide = 6 or more categories color coded green.**  
Genuine effort characterized by sincere and earnest activities – “Solicitation” and “Sound Reasoning” must be green
- **GFE Approval:**  
**Sufficient = 5 or more categories color coded green or yellow**  
Adequate effort documented with a variety of quality activities – “Solicitation” and “Sound Reasoning” must be green or yellow
- **GFE Denial:**  
**Pro Forma efforts = 4 or less categories color coded green or yellow.** Perfunctory effort characterized by routine or superficial activities

**Green = Exceeds expectations**

**Yellow = Meets expectations**

**Red = Areas in need of attention and/or absence of documentation**

**See OBOEC Rubric Analysis Feedback**

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

<b>GFE RUBRIC ANALYSIS</b>	
OBOEC DECISION	APPROVAL OR DENIAL
Prime Contractor	
Proposal	
Project	
Bid Letting	
DBE Goal Amount	
DBE Goal Amount Achieved	
<b>Bid Analysis</b>	
Goal %	Achieved %
Apparent Low Bidder	%
Bidder B	
Bidder C	
<b>Average of OTHER Bidders (Not including Apparent Low Bidder)</b>	
<b>DBE Quotes Received</b>	
<b>DBE Quotes Awarded</b>	
<b>DBE Quote(s) Rejected</b>	<b>Rejected Quote Analysis</b>
<b>DBE Quote(s) Awarded</b>	<b>Awarded DBE Amount</b>

## **Appendix E**

### **Good Faith Effort Best Practices**

This list is not a set of requirements; it is a list of potential strategies

#### **Primes**

- Prime contractor open houses inviting DBE firms to see the bid “war room” or providing technical assistance.
- Participate in speed networking and mosaic exercises as arranged by DBE office.
- Host information sessions not directly associated with a bid letting.
- Participate in a formal mentor protégé or joint venture with a DBE firm.
- Participate in WisDOT advisory committees i.e. TRANSAC, or Mega Project committee meetings.
- Facilitate a small group DBE ‘training session’ clarifying how your firm prepares for bid letting, evaluates subcontractors, preferred qualifications, and communication methods.
- Encourage subcontractors to solicit and highlight DBE participation in their quotes to you.
- 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**

- DBE firms should contact primes as soon as possible with questions regarding their quotes or bid; seven days prior is optimal.
- Continually check for contract addendums on the HCCI website through the Thursday prior to letting to stay abreast of changes.
- Review the status of contracts on the HCCI website reviewing the ‘apparent low bidder’ list and bid tabs at a minimum.
- Prepare a portfolio or list of related projects and prime and supplier references; be sure to note transportation related projects of similar size and scope, firm expertise and staffing.
- Participate in DBE office assessment programs.
- Participate on advisory and mega-project committees.
- Sign up to receive the DBE Contracting Update.
- Consider membership in relevant industry or contractor organizations.
- Active participation is a must. Quote as many projects as you can reasonably work on; quoting the primes and bidding as a prime with the Department are the only ways to get work.

## **Appendix 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) Conducting 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**

**Official Form DT1506 can be found here:** <https://wisconsindot.gov/Documents/formdocs/dt1506.pdf>

### COMMITMENT TO SUBCONTRACT TO DBE

**Clear**

Wisconsin Department of Transportation

DT1506 12/2021 s.84.06(2) Wis. Stats.

☐ Non-Traditional Project

Project ID: \_\_\_\_\_

Proposal # \_\_\_\_\_

Prime Contractor: \_\_\_\_\_

County: \_\_\_\_\_

This contract requires that a specified percentage of the work be subcontracted to a disadvantaged business enterprise and that this information be submitted as described in ASP-3. The submittal of this form with the bid proposal constitutes your DBE commitment. Include Attachment A for DBEs included on commitment.

Letting Date: \_\_\_\_\_

Total \$ Value of \_\_\_\_\_

Prime Contract: \$

DBE Contract Goal: %

DBE Goal Achieved: 0.00 %

This form must be completed and returned for this proposal. See page 2 for instructions.

[illegible]

Government Use Only Approved Amounts		
A =	\$	%
V =	\$	%
Total =	\$	%

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Good faith effort approved: Yes ☐ No ☐

**Prime Representative Signature & Date**

DBE Office Signature &amp; Date Approved

**COMMITMENT TO SUBCONTRACT TO DBE  
ATTACHMENT A**

**CONFIRMATION OF PARTICIPATION**

Project I.D.:	Proposal Number:
Letting Date:	

Name of DBE Firm Participating in this Contract:	
Name of the Prime/Subcontractor who hired the DBE Firm: <i>(list all names of tiers if more than one)</i>	
Type of Work or Type of Material Supplied:	
Total Subcontract Value:	Total DBE Credit Value:

<b>FOR PRIME CONTRACTORS ONLY:</b> 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 Signature
	Prime Contractor Representative's Name (Print Name)
	Prime Contractor (Print Company Name)
	Date

<b>FOR PARTICIPATING DBE FIRMS ONLY:</b> I certify that I made arrangements with the Prime Contractor or the Hiring Contractor to perform the type of work or supply the material indicated above for the subcontract value listed above.  <b>FOR DBE TRUCKING FIRMS ONLY:</b> I certify that I will utilize, for DBE credit, only trucks listed 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.	Participating DBE Firm Representative's Signature	Date
	Participating DBE Firm Representative's Name (Print Name)	
	Participating DBE Firm (Print Company Name)	
	DBE Firm's Address:	

# Owned Trucks	# Leased Trucks	# DBE-Owned Leased Trucks	# Non-DBE-Owned Leased Trucks

☐ Off site Hauling

**DOCUMENTATION OF GOOD FAITH EFFORT**
 Wisconsin Department of Transportation  
 DT1202 ..... 3/2020


Project ID *****	Proposal No. *****	Letting *****
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 firms to meet the DBE participation requirements of this contract proposal, as demonstrated by my responses and as specified in Additional Special Provision 3 (ASP-3).

I certify that the information given in the Documentation of Good Faith Efforts is true and correct to the best of my knowledge and belief.

I further understand that any willful falsification, fraudulent statement, or misrepresentation will result in appropriate sanctions, which may involve debarment and/or prosecution under applicable state (Trans 504) and Federal laws.

		(Bidder/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
Pavement Marking	ABC Marking	Leslie Lynch	4/1/2020	Email; phone
	#1 Marking Co.	Mark Smart	4/1/2020	Email; left VM
Electrical	Winterland Electric	Tabitha Tinker	4/3/2020	Email, left VM
	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?	Considered 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	Winston Walters	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: <https://wisconsindot.gov/pages/global-footer/formdocs/default.aspx>

## **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.

### **Acceptance and Final Payment**

Within 30 calendar days of receiving the semi-final estimate from the department, submit written certification that subcontractors at all tiers are paid in full for acceptably completed work.

## ADDITIONAL SPECIAL PROVISIONS 5 FUEL COST ADJUSTMENT

### A Description

Fuel Cost Adjustments will be applied to partial and final payments for work items categorized in Section B as a payment to the contractor or a credit to the department. ASP-5 shall not apply to any force account work.

### B Categories of Work Items

The following items and Fuel Usage Factors shall be used to determine Fuel Cost Adjustments:

(1) Earthwork.		Unit	Gal. Fuel Per Unit
205.0100	Excavation Common	CY	0.23
205.0200	Excavation Rock	CY	0.39
205.0400	Excavation Marsh	CY	0.29
208.0100	Borrow	CY	0.23
208.1100	Select Borrow	CY	0.23
209.1100	Backfill Granular Grade 1	CY	0.23
209.1500	Backfill Granular Grade 1	Ton	0.115
209.2100	Backfill Granular Grade 2	CY	0.23
209.2500	Backfill Granular Grade 2	Ton	0.115
350.0102	Subbase	CY	0.28
350.0104	Subbase	Ton	0.14
350.0115	Subbase 6-Inch	SY	0.05
350.0120	Subbase 7-Inch	SY	0.05
350.0125	Subbase 8-Inch	SY	0.06
350.0130	Subbase 9-Inch	SY	0.07
350.0135	Subbase 10-Inch	SY	0.08
350.0140	Subbase 11-Inch	SY	0.09
350.0145	Subbase 12-Inch	SY	0.09

**C Fuel Index**

A Current Fuel Index (CFI) in dollars per gallon will be established by the Department of Transportation for each month. The CFI will be the price of No. 2 fuel oil, as reported in U.S. Oil Week, using the first issue dated that month. The CFI will be the average of prices quoted for Green Bay, Madison, Milwaukee and Minneapolis.

The base Fuel Index (BFI) for this contract is \$2.55 per gallon.

**D Computing the Fuel Cost Adjustment**

The engineer will compute the ratio CFI/BFI each month. If the ratio falls between 0.85 and 1.15, inclusive, no fuel adjustment will be made for that month. If the ratio is less than 0.85 a credit to the department will be computed. If the ratio is greater than 1.15 additional payment to the contractor will be computed. Credit or additional payment will be computed as follows:

- (1) The engineer will estimate the quantity of work done in that month under each of the contract items categorized in Section B.
- (2) The engineer will compute the gallons of fuel used in that month for each of the contract items categorized in Section B by applying the unit fuel usage factors shown in Section B.
- (3) The engineer will summarize the total gallons (Q) of fuel used in that month for the items categorized in Section B.
- (4) The engineer will determine the Fuel Cost Adjustment credit or payment from the following formula:

$$FA = \frac{CFI}{BFI} - 1 \times Q \times BFI$$

(plus is payment to contractor; minus is credit to the department)

Where	FA	=	Fuel Cost Adjustment (plus or minus)
	CFI	=	Current Fuel Index
	BFI	=	Base Fuel Index
	Q	=	Monthly total gallons of fuel

**E Payment**

A Fuel Cost Adjustment credit to the department will be deducted as a dollar amount each month from any sums due to the contractor. A Fuel Cost Adjustment payment to the contractor will be made as a dollar amount each month.

Upon completion of the work under the contract, any difference between the estimated quantities and the final quantities will be determined. An average CFI, calculated by averaging the CFI for all months that fuel cost adjustment was applied, will be applied to the quantity differences. The average CFI shall be applied in accordance with the procedure set forth in Section D.

## Additional Special Provision 6 (ASP-6)

### Modifications to the standard specifications

*Make the following revisions to the standard specifications.*

#### **107 Legal Relations and Responsibility to the Public**

Add subsection 107.27 effective with the November 2024 letting.

#### **107.27 Drones or Unmanned Aircraft Systems (UAS)**

##### **107.27.1 Licensing and Compliance**

- (1) Obtain and possess the necessary Federal Aviation Administration (FAA) licenses and certifications to operate drones commercially (<https://www.faa.gov/uas>).
- (2) Comply with all FAA regulations, airspace restrictions, and local laws. Operators of small drones that are less than 55 pounds for work or business must follow all requirements as listed in Title 14, Chapter 1, Subchapter F, Part 107 of the Code of Federal Regulations (14 CFR) and obtain a remote pilot certificate ([https://www.faa.gov/uas/commercial\\_operators](https://www.faa.gov/uas/commercial_operators)).
- (3) Comply with Wisconsin State Statute 942.10. Limit operations to the specific approved purpose and employ reasonable precautions to avoid capturing images of the public except those that are incidental to the project.
- (4) Provide copies of waivers required for specific project conditions to the engineer prior to any flight.

##### **107.27.2 Flight Approval, Safety, and Incident Reporting**

- (1) Submit information in 107.27.2(2) to obtain written drone flight approval from the engineer at least 3 business days prior to operating a drone within the right-of-way. Do not operate a drone within the right-of-way unless approved by the engineer.
- (2) Drone flight application for review and approval must include:
  - UAS pilot information and qualifications, images of certification
  - UAS drone information and FAA tail numbers
  - Max/ Min allowable flight parameters (weather)
  - Specifics of flight mission: capture scope
  - Estimated flight duration
  - Pre-flight checklist
  - Site-specific parameters
  - Notification protocols - Federal/Local/Agency/Owner/Responsible in Charge
  - Confirmation and verification of approved operators and hardware
  - Flight plan map diagram (including launch and landing location)
  - FAA-Airspace flight map classification and confirmation with graphics
  - UAS incident management protocol
- (3) If contractor is requesting multiple types of the same flight, a simplified request can be submitted listing weekly flight plan.
- (4) Safety measures must include but are not limited to:
  - Regular training and updates on drone regulations are required and must be provided upon request.
  - Drones must be operated in accordance with safety guidelines, including maintaining a safe distance from people, structures, vehicles, etc.
  - Conduct a pre-flight safety assessment, considering weather conditions, airspace restrictions, and potential hazards.
  - Emergency procedures (e.g., drone malfunction, loss of control) must be documented and followed.
  - All incidents must be reported to the engineer.
- (5) If the drone has an incident during flight, report the following to the engineer:
  - Incident background and details.
  - FAA (14 CFR 107.9) and NTSB (49 CFR 870) notification protocol.
  - Contractor internal notification protocol.

##### **107.27.3 Insurance Requirements**

- (1) Maintain drone liability insurance with the following limits.
  1. For drones weighing 10 pounds or less, a liability policy with a minimum limit of \$1,000,000.00 is required.

2. For drones weighing more than 10 pounds and less than or equal to 20 pounds, a liability policy with a minimum limit of \$2,000,000.00 is required.
3. For drones weighing more than 20 pounds, notify engineer and department will determine appropriate liability policy coverage levels based on size, use, location, and other risk factors.

## 646 Pavement Markings

### 646.3.2.4 Black Epoxy

Replace paragraph (1) with the following effective with the November 2024 letting.

- (1) Apply black epoxy in a grooved slot directly after the white marking. Apply epoxy at a wet mil thickness of 20. Apply black aggregate at or exceeding 25 pounds per gallon of epoxy. Do not apply glass beads to black epoxy.

## ERRATA

### 204.3.1.3 Salvaging or Disposal of Materials

Replace paragraph (2) to correct link from 203.3.4 to 203.3.5 effective with the November 2024 letting.

- (2) Dispose of concrete, stone, brick, and other material not designated for salvage as specified for disposing of materials under 203.3.5.

### 204.3.2.3 Removing Buildings

Replace paragraph (2) to correct link from 203.3.4 to 203.3.5 effective with the November 2024 letting.

- (2) Buildings removed and materials resulting from building removal become the contractor's property unless the contract specifies otherwise. Dispose of unclaimed and removed material as specified for disposing of materials in 203.3.5.

### 335.3.2 Rubblizing

Replace paragraph (6) to correct link from 203.3.4 to 203.3.5 effective with the November 2024 letting.

- (6) Remove reinforcing steel exposed at the surface by cutting below the surface and disposing of the steel as specified in 203.3.5. Do not remove unexposed reinforcing steel.

### 335.3.3 Compacting

Replace paragraph (2) to correct link from 203.3.4 to 203.3.5 effective with the November 2024 letting.

- (2) Remove loose asphaltic patching material, joint fillers, expansion material, or other similar materials from the compacted surface. Also remove pavement or patches that have a maximum dimension greater than or equal to 6 inches that are either not well seated or projecting more than one inch. Dispose of removed material as specified in 203.3.5.

### 526.3.4 Construction, Backfilling, Inspection and Maintenance

Replace paragraph (3) to correct link from 203.3.4 to 203.3.5 effective with the November 2024 letting.

- (3) Maintain temporary structures and approaches in place until no longer needed. Unless the engineer directs otherwise, completely remove and dispose of as specified in 203.3.5. Contractor-furnished materials remain the contractor's property upon removal.

### 602.3.6 Concrete Rumble Strips

Replace paragraph (5) to correct link from 203.3.4 to 203.3.5 effective with the November 2024 letting.

- (5) At the end of each workday, move equipment and material out of the clear zone and sweep or vacuum the traveled way pavement and shoulder areas. Sweep away or vacuum up milling debris before opening adjacent lanes to traffic. Dispose of waste material as specified in 203.3.5; do not place on the finished shoulder surface.

### 604.2 Materials

Replace paragraph (1) with the following information to remove line and link for crushed aggregate effective with the November 2024 letting. The crushed aggregate gradation information for slope paving is now found in 604.2(3).

- (1) Furnish materials conforming to the following:

Water.....	501.2
Select crushed material.....	312.2
Concrete.....	501
Reinforcement.....	505
Expansion joint filler .....	415.2.3
Asphaltic materials .....	455.2

## **ADDITIONAL SPECIAL PROVISION 7**

### **A. Reporting 1<sup>st</sup> Tier and DBE Payments During Construction**

1. Comply with reporting requirements specified in the department's Civil Rights Compliance, Contractor's User Manual, Sublets and Payments.
2. Report payments to all DBE firms within 10 calendar days of receipt of a progress payment by the department or a contractor for work performed, materials furnished, or materials stockpiled by a DBE firm. Report the payment as specified in A(1) for all work satisfactorily performed and for all materials furnished or stockpiled.
3. Report payments to all first tier subcontractor relationships within 10 calendar days of receipt of a progress payment by the department for work performed. Report the payment as specified in A(1) for all work satisfactorily performed.
4. All tiers shall report payments as necessary to comply with the DBE payment requirement as specified in A(2).
5. DBE firms must enter all payments to DBE and non-DBE firms regardless of tier.
6. 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).
7. All agreements made by a contractor shall include the provisions in A(1), (2), (3), (4), (5), and (6), and shall be binding on all first tier subcontractor relationships, all contractors and subcontractors utilizing DBE firms on the project, and all payments from DBE firms.

### **B. Costs for conforming to this special provision are incidental to the contract.**

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

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

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

## **ADDITIONAL SPECIAL PROVISION 9**

### **Electronic Certified Payroll or Labor Data Submittal**

- (1) Use the department's Civil Rights Compliance System (CRCS) for projects with a LET date on or before December 2024 and AASHTOWare Project Civil Rights and Labor (AWP CRL) for projects with a LET date on or after January 2025 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 or AWP CRL. 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 or AWP CRL 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, via the online AWP Knowledge Base, or by telephone. to schedule CRCS specific training. The AWP Knowledge Base is at: <https://awpkb.dot.wi.gov/>
- (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) For firms wishing to export payroll/labor data from their computer system, have their payroll coordinator contact:
  - For CRCS: Paul Ndon at [paul.ndon@dot.wi.gov](mailto:paul.ndon@dot.wi.gov). Information about exporting payroll/labor data. Not every contractor's payroll system can produce 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>
  - For AWP CRL: Contact AWP Support at [awpsupport@dot.wi.gov](mailto:awpsupport@dot.wi.gov). Additional information can be found in the AWP Knowledge Base at <https://awpkb.dot.wi.gov/Content/crl/Payrolls-PrimesAndSubs/PayrollXMLFileCreationProcess.htm>

## REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS

- I. General
- II. Nondiscrimination
- III. Non-segregated Facilities
- IV. Davis-Bacon and Related Act Provisions
- V. Contract Work Hours and Safety Standards Act Provisions
- VI. Subletting or Assigning the Contract
- VII. Safety: Accident Prevention
- VIII. False Statements Concerning Highway Projects
- IX. Implementation of Clean Air Act and Federal Water Pollution Control Act
- X. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion
- XI. Certification Regarding Use of Contract Funds for Lobbying
- XII. Use of United States-Flag Vessels:

### 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, United States Code, as required in 23 CFR 633.102(b) (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). 23 CFR 633.102(e).

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. 23 CFR 633.102(e).

Form FHWA-1273 must be included in all Federal-aid design-build contracts, in all subcontracts and in lower tier subcontracts (excluding subcontracts for design services, purchase orders, rental agreements and other agreements for supplies or services) in accordance with 23 CFR 633.102. 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 solicitation-for-bids or request-for-proposals 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). 23 CFR 633.102(b).

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. 23 CFR 633.102(d).

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. 23 U.S.C. 114(b). The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors. 23 U.S.C. 101(a).

### II. NONDISCRIMINATION (23 CFR 230.107(a); 23 CFR Part 230, Subpart A, Appendix A; EO 11246)

The provisions of this section related to 23 CFR Part 230, Subpart A, Appendix A 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 Part 60, 29 CFR Parts 1625-1627, 23 U.S.C. 140, Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794), Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d et seq.), 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 Part 60, and 29 CFR Parts 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with 23 U.S.C. 140, Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794), and Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d et seq.), 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 Part 230, Subpart A, 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 (see 28 CFR Part 35, 29 CFR Part 1630, 29 CFR Parts 1625-1627, 41 CFR Part 60 and 49 CFR Part 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 Part 35 and 29 CFR Part 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. 23 CFR 230.409 (g)(4) & (5).

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, sexual orientation, gender identity, 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 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 or other knowledgeable company official.

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, sexual orientation, gender identity, national origin, age or disability. The following procedures shall be followed:

a. The contractor will conduct periodic inspections of project sites to ensure 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. 23 CFR 230.409. 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, sexual orientation, gender identity, 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, sexual orientation, gender identity, 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 thereunder. 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, sexual orientation, gender identity, national origin, age, or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.

a. The contractor shall notify all potential subcontractors, 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. Assurances Required:**

a. The requirements of 49 CFR Part 26 and the State DOT's FHWA-approved Disadvantaged Business Enterprise (DBE) program are incorporated by reference.

b. The contractor, subrecipient 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 recipient deems appropriate, which may include, but is not limited to:

- (1) Withholding monthly progress payments;
- (2) Assessing sanctions;
- (3) Liquidated damages; and/or
- (4) Disqualifying the contractor from future bidding as non-responsible.

c. The Title VI and nondiscrimination provisions of U.S. DOT Order 1050.2A at Appendixes A and E are incorporated by reference. 49 CFR Part 21.

