HIGHWAY WORK PROPOSAL

Proposal Number: Ø 3

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

COUNTY	STATE PROJECT ID	FEDERAL PROJECT ID	PROJECT DESCRIPTION	HIGHWAY
Milwaukee	1350-09-70	WISC 2015 485	Stadium Freeway State Street - Lisbon Avenue	USH 41

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, $ 100,000.00 Payable to: Wisconsin Department of Transportation	Attach Proposal Guaranty on back of this PAGE.
Bid Submittal Due Date: September 15, 2015 Time (Local Time): 9:00 AM	Firm Name, Address, City, State, Zip Code **SAMPLE** **NOT FOR BIDDING PURPOSES**
Contract Completion Time October 23, 2016	
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)

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

(Date Commission Expires)

Notary Seal

(Bidder Signature)

(Print or Type Bidder Name)

(Bidder Title)

For Department Use Only

Type of Work Milling, HMA overlay, base patching, concrete shoulder repair, concrete barrier repair, bridge deck replacement, bridge deck overlay, pavement marking, lighting, FTMS, signs.	
Notice of Award Dated	Date Guaranty Returned

PLEASE ATTACH
PROPOSAL GUARANTY HERE

Effective with November 2007 Letting

PROPOSAL REQUIREMENTS AND CONDITIONS

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

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

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

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

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

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

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

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

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

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

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

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

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

Effective with August 2015 Letting

BID PREPARATION

Preparing the Proposal Schedule of Items

A General

(1) Obtain bidding proposals as specified in section 102 of the standard specifications prior to 11:45 AM of the last business day preceding the letting. Submit bidding proposals using one of the following methods:

1. Electronic bid on the internet.
2. Electronic bid on a printout with accompanying diskette or CD ROM.
3. Paper bid under a waiver of the electronic submittal requirements.

(2) Bids submitted on a printout with accompanying diskette or CD ROM or paper bids submitted under a waiver of the electronic submittal requirements govern over bids submitted on the internet.

(3) The department will provide bidding information through the department's web site at:
http://wisconsindot.gov/Pages/doing-bus/contractors/hcci/bid-let.aspx

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

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

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

(5) The department will address equipment and process failures, if the bidder can demonstrate that those failures were beyond their control.

(6) Contractors are responsible for checking on the issuance of addenda and for obtaining the addenda. Notice of issuance of addenda is posted on the department's web site at:
http://wisconsindot.gov/Pages/doing-bus/contractors/hcci/bid-let.aspx

or by calling the department at (608) 266-1631. Addenda can ONLY be obtained from the departments web site listed above or by picking up the addenda at the Bureau of Highway Construction, Room 601, 4802 Sheboygan Avenue, Madison, WI, during regular business hours.

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

B Submitting Electronic Bids

B.1 On the Internet

(1) Do the following before submitting the bid:

1. Have a properly executed annual bid bond on file with the department.
2. Have a digital ID on file with and enabled by Info Tech Inc. Using this digital ID will constitute the bidder's signature for proper execution of the bidding proposal.

(2) In lieu of preparing, delivering, and submitting the proposal as specified in 102.6 and 102.9 of the standard specifications, submit the proposal on the internet as follows:

1. Download the latest schedule of items reflecting all addenda from the Bid 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:

http://wisconsindot.gov/Pages/doing-bus/contractors/hcci/bid-let.aspx

Use Expedite ™ software to prepare and print the schedule of items. Provide a valid amount for all price fields. Follow instructions and review the help screens provided on the Bid Express™ web site to assure that the schedule of items is prepared properly.

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

Bidder

Name

BN00

Proposals: 1, 12, 14, & 22

(3) If bidding on more than one proposal in the letting, the bidder may include all proposals for that letting on one diskette or CD ROM. Include only submitted proposals with no incomplete or other files on the diskette or CD ROM.

(4) The bidder-submitted printout of the Expedite™ generated schedule of items is the governing contract document and must conform to the requirements of section 102 of the standard specifications. If a printout needs to be altered, cross out the printed information with ink or typewriter and enter the new information and initial it in ink. If there is a discrepancy between the printout and the diskette or CD ROM, the department will analyze the bid using the printout information.

(5) In addition to the reasons specified in section 102 of the standard specifications, proposals are irregular and the department may reject them for one or more of the following:

1. The check code printed on the bottom of the printout of the Expedite™ generated schedule of items is not the same on each page.
2. The check code printed on the printout of the Expedite™ generated schedule of items is not the same as the check code for that proposal provided on the diskette or CD ROM.
3. The diskette or CD ROM is not submitted at the time and place the