**11. Records and Reports:** The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.

a. The records kept by the contractor shall document the following:

(1) The number and work hours of minority and non-minority group members and women employed in each work classification on the project;

(2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and

(3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women.

b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on [Form FHWA-1391](#). The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

### III. NONSEGREGATED FACILITIES

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of more than \$10,000. 41 CFR 60-1.5.

As prescribed by 41 CFR 60-1.8, 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, sexual orientation, gender identity, 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), in accordance with 29 CFR 5.5. The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. 23 U.S.C. 113. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. 23 U.S.C. 101. Where applicable law requires that projects be treated as a project on a Federal-aid highway, the provisions of this subpart will apply regardless of the location of the project. Examples include: Surface Transportation Block Grant Program projects funded under 23 U.S.C. 133 [excluding recreational trails projects], the Nationally Significant Freight and Highway

Projects funded under 23 U.S.C. 117, and National Highway Freight Program projects funded under 23 U.S.C. 167.

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 (29 CFR 5.5)

a. *Wage rates and fringe benefits.* All laborers and mechanics employed or working upon the site of the work (or otherwise working in construction or development of the project under a development statute), 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 basic hourly 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. As provided in paragraphs (d) and (e) of 29 CFR 5.5, the appropriate wage determinations are effective by operation of law even if they have not been attached to the contract. Contributions made or costs reasonably anticipated for bona fide fringe benefits under the Davis-Bacon Act ([40 U.S.C. 3141\(2\)\(B\)](#)) on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph 1.e. 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 must be paid the appropriate wage rate and fringe benefits on the wage determination for the classification(s) of work actually performed, without regard to skill, except as provided in paragraph 4. of this section. 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 classifications and wage rates conformed under paragraph 1.c. of this section) and the Davis-Bacon poster (WH-1321) must 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. *Frequently recurring classifications.* (1) In addition to wage and fringe benefit rates that have been determined to be prevailing under the procedures set forth in [29 CFR part 1](#), a wage determination may contain, pursuant to § 1.3(f), wage and fringe benefit rates for classifications of laborers and mechanics for which conformance requests are regularly submitted pursuant to paragraph 1.c. of this section, provided that:

(i) The work performed by the classification is not performed by a classification in the wage determination for which a prevailing wage rate has been determined;

(ii) The classification is used in the area by the construction industry; and

(iii) The wage rate for the classification bears a reasonable relationship to the prevailing wage rates contained in the wage determination.

(2) The Administrator will establish wage rates for such classifications in accordance with paragraph 1.c.(1)(iii) of this section. Work performed in such a classification must be paid at no less than the wage and fringe benefit rate listed on the wage determination for such classification.

c. *Conformance.* (1) The contracting officer must 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 be classified in conformance with the wage determination. Conformance of an additional classification and wage rate and fringe benefits is appropriate 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 used 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) The conformance process may not be used to split, subdivide, or otherwise avoid application of classifications listed in the wage determination.

(3) 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 will be sent by the contracting officer by email to [DBAconformance@dol.gov](mailto:DBAconformance@dol.gov). 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.

(4) 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 will, by email to [DBAconformance@dol.gov](mailto:DBAconformance@dol.gov), refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Administrator for determination. The 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.

(5) The contracting officer must promptly notify the contractor of the action taken by the Wage and Hour Division

under paragraphs 1.c.(3) and (4) of this section. The contractor must furnish a written copy of such determination to each affected worker or it must be posted as a part of the wage determination. The wage rate (including fringe benefits where appropriate) determined pursuant to paragraph 1.c.(3) or (4) of this section must 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.

d. *Fringe benefits not expressed as an hourly rate.* 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 may either pay the benefit as stated in the wage determination or may pay another bona fide fringe benefit or an hourly cash equivalent thereof.

e. *Unfunded plans.* 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, in accordance with the criteria set forth in § 5.28, 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.

f. *Interest.* In the event of a failure to pay all or part of the wages required by the contract, the contractor will be required to pay interest on any underpayment of wages.

## 2. Withholding (29 CFR 5.5)

a. *Withholding requirements.* The contracting agency may, upon its own action, or must, upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor so much of the accrued payments or advances as may be considered necessary to satisfy the liabilities of the prime contractor or any subcontractor for the full amount of wages and monetary relief, including interest, required by the clauses set forth in this section for violations of this contract, or to satisfy any such liabilities required by any other Federal contract, or federally assisted contract subject to Davis-Bacon labor standards, that is held by the same prime contractor (as defined in § 5.2). The necessary funds may be withheld from the contractor under this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract that is subject to Davis-Bacon labor standards requirements and is held by the same prime contractor, regardless of whether the other contract was awarded or assisted by the same agency, and such funds may be used to satisfy the contractor liability for which the funds were withheld. In the event of a contractor's failure to pay any laborer or mechanic, including any apprentice or helper working on the site of the work all or part of the wages required by the contract, or upon the contractor's failure to submit the required records as discussed in paragraph 3.d. of this section, the contracting agency may on its own initiative and 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.

b. *Priority to withheld funds.* The Department has priority to funds withheld or to be withheld in accordance with paragraph

2.a. of this section or Section V, paragraph 3.a., or both, over claims to those funds by:

(1) A contractor's surety(ies), including without limitation performance bond sureties and payment bond sureties;

(2) A contracting agency for its procurement costs;

(3) A trustee(s) (either a court-appointed trustee or a U.S. trustee, or both) in bankruptcy of a contractor, or a contractor's bankruptcy estate;

(4) A contractor's assignee(s);

(5) A contractor's successor(s); or

(6) A claim asserted under the Prompt Payment Act, [31 U.S.C. 3901–3907](#).

### 3. Records and certified payrolls (29 CFR 5.5)

*a. Basic record requirements (1) Length of record retention.* All regular payrolls and other basic records must be maintained by the contractor and any subcontractor during the course of the work and preserved for all laborers and mechanics working at the site of the work (or otherwise working in construction or development of the project under a development statute) for a period of at least 3 years after all the work on the prime contract is completed.

*(2) Information required.* Such records must contain the name; Social Security number; last known address, telephone number, and email address of each such worker; each worker's correct classification(s) of work actually performed; 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 [40 U.S.C. 3141\(2\)\(B\)](#) of the Davis-Bacon Act); daily and weekly number of hours actually worked in total and on each covered contract; deductions made; and actual wages paid.

*(3) Additional records relating to fringe benefits.* Whenever the Secretary of Labor has found under paragraph 1.e. of this section 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 [40 U.S.C. 3141\(2\)\(B\)](#) of the Davis-Bacon Act, the contractor must 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.

*(4) Additional records relating to apprenticeship.* Contractors with apprentices working under approved programs must maintain written evidence of the registration of apprenticeship programs, the registration of the apprentices, and the ratios and wage rates prescribed in the applicable programs.

*b. Certified payroll requirements (1) Frequency and method of submission.* The contractor or subcontractor must submit weekly, for each week in which any DBA- or Related Acts-covered work is performed, certified payrolls to the contracting

agency. The prime contractor is responsible for the submission of all certified payrolls by all subcontractors. A contracting agency or prime contractor may permit or require contractors to submit certified payrolls through an electronic system, as long as the electronic system requires a legally valid electronic signature; the system allows the contractor, the contracting agency, and the Department of Labor to access the certified payrolls upon request for at least 3 years after the work on the prime contract has been completed; and the contracting agency or prime contractor permits other methods of submission in situations where the contractor is unable or limited in its ability to use or access the electronic system.

*(2) Information required.* The certified payrolls submitted must set out accurately and completely all of the information required to be maintained under paragraph 3.a.(2) of this section, except that full Social Security numbers and last known addresses, telephone numbers, and email addresses must not be included on weekly transmittals. Instead, the certified payrolls need only include an individually identifying number for each worker (e.g., the last four digits of the worker's Social Security number). The required weekly certified payroll information may be submitted using Optional Form WH-347 or in any other format desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division website at <https://www.dol.gov/sites/dolgov/files/WHDL/legacy/files/wh347.pdf> or its successor website. It is not a violation of this section for a prime contractor to require a subcontractor to provide full Social Security numbers and last known addresses, telephone numbers, and email addresses to the prime contractor for its own records, without weekly submission by the subcontractor to the contracting agency.

*(3) Statement of Compliance.* Each certified payroll submitted must be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor, or the contractor's or subcontractor's agent who pays or supervises the payment of the persons working on the contract, and must certify the following:

(i) That the certified payroll for the payroll period contains the information required to be provided under paragraph 3.b. of this section, the appropriate information and basic records are being maintained under paragraph 3.a. of this section, and such information and records are correct and complete;

(ii) That each laborer or mechanic (including each helper and apprentice) working 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 [29 CFR part 3](#); and

(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(s) of work actually performed, as specified in the applicable wage determination incorporated into the contract.

*(4) Use of Optional Form WH-347.* The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 will satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(3) of this section.

(5) *Signature.* The signature by the contractor, subcontractor, or the contractor's or subcontractor's agent must be an original handwritten signature or a legally valid electronic signature.

(6) *Falsification.* The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under [18 U.S.C. 1001](#) and [31 U.S.C. 3729](#).

(7) *Length of certified payroll retention.* The contractor or subcontractor must preserve all certified payrolls during the course of the work and for a period of 3 years after all the work on the prime contract is completed.

c. *Contracts, subcontracts, and related documents.* The contractor or subcontractor must maintain this contract or subcontract and related documents including, without limitation, bids, proposals, amendments, modifications, and extensions. The contractor or subcontractor must preserve these contracts, subcontracts, and related documents during the course of the work and for a period of 3 years after all the work on the prime contract is completed.

d. *Required disclosures and access* (1) *Required record disclosures and access to workers.* The contractor or subcontractor must make the records required under paragraphs 3.a. through 3.c. of this section, and any other documents that the contracting agency, the State DOT, the FHWA, or the Department of Labor deems necessary to determine compliance with the labor standards provisions of any of the applicable statutes referenced by § 5.1, available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and must permit such representatives to interview workers during working hours on the job.

(2) *Sanctions for non-compliance with records and worker access requirements.* If the contractor or subcontractor fails to submit the required records or to make them available, or refuses to permit worker interviews during working hours on the job, the Federal agency may, after written notice to the contractor, sponsor, applicant, owner, or other entity, as the case may be, that maintains such records or that employs such workers, 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, or to permit worker interviews during working hours on the job, may be grounds for debarment action pursuant to § 5.12. In addition, any contractor or other person that fails to submit the required records or make those records available to WHD within the time WHD requests that the records be produced will be precluded from introducing as evidence in an administrative proceeding under [29 CFR part 6](#) any of the required records that were not provided or made available to WHD. WHD will take into consideration a reasonable request from the contractor or person for an extension of the time for submission of records. WHD will determine the reasonableness of the request and may consider, among other things, the location of the records and the volume of production.

(3) *Required information disclosures.* Contractors and subcontractors must maintain the full Social Security number and last known address, telephone number, and email address

of each covered worker, and must provide them upon request to the contracting agency, the State DOT, the FHWA, the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or other compliance action.

#### **4. Apprentices and equal employment opportunity (29 CFR 5.5)**

a. *Apprentices (1) Rate of pay.* Apprentices will be permitted to work at less than the predetermined rate for the work they perform 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 (OA), or with a State Apprenticeship Agency recognized by the OA. A person who is not individually registered in the program, but who has been certified by the OA or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice, will be permitted to work at less than the predetermined rate for the work they perform in the first 90 days of probationary employment as an apprentice in such a program. In the event the OA or a State Apprenticeship Agency recognized by the OA withdraws approval of an apprenticeship program, the contractor will no longer be permitted to use apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(2) *Fringe benefits.* Apprentices must 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, fringe benefits must be paid in accordance with that determination.

(3) *Apprenticeship ratio.* The allowable ratio of apprentices to journeyworkers on the job site in any craft classification must not be greater than the ratio permitted to the contractor as to the entire work force under the registered program or the ratio applicable to the locality of the project pursuant to paragraph 4.a.(4) of this section. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated in paragraph 4.a.(1) of this section, must 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 this section must be paid not less than the applicable wage rate on the wage determination for the work actually performed.

(4) *Reciprocity of ratios and wage rates.* Where a contractor is performing construction on a project in a locality other than the locality in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyworker's hourly rate) applicable within the locality in which the construction is being performed must be observed. If there is no applicable ratio or wage rate for the locality of the project, the ratio and wage rate specified in the contractor's registered program must be observed.

b. *Equal employment opportunity.* The use of apprentices and journeyworkers under this part must be in conformity with

the equal employment opportunity requirements of Executive Order 11246, as amended, and [29 CFR part 30](#).

c. 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. 23 CFR 230.111(e)(2). 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 journeyworkers 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 as provided in 29 CFR 5.5.

**6. Subcontracts.** The contractor or subcontractor must insert FHWA-1273 in any subcontracts, along with the applicable wage determination(s) and such other clauses or contract modifications as the contracting agency may by appropriate instructions require, and a clause requiring the subcontractors to include these clauses and wage determination(s) in any lower tier subcontracts. The prime contractor is responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in this section. In the event of any violations of these clauses, the prime contractor and any subcontractor(s) responsible will be liable for any unpaid wages and monetary relief, including interest from the date of the underpayment or loss, due to any workers of lower-tier subcontractors, and may be subject to debarment, as appropriate. 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 as provided in 29 CFR 5.5.

**9. Disputes concerning labor standards.** As provided in 29 CFR 5.5, 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 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 [40 U.S.C. 3144\(b\)](#) or § 5.12(a).

b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of [40 U.S.C. 3144\(b\)](#) or § 5.12(a).

c. The penalty for making false statements is prescribed in the U.S. Code, Title 18 Crimes and Criminal Procedure, [18 U.S.C. 1001](#).

**11. Anti-retaliation.** It is unlawful for any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, or to cause any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, any worker or job applicant for:

a. Notifying any contractor of any conduct which the worker reasonably believes constitutes a violation of the DBA, Related Acts, this part, or [29 CFR part 1](#) or [3](#);

b. Filing any complaint, initiating or causing to be initiated any proceeding, or otherwise asserting or seeking to assert on behalf of themselves or others any right or protection under the DBA, Related Acts, this part, or [29 CFR part 1](#) or [3](#);

c. Cooperating in any investigation or other compliance action, or testifying in any proceeding under the DBA, Related Acts, this part, or [29 CFR part 1](#) or [3](#); or

d. Informing any other person about their rights under the DBA, Related Acts, this part, or [29 CFR part 1](#) or [3](#).

## **V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT**

Pursuant to 29 CFR 5.5(b), 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 watchpersons 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. 29 CFR 5.5.

**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 and interest from the date of the underpayment. 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 watchpersons and guards, employed in violation of the clause set forth in paragraph 1. of this section, in the sum currently provided in 29 CFR 5.5(b)(2)\* 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.

\* \$31 as of January 15, 2023 (See 88 FR 88 FR 2210) as may be adjusted annually by the Department of Labor, pursuant to the Federal Civil Penalties Inflation Adjustment Act of 1990.

### 3. Withholding for unpaid wages and liquidated damages

a. *Withholding process.* The FHWA or the contracting agency may, upon its own action, or must, upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor so much of the accrued payments or advances as may be considered necessary to satisfy the liabilities of the prime contractor or any subcontractor for any unpaid wages; monetary relief, including interest; and liquidated damages required by the clauses set forth in this section on this contract, 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 that is held by the same prime contractor (as defined in § 5.2). The necessary funds may be withheld from the contractor under this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract that is subject to the Contract Work Hours and Safety Standards Act and is held by the same prime contractor, regardless of whether the other contract was awarded or assisted by the same agency, and such funds may be used to satisfy the contractor liability for which the funds were withheld.

b. *Priority to withheld funds.* The Department has priority to funds withheld or to be withheld in accordance with Section IV paragraph 2.a. or paragraph 3.a. of this section, or both, over claims to those funds by:

- (1) A contractor's surety(ies), including without limitation performance bond sureties and payment bond sureties;
- (2) A contracting agency for its procurement costs;
- (3) A trustee(s) (either a court-appointed trustee or a U.S. trustee, or both) in bankruptcy of a contractor, or a contractor's bankruptcy estate;
- (4) A contractor's assignee(s);
- (5) A contractor's successor(s); or
- (6) A claim asserted under the Prompt Payment Act, [31 U.S.C. 3901](#)–3907.

4. **Subcontracts.** The contractor or subcontractor must insert in any subcontracts the clauses set forth in paragraphs 1. through 5. of this section and a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor is responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs 1. through 5. In the

event of any violations of these clauses, the prime contractor and any subcontractor(s) responsible will be liable for any unpaid wages and monetary relief, including interest from the date of the underpayment or loss, due to any workers of lower-tier subcontractors, and associated liquidated damages and may be subject to debarment, as appropriate.

5. **Anti-retaliation.** It is unlawful for any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, or to cause any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, any worker or job applicant for:

a. Notifying any contractor of any conduct which the worker reasonably believes constitutes a violation of the Contract Work Hours and Safety Standards Act (CWHSSA) or its implementing regulations in this part;

b. Filing any complaint, initiating or causing to be initiated any proceeding, or otherwise asserting or seeking to assert on behalf of themselves or others any right or protection under CWHSSA or this part;

c. Cooperating in any investigation or other compliance action, or testifying in any proceeding under CWHSSA or this part; or

d. Informing any other person about their rights under CWHSSA or this part.

## VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System pursuant to 23 CFR 635.116.

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" in paragraph 1 of Section VI 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: (based on longstanding interpretation)

- (1) the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;
- (2) the prime contractor remains responsible for the quality of the work of the leased employees;

(3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and  
(4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.

b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract. 23 CFR 635.102.

2. Pursuant to 23 CFR 635.116(a), 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. Pursuant to 23 CFR 635.116(c), 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. (based on long-standing interpretation of 23 CFR 635.116).

5. The 30-percent self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements. 23 CFR 635.116(d).

## **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 Part 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. 23 CFR 635.108.

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 Part 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). 29 CFR 1926.10.

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 Part 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 11, 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 (42 U.S.C. 7606; 2 CFR 200.88; EO 11738)**

This provision is applicable to all Federal-aid construction contracts in excess of \$150,000 and to all related subcontracts. 48 CFR 2.101; 2 CFR 200.327.

By submission of this bid/proposal or the execution of this contract or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, subcontractor, supplier, or vendor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401-7671q) and the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251-1387). Violations must be reported to the Federal Highway Administration and the Regional Office of the Environmental Protection Agency. 2 CFR Part 200, Appendix II.

The contractor agrees to include or cause to be included the requirements of this Section in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements. 2 CFR 200.327.

## **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. 2 CFR 180.220 and 1200.220.

### **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. 2 CFR 180.320.

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. 2 CFR 180.325.

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. 2 CFR 180.345 and 180.350.

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, Subpart I, 180.900-180.1020, and 1200. "First Tier Covered Transactions" refers to any covered transaction between a recipient or subrecipient 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 recipient or subrecipient of Federal funds (such as the prime or general contract). "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. 2 CFR 180.330.

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. 2 CFR 180.220 and 180.300.

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. 2 CFR 180.300; 180.320, and 180.325. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. 2 CFR 180.335. 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 System for Award Management website (<https://www.sam.gov/>). 2 CFR 180.300, 180.320, and 180.325.

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 CFR 180.325.

\* \* \* \* \*

## **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 CFR 180.335;.

(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, 2 CFR 180.800;

(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, 2 CFR 180.700 and 180.800; 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. 2 CFR 180.335(d).

(5) Are not a corporation that has been convicted of a felony violation under any Federal law within the two-year period preceding this proposal (USDOT Order 4200.6 implementing appropriations act requirements); and

(6) Are not a corporation with any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability (USDOT Order 4200.6 implementing appropriations act requirements).

b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant should attach an explanation to this proposal. 2 CFR 180.335 and 180.340.

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## **3. 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). 2 CFR 180.220 and 1200.220.

a. By signing and submitting this proposal, the prospective lower tier participant 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. 2 CFR 180.365.

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, Subpart I, 180.900 – 180.1020, 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 recipient or subrecipient of Federal funds and a participant (such as the prime or general contractor). "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 recipient or subrecipient 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. 2 CFR 1200.220 and 1200.332.

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. 2 CFR 180.220 and 1200.220.

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 System for Award Management website (<https://www.sam.gov/>), which is compiled by the General Services Administration. 2 CFR 180.300, 180.320, 180.330, and 180.335.

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. 2 CFR 180.325.

\* \* \* \* \*

#### **4. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:**

a. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals:

(1) is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency, 2 CFR 180.355;

(2) is a corporation that has been convicted of a felony violation under any Federal law within the two-year period preceding this proposal (USDOT Order 4200.6 implementing appropriations act requirements); and

(3) is a corporation with any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability. (USDOT Order 4200.6 implementing appropriations act requirements)

b. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant should 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 Part 20, App. A.

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.

#### **XII. USE OF UNITED STATES-FLAG VESSELS:**

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, or any other covered transaction. 46 CFR Part 381.

This requirement applies to material or equipment that is acquired for a specific Federal-aid highway project. 46 CFR 381.7. It is not applicable to goods or materials that come into inventories independent of an FHWA funded-contract.

When oceanic shipments (or shipments across the Great Lakes) are necessary for materials or equipment acquired for a specific Federal-aid construction project, the bidder, proposer, contractor, subcontractor, or vendor 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. 46 CFR 381.7.

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 Office of Cargo and Commercial Sealift (MAR-620), Maritime Administration, Washington, DC 20590. (MARAD requires copies of the ocean carrier's (master) bills of lading, certified onboard, dated, with rates and charges. These bills of lading may contain business sensitive information and therefore may be submitted directly to MARAD by the Ocean Transportation Intermediary on behalf of the contractor). 46 CFR 381.7.

**ATTACHMENT A - EMPLOYMENT AND MATERIALS  
PREFERENCE FOR APPALACHIAN DEVELOPMENT  
HIGHWAY SYSTEM OR APPALACHIAN LOCAL ACCESS  
ROAD CONTRACTS (23 CFR 633, Subpart B, Appendix B)**

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).

## NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY (EXECUTIVE ORDER 11246)

1. The Offeror's or Bidder's attention is called to the "Employment Practices" and "Equal Opportunity Clause" set forth in the Required Contract Provisions, FHWA 1273.
2. The goals and timetables for minority and female participation expressed in percentage terms for the contractor's aggregate work force in each trade, on all construction work in the covered area, are as follows:

### Goals for Minority Participation for Each Trade:

<u>County</u>	<u>%</u>	<u>County</u>	<u>%</u>	<u>County</u>	<u>%</u>
Adams	1.7	Iowa	1.7	Polk	2.2
Ashland	1.2	Iron	1.2	Portage	0.6
Barron	0.6	Jackson	0.6	Price	0.6
Bayfield	1.2	Jefferson	7.0	Racine	8.4
Brown	1.3	Juneau	0.6	Richland	1.7
Buffalo	0.6	Kenosha	3.0	Rock	3.1
Burnett	2.2	Kewaunee	1.0	Rusk	0.6
Calumet	0.9	La Crosse	0.9	St. Croix	2.9
Chippewa	0.5	Lafayette	0.5	Sauk	1.7
Clark	0.6	Langlade	0.6	Sawyer	0.6
Columbia	1.7	Lincoln	0.6	Shawano	1.0
Crawford	0.5	Manitowoc	1.0	Sheboygan	7.0
Dane	2.2	Marathon	0.6	Taylor	0.6
Dodge	7.0	Marinette	1.0	Trempealeau	0.6
Door	1.0	Marquette	1.7	Vernon	0.6
Douglas	1.0	Menominee	1.0	Vilas	0.6
Dunn	0.6	Milwaukee	8.0	Walworth	7.0
Eau Claire	0.5	Monroe	0.6	Washburn	0.6
Florence	1.0	Oconto	1.0	Washington	8.0
Fond du Lac	1.0	Oneida	0.6	Waukesha	8.0
Forest	1.0	Outagamie	0.9	Waupaca	1.0
Grant	0.5	Ozaukee	8.0	Waushara	1.0
Green	1.7	Pepin	0.6	Winnebago	0.9
Green Lake	1.0	Pierce	2.2	Wood	0.6

**Goals for female participation for each trade: 6.9%**

These goals are applicable to all the contractor's construction work, (whether or not it is federal or federally assisted), performed in the covered area. If the contractor performs construction work in the geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the contractor also is subject to the goals for both its federally involved and nonfederally involved construction.

The contractor's compliance with the Executive Order and the Regulations in 41 CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3(a), and its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from contractor to contractor or from project to project for the sole purpose of meeting the contractor's goals shall be a violation of the contract, the Executive Order and the Regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

3. The contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs within ten (10) working days of award of any construction subcontract in excess of \$10,000.00 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address and telephone number of the subcontractor, employer identification number of the subcontractor; estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the subcontract is to be performed.

As referred to in this section, the Director means:

Director  
Office of Federal Contract Compliance Programs  
Ruess Federal Plaza  
310 W. Wisconsin Ave., Suite 1115  
Milwaukee, WI 53202

The "Employer Identification Number" means the Federal Social Security number used on the Employer's Quarterly Federal Tax Return, U.S. Treasury Department Form 941.

4. As used in this notice, and in the contract resulting from solicitation, the "covered area" is the county(ies) in Wisconsin to which this proposal applies.

## **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.

## BUY AMERICA PROVISION

Buy America (as documented in [88 FR 57750 \(2 CFR part 184 and 200\)](#) from the Office of Management and Budget: [Federal Register: Guidance for Grants and Agreements](#) ) shall be domestic products and permanently incorporated in this project as classified in the following three categories, and as noted in the Construction and Materials Manual (CMM):

### 1. Iron and Steel

All iron and steel manufacturing and coating processes (from the initial melting stage through the application of coatings) 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 the iron and steel manufacturing and coating processes Buy America 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.

### 2. Manufactured Product

All manufactured products (as defined in CMM 228.5) are covered under a previous waiver from 1983 and are currently exempt from Buy America.

### 3. Construction Material

All construction materials (as defined in [88 FR 57750 \(2 CFR part 184 and 200\)](#) and as referenced in CMM 228.5) must comply with Buy America. All manufacturing process of construction materials must occur in the United States.

[88 FR 55817 \(DOT-OST-2022-0124\)](#) allows a limited waiver of Buy America requirements for de minimis costs and small grants.

- The Total value of the non-compliant products is no more than the lesser of \$1,000,000 or 5% of total applicable costs for the project<sup>1</sup>; or
- The total amount of Federal financial assistance applied to the project, through awards or subaward, is below \$500,000<sup>2</sup>

The contractor shall take actions and provide documentation conforming to CMM 228.5 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 iron and steel, manufactured products, and construction materials conform to this Buy America provision.

Form DT4567 is available at: <https://wisconsindot.gov/Documents/formdocs/dt4567.docx>

Attach a list of iron or steel and construction material exemptions and their associated costs to the certification form using the Buy America Exemption Tracking Tool, available at:

<https://wisconsindot.gov/hccidocs/contracting-info/buy-america-exemption-tracking-tool.xlsx>

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<sup>1</sup> The de minimis public interest waiver does not apply to iron and steel subject to the requirements of 23 U.S.C. 313 on financial assistance administered by FHWA. The de minimis threshold in 23 CFR 635.410(b)(4) continues to apply for iron and steel.

<sup>2</sup> The small grant portion of the waiver does not apply to iron, steel, and manufactured goods subject to the requirements of 49 U.S.C. 22905(a).

## **CARGO PREFERENCE ACT REQUIREMENT**

All Federal-aid projects shall comply with 46 CFR 381.7 (a) – (b) as follows:

(a) *Agreement Clauses.* “Use of United States-flag vessels:”

(1) Pursuant to Pub. L. 664 (43 U.S.C. 1241(b)) at least 50 percent of any equipment, materials or commodities procured, contracted for or otherwise obtained with funds granted, guaranteed, loaned, or advanced by the U.S. Government under this agreement, and which may be transported by ocean vessel, shall be transported on privately owned United States-flag commercial vessels, if available.

(2) Within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, ‘on-board’ commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph (a)(1) of this section shall be furnished to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590.”

(b) *Contractor and Subcontractor Clauses.* “Use of United States-flag vessels: The contractor agrees—”

(1) To utilize privately owned United States-flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to this contract, to the extent such vessels are available at fair and reasonable rates for United States-flag commercial vessels.

(2) To furnish within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, ‘on-board’ commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph (b) (1) of this section to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590.

(3) To insert the substance of the provisions of this clause in all subcontracts issued pursuant to this contract.

**WISCONSIN DEPARTMENT OF TRANSPORTATION  
DIVISION OF TRANSPORTATION AND SYSTEM DEVELOPMENT**

**SUPPLEMENTAL REQUIRED CONTRACT PROVISIONS  
FOR PROJECTS WITH FEDERAL AID**

**I. PREVAILING WAGE RATES**

The attached U.S. Department of Labor (Davis-Bacon Minimum Wage Rates) furnishes the minimum prevailing wage rates pursuant to the Davis-Bacon and Related Acts. The wage rates shown are the minimum rates required by the contract to be paid during its life, however this is not a representation that labor can be obtained at these rates. It is the responsibility of bidders to inform themselves as to the local labor conditions and prospective changes or adjustments of wage rates. No increase in the contract price will be allowed or authorized on account of the payment of wage rates in excess of those listed herein.

**II. COVERAGE OF TRUCK DRIVERS**

Truck drivers are covered by Davis-Bacon Minimum Wage Rates in the following circumstances:

- Drivers of a contractor or subcontractor for time spent working on the site of the work.
- Drivers of a contractor or subcontractor for time spent loading and/or unloading materials and supplies on the site of the work, if such time is not de minimis.  
[https://www.dol.gov/whd/FOH/FOH\\_Ch15.pdf](https://www.dol.gov/whd/FOH/FOH_Ch15.pdf)
- Truck drivers transporting materials or supplies between a facility that is deemed part of the site of the work and the actual construction site.
- Truck drivers transporting portions of the building or work between a site established specifically for the performance of the contract where a significant portion of such building or work is constructed and the physical place where the building or work called for in the contract will remain.

Truck drivers are not covered by Davis-Bacon Minimum Wage Rates in the following circumstances:

- Material delivery truck drivers while off the site of the work.
- Drivers of a contractor or subcontractor traveling between a Davis-Bacon job and a commercial supply facility while they are off the site of the work.”
- Truck drivers whose time spent on the site of the work is de minimis, such as only a few minutes at a time merely to pick up or drop off materials or supplies.

Details are available online at:

<https://www.dol.gov/whd/recovery/pwrb/Tab9.pdf>

<https://wisconsindot.gov/Pages/doing-bus/civil-rights/labornwage/trckng.aspx>

**III. POSTINGS AT THE SITE OF THE WORK**

In addition to the required postings furnished by the department, the contractor shall post the following in at least one conspicuous and accessible place at the site of work:

- a. A copy of the contractor's Equal Employment Opportunity Policy.

All required documents shall be posted by the first day of work and be accurate and complete. Postings must be readable, in an area where they will be noticed, and maintained until the last day of work.

**IV. RESOURCES**

Required information regarding compliance with federal provisions is found in the following resources:

- FHWA-1273 included in this contract
- U.S. Department of Labor Prevailing Wage Resource Book
- U.S. Department of Labor Field Operations Handbook
- U.S. Code of Federal Regulations
- Any applicable law, Act, or Executive Order enacted by the federal government at the time of the letting of this contract

"General Decision Number: WI20250010 01/03/2025

Superseded General Decision Number: WI20240010

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: Contracts subject to the Davis-Bacon Act are generally required to pay at least the applicable minimum wage rate required under Executive Order 14026 or Executive Order 13658. Please note that these Executive Orders apply to covered contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but do not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(1).

If the contract is entered into on or after January 30, 2022, or the contract is renewed or extended (e.g., an option is exercised) on or after January 30, 2022:	<ul style="list-style-type: none"><li>. Executive Order 14026 generally applies to the contract.</li><li>. The contractor must pay all covered workers at least \$17.75 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 2025.</li></ul>
If the contract was awarded on or between January 1, 2015 and January 29, 2022, and the contract is not renewed or extended on or after January 30, 2022:	<ul style="list-style-type: none"><li>. Executive Order 13658 generally applies to the contract.</li><li>. The contractor must pay all covered workers at least \$13.30 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on that contract in 2025.</li></ul>

Additional information on contractor requirements and worker protections under the Executive Orders is available at <http://www.dol.gov/whd/govcontracts>.

	Rates	Fringes
BRICKLAYER.....	\$ 38.86	27.00
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	Rates	Fringes
BRICKLAYER.....	\$ 46.60	27.01

	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER...	\$ 41.62	27.03

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BRWI0003-002 06/01/2024

BROWN, DOOR, FLORENCE, KEWAUNEE, MARINETTE, AND OCONTO COUNTIES

	Rates	Fringes
BRICKLAYER.....	\$ 38.45	27.41

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BRWI0004-002 06/01/2024

KENOSHA, RACINE, AND WALWORTH COUNTIES

	Rates	Fringes
BRICKLAYER.....	\$ 43.21	27.90

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BRWI0006-002 06/01/2024

ADAMS, CLARK, FOREST, LANGLADE, LINCOLN, MARATHON, MENOMINEE,  
ONEIDA, PORTAGE, PRICE, TAYLOR, VILAS AND WOOD COUNTIES

	Rates	Fringes
BRICKLAYER.....	\$ 38.33	27.53

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BRWI0007-002 06/01/2024

GREEN, LAFAYETTE, AND ROCK COUNTIES

	Rates	Fringes
BRICKLAYER.....	\$ 39.34	28.15

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BRWI0008-002 06/01/2024

MILWAUKEE, OZAUKEE, WASHINGTON, AND WAUKESHA COUNTIES

	Rates	Fringes
BRICKLAYER.....	\$ 46.16	27.33

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BRWI0011-002 06/01/2024

CALUMET, FOND DU LAC, MANITOWOC, AND SHEBOYGAN COUNTIES

	Rates	Fringes
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BRICKLAYER.....\$ 38.45 27.41

BRWI0019-002 06/01/2024

BARRON, BUFFALO, BURNETT, CHIPPEWA, DUNN, EAU CLAIRE, PEPIN,  
PIERCE, POLK, RUSK, ST. CROIX, SAWYER AND WASHBURN COUNTIES

	Rates	Fringes
BRICKLAYER.....	\$ 38.18	27.68

BRWI0034-002 06/01/2024

COLUMBIA AND SAUK COUNTIES

	Rates	Fringes
BRICKLAYER.....	\$ 40.17	27.32

CARP0068-011 05/02/2022

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.....	\$ 41.19	27.05

CARP0231-002 06/05/2023

KENOSHA, MILWAUKEE, OZAUKEE, RACINE, WASHINGTON, AND WAUKESHA  
COUNTIES

	Rates	Fringes
CARPENTER.....	\$ 41.91	29.72

CARP0310-002 06/03/2024

ADAMS, ASHLAND, BAYFIELD (Eastern 2/3), FOREST, IRON, JUNEAU,  
LANGLADE, LINCOLN, MARATHON, ONEIDA, PORTAGE, PRICE, SHAWANO  
(Western Portion of the County), TAYLOR, VILAS, AND WOOD  
COUNTIES

	Rates	Fringes
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CARPENTER.....	\$ 42.44	28.44
Piledriver.....	\$ 42.44	28.44

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CARP0314-001 06/05/2023

COLUMBIA, DANE, DODGE, GRANT, GREEN, IOWA, JEFFERSON,  
LAFAYETTE, RICHLAND, ROCK, SAUK, AND WALWORTH COUNTIES

	Rates	Fringes
CARPENTER.....	\$ 38.86	27.06
Piledriver.....	\$ 39.43	27.02

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CARP0361-004 05/01/2018

BAYFIELD (West of Hwy 63) AND DOUGLAS COUNTIES

	Rates	Fringes
CARPENTER.....	\$ 36.15	20.43

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CARP0731-002 06/03/2024

CALUMET (Eastern Portion of the County), FOND DU LAC (Eastern  
Portion of the County), MANITOWOC, AND SHEBOYGAN COUNTIES

	Rates	Fringes
CARPENTER.....	\$ 42.44	28.44
Piledriver.....	\$ 42.44	28.44

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CARP0955-002 06/03/2024

CALUMET (Western Portion of the County), FOND DU LAC (Western  
Portion of the County), GREEN LAKE, MARQUETTE, OUTAGAMIE,  
WAUPACA, WAUSHARA, AND WINNEBAGO

	Rates	Fringes
CARPENTER.....	\$ 42.44	28.44
PILEDRIIVER.....	\$ 42.44	28.44

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CARP1056-002 06/01/2024

ADAMS, ASHLAND, BARRON, BAYFIELD , BROWN, BUFFALO, BURNETT

,CALUMET, CHIPPEWA, CLARK, COLUMBIA, CRAWFORD, DANE, DODGE, DOOR, DUNN, EAU CLAIRE, FLORENCE, FOND DU LAC, FOREST, GRANT, GREEN, GREEN LAKE, IOWA, IRON, JACKSON, JEFFERSON, JUNEAU, KEWAUNEE, LA CROSSE, LAFAYETTE, LANGLADE, LINCOLN, MANITOWOC, MARATHON, MARINETTE, MARQUETTE, MENOMINEE, MONROE, OCONTO, ONEIDA, OUTAGAMIE, PEPIN, PIERCE (E. of Hwy. 29 & 65), POLK (E. of Hwy. 35, 48 & 65), PORTAGE, PRICE, RICHLAND, ROCK, RUSK, SAUK, SAWYER, SHAWANO, SHEBOYGAN, ST. CROIX (E. of Hwy. 65), TAYLOR, TREMPLEALEAU, VERNON, VILAS, WALWORTH, WASHBURN, WAUPACA, WAUSHARA, WINNEBAGO, AND WOOD COUNTIES

	Rates	Fringes
MILLWRIGHT.....	\$ 42.00	28.85
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CARP1074-002 06/03/2024		

BARRON, BURNETT, CHIPPEWA, CLARK, DUNN, EAU CLAIRE, PEPIN, PIERCE (E. of Hwy. 29 & 65), POLK (E. of Hwy. 35, 48 & 65), RUSK, SAWYER, ST. CROIX (E. of Hwy. 65), AND WASHBURN

	Rates	Fringes
CARPENTER.....	\$ 42.44	28.44
PILEDRIIVER.....	\$ 42.44	28.44
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CARP1143-002 06/03/2024		

BUFFALO, CRAWFORD, JACKSON, LA CROSSE, MONROE, TREMPLEALEAU AND VERNON COUNTIES

	Rates	Fringes
CARPENTER.....	\$ 42.44	28.44
PILEDRIIVER.....	\$ 42.44	28.44
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CARP1146-002 06/03/2024		

BROWN, DOOR, FLORENCE, KEWAUNEE, MARINETTE, MENOMINEE, OCONTO, AND SHAWANO (Western Portion of the County) COUNTIES

	Rates	Fringes
CARPENTER.....	\$ 42.44	28.44
PILEDRIIVER.....	\$ 42.44	28.44

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CARP2337-009 06/03/2024

KENOSHA, MILWAUKEE, OZAUCKEE, RACINE, WASHINGTON, AND WAUKESHA

	Rates	Fringes
PILEDRIVERMAN.....	\$ 42.21	34.07

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ELEC0014-002 05/26/2024

ASHLAND, BARRON, BAYFIELD, BUFFALO, BURNETT, CHIPPEWA, CLARK  
(except Maryville, Colby, Unity, Sherman, Fremont, Lynn &  
Sherwood), CRAWFORD, DUNN, EAU CLAIRE, GRANT, IRON, JACKSON, LA  
CROSSE, MONROE, PEPIN, PIERCE, POLK, PRICE, RICHLAND, RUSK, ST  
CROIX, SAWYER, TAYLOR, TREMPLEAU, VERNON, AND WASHBURN  
COUNTIES

	Rates	Fringes
Electricians:.....	\$ 42.73	23.99

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ELEC0014-007 05/26/2024

REMAINING COUNTIES

	Rates	Fringes
Teledata System Installer		
Installer/Technician.....	\$ 30.27	19.11

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 06/01/2023

KENOSHA COUNTY

	Rates	Fringes
Electricians:.....	\$ 46.05	30%+13.15

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ELEC0158-002 06/01/2024

BROWN, DOOR, KEWAUNEE, MANITOWOC (except Schleswig),  
MARINETTE(Wausuakee and area South thereof), OCONTO, MENOMINEE  
(East of a line 6 miles West of the West boundary of Oconto  
County), SHAWANO (Except Area North of Townships of Aniwa and  
Hutchins) COUNTIES

	Rates	Fringes
ELECTRICIAN.....	\$ 40.25	29.75%+11.17

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ELEC0159-003 05/26/2024

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.....	\$ 48.55	25.91

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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.....	\$ 33.94	21.80
Electrical contracts under		
\$180,000.....	\$ 31.75	21.73

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ELEC0242-005 06/02/2024

DOUGLAS COUNTY

	Rates	Fringes
Electricians:.....	\$ 46.23	69.19%

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ELEC0388-002 06/01/2023

ADAMS, CLARK (Colby, Freemont, Lynn, Mayville, Sherman, Sherwood, Unity), FOREST, JUNEAU, LANGLADE, LINCOLN, MARATHON, MARINETTE (Beecher, Dunbar, Goodman & Pembine), MENOMINEE (Area West of a line 6 miles West of the West boundary of Oconto County), ONEIDA, PORTAGE, SHAWANO (Aniwa and Hutchins), VILAS AND WOOD COUNTIES

	Rates	Fringes
Electricians:.....	\$ 38.74	26%+11.76
-----		

ELEC0430-002 06/01/2023

RACINE COUNTY (Except Burlington Township)

	Rates	Fringes
Electricians:.....	\$ 46.70	25.02
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ELEC0494-005 05/26/2024

MILWAUKEE, OZAUKEE, WASHINGTON, AND WAUKESHA COUNTIES

	Rates	Fringes
Electricians:.....	\$ 49.48	27.34
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ELEC0494-006 05/26/2024

CALUMET (Township of New Holstein), DODGE (East of Hwy 26 including Chester Township), FOND DU LAC, MANITOWOC (Schleswig), and SHEBOYGAN COUNTIES

	Rates	Fringes
Electricians:.....	\$ 42.77	24.66
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ELEC0494-013 05/26/2024

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
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Sound & Communications		
Installer.....	\$ 36.03	18.87
Technician.....	\$ 36.03	18.87

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 05/26/2024

CALUMET (except Township of New Holstein), GREEN LAKE (N. part including Townships of Berlin, St Marie, and Seneca), MARQUETTE (N. part including Townships of Crystal Lake, Neshkoro, Newton, and Springfield), OUTAGAMIE, WAUPACA, WAUSHARA, AND WINNEBAGO COUNTIES

	Rates	Fringes
Electricians:.....	\$ 40.00	22.69

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ELEC0890-003 06/01/2024

DODGE (Emmet Township only), GREEN, JEFFERSON, LAFAYETTE, RACINE (Burlington Township), ROCK AND WALWORTH COUNTIES

	Rates	Fringes
Electricians:.....	\$ 43.65	25.95%+12.26

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ELEC0953-001 06/02/2019

	Rates	Fringes
Line Construction:		
(1) Lineman.....	\$ 47.53	21.43
(2) Heavy Equipment Operator.....	\$ 42.78	19.80
(3) Equipment Operator.....	\$ 38.02	18.40
(4) Heavy Groundman Driver..	\$ 33.27	16.88
(5) Light Groundman Driver..	\$ 30.89	16.11
(6) Groundsman.....	\$ 26.14	14.60
-----		
ENGI0139-005 06/01/2024		

	Rates	Fringes
Power Equipment Operator		
Group 1.....	\$ 46.37	28.80
Group 2.....	\$ 45.87	28.80
Group 3.....	\$ 44.77	28.80
Group 4.....	\$ 44.51	28.80
Group 5.....	\$ 44.22	28.80
Group 6.....	\$ 38.32	28.80

#### 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; bituminous paver; bump cutter & grooving machine; milling machine; screed (bituminous paver); asphalt heater, planer & scarifier; Backhoes (excavators) weighing under 130,000 lbs; grader or motor patrol; tractor (scraper, dozer, pusher, loader); scraper - rubber tired (single or twin engine); endloader; hydraulic backhoe (tractor type); trenching machine; skid rigs; tractor, side boom (heavy); drilling or boring machine (mechanical heavy); roller over 5 tons; percussion or rotary drilling machine; air track; blaster; loading machine (conveyor); tugger; boatmen; winches & A-frames; post driver; material hoist.

GROUP 4: Greaser, roller steel (5 tons or less); roller (pneumatic tired) - self propelled; tractor (mounted or towed compactors & light equipment); shouldering machine; self- propelled chip spreader; concrete spreader; finishing machine; mechanical float; curing machine; power subgrader; joint sawer (multiple blade) belting machine; burlap machine; texturing machine; tractor endloader (rubber tired) - light; jeep digger; forklift; mulcher; launch operator; fireman, environmental burner

GROUP 5: Air compressor; power pack; vibrator hammer and extractor; heavy equipment, leadman; tank car heaters; stump chipper; curb machine operator; Concrete proportioning plants; generators; mudjack operator; rock breaker; crusher or screening plant; screed (milling machine); automatic belt conveyor and surge bin; pug mill operator; Oiler, pump (over 3 inches); Drilling Machine Tender, day light machine

GROUP 6: Off-road material hauler with or without ejector.

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IRON0008-002 06/02/2024

BROWN, CALUMET, DOOR, FOND DU LAC, KEWAUNEE, MANITOWOC,  
MARINETTE, OCONTO, OUTAGAMI, SHAWANO, SHEBOYGAN, AND WINNEBAGO  
COUNTIES:

Rates

Fringes

IRONWORKER.....\$ 43.02                      32.32

    Paid Holidays: New Year's Day, Memorial Day, July 4th, Labor  
    Day, Thanksgiving Day & Christmas Day.

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IRON0008-003 06/02/2024

KENOSHA, MILWAUKEE, OZAUCKEE, RACINE, WALWORTH (N.E. 2/3),  
WASHINGTON, AND WAUKESHA COUNTIES

	Rates	Fringes
IRONWORKER.....	\$ 44.79	32.32

    Paid Holidays: New Year's Day, Memorial Day, July 4th, Labor  
    Day, Thanksgiving Day & Christmas Day.

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IRON0383-001 06/02/2024

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.....	\$ 42.00	31.93

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IRON0498-005 06/01/2024

GREEN (S.E. 1/3), ROCK (South of Edgerton and Milton), and  
WALWORTH (S.W. 1/3) COUNTIES:

	Rates	Fringes
IRONWORKER.....	\$ 46.59	48.80

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IRON0512-008 04/28/2024

BARRON, BUFFALO, CHIPPEWA, CLARK, DUNN, EAU CLAIRE, JACKSON,  
PEPIN, PIERCE, POLK, RUSK, ST CROIX, TAYLOR, AND TREMPLEAU  
COUNTIES

	Rates	Fringes
IRONWORKER.....	\$ 44.85	35.22
-----		
IRON0512-021 04/28/2024		

ASHLAND, BAYFIELD, BURNETT, DOUGLAS, IRON, LINCOLN, ONEIDA,  
PRICE, SAWYER, VILAS AND WASHBURN COUNTIES

	Rates	Fringes
IRONWORKER.....	\$ 41.19	34.68
-----		
LABO0113-002 06/03/2024		

MILWAUKEE AND WAUKESHA COUNTIES

	Rates	Fringes
LABORER		
Group 1.....	\$ 35.61	25.01
Group 2.....	\$ 35.76	25.01
Group 3.....	\$ 35.96	25.01
Group 4.....	\$ 36.11	25.01
Group 5.....	\$ 36.26	25.01
Group 6.....	\$ 32.10	25.01

#### LABORERS CLASSIFICATIONS

GROUP 1: General Laborer; Tree Trimmer; Conduit Layer;  
Demolition and Wrecking Laborer; Guard Rail, Fence, and  
Bridge Builder; Landscaper; Multiplate Culvert Assembler;  
Stone Handler; Bituminous Worker (Shoveler, Loader, and  
Utility Man); Batch Truck Dumper or Cement Handler;  
Bituminous Worker (Dumper, Ironer, Smoother, and Tamper);  
Concrete Handler

GROUP 2: Air Tool Operator; Joint Sawyer and Filler  
(Pavement); Vibrator or Tamper Operator (Mechanical Hand  
Operated); Chain Saw Operator; Demolition Burning Torch  
Laborer

GROUP 3: Bituminous Worker (Raker and Luteman); Formsetter  
(Curb, Sidewalk, and Pavement); Strike Off Man

GROUP 4: Line and Grade Specialist

GROUP 5: Blaster and Powderman

GROUP 6: Flagperson; traffic control person

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LAB00113-003 06/03/2024

OZAUKEE AND WASHINGTON COUNTIES

	Rates	Fringes
LABORER		
Group 1.....	\$ 34.86	25.01
Group 2.....	\$ 34.96	25.01
Group 3.....	\$ 35.01	25.01
Group 4.....	\$ 35.21	25.01
Group 5.....	\$ 35.06	25.01
Group 6.....	\$ 31.95	25.01

LABORERS CLASSIFICATIONS

GROUP 1: General Laborer; Tree Trimmer; Conduit Layer; Demolition and Wrecking Laborer; Guard Rail, Fence, and Bridge Builder; Landscaper; Multiplate Culvert Assembler; Stone Handler; Bituminous Worker (Shoveler, Loader, and Utility Man); Batch Truck Dumper or Cement Handler; Bituminous Worker (Dumper, Ironer, Smoother, and Tamper); Concrete Handler

GROUP 2: Air Tool Operator; Joint Sawyer and Filler (Pavement); Vibrator or Tamper Operator (Mechanical Hand Operated);

GROUP 3: Bituminous Worker (Raker and Luteman); Formsetter (Curb, Sidewalk, and Pavement); Strike Off Man

GROUP 4: Line and Grade Specialist

GROUP 5: Blaster; powderman

GROUP 6: Flagperson and Traffic Control Person

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LAB00113-011 06/03/2024

KENOSHA AND RACINE COUNTIES

Rates	Fringes
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LABORER		
Group 1.....	\$ 34.67	25.01
Group 2.....	\$ 34.82	25.01
Group 3.....	\$ 35.02	25.01
Group 4.....	\$ 34.99	25.01
Group 5.....	\$ 35.32	25.01
Group 6.....	\$ 31.81	25.01

LABORERS CLASSIFICATIONS:

- GROUP 1: General laborer; Tree Trimmer; Conduit Layer; Demolition and Wrecking Laborer; Guard Rail, Fence, and Bridge Builder; Landscaper; Multiplate Culvert Assembler; Stone Handler; Bituminous Worker (Shoveler, Loader, and Utility Man); Batch Truck Dumper or Cement Handler; Bituminous worker (Dumper, Ironer, Smoother, and Tamper); Concrete Handler
- GROUP 2: Air Tool Operator; Joint Sawyer and Filler (Pavement); Vibrator or Tamper Operator (Mechanical Hand Operated); Chain Saw Operator; Demolition Burning Torch Laborer
- GROUP 3: Bituminous Worker (Raker and Luteman); Formsetter (Curb, Sidewalk, and Pavement); Strike Off Man
- GROUP 4: Line and Grade Specialist
- GROUP 5: Blaster and Powderman
- GROUP 6: Flagman; traffic control person
- LAB00140-002 06/03/2024

ADAMS, ASHLAND, BARRON, BAYFIELD, BROWN, BUFFALO, BURNETT, CALUMET, CHIPPEWA, CLARK, COLUMBIA, CRAWFORD, DODGE, DOOR, DOUGLAS, DUNN, EAU CLAIRE, FLORENCE, FOND DU LAC, FOREST, GRANT, GREEN, GREEN LAKE, IRON, JACKSON, JUNEAU, IOWA, JEFFERSON, KEWAUNEE, LA CROSSE, LAFAYETTE, LANGLADE, LINCOLN, MANITOWOC, MARATHON, MARINETTE, MARQUETTE, MENOMINEE, MONROE, OCONTO, ONEIDA, OUTAGAMIE, PEPIN, PIERCE, POLK, PORTAGE, PRICE, RICHLAND, ROCK, RUSK, SAUK, SAWYER, SHAWANO, SHEBOYGAN, ST. CROIX, TAYLOR, TREMPLEAU, VERNON, VILLAS, WALWORTH, WASHBURN, WAUPACA, WAUSHARA, WINNEBAGO, AND WOOD COUNTIES

LABORER		
Group 1.....	\$ 40.57	19.45
Group 2.....	\$ 40.67	19.45
Group 3.....	\$ 40.72	19.45
Group 4.....	\$ 40.92	19.45
Group 5.....	\$ 40.77	19.45
Group 6.....	\$ 37.20	19.45

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 Sawyer and Filler (Pavement); Vibrator or Tamper Operator (Mechanical Hand Operated); Chain Saw Operator, Demolition Burning Torch Laborer

GROUP 3: Bituminous Worker (Raker and Luteman); Formsetter (Curb, Sidewalk and Pavement); Strike Off Man

GROUP 4: Line and Grade Specialist

GROUP 5: Blaster; powderman

GROUP 6: Flagperson; Traffic Control

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LAB00464-003 06/03/2024

DANE COUNTY

	Rates	Fringes
LABORER		
Group 1.....	\$ 40.85	19.45
Group 2.....	\$ 40.95	19.45
Group 3.....	\$ 41.00	19.45
Group 4.....	\$ 41.20	19.45
Group 5.....	\$ 41.05	19.45
Group 6.....	\$ 37.20	19.45

LABORERS CLASSIFICATIONS:

GROUP 1: General Laborer; Tree Trimmer; Conduit Layer; Demolition and Wrecking Laborer; Guard Rail, Fence, and Bridge Builder; Landscaper; Multiplate Culvert Assembler; Stone Handler; Bituminous Worker (Shoveler, Loader, and Utility Man); Batch Truck Dumper or Cement Handler; Bituminous Worker (Dumper, Ironer, Smoother, and Tamper); Concrete Handler

GROUP 2: Air Tool Operator; Joint Sawyer and Filler (Pavement); Vibrator or Tamper Operator (Mechanical Hand Operated); Chain Saw Operator; Demolition Burning Torch Laborer

GROUP 3: Bituminous Worker (Raker and Luteman); Formsetter (Curb, Sidewalk, and Pavement); Strike Off Man

GROUP 4: Line and Grade Specialist

GROUP 5: Blaster; Powderman

GROUP 6: Flagperson and Traffic Control Person

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PAIN0106-008 05/06/2024

ASHLAND, BAYFIELD, BURNETT, AND DOUGLAS COUNTIES

	Rates	Fringes
Painters:		
New:		
Brush, Roller.....	\$ 36.16	26.27
Spray, Sandblast, Steel....	\$ 36.76	26.27
Repaint:		
Brush, Roller.....	\$ 34.66	26.27
Spray, Sandblast, Steel....	\$ 35.26	26.27

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PAIN0108-002 06/01/2024

RACINE COUNTY

	Rates	Fringes
Painters:		
Brush, Roller.....	\$ 42.04	22.95
Spray & Sandblast.....	\$ 43.04	22.95

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PAIN0259-002 05/01/2008

BARRON, CHIPPEWA, DUNN, EAU CLAIRE, PEPIN, PIERCE, POLK, RUSK,  
SAWYER, ST. CROIX, AND WASHBURN COUNTIES

	Rates	Fringes
PAINTER.....	\$ 24.11	12.15
-----		
PAIN0259-004 05/01/2015		

BUFFALO, CRAWFORD, JACKSON, LA CROSSE, MONROE, TREMPLEAU, AND  
VERNON COUNTIES

	Rates	Fringes
PAINTER.....	\$ 22.03	12.45
-----		
PAIN0781-002 06/01/2024		

JEFFERSON, MILWAUKEE, OZAUKEE, WASHINGTON, AND WAUKESHA COUNTIES

	Rates	Fringes
Painters:		
Bridge.....	\$ 41.39	24.92
Brush.....	\$ 40.64	24.92
Spray & Sandblast.....	\$ 41.39	24.92
-----		
PAIN0802-002 06/01/2024		

COLUMBIA, DANE, DODGE, GRANT, GREEN, IOWA, LAFAYETTE, RICHLAND,  
ROCK, AND SAUK COUNTIES

	Rates	Fringes
PAINTER		
Brush.....	\$ 36.35	20.87
PREMIUM PAY:		
Structural Steel, Spray, Bridges =   \$1.00 additional per		
hour.		
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PAIN0802-003 06/01/2024		

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.....	\$ 36.35	20.87
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PAIN0934-001 06/01/2024		

KENOSHA AND WALWORTH COUNTIES

	Rates	Fringes
Painters:		
Brush.....	\$ 38.67	26.32
Spray.....	\$ 39.67	26.32
Structural Steel.....	\$ 38.82	26.32
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PAIN1011-002 06/02/2024		

FLORENCE COUNTY

	Rates	Fringes
Painters:.....	\$ 29.95	15.89
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PLAS0599-002 06/01/2024		

	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER		
Area A.....	\$ 47.17	30.35
Area B.....	\$ 41.62	26.34
Area C.....	\$ 42.74	25.91
Area D.....	\$ 43.16	25.49
Area E.....	\$ 42.25	26.39
Area F.....	\$ 38.98	29.67

AREA DESCRIPTIONS

AREA A: ASHLAND, BURNETT, BAYFIELD, DOUGLAS, IRON, PRICE,  
SAWYER, AND WASHBURN COUNTIES

AREA B: ADAMS, BARRON, BROWN, CALUMET, CHIPPEWA, CLARK,  
COLUMBIA, DODGE, DOOR, DUNN, FLORENCE, FOND DU LAC, FOREST,  
GREEN LAKE, 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 C: BUFFALO, CRAWFORD, EAU CLAIRE, JACKSON, JUNEAU, LA  
CROSSE, MONROE, PEPIN, PIERCE, RICHLAND, TREMPLEAU, AND  
VERNON COUNTIES

AREA D: MILWAUKEE, OZAUKEE, WASHINGTON, AND WAUKESHA COUNTIES

AREA E: DANE, GRANT, GREEN, IOWA, LAFAYETTE, AND ROCK COUNTIES

AREA F: KENOSHA AND RACINE COUNTIES

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TEAM0039-001 06/01/2024

	Rates	Fringes
TRUCK DRIVER		
1 & 2 Axles.....	\$ 37.57	27.41
3 or more Axles; Euclids, Dumpton & Articulated, Truck Mechanic.....	\$ 37.72	27.41

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WELDERS - Receive rate prescribed for craft performing  
operation to which welding is incidental.

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Note: Executive Order (EO) 13706, Establishing Paid Sick Leave  
for Federal Contractors applies to all contracts subject to the  
Davis-Bacon Act for which the contract is awarded (and any  
solicitation was issued) on or after January 1, 2017. If this  
contract is covered by the EO, the contractor must provide  
employees with 1 hour of paid sick leave for every 30 hours  
they work, up to 56 hours of paid sick leave each year.  
Employees must be permitted to use paid sick leave for their  
own illness, injury or other health-related needs, including  
preventive care; to assist a family member (or person who is  
like family to the employee) who is ill, injured, or has other  
health-related needs, including preventive care; or for reasons  
resulting from, or to assist a family member (or person who is  
like family to the employee) who is a victim of, domestic  
violence, sexual assault, or stalking. Additional information  
on contractor requirements and worker protections under the EO

is available at  
<https://www.dol.gov/agencies/whd/government-contracts>.

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) (iii)).

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The body of each wage determination lists the classifications and wage rates that have been found to be prevailing for the type(s) of construction and geographic area covered by the wage determination. The classifications are listed in alphabetical order under rate identifiers indicating whether the particular rate is a union rate (current union negotiated rate), a survey rate, a weighted union average rate, a state adopted rate, or a supplemental classification rate.

#### Union Rate Identifiers

A four-letter identifier beginning with characters other than ""SU"", ""UAVG"", ?SA?, or ?SC? denotes that a union rate was prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2024. PLUM is an identifier of the union whose collectively bargained rate 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. The date, 07/01/2024 in the example, is the effective date of the most current negotiated rate.

Union prevailing wage rates are updated to reflect all changes over time that are reported to WHD in the rates in the collective bargaining agreement (CBA) governing the classification.

#### Union Average Rate Identifiers

The UAVG identifier indicates that no single rate prevailed for those classifications, but that 100% of the data reported for the classifications reflected union rates. EXAMPLE: UAVG-OH-0010 01/01/2024. UAVG indicates that the rate is a weighted union average rate. OH indicates the State of Ohio. The next number, 0010 in the example, is an internal number used in producing the wage determination. The date, 01/01/2024

in the example, indicates the date the wage determination was updated to reflect the most current union average rate.

A UAVG rate will be updated once a year, usually in January, to reflect a weighted average of the current rates in the collective bargaining agreements on which the rate is based.

Survey Rate Identifiers

The ""SU"" identifier indicates that either a single non-union rate prevailed (as defined in 29 CFR 1.2) for this classification in the survey or that the rate was derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As a weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SUFL2022-007 6/27/2024. SU indicates the rate is a single non-union prevailing rate or a weighted average of survey data for that classification. FL indicates the State of Florida. 2022 is the year of the 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. The date, 6/27/2024 in the example, indicates the survey completion date for the classifications and rates under that identifier.

?SU? wage rates typically remain in effect until a new survey is conducted. However, the Wage and Hour Division (WHD) has the discretion to update such rates under 29 CFR 1.6(c)(1).

State Adopted Rate Identifiers

The ""SA"" identifier indicates that the classifications and prevailing wage rates set by a state (or local) government were adopted under 29 C.F.R 1.3(g)-(h). Example: SAME2023-007 01/03/2024. SA reflects that the rates are state adopted. ME refers to the State of Maine. 2023 is the year during which the state completed the survey on which the listed classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. The date, 01/03/2024 in the example, reflects the date on which the classifications and rates under the ?SA? identifier took effect under state law in the state from which the rates were adopted.

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WAGE DETERMINATION APPEALS PROCESS

1) Has there been an initial decision in the matter? This can

be:

- a) a survey underlying a wage determination
- b) an existing published wage determination
- c) an initial WHD letter setting forth a position on a wage determination matter
- d) an initial conformance (additional classification and rate) determination

On survey related matters, initial contact, including requests for summaries of surveys, should be directed to the WHD Branch of Wage Surveys. Requests can be submitted via email to [davisbaconinfo@dol.gov](mailto:davisbaconinfo@dol.gov) or by mail to:

Branch of Wage Surveys  
Wage and Hour Division  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

Regarding any other wage determination matter such as conformance decisions, requests for initial decisions should be directed to the WHD Branch of Construction Wage Determinations. Requests can be submitted via email to [BCWD-Office@dol.gov](mailto:BCWD-Office@dol.gov) or by mail 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 an initial decision has been issued, then any interested party (those affected by the action) that disagrees with the decision can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Requests for review and reconsideration can be submitted via email to [dba.reconsideration@dol.gov](mailto:dba.reconsideration@dol.gov) or by mail 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 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.

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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.



## Proposal Schedule of Items

Page 1 of 25

Proposal ID: 20250211016 Project(s): 2590-04-71

Federal ID(s): WISC 2025314

SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0002	108.4400 CPM Progress Schedule	1.000 EACH	_____.	_____.
0004	201.0105 Clearing	24.000 STA	_____.	_____.
0006	201.0120 Clearing	614.000 ID	_____.	_____.
0008	201.0205 Grubbing	53.000 STA	_____.	_____.
0010	201.0220 Grubbing	1,808.000 ID	_____.	_____.
0012	204.0100 Removing Concrete Pavement	110,080.000 SY	_____.	_____.
0014	204.0115 Removing Asphaltic Surface Butt Joints	1,116.000 SY	_____.	_____.
0016	204.0150 Removing Curb & Gutter	201.000 LF	_____.	_____.
0018	204.0155 Removing Concrete Sidewalk	15,620.000 SY	_____.	_____.
0020	204.0195 Removing Concrete Bases	124.000 EACH	_____.	_____.
0022	204.0210 Removing Manholes	58.000 EACH	_____.	_____.
0024	204.0220 Removing Inlets	113.000 EACH	_____.	_____.
0026	204.0245 Removing Storm Sewer (size) 006. 6-Inch	9.000 LF	_____.	_____.
0028	204.0245 Removing Storm Sewer (size) 008. 8-Inch	2,022.000 LF	_____.	_____.
0030	204.0245 Removing Storm Sewer (size) 012. 12-Inch	742.000 LF	_____.	_____.



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Alt Set ID:

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Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0032	204.0245 Removing Storm Sewer (size) 018. 18-Inch	63.000 LF	_____.	_____.
0034	204.0245 Removing Storm Sewer (size) 021. 21-Inch	42.000 LF	_____.	_____.
0036	204.0245 Removing Storm Sewer (size) 024. 24-Inch	38.000 LF	_____.	_____.
0038	204.0245 Removing Storm Sewer (size) 036. 36-Inch	62.000 LF	_____.	_____.
0040	204.0250 Abandoning Manholes	3.000 EACH	_____.	_____.
0042	204.0260 Abandoning Inlets	4.000 EACH	_____.	_____.
0044	204.0280 Sealing Pipes	11.000 EACH	_____.	_____.
0046	204.9060.S Removing (item description) 300. Removing Poles	251.000 EACH	_____.	_____.
0048	204.9090.S Removing (item description) 300. Removing Aerial Cable	17,994.000 LF	_____.	_____.
0050	205.0100 Excavation Common	90,343.000 CY	_____.	_____.
0052	211.0101 Prepare Foundation for Asphaltic Paving (project) 001. 2590-04-71	1.000 EACH	_____.	_____.
0054	213.0100 Finishing Roadway (project) 001. 2590-04-71	1.000 EACH	_____.	_____.
0056	305.0120 Base Aggregate Dense 1 1/4-Inch	63,229.000 TON	_____.	_____.
0058	405.0100 Coloring Concrete WisDOT Red	244.000 CY	_____.	_____.



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Alt Set ID:

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Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0060	405.0200 Coloring Concrete Custom	1,971.000 CY	_____.	_____.
0062	415.0080 Concrete Pavement 8-Inch	59,071.000 SY	_____.	_____.
0064	415.0210 Concrete Pavement Gaps	13.000 EACH	_____.	_____.
0066	415.2010 Concrete Truck Apron 12-inch	653.000 SY	_____.	_____.
0068	416.0610 Drilled Tie Bars	578.000 EACH	_____.	_____.
0070	416.0620 Drilled Dowel Bars	969.000 EACH	_____.	_____.
0072	416.1725 Concrete Pavement Replacement SHES	132.000 SY	_____.	_____.
0074	455.0605 Tack Coat	3,779.000 GAL	_____.	_____.
0076	460.5224 HMA Pavement 4 LT 58-28 S	109.000 TON	_____.	_____.
0078	465.0125 Asphaltic Surface Temporary	2,723.000 TON	_____.	_____.
0080	495.1000.S Cold Patch	169.000 TON	_____.	_____.
0082	520.8000 Concrete Collars for Pipe	190.000 EACH	_____.	_____.
0084	601.0319 Concrete Curb & Gutter 19-Inch	17,353.000 LF	_____.	_____.
0086	601.0322 Concrete Curb & Gutter 22-Inch	766.000 LF	_____.	_____.
0088	601.0331 Concrete Curb & Gutter 31-Inch	28,512.000 LF	_____.	_____.
0090	601.0574 Concrete Curb & Gutter 4-Inch Sloped 30-Inch Type G	813.000 LF	_____.	_____.



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Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0092	601.0580 Concrete Curb & Gutter 4-Inch Sloped 36-Inch Type R	499.000 LF	_____.	_____.
0094	601.0600 Concrete Curb Pedestrian	2,347.000 LF	_____.	_____.
0096	602.0410 Concrete Sidewalk 5-Inch	324,286.000 SF	_____.	_____.
0098	602.0515 Curb Ramp Detectable Warning Field Natural Patina	3,582.000 SF	_____.	_____.
0100	602.0615 Curb Ramp Detectable Warning Field Radial Natural Patina	1,011.000 SF	_____.	_____.
0102	602.0815 Concrete Driveway 7-Inch	497.000 SY	_____.	_____.
0104	602.0820 Concrete Driveway 8-Inch	1,923.000 SY	_____.	_____.
0106	602.0865 Concrete Driveway HES 7-Inch	427.000 SY	_____.	_____.
0108	602.0870 Concrete Driveway HES 8-Inch	1,439.000 SY	_____.	_____.
0110	602.1000 Concrete Loading Zone	2,055.000 SF	_____.	_____.
0112	602.2400 Concrete Safety Islands	364.000 SF	_____.	_____.
0114	608.0412 Storm Sewer Pipe Reinforced Concrete Class IV 12-Inch	3,875.000 LF	_____.	_____.
0116	608.0415 Storm Sewer Pipe Reinforced Concrete Class IV 15-Inch	64.000 LF	_____.	_____.
0118	608.0418 Storm Sewer Pipe Reinforced Concrete Class IV 18-Inch	157.000 LF	_____.	_____.



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Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0120	608.0421 Storm Sewer Pipe Reinforced Concrete Class IV 21-Inch	87.000 LF	_____.	_____.
0122	608.0424 Storm Sewer Pipe Reinforced Concrete Class IV 24-Inch	8.000 LF	_____.	_____.
0124	608.0427 Storm Sewer Pipe Reinforced Concrete Class IV 27-Inch	16.000 LF	_____.	_____.
0126	608.0430 Storm Sewer Pipe Reinforced Concrete Class IV 30-Inch	20.000 LF	_____.	_____.
0128	608.0436 Storm Sewer Pipe Reinforced Concrete Class IV 36-Inch	134.000 LF	_____.	_____.
0130	611.0420 Reconstructing Manholes	26.000 EACH	_____.	_____.
0132	611.0430 Reconstructing Inlets	1.000 EACH	_____.	_____.
0134	611.0652 Inlet Covers Type T	4.000 EACH	_____.	_____.
0136	611.1004 Catch Basins 4-FT Diameter	48.000 EACH	_____.	_____.
0138	611.1005 Catch Basins 5-FT Diameter	32.000 EACH	_____.	_____.
0140	611.1006 Catch Basins 6-FT Diameter	19.000 EACH	_____.	_____.
0142	611.1230 Catch Basins 2x3-FT	39.000 EACH	_____.	_____.
0144	611.2003 Manholes 3-FT Diameter	17.000 EACH	_____.	_____.
0146	611.2004 Manholes 4-FT Diameter	45.000 EACH	_____.	_____.
0148	611.2005 Manholes 5-FT Diameter	1.000 EACH	_____.	_____.



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Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0150	611.2008 Manholes 8-FT Diameter	5.000 EACH	_____.	_____.
0152	611.3004 Inlets 4-FT Diameter	15.000 EACH	_____.	_____.
0154	611.3230 Inlets 2x3-FT	7.000 EACH	_____.	_____.
0156	611.8110 Adjusting Manhole Covers	83.000 EACH	_____.	_____.
0158	611.8115 Adjusting Inlet Covers	5.000 EACH	_____.	_____.
0160	612.0106 Pipe Underdrain 6-Inch	698.000 LF	_____.	_____.
0162	612.0206 Pipe Underdrain Unperforated 6-Inch	111.000 LF	_____.	_____.
0164	612.0208 Pipe Underdrain Unperforated 8-Inch	114.000 LF	_____.	_____.
0166	618.0100 Maintenance and Repair of Haul Roads (project) 001. 2590-04-71	1.000 EACH	_____.	_____.
0168	619.1000 Mobilization	1.000 EACH	_____.	_____.
0170	620.0100 Concrete Corrugated Median	63.000 SF	_____.	_____.
0172	620.0300 Concrete Median Sloped Nose	929.000 SF	_____.	_____.
0174	623.0200 Dust Control Surface Treatment	87,100.000 SY	_____.	_____.
0176	624.0100 Water	1,620.000 MGAL	_____.	_____.
0178	625.0100 Topsoil	49,500.000 SY	_____.	_____.
0180	627.0200 Mulching	49,500.000 SY	_____.	_____.



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Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0182	628.1504 Silt Fence	2,250.000 LF	_____.	_____.
0184	628.1520 Silt Fence Maintenance	1,125.000 LF	_____.	_____.
0186	628.1905 Mobilizations Erosion Control	6.000 EACH	_____.	_____.
0188	628.1910 Mobilizations Emergency Erosion Control	8.000 EACH	_____.	_____.
0190	628.2006 Erosion Mat Urban Class I Type A	170.000 SY	_____.	_____.
0192	628.7005 Inlet Protection Type A	206.000 EACH	_____.	_____.
0194	628.7010 Inlet Protection Type B	223.000 EACH	_____.	_____.
0196	628.7015 Inlet Protection Type C	3.000 EACH	_____.	_____.
0198	628.7020 Inlet Protection Type D	10.000 EACH	_____.	_____.
0200	628.7560 Tracking Pads	8.000 EACH	_____.	_____.
0202	629.0210 Fertilizer Type B	23.000 CWT	_____.	_____.
0204	630.0200 Seeding Temporary	1,500.000 LB	_____.	_____.
0206	631.0300 Sod Water	1,110.000 MGAL	_____.	_____.
0208	631.1000 Sod Lawn	49,658.000 SY	_____.	_____.
0210	632.0101 Trees (species, root, size) 001. Frontier Elm 3" CAL. B&B	49.000 EACH	_____.	_____.



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Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0212	632.0101 Trees (species, root, size) 002. Upright English Oak 3" CAL. B&B	7.000 EACH	_____.	_____.
0214	632.0101 Trees (species, root, size) 003. Crimson Spire Oak 3" CAL. B&B	75.000 EACH	_____.	_____.
0216	632.0101 Trees (species, root, size) 004. Autumn Blaze Maple 3.5" CAL. B&B	8.000 EACH	_____.	_____.
0218	632.0101 Trees (species, root, size) 005. Sunburst Honeylocust 3" CAL. B&B	45.000 EACH	_____.	_____.
0220	632.0101 Trees (species, root, size) 006. Pacific Sunset Maple 2.5" CAL. B&B	3.000 EACH	_____.	_____.
0222	632.0101 Trees (species, root, size) 007. Japanese Tree Lilac 2.5" CAL. B&B	49.000 EACH	_____.	_____.
0224	632.0101 Trees (species, root, size) 008. Adams Crabapple 2.5" CAL. B&B	22.000 EACH	_____.	_____.
0226	632.0101 Trees (species, root, size) 009. Golden Raindrops Crabapple 2.5" CAL. B&B	24.000 EACH	_____.	_____.
0228	632.0101 Trees (species, root, size) 010. Prairie Fire Crabapple 2.5" CAL. B&B	3.000 EACH	_____.	_____.
0230	632.0101 Trees (species, root, size) 011. Adirondack Crabapple 2.5" CAL. B&B	12.000 EACH	_____.	_____.
0232	632.0101 Trees (species, root, size) 012. Tulip Tree 3" CAL. B&B	7.000 EACH	_____.	_____.
0234	632.0101 Trees (species, root, size) 013. Raspberry Spear Crabapple 2.5" CAL. B&B	10.000 EACH	_____.	_____.



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Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0236	632.0101 Trees (species, root, size) 014. Kentucky Coffeetree 3" CAL. B&B	17.000 EACH	_____.	_____.
0238	632.0101 Trees (species, root, size) 015. Purple Prince Crabapple 2.5" CAL. B&B	25.000 EACH	_____.	_____.
0240	632.0101 Trees (species, root, size) 016. Pink Spire Crabapple 2.5" CAL. B&B	7.000 EACH	_____.	_____.
0242	632.0101 Trees (species, root, size) 017. Redpointe Maple 3" CAL. B&B	13.000 EACH	_____.	_____.
0244	632.0101 Trees (species, root, size) 018. Fort Mcnair Red Horsechestnut 3" CAL. B&B	37.000 EACH	_____.	_____.
0246	632.0101 Trees (species, root, size) 019. Dawn Redwood 3" CAL. B&B	13.000 EACH	_____.	_____.
0248	632.9101 Landscape Planting Surveillance and Care Cycles	30.000 EACH	_____.	_____.
0250	637.2210 Signs Type II Reflective H	1,193.710 SF	_____.	_____.
0252	637.2230 Signs Type II Reflective F	505.000 SF	_____.	_____.
0254	638.2102 Moving Signs Type II	4.000 EACH	_____.	_____.
0256	638.2602 Removing Signs Type II	41.000 EACH	_____.	_____.
0258	638.3000 Removing Small Sign Supports	1.000 EACH	_____.	_____.
0260	643.0300 Traffic Control Drums	79,721.000 DAY	_____.	_____.
0262	643.0410 Traffic Control Barricades Type II	2,728.000 DAY	_____.	_____.



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Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0264	643.0420 Traffic Control Barricades Type III	58,855.000 DAY	_____.	_____.
0266	643.0500 Traffic Control Flexible Tubular Marker Posts	395.000 EACH	_____.	_____.
0268	643.0600 Traffic Control Flexible Tubular Marker Bases	395.000 EACH	_____.	_____.
0270	643.0705 Traffic Control Warning Lights Type A	114,453.000 DAY	_____.	_____.
0272	643.0715 Traffic Control Warning Lights Type C	9,263.000 DAY	_____.	_____.
0274	643.0800 Traffic Control Arrow Boards	1,614.000 DAY	_____.	_____.
0276	643.0900 Traffic Control Signs	79,483.000 DAY	_____.	_____.
0278	643.0920 Traffic Control Covering Signs Type II	5.000 EACH	_____.	_____.
0280	643.1050 Traffic Control Signs PCMS	84.000 DAY	_____.	_____.
0282	643.3105 Temporary Marking Line Paint 4-Inch	25,423.000 LF	_____.	_____.
0284	643.3150 Temporary Marking Line Removable Tape 4-Inch	2,205.000 LF	_____.	_____.
0286	643.3205 Temporary Marking Line Paint 8-Inch	964.000 LF	_____.	_____.
0288	643.3505 Temporary Marking Arrow Paint	17.000 EACH	_____.	_____.
0290	643.3605 Temporary Marking Word Paint	1.000 EACH	_____.	_____.
0292	643.3960 Temporary Marking Removable Mask Out Tape 6-Inch	2,450.000 LF	_____.	_____.



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Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0294	643.5000 Traffic Control	1.000 EACH	_____.	_____.
0296	644.1410 Temporary Pedestrian Surface Asphalt	808.000 SF	_____.	_____.
0298	644.1440 Temporary Pedestrian Surface Matting	3,615.000 SF	_____.	_____.
0300	644.1601 Temporary Pedestrian Curb Ramp	209.000 DAY	_____.	_____.
0302	644.1605 Temporary Pedestrian Detectable Warning Field	282.000 SF	_____.	_____.
0304	644.1810 Temporary Pedestrian Barricade	4,835.000 LF	_____.	_____.
0306	645.0112 Geotextile Type DF Schedule B	233.000 SY	_____.	_____.
0308	645.0130 Geotextile Type R	65.000 SY	_____.	_____.
0310	646.1020 Marking Line Epoxy 4-Inch	6,125.000 LF	_____.	_____.
0312	646.2020 Marking Line Epoxy 6-Inch	1,533.000 LF	_____.	_____.
0314	646.3020 Marking Line Epoxy 8-Inch	5,824.000 LF	_____.	_____.
0316	646.5020 Marking Arrow Epoxy	140.000 EACH	_____.	_____.
0318	646.5120 Marking Word Epoxy	14.000 EACH	_____.	_____.
0320	646.5220 Marking Symbol Epoxy	117.000 EACH	_____.	_____.
0322	646.6320 Marking Dotted Extension Epoxy 18-Inch	166.000 LF	_____.	_____.
0324	646.7120 Marking Diagonal Epoxy 12-Inch	239.000 LF	_____.	_____.



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Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0326	646.7220 Marking Chevron Epoxy 24-Inch	125.000 LF	_____.	_____.
0328	646.8120 Marking Curb Epoxy	1,571.000 LF	_____.	_____.
0330	646.8220 Marking Island Nose Epoxy	68.000 EACH	_____.	_____.
0332	646.9000 Marking Removal Line 4-Inch	1,947.000 LF	_____.	_____.
0334	646.9010 Marking Removal Line Water Blasting 4-Inch	181.000 LF	_____.	_____.
0336	646.9210 Marking Removal Line Water Blasting Wide	508.000 LF	_____.	_____.
0338	652.0225 Conduit Rigid Nonmetallic Schedule 40 2-Inch	2,160.000 LF	_____.	_____.
0340	652.0235 Conduit Rigid Nonmetallic Schedule 40 3-Inch	13,776.000 LF	_____.	_____.
0342	652.0335 Conduit Rigid Nonmetallic Schedule 80 3-Inch	8,549.000 LF	_____.	_____.
0344	652.0615 Conduit Special 3-Inch	1,649.000 LF	_____.	_____.
0346	654.0101 Concrete Bases Type 1	15.000 EACH	_____.	_____.
0348	654.0102 Concrete Bases Type 2	10.000 EACH	_____.	_____.
0350	654.0105 Concrete Bases Type 5	121.000 EACH	_____.	_____.
0352	654.0110 Concrete Bases Type 10	8.000 EACH	_____.	_____.
0354	655.0230 Cable Traffic Signal 5-14 AWG	1,140.000 LF	_____.	_____.



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0356	655.0240 Cable Traffic Signal 7-14 AWG	2,250.000 LF	_____.	_____.
0358	655.0260 Cable Traffic Signal 12-14 AWG	5,485.000 LF	_____.	_____.
0360	655.0270 Cable Traffic Signal 15-14 AWG	1,120.000 LF	_____.	_____.
0362	655.0305 Cable Type UF 2-12 AWG Grounded	2,901.000 LF	_____.	_____.
0364	655.0515 Electrical Wire Traffic Signals 10 AWG	3,955.000 LF	_____.	_____.
0366	655.0610 Electrical Wire Lighting 12 AWG	31,896.000 LF	_____.	_____.
0368	655.0900 Traffic Signal EVP Detector Cable	2,225.000 LF	_____.	_____.
0370	657.0100 Pedestal Bases	15.000 EACH	_____.	_____.
0372	657.0255 Transformer Bases Breakaway 11 1/2-Inch Bolt Circle	131.000 EACH	_____.	_____.
0374	657.0310 Poles Type 3	10.000 EACH	_____.	_____.
0376	657.0322 Poles Type 5-Aluminum	121.000 EACH	_____.	_____.
0378	657.0345 Poles Type 9	4.000 EACH	_____.	_____.
0380	657.0350 Poles Type 10	4.000 EACH	_____.	_____.
0382	657.0405 Traffic Signal Standards Aluminum 3.5-FT	3.000 EACH	_____.	_____.
0384	657.0420 Traffic Signal Standards Aluminum 13-FT	3.000 EACH	_____.	_____.



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0386	657.0425 Traffic Signal Standards Aluminum 15-FT	3.000 EACH	_____.	_____.
0388	657.0430 Traffic Signal Standards Aluminum 10-FT	6.000 EACH	_____.	_____.
0390	657.0515 Monotube Arms 15-FT	1.000 EACH	_____.	_____.
0392	657.0520 Monotube Arms 20-FT	1.000 EACH	_____.	_____.
0394	657.0525 Monotube Arms 25-FT	6.000 EACH	_____.	_____.
0396	657.0610 Luminaire Arms Single Member 4 1/2-Inch Clamp 6-FT	20.000 EACH	_____.	_____.
0398	657.0615 Luminaire Arms Single Member 4 1/2-Inch Clamp 8-FT	212.000 EACH	_____.	_____.
0400	658.0173 Traffic Signal Face 3S 12-Inch	28.000 EACH	_____.	_____.
0402	658.0174 Traffic Signal Face 4S 12-Inch	8.000 EACH	_____.	_____.
0404	658.0412 Pedestrian Signal Face 12-Inch	16.000 EACH	_____.	_____.
0406	658.5070 Signal Mounting Hardware (location) 001. W Lisbon Ave at W Burleigh St	1.000 EACH	_____.	_____.
0408	658.5070 Signal Mounting Hardware (location) 002. W Lisbon Ave at N 76th St	1.000 EACH	_____.	_____.
0410	659.5000.S Lamp, Ballast, LED, Switch Disposal by Contractor	320.000 EACH	_____.	_____.
0412	661.0201 Temporary Traffic Signals for Intersections (location) 001. W Lisbon Ave at W Burleigh St	1.000 EACH	_____.	_____.



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Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0414	661.0201 Temporary Traffic Signals for Intersections (location) 002. W Lisbon Ave at N 76th St	1.000 EACH	_____.	_____.
0416	661.0201 Temporary Traffic Signals for Intersections (location) 003. W Lisbon Ave at N 84th St	1.000 EACH	_____.	_____.
0418	661.0201 Temporary Traffic Signals for Intersections (location) 004. W Lisbon Ave at N 92nd St	1.000 EACH	_____.	_____.
0420	671.0132 Conduit HDPE 3-Duct 2-Inch	38.000 LF	_____.	_____.
0422	678.0200 Fiber Optic Splice Enclosure	5.000 EACH	_____.	_____.
0424	678.0300 Fiber Optic Splice	360.000 EACH	_____.	_____.
0426	690.0150 Sawing Asphalt	1,312.000 LF	_____.	_____.
0428	690.0250 Sawing Concrete	4,176.000 LF	_____.	_____.
0430	715.0715 Incentive Flexural Strength Concrete Pavement	17,918.000 DOL	1.00000	17,918.00
0432	740.0440 Incentive IRI Ride	7,829.000 DOL	1.00000	7,829.00
0434	ASP.1T0A On-the-Job Training Apprentice at \$5.00/HR	5,600.000 HRS	5.00000	28,000.00
0436	ASP.1T0G On-the-Job Training Graduate at \$5.00/HR	17,280.000 HRS	5.00000	86,400.00
0438	SPV.0035 Special 500. Bedding Layer Permeable Pavers	611.000 CY	_____.	_____.



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0440	SPV.0035 Special 501. Storage Layer Permeable Pavers	1,224.000 CY	_____.	_____.
0442	SPV.0035 Special 600. Engineered Soil	360.000 CY	_____.	_____.
0444	SPV.0035 Special 601. Bedding Layer Bioswales	66.000 CY	_____.	_____.
0446	SPV.0035 Special 602. Storage Layer Bioswales	369.000 CY	_____.	_____.
0448	SPV.0060 Special 001. Field Facilities Office Space	1.000 EACH	_____.	_____.
0450	SPV.0060 Special 002. Utility Line Opening (ULO)	15.000 EACH	_____.	_____.
0452	SPV.0060 Special 003. Construction Staking Survey Project 2590-04-71	1.000 EACH	_____.	_____.
0454	SPV.0060 Special 020. Water Main Protection	33.000 EACH	_____.	_____.
0456	SPV.0060 Special 024. Inlet Covers Type MS 55	7.000 EACH	_____.	_____.
0458	SPV.0060 Special 025. Inlet Covers Type MS 57	154.000 EACH	_____.	_____.
0460	SPV.0060 Special 026. Manhole Covers Type MS-58A	75.000 EACH	_____.	_____.
0462	SPV.0060 Special 027. Curb Inlet Type 70A	45.000 EACH	_____.	_____.
0464	SPV.0060 Special 029. Inlet Covers Temporary	2.000 EACH	_____.	_____.
0466	SPV.0060 Special 030. Traffic Delineators Flexible	16.000 EACH	_____.	_____.
0468	SPV.0060 Special 037. High Friction Traffic Marking White Bike Lane Arrow	4.000 EACH	_____.	_____.



## Proposal Schedule of Items

Page 17 of 25

Proposal ID: 20250211016 Project(s): 2590-04-71

Federal ID(s): WISC 2025314

SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0470	SPV.0060 Special 038. High Friction Traffic Marking White Bike Lane Symbol	4.000 EACH	_____.	_____.
0472	SPV.0060 Special 039. High Friction Traffic Marking Bike Lane Green Two-Stage Queue Boxes	4.000 EACH	_____.	_____.
0474	SPV.0060 Special 040. Marking Speed Table Chevron White	70.000 EACH	_____.	_____.
0476	SPV.0060 Special 050. Round Aluminum Sign Post System in Soft Surface 7-Foot	39.000 EACH	_____.	_____.
0478	SPV.0060 Special 051. Round Aluminum Sign Post System in Soft Surface 10-Foot	122.000 EACH	_____.	_____.
0480	SPV.0060 Special 052. Round Aluminum Sign Post System in Soft Surface 11-Foot	14.000 EACH	_____.	_____.
0482	SPV.0060 Special 053. Round Aluminum Sign Post System in Soft Surface 12-Foot	29.000 EACH	_____.	_____.
0484	SPV.0060 Special 054. Round Aluminum Sign Post System in Concrete Surface 7-Foot	8.000 EACH	_____.	_____.
0486	SPV.0060 Special 055. Round Aluminum Sign Post System in Concrete Surface 10-Foot	11.000 EACH	_____.	_____.
0488	SPV.0060 Special 060. Sign Mounting Hardware on Existing Pole (Concrete, Aluminum, or Steel)	82.000 EACH	_____.	_____.
0490	SPV.0060 Special 061. Street Name Sign Mounting Hardware on Mast Arm	8.000 EACH	_____.	_____.
0492	SPV.0060 Special 062. Street Name Sign Mounting Hardware on Existing Pole (Conc., Alum., or Steel)	31.000 EACH	_____.	_____.



## Proposal Schedule of Items

Page 18 of 25

Proposal ID: 20250211016 Project(s): 2590-04-71

Federal ID(s): WISC 2025314

SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0494	SPV.0060 Special 065. Remove Sign Post Assembly and Type II Signage	163.000 EACH	_____.	_____.
0496	SPV.0060 Special 080. Temporary No Parking Signs	100.000 EACH	_____.	_____.
0498	SPV.0060 Special 100. Adjusting Sanitary Manholes	109.000 EACH	_____.	_____.
0500	SPV.0060 Special 104. Internal Sanitary Manhole Seals	7.000 EACH	_____.	_____.
0502	SPV.0060 Special 190. Adjusting Water Valve Boxes	169.000 EACH	_____.	_____.
0504	SPV.0060 Special 191. Adjusting Water Manholes	6.000 EACH	_____.	_____.
0506	SPV.0060 Special 201. Install City Precast Controller Base	2.000 EACH	_____.	_____.
0508	SPV.0060 Special 205. ATC Controller and Cabinet Installed	2.000 EACH	_____.	_____.
0510	SPV.0060 Special 212. Fiber Optic Patch Panel	2.000 EACH	_____.	_____.
0512	SPV.0060 Special 213. Ethernet Switch	2.000 EACH	_____.	_____.
0514	SPV.0060 Special 214. Fiber Optic Patch Cords	8.000 EACH	_____.	_____.
0516	SPV.0060 Special 215. Electrical Service Pedestal	2.000 EACH	_____.	_____.
0518	SPV.0060 Special 218. EVP 1 Direction Detector	8.000 EACH	_____.	_____.
0520	SPV.0060 Special 221. EVP Phase Selector Card 4 Channel	2.000 EACH	_____.	_____.



## Proposal Schedule of Items

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Proposal ID: 20250211016 Project(s): 2590-04-71

Federal ID(s): WISC 2025314

SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0522	SPV.0060 Special 223. EVP Confirmation Light	8.000 EACH	_____.	_____.
0524	SPV.0060 Special 224. Vehicular Video Detection System - 2 Cameras	2.000 EACH	_____.	_____.
0526	SPV.0060 Special 244. Remove Pole and Wire	48.000 EACH	_____.	_____.
0528	SPV.0060 Special 268. Voice Instruction Audible Pushbutton	18.000 EACH	_____.	_____.
0530	SPV.0060 Special 269. Voice Instruction Audible Control Unit	2.000 EACH	_____.	_____.
0532	SPV.0060 Special 278. Remove Traffic Signal Face	90.000 EACH	_____.	_____.
0534	SPV.0060 Special 302. Pull Boxes 13-Inch X 24-Inch X 24-Inch	164.000 EACH	_____.	_____.
0536	SPV.0060 Special 303. Pull Boxes 17-Inch X 30-Inch X 24-Inch	87.000 EACH	_____.	_____.
0538	SPV.0060 Special 324. 40-FT Wood Pole	129.000 EACH	_____.	_____.
0540	SPV.0060 Special 334. Inline 5A Fast Acting Fuse with Holder	12.000 EACH	_____.	_____.
0542	SPV.0060 Special 342. Submersible Multitap 3-Port Pre-Insulated Connector	11.000 EACH	_____.	_____.
0544	SPV.0060 Special 343. Submersible Multitap 4-Port Pre-Insulated Connector	1.000 EACH	_____.	_____.
0546	SPV.0060 Special 346. Luminaire Arms Single Member 6 FT. WP Mount	109.000 EACH	_____.	_____.



## Proposal Schedule of Items

Page 20 of 25

Proposal ID: 20250211016 Project(s): 2590-04-71

Federal ID(s): WISC 2025314

SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0548	SPV.0060 Special 353. Equipment Grounding Electrode	12.000 EACH	_____.	_____.
0550	SPV.0060 Special 371. Luminaire Utility 2LED2 Temporary	109.000 EACH	_____.	_____.
0552	SPV.0060 Special 375. Luminaire Utility 2LED2	232.000 EACH	_____.	_____.
0554	SPV.0060 Special 400. Adjusting CUC Manhole Cover	5.000 EACH	_____.	_____.
0556	SPV.0060 Special 401. 4' Diameter Manhole Type CUC	25.000 EACH	_____.	_____.
0558	SPV.0060 Special 412. 5' Diameter "Doghouse" Manhole Type CUC	2.000 EACH	_____.	_____.
0560	SPV.0060 Special 420. Removing CUC Manhole	2.000 EACH	_____.	_____.
0562	SPV.0060 Special 425. Installing Conduit Into Existing Manhole	5.000 EACH	_____.	_____.
0564	SPV.0060 Special 426. Sawing Concrete-Encased Duct Package	5.000 EACH	_____.	_____.
0566	SPV.0060 Special 490. CUC Manhole Drain	1.000 EACH	_____.	_____.
0568	SPV.0060 Special 600. 8-Inch Dia Overflow Standpipe with Dome Grate	7.000 EACH	_____.	_____.
0570	SPV.0060 Special 601. Informational Sign Post	10.000 EACH	_____.	_____.
0572	SPV.0060 Special 602. 6-Inch Cleanout	16.000 EACH	_____.	_____.
0574	SPV.0060 Special 604. Inlet Covers Type Beehive	2.000 EACH	_____.	_____.



## Proposal Schedule of Items

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Proposal ID: 20250211016 Project(s): 2590-04-71

Federal ID(s): WISC 2025314

SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0576	SPV.0060 Special 620. Arrowwood Viburnum 3 Gallon	9.000 EACH	_____.	_____.
0578	SPV.0060 Special 621. Catmint Nepeta 'Blue Wonder' 1 Gallon	138.000 EACH	_____.	_____.
0580	SPV.0060 Special 622. Daylilies 'Stella D'Oro' 1 Gallon	72.000 EACH	_____.	_____.
0582	SPV.0060 Special 623. Diablo Ninebark 3 Gallon	5.000 EACH	_____.	_____.
0584	SPV.0060 Special 624. Diervilla Lonicera 2 Gallon	37.000 EACH	_____.	_____.
0586	SPV.0060 Special 625. False Indigo 'Midnight Prairie Blue Eyes' 1 Gallon	15.000 EACH	_____.	_____.
0588	SPV.0060 Special 626. Gro Low Sumac 2 Gallon	45.000 EACH	_____.	_____.
0590	SPV.0060 Special 627. Joe Pye Weed 'Gateway' 1 Gallon	24.000 EACH	_____.	_____.
0592	SPV.0060 Special 628. Karl Foerster Grass 1 Gallon	48.000 EACH	_____.	_____.
0594	SPV.0060 Special 629. Little Bluestem Grass 'Blue Heaven' 1 Gallon	18.000 EACH	_____.	_____.
0596	SPV.0060 Special 630. Little Bluestem Grass 'Carousel' 1 Gallon	126.000 EACH	_____.	_____.
0598	SPV.0060 Special 631. Panicum Grass 'Apache Rose' 1 Gallon	96.000 EACH	_____.	_____.
0600	SPV.0060 Special 632. Panicum Grass 'Heavy Metal' 1 Gallon	84.000 EACH	_____.	_____.



## Proposal Schedule of Items

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Proposal ID: 20250211016 Project(s): 2590-04-71

Federal ID(s): WISC 2025314

SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0602	SPV.0060 Special 633. Panicum Grass 'Red Sunset' 1 Gallon	54.000 EACH	_____.	_____.
0604	SPV.0060 Special 634. Purple Coneflower 'Magnus' 1 Gallon	24.000 EACH	_____.	_____.
0606	SPV.0060 Special 635. Purple Pavement Roses Rugosa 2 Gallon	18.000 EACH	_____.	_____.
0608	SPV.0060 Special 636. Red Twigged Dogwood 3 Gallon	19.000 EACH	_____.	_____.
0610	SPV.0060 Special 637. Little Bluestem Grass 'The Blues' 1 Gallon	72.000 EACH	_____.	_____.
0612	SPV.0060 Special 638. Panicum Grass 'Northwind' 1 Gallon	54.000 EACH	_____.	_____.
0614	SPV.0060 Special 639. Prairie Dropseed 1 Gallon	54.000 EACH	_____.	_____.
0616	SPV.0060 Special 640. Autumn Moor Grass 1 Gallon	54.000 EACH	_____.	_____.
0618	SPV.0090 Special 010. Concrete Curb & Gutter Integral 19-Inch	414.000 LF	_____.	_____.
0620	SPV.0090 Special 011. Concrete Curb & Gutter Integral 31-Inch	415.000 LF	_____.	_____.
0622	SPV.0090 Special 020. Reconnecting Existing Pipes	28.000 LF	_____.	_____.
0624	SPV.0090 Special 021. Storm Sewer PVC 12-Inch	713.000 LF	_____.	_____.
0626	SPV.0090 Special 038. Marking Stop Line Epoxy 24-Inch	396.000 LF	_____.	_____.



## Proposal Schedule of Items

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Proposal ID: 20250211016 Project(s): 2590-04-71

Federal ID(s): WISC 2025314

SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0628	SPV.0090 Special 039. Marking Crosswalk Epoxy 12-Inch	1,888.000 LF	_____.	_____.
0630	SPV.0090 Special 040. Marking Line Epoxy Block Style 12-Inch	4,707.000 LF	_____.	_____.
0632	SPV.0090 Special 200. Install Fiber Optic Outdoor Plant 144-CT Contractor Supplied	14,550.000 LF	_____.	_____.
0634	SPV.0090 Special 202. Install Fiber Optic Outdoor Plant 12-CT Contractor Supplied	3,620.000 LF	_____.	_____.
0636	SPV.0090 Special 300. City Furnished Electrical Cable Type 1#8 AWG 5kV Concentric	1,550.000 LF	_____.	_____.
0638	SPV.0090 Special 304. Electrical Cable Type 2#2/1#4 AL.	17,994.000 LF	_____.	_____.
0640	SPV.0090 Special 308. Electrical Cable Type 3#2/1#8 XLP	336.000 LF	_____.	_____.
0642	SPV.0090 Special 319. Liquidtight Flexible Nonmetallic 1-1/2-Inch Conduit	69.000 LF	_____.	_____.
0644	SPV.0090 Special 321. Electrical Cable Type 4#8/1#8 XLP	134.000 LF	_____.	_____.
0646	SPV.0090 Special 322. Electrical Cable Type 4#6/1#8 XLP	1,176.000 LF	_____.	_____.
0648	SPV.0090 Special 324. Electrical Cable Type 4#2/1#8 XLP	21,505.000 LF	_____.	_____.
0650	SPV.0090 Special 401. 1-Duct Conduit Cement Encased, 4-Inch Rigid Nonmetallic Conduit DB-60	22.000 LF	_____.	_____.



## Proposal Schedule of Items

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Proposal ID: 20250211016 Project(s): 2590-04-71

Federal ID(s): WISC 2025314

SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0652	SPV.0090 Special 402. 2-Duct Conduit Cement Encased, 4-Inch Rigid Nonmetallic Conduit DB-60	526.000 LF	_____.	_____.
0654	SPV.0090 Special 403. 3-Duct Conduit Cement Encased, 4-Inch Rigid Nonmetallic Conduit DB-60	470.000 LF	_____.	_____.
0656	SPV.0090 Special 404. 4-Duct Conduit Cement Encased, 4-Inch Rigid Nonmetallic Conduit DB-60	11,798.000 LF	_____.	_____.
0658	SPV.0090 Special 406. 6-Duct Conduit Cement Encased 4-Inch Rigid Nonmetallic Conduit DB-60	13.000 LF	_____.	_____.
0660	SPV.0090 Special 480. 6-Duct Conduit Cement Encased, 3-Inch Rigid Nonmetallic Conduit DB-60	39.000 LF	_____.	_____.
0662	SPV.0090 Special 490. Storm Sewer PVC 4-Inch	9.000 LF	_____.	_____.
0664	SPV.0165 Special 020. Detectable Edge Tiles	3,529.000 SF	_____.	_____.
0666	SPV.0165 Special 040. High Friction Traffic Marking Green Bike Lane Panel	5,106.000 SF	_____.	_____.
0668	SPV.0180 Special 010. Concrete Pavement Joint Sealing	59,209.000 SY	_____.	_____.
0670	SPV.0180 Special 011. Concrete Driveway SHES 8-Inch	281.000 SY	_____.	_____.
0672	SPV.0180 Special 500. Permeable Paver Blocks	3,669.000 SY	_____.	_____.
0674	SPV.0180 Special 501. Geomembrane Barrier	64.000 SY	_____.	_____.



## Proposal Schedule of Items

Page 25 of 25

Proposal ID: 20250211016 Project(s): 2590-04-71

Federal ID(s): WISC 2025314

SECTION: 0001

Contract Items

Alt Set ID:

Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0676	SPV.0180 Special 502. Geogrid Separator	3,669.000 SY	_____.	_____.
0678	SPV.0180 Special 503. Geosynthetic Fabric	3,669.000 SY	_____.	_____.
0680	SPV.0180 Special 600. Cobblestones	77.000 SY	_____.	_____.
0682	SPV.0195 Special 001. Excavation, Hauling, and Disposal of PAH Contaminated Soil	2,111.700 TON	_____.	_____.
0684	SPV.0195 Special 002. Excavation, Hauling, and Disposal of Petroleum Contaminated Soil	833.400 TON	_____.	_____.
0686	SPV.0195 Special 003. Excavation, Hauling, and Disposal of Lead Contaminated Soil	1.700 TON	_____.	_____.
Section: 0001			Total:	_____.
			Total Bid:	_____.

**PLEASE ATTACH ADDENDA HERE**



## Wisconsin Department of Transportation

---

January 29, 2025

**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 #16: 2590-04-71, WISC 2025314**  
**C Milwaukee W Lisbon Ave**  
**N 100<sup>th</sup> Street to W Burleigh Avenue**  
**LOC STR**  
**Milwaukee County**

### Letting of February 11, 2025

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

#### Special Provisions:

Revised Special Provisions	
Article No.	Description
124	Permeable Paver Blocks, Item SPV.0180.500

#### Plan Sheets:

Revised Plan Sheets	
Plan Sheet	Plan Sheet Title (brief description of changes to sheet)
22	CONSTRUCTION DETAILS – Additional construction notes

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

Sincerely,

*Mike Coleman*

Proposal Development Specialist  
Proposal Management Section

**ADDENDUM NO. 01**

**2590-04-71**

**January 29, 2025**

**Special Provisions**

**124. Permeable Paver Blocks, Item SPV0180.500.**

*Replace paragraph one under section titled **A Description** with the following:*

This special provision describes furnishing and installing solid Permeable Paver Blocks within the project as shown on the plans and application of salt barrier to the permeable pavers.

*Replace paragraphs one, two and three under section titled **B Material** with the following:*

Furnish Permeable Articulating Concrete Blocks (P-ACB) which are premanufactured of individual concrete blocks with specific stormwater runoff and storage capacities. The paver blocks shall be of Rose color and have a salt barrier. The blocks shall be 12" long x 12" wide x 5.65" high. The solid blocks shall be constructed of closed cell blocks.

Each P-ACB shall incorporate interlocking surfaces that prevent lateral displacement of the blocks. The interlocking surfaces shall not protrude beyond the perimeter of the blocks to such an extent that they reduce the flexibility or articulating capability of the system. P-ACB shall be such that backfilling of the joints between the P-ACB with rock chips or sand is not required and shall not be done or included in the project.

The design of the P-ACB shall be capable of supporting AASHTO H-25 and HS-25 truck loading. The blocks shall be analyzed as unreinforced concrete supporting a uniform truck tire load with impact per AASHTO standards.

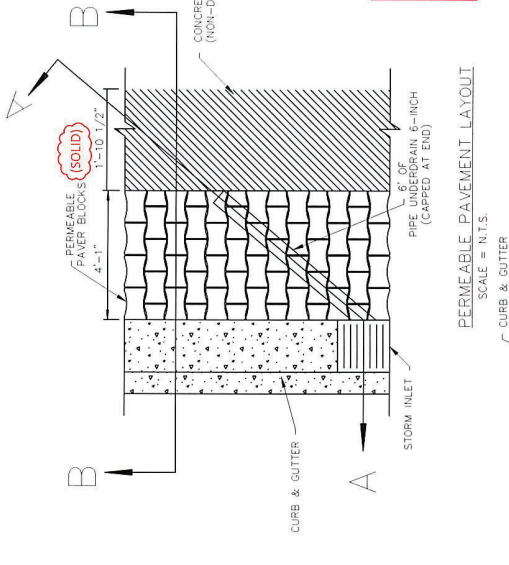
**Plan Sheets**

The following 8½ x 11-inch sheets are attached and made part of the plans for this proposal:  
Revised: 22.

END OF ADDENDUM

Addendum No. 01  
ID 2590-04-71  
Revised Sheet 22  
January 29, 2025

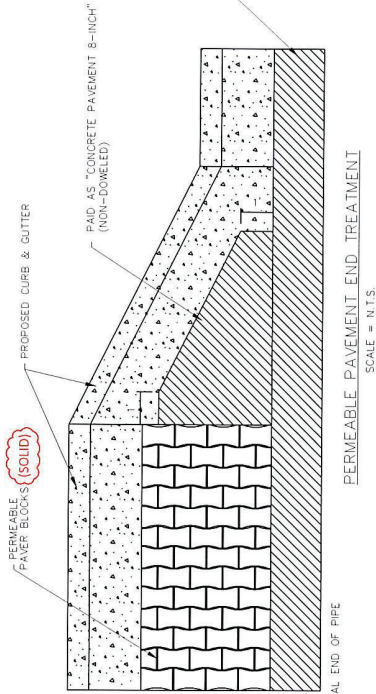
Addendum No. 1  
ID: 2590-04-71  
Revised Sheet 22  
January 28, 2025



PAVER LOCATIONS

105+99 RT	- 110+22 LT
106+74 LT	- 110+17 LT
111+62 ST	- 106+58 ST
122+19 LT	- 125+28 LT
122+19 RT	- 125+29 RT
129+78 LT	- 129+76 LT
130+49 RT	- 131+49 RT
134+59 RT	- 138+16 RT
135+22 LT	- 135+22 LT
135+22 ST	- 135+22 ST
141+83 RT	- 146+05 RT
149+51 RT	- 151+83 RT
154+04 RT	- 156+32 RT
168+70 RT	- 171+11 RT
168+72 LT	- 171+14 LT
172+58 RT	- 173+11 RT
176+51 LT	- 178+46 LT
176+54 RT	- 178+43 RT
178+05 LT	- 183+23 LT
183+72 LT	- 185+49 LT
183+82 RT	- 185+85 RT
185+69 LT	- 185+74 LT
201+87 RT	- 204+32 RT
201+88 LT	- 204+35 LT

SECTION B-B  
SCALE = N.T.S.



PERMEABLE PAVEMENT END TREATMENT  
SCALE = N.T.S.

- NOTES:
1. THE PIPE UNDERDRAIN SHALL HAVE 3/8-INCH PERFORATIONS, SPACED AT 6-INCH CENTERS, WITH A MINIMUM OF 4 HOLES PER ROW. THE PERFORATIONS SHALL BE DRILLED TO THE BOTTOM SURFACE OF THE PIPE.
  2. INSTALL GEOTEXTILE FILTER FABRIC TYPE "DF" ABOVE THE 6" UNDER DRAIN PVC PIPE; BETWEEN THE BEDDING LAYER AND STORAGE LAYER. FILTER FABRIC SHALL COVER AND BE CENTERED OVER THE UNDER DRAIN PIPE AND SHALL NOT EXTEND Laterally FROM EITHER SIDE OF THE PIPE MORE THAN ONE FOOT.
  3. INSTALL GEOMEMBRANE BARRIER WITHIN 3' OF ALL EXISTING WATER LATERALS AND MAINS AS SHOWN.
  4. INSTALL STORAGE LAYER IN 4-6" LIFTS AND COMPACT WITH ROLLER COMPACTOR.
  5. INSTALL INITIAL BEDDING LAYER STONE IN A 2" LIFT DIRECTLY ON THE STORAGE LAYER. THOROUGHLY COMPACT WITH A ROLLER COMPACTOR. FOLLOWING LAYERS CAN BE INSTALLED IN 4-6" LIFTS AND COMPACTED WITH A ROLLER COMPACTOR.
  6. SEE MISCELLANEOUS QUANTITIES FOR PERMEABLE PAVEMENT LIMITS

GEOMEMBRANE AT WATER LATERALS/BRANCHES

PROJECT NO: 2590-04-71	HWY: W. LISBON AVENUE	COUNTY: MILWAUKEE	CONSTRUCTION DETAILS	SHEET 22	E
FILE NAME: W:\SPRISON\AVE BURRIGH TO 100TH\021001_CD.DWG	DATE: 1/28/2025 11:52 AM	PLOT BY: BEGEMAN, SCOTT	PLOT NAME: 5'x10.5' FT	WOOD/CARDS SHEET 42	





## Wisconsin Department of Transportation

---

January 30, 2025

**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 #16: 2590-04-71, WISC 2025314**  
**C Milwaukee, W Lisbon Ave**  
**W Burleigh St to N 100<sup>th</sup> St**  
**LOC STR**  
**Milwaukee County**

### Letting of February 11, 2025

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

#### Special Provisions:

Revised Special Provisions	
Article No.	Description
6	Utilities

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

Sincerely,

*Mike Coleman*

Proposal Development Specialist  
Proposal Management Section

**ADDENDUM NO. 02**

**2590-04-71**

**January 30, 2025**

**Special Provisions**

**6. Utilities.**

*Replace paragraph four under section titled **WE Energies – Electric** with the following:*

Prior to 2025 Construction, WE Energies – Electric will lower their manhole at Station 106+75. They will also place steel plating over their conduit along 92<sup>nd</sup> Street from Station 10+13"E", 9' RT to Station 12+60"E", 9' RT. This work will take 15 working days prior to construction.

END OF ADDENDUM



## Wisconsin Department of Transportation

February 4, 2025

### 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 #16: 2590-04-71, WISC 2025314**  
**C Milwaukee, W Lisbon Ave**  
**W Burleigh St to N 100<sup>th</sup> St**  
**LOC STR**  
**Milwaukee County**

### Letting of February 11, 2025

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

#### Plan Sheets:

Revised Plan Sheets	
Plan Sheet	Plan Sheet Title (brief description of changes to sheet)
4	Typical Sections - Existing (revised existing concrete pavement thickness information)
5	Typical Sections - Existing (revised existing concrete pavement thickness information)
6	Typical Sections - Existing (revised existing concrete pavement thickness information)
7	Typical Sections - Existing (revised existing concrete pavement thickness information)
8	Typical Sections - Existing (revised existing concrete pavement thickness information)
9	Typical Sections - Existing (revised existing concrete pavement thickness information)
10	Typical Sections - Existing (revised existing concrete pavement thickness information)
11	Typical Sections - Existing (revised existing concrete pavement thickness information)
12	Typical Sections - Finished (revised existing concrete pavement thickness information)
15	Typical Sections - Finished (revised existing concrete pavement thickness information)
20	Typical Sections - Finished (revised existing concrete pavement thickness information and noted doveled pavement on 76 <sup>th</sup> Street to match existing pavement)
21	Typical Sections - Finished (revised existing concrete pavement thickness information)

Added Plan Sheets	
Plan Sheet	Plan Sheet Title (brief description of why sheet was added)
802B	Urban Doveled Concrete Pavement (added for doveled pavement on 76 <sup>th</sup> Street)

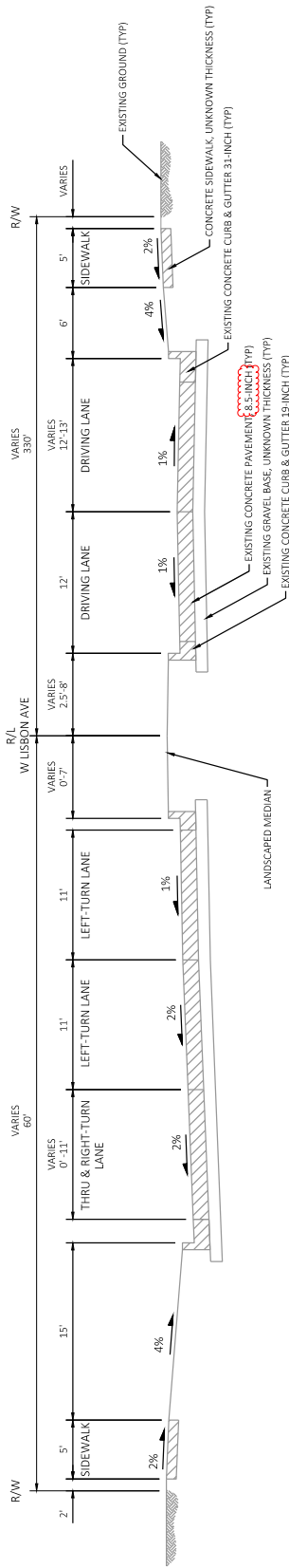
The responsibility for notifying potential subcontractors and suppliers of these changes remains with the prime contractor.

Sincerely,

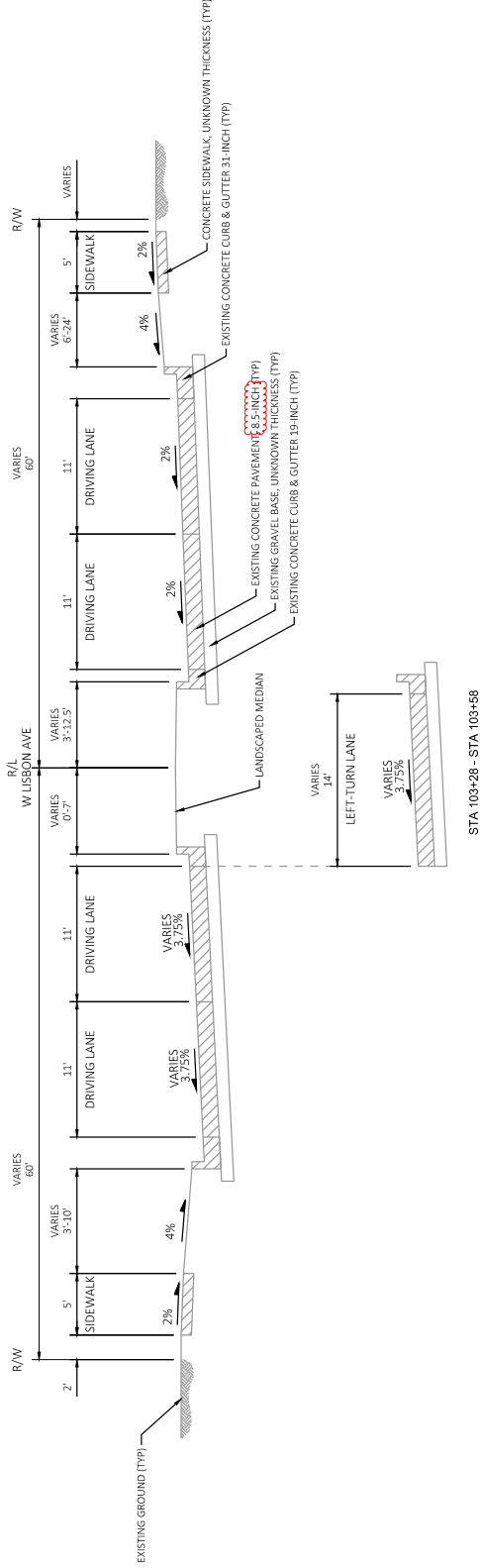
*Mike Coleman*

Proposal Development Specialist  
Proposal Management Section

END OF ADDENDUM



EXISTING TYPICAL SECTION  
WEST LISBON AVENUE (LOOKING EAST)  
STA 101+23 - STA 102+30

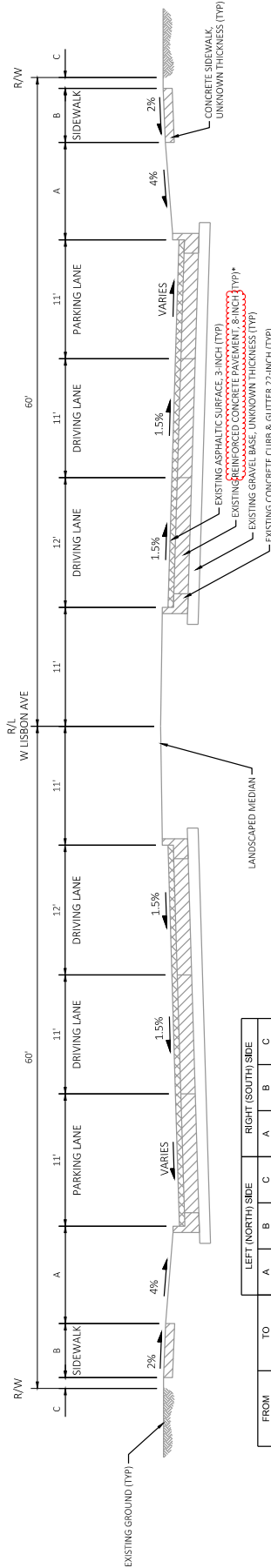


Addendum No. 03  
ID 2590-04-71  
Revised Sheet 4  
February 4, 2025

EXISTING TYPICAL SECTION  
WEST LISBON AVENUE (LOOKING EAST)  
STA 102+30 - STA 103+58

NOTE:  
CONTRACTOR TO PERFORM THIN ASPHALTIC OVERLAY  
ON WEST LISBON AVENUE EASTBOUND LANES FOR TRAFFIC STAGING.  
SEE CONSTRUCTION STAGING/TRAFFIC CONTROL PLANS.

PROJECT NO: 2590-04-71	HWY: W. LISBON AVENUE	COUNTY: MILWAUKEE	TYPICAL SECTIONS - EXISTING	SHEET 4	E
FILE NAME: Y:\33\X\13889 DP 21 LISBON AVE MIL CAD\05\2590\04\01\Sheet9P\PLAN\020301-TS.DWG	LAYOUT NAME: 020301-15	PLOT DATE: 2/3/2025 1:13 PM	PLOT BY: AUSTIN ROSA	PLOT NAME: 1 IN=10 FT	WISDOT/CADD5 SHEET 42

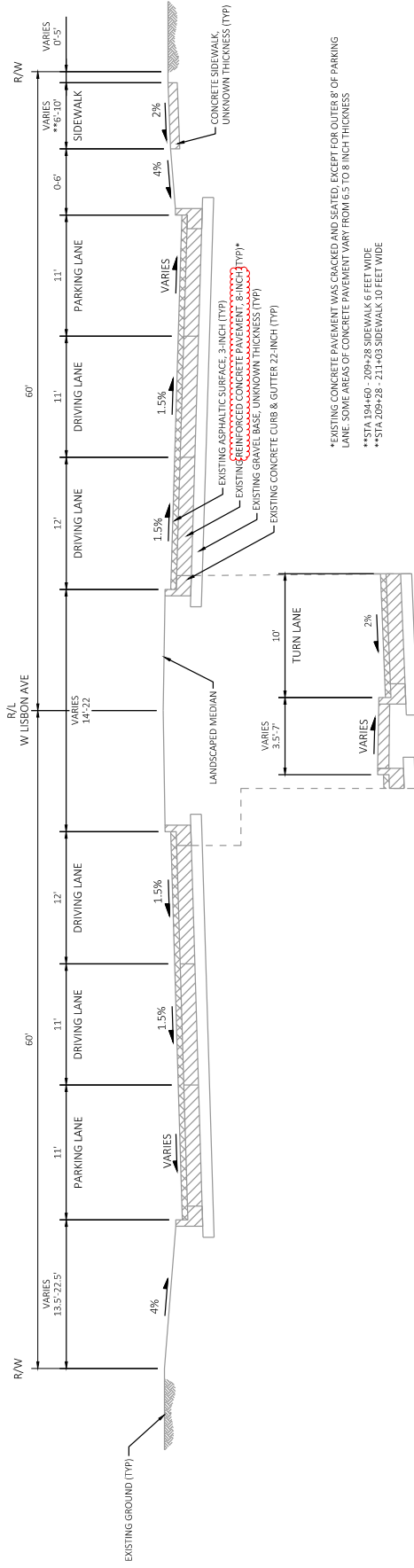


\*EXISTING CONCRETE PAVEMENT WAS CRACKED AND SEALED, EXCEPT FOR OUTER 8' OF PARKING LANE. SOME AREAS OF CONCRETE PAVEMENT VARY FROM 6.5 TO 8 INCH THICKNESS

**EXISTING TYPICAL SECTION**  
WEST LISBON AVENUE (LOOKING EAST)  
STA 103+58 - STA 206+50

LEFT (NORTH) SIDE				RIGHT (SOUTH) SIDE			
FROM	TO	A	B	C	A	B	C
N 100TH ST	N 98TH ST	9'	5'	1'	9'	5'	1'
N 98TH ST	N 97TH ST	9'	5'	1'	8'-6"	5'-6"	1'
N 97TH ST	N 96TH ST	9'	5'	1'	8'	6'	1'
N 96TH ST	N 95TH ST	9'-10"	5'	0'-10"	8'-5"	5'-6"	0.5'
N 95TH ST	N 94TH ST	8.5'	5'	1'	8.5'	6'	0.5'
N 94TH ST	N 93TH ST	15' TO ROW, NO SIDEWALK	6'	0.5'	8.5'	6'	0.5'
N 93TH ST	N 92TH ST	15' TO ROW, NO SIDEWALK	6'	0.5'	7'	6'	2'
N 92TH ST	N 91TH ST	15' TO ROW, NO SIDEWALK	6'	0.5'	VARIES	6'	VARIES

NOTE: SOME COMMERCIAL AREAS HAVE FULL-WIDTH SIDEWALK

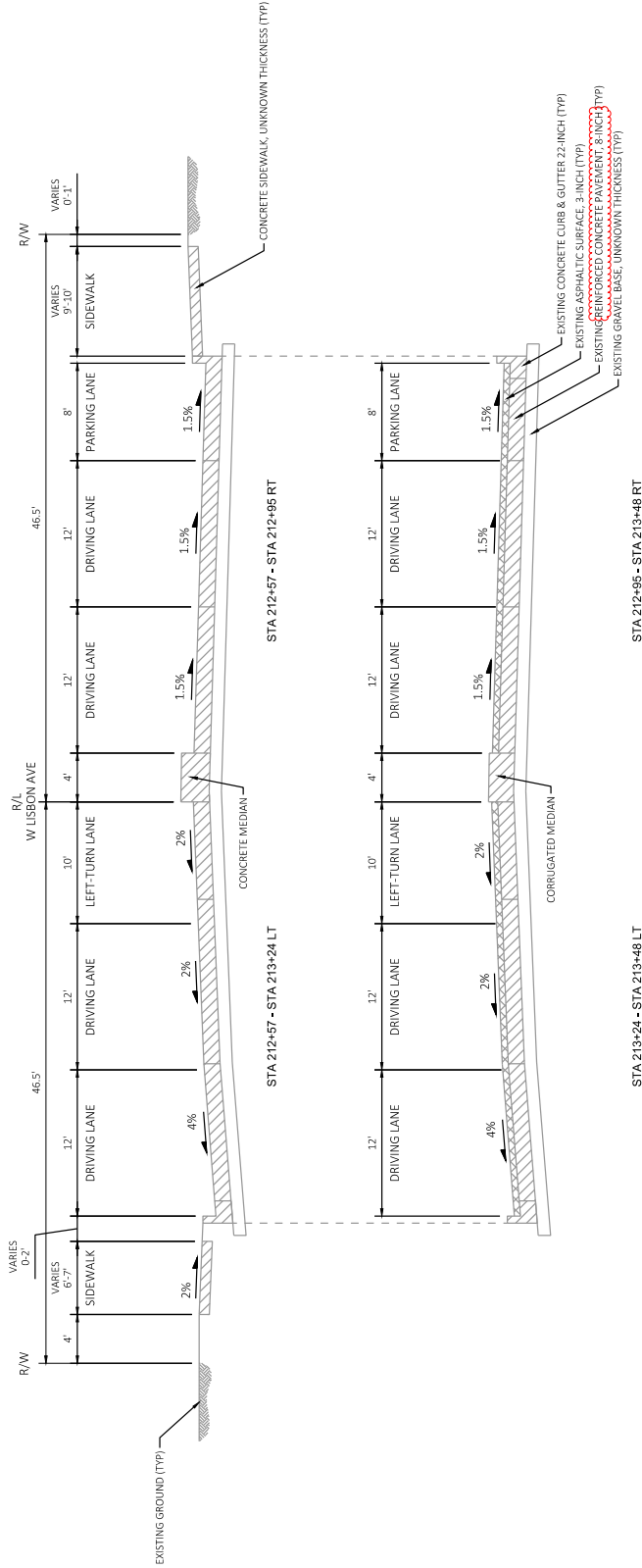


\*EXISTING CONCRETE PAVEMENT WAS CRACKED AND SEALED, EXCEPT FOR OUTER 8' OF PARKING LANE. SOME AREAS OF CONCRETE PAVEMENT VARY FROM 6.5 TO 8 INCH THICKNESS

\*\*STA 194+60 - 209+28 SIDEWALK 6 FEET WIDE  
\*\*STA 209+28 - 211+03 SIDEWALK 10 FEET WIDE

**EXISTING TYPICAL SECTION**  
WEST LISBON AVENUE (LOOKING EAST)  
STA 194+60 - STA 211+03

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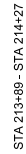


**EXISTING TYPICAL SECTION**

W LISBON AVE  
STA 212+57 - STA 213+48

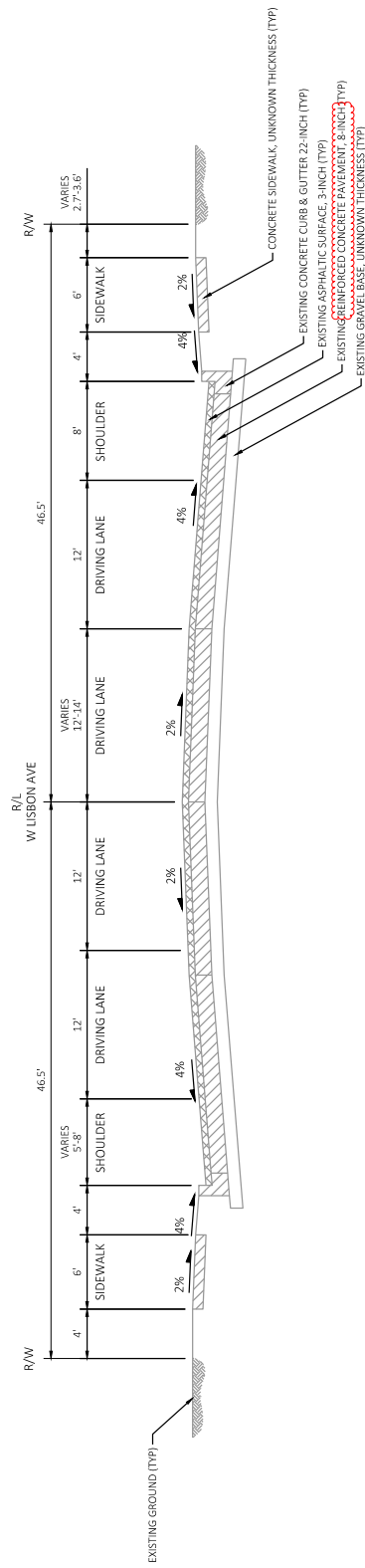
Addendum No. 03  
ID 2590-04-71  
Revised Sheet 6  
February 4, 2025

PROJECT NO: 2590-04-71	HWY: W LISBON AVENUE	COUNTY: MILWAUKEE	TYPICAL SECTIONS - EXISTING	SHEET 6	E
FILE NAME: Y:\3\X\3889 DP 21 LISBON AVE MIL\CAD\50\2590\0401\Sheet\PLAN\020301-TS.DWG	LAYOUT NAME: 020301-15	PLOT DATE: 2/3/2025 1:15 PM	PLOT BY: AUSTIN ROSA	PLOT SCALE: 1 IN=10 FT	WISDOT/CADD5 SHEET 42



## EXISTING TYPICAL SECTION

W LISBON AVE  
STA 213+89 - STA 215+10



## EXISTING TYPICAL SECTION

W LISBON AVE  
STA 215+10 - STA 216+18

PROJECT NO: 2590-04-71

HWY: W. LISBON AVENUE

COUNTY: MILWAUKEE

TYPICAL SECTIONS - EXISTING

SHEET 7

FILE NAME : Y:\53XX\5389.DP.21\USBONAVE.MIL\CADD\525900401\1\SHEETSP\PLAN\020301-TS.DWG  
LAYOUT NAME - 020304-TS

PLOT DATE: 2/3/2025 1:15 PM

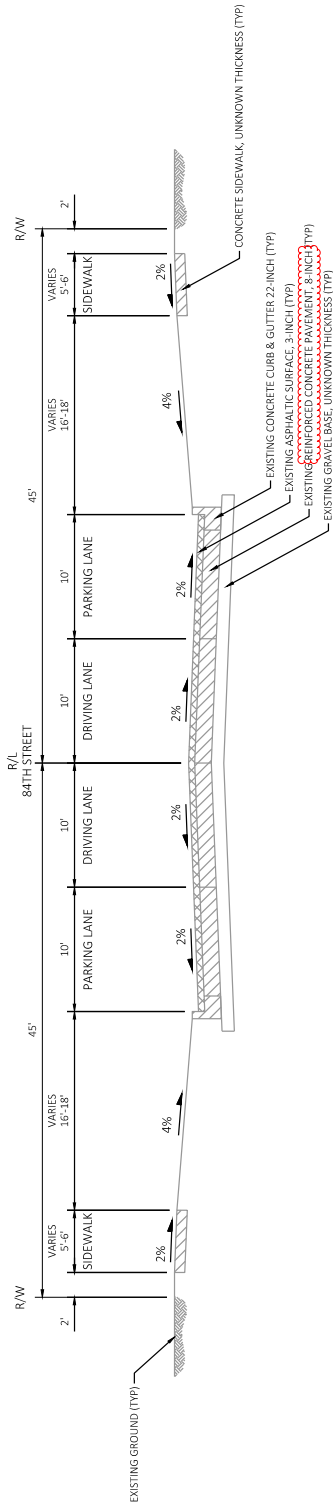
PLOT BY: AUSTIN ROSA

PLOT SCALE: 1 IN:10 FT

WISDOT/CADDs SHEET 42

PROJECT NO: 2590-04-71	HWY: W. LISBON AVENUE	COUNTY: MILWAUKEE	TYPICAL SECTIONS - EXISTING		
FILE NAME: Y:\55XV\3389.DP 21 LISBON AVE - MILWAUKEE\2590040\1\SHETSPLAN\020301.TS.DWG					
PLOT DATE: 2/3/2025 1:15 PM		PLOT BY: AUSTIN ROSA		PLOT NAME: 1 IN 10 FT	
PLOT NAME: 020305-1s				SHEET 8	
WSDOT/CADD SHEET 42					





**EXISTING TYPICAL SECTION**

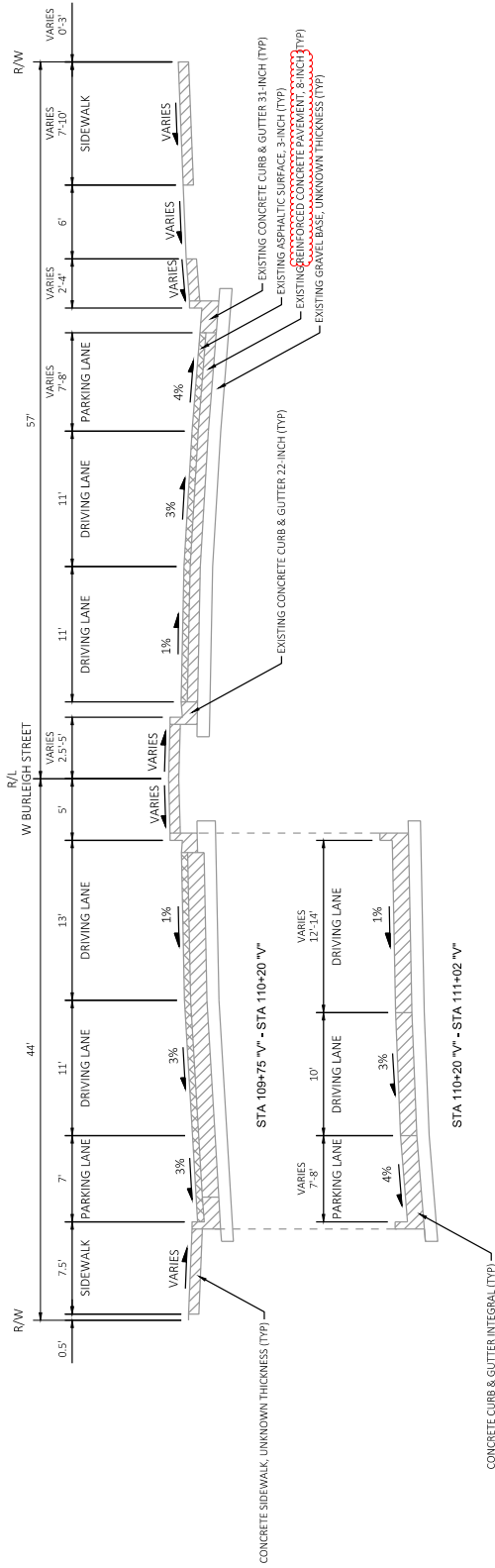
84TH STREET  
STA 10+00 "L" - STA 12+56 "L"  
STA 14+27 "L" - STA 16+50 "L"

Addendum No. 03  
ID 2590-04-71  
Revised Sheet 9  
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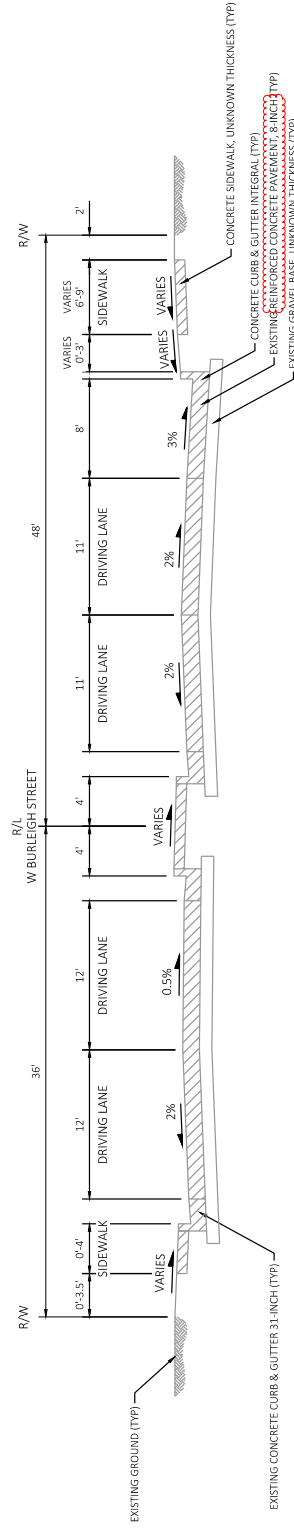
PROJECT NO: 2590-04-71	COUNTY: MILWAUKEE	TYPICAL SECTIONS - EXISTING	SHEET 9	E
FILE NAME: Y:\33\X\3889 DP 21 LISBON AVE MIL\CAD\05\2590\04\1\Sheet\PLAN\020301-TS.DWG	HWY: W LISBON AVENUE	FLAT BY: AUSTIN ROSA	FLAT SCALE: 1 IN=10 FT	WISDOT/CADD SHEET 42
LAYOUT NAME: 020306-15	PLAT DATE: 2/3/2025 1:15 PM	PLAT NAME:		



PROJECT NO: 2590-04-71	COUNTY: MILWAUKEE	TYPICAL SECTIONS - EXISTING	SHEET 10
HWY: W. LISBON AVENUE FILE NAME: Y:\53XX\5389.DP 2\1 LISBON AVE MAIL CAD\0512590401\5389\02301.TS.DWG		PLOT BY: AUSTIN ROSA PLOT DATE: 2/3/2025 1:15 PM	PLOT NAME: 1 IN=10 FT WSDOT/CADDIS SHEET 42



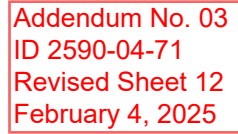
EXISTING TYPICAL SECTION  
W BURLEIGH STREET (WEST)  
STA 109+75 'V' - STA 111+02 'V'

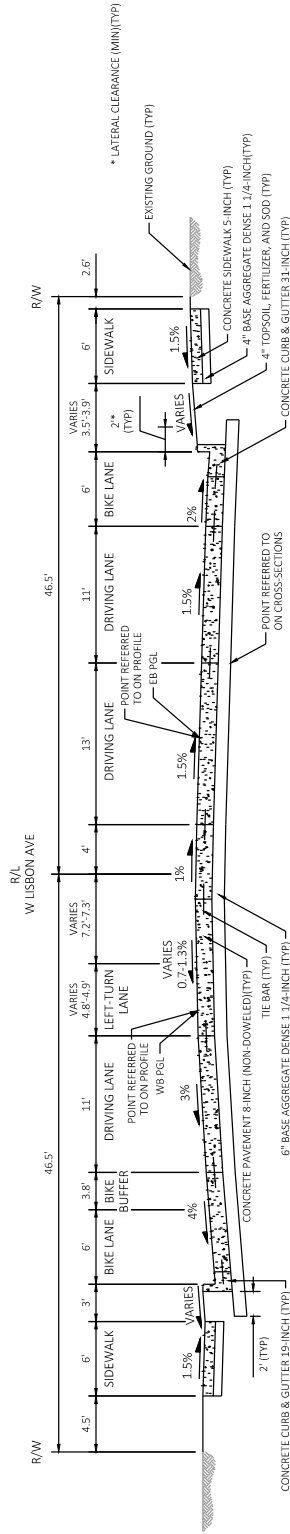


EXISTING TYPICAL SECTION  
W BURLEIGH STREET (EAST)  
STA 112+71 'V' - STA 114+00 'V'

Addendum No. 03  
ID 2590-04-71  
Revised Sheet 11  
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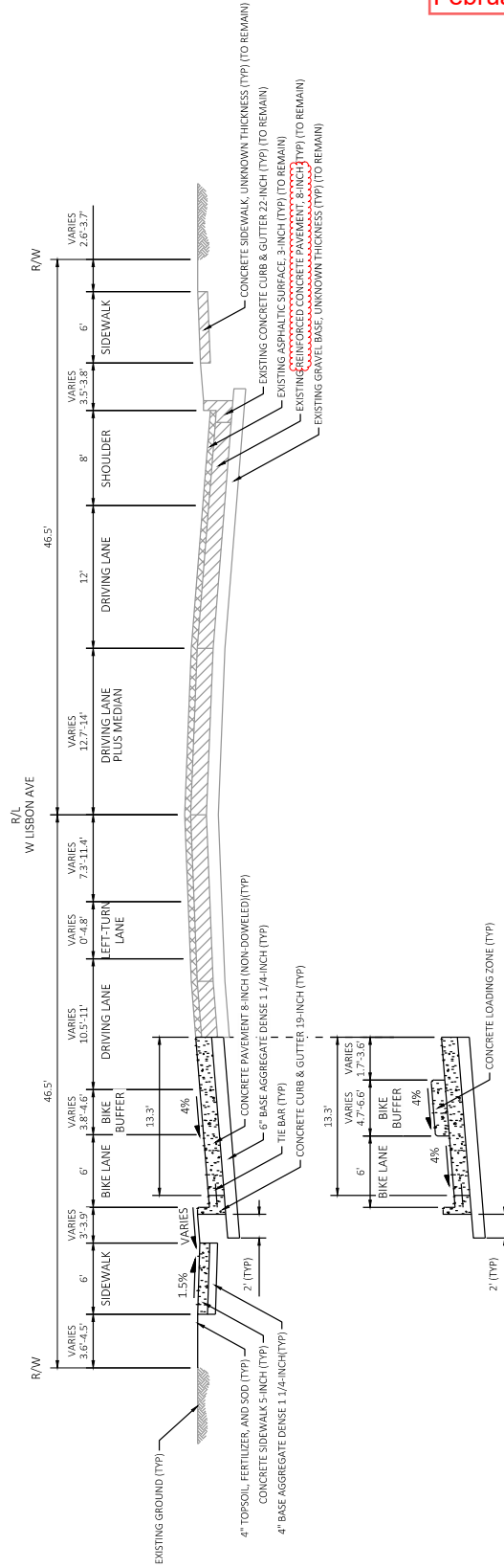
PROJECT NO: 2590-04-71	HWY: W LISBON AVENUE	COUNTY: MILWAUKEE	TYPICAL SECTIONS - EXISTING	SHEET 11	E
FILE NAME: Y:\33\X\3889 DP 21 LISBON AVE MIL CAD\05\2590\04\01\Sheet9P\AN\020301-TS.DWG	LAYOUT NAME: 020308-15	2/9/2025 1:13 PM	PLOT BY: AUSTIN ROSA	1 IN=10 FT	WISDOT/CADD 5-SHEET 42





**FINISHED TYPICAL SECTION**

WEST LISBON AVE  
STA 215+16.09 - STA 215+17.21



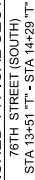
**FINISHED TYPICAL SECTION**

WEST LISBON AVE  
STA 215+17.21 - STA 216+19.80

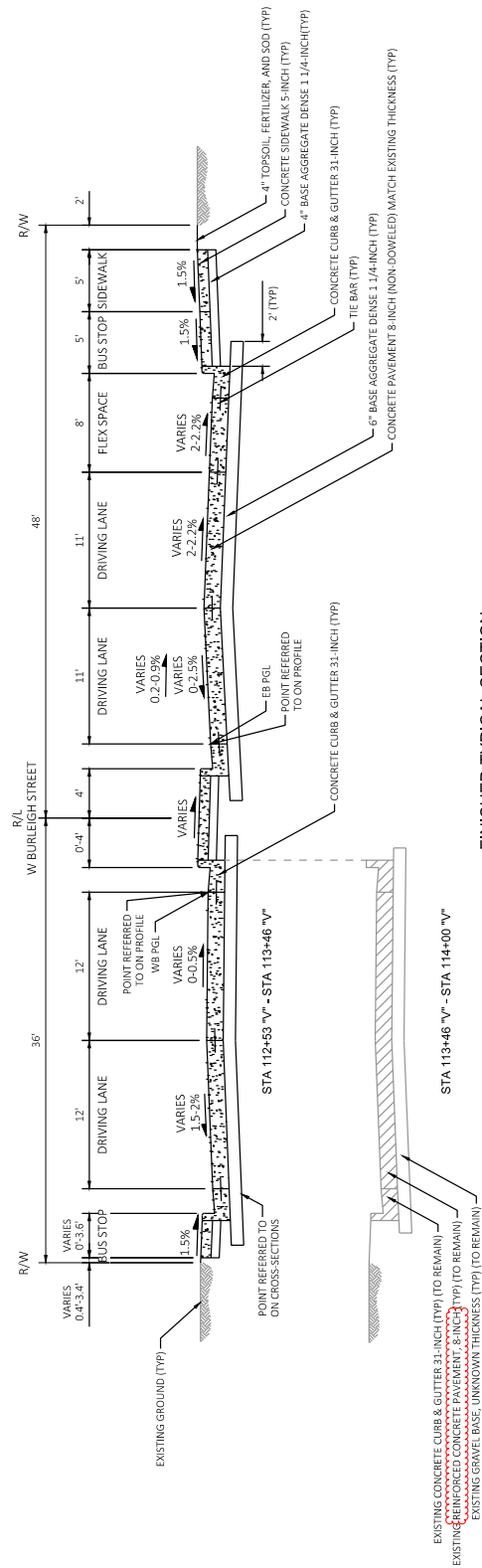
Addendum No. 03  
ID 2590-04-71  
Revised Sheet 15  
February 4, 2025

PROJECT NO: 2590-04-71	HWY: W. LISBON AVENUE	COUNTY: MILWAUKEE	TYPICAL SECTIONS - FINISHED	SHEET 15	E
FILE NAME: Y:\33\X\3889 DP 21 LISBON AVE MIL CAD\05\2590\04\01\002590-04-71.DWG	DATE: 2/2/2025 1:13 PM	PLT BY: AUSTIN ROSA	PLT NAME: 1 IN=10 FT	PLT SCALE: 1 IN=10 FT	WISDOT/CADD SHEET 42

**FINISHED TYPICAL SECTION**  
76TH STREET (SOUTH)  
STA 13+51 "T" - STA 14+29 "T"



PROJECT NO:	2590-04-71	HWY: W. LISBON AVENUE	COUNTY: MILWAUKEE	TYPICAL SECTIONS - FINISHED	E
FILE NAME: Y:\33\X\33889.DP_21.LISBON.AVE.MIL\CAD009\25900401\SHEETS\PLAN\020301.TS.DWG PLOT DATE: 2/3/2025 3:15 PM PLOT BY: AUSTIN ROSA PLOT NAME: 1 IN 10 FT PLOT SCALE: 1 IN 10 FT WSDOT/CADDS SHEET 42					



## CONTRACTION JOINTS

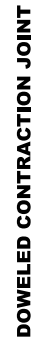
INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE. FOR PAVEMENT SLABS OF VARYING WIDTHS, LOCATE THE OUTER MOST DOWEL BAR SO THAT THE CENTER OF THE BAR IS A MINIMUM OF 6 INCHES FROM AND A MAXIMUM OF 19 INCHES FROM THE FREE EDGE OF PAVEMENT.

## CONSTRUCTION JOINTS

LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO THE CONTRACTION JOINTS.

- ① OBTAIN THE ENGINEER'S APPROVAL FOR THE USE OF ALTERNATIVE DESIGNS OF THE DOWEL ASSEMBLY. USE MECHANICAL TYPE BAR INSERTERS ON DOWEL ASSEMBLIES WHEN CONSTRUCTION CONTRACTION JOINTS.
- ② SECURE BARS WITH ANCHORS TO HOLD DOWEL BARS IN THE CORRECT POSITION AND ALIGNMENT. TYPE, LOCATION, NUMBER AND LENGTH OF ANCHORS ARE DEPENDENT UPON FIELD CONDITIONS.
- ③ FORM OR SAW CONSTRUCTION JOINTS. PROVIDE A  $\sqrt{r}$  RADIUS AT FORMED JOINTS.
- ④ PROVIDE A SMOOTH VERTICAL FACE FOR THE ENTIRE DEPTH OF THE PAVEMENT WHEN FORMING CONSTRUCTION JOINTS.
- ⑤ INSTALL DOWEL BARS AT CONSTRUCTION JOINTS BY FORMING OR DRILLING. INSTALL FORMED BARS 12 INCHES C - C AND 12 INCHES FROM PAVEMENT EDGE. REMOVE EXCESS CONCRETE FROM THE FREE END OF THE DOWEL BAR IF DOWEL BARS ARE FORMED. DRILL DRILLED DOWEL BARS ACCORDING TO THE DRILLED DOWEL BAR CONSTRUCTION JOINT DETAIL.
- ⑥ APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT "BONDING."
- ⑦ ANCHOR DOWEL BARS INTO DRILLED HOLES WITH AN EPOXY. MAXIMUM DRILLED HOLE SIZE IS  $\frac{1}{8}$ " GREATER THAN DOWEL BAR DIAMETER, 9 INCHES IN LENGTH.

PAVEMENT DEPTH (D)	DOWEL BAR DIAMETER	CONTRACTION JOINT SPACING
6", 6 1/2"	NONE	12'
7", 7 1/2"	1"	14'
8" & ABOVE	1 1/2"	15'



## URBAN DOWELED CONCRETE PAVEMENT

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED	/s/ Peter Kemp P.E.
November 2022	PAVEMENT SUPERVISOR
DATE	
FHWA	

Sheet 802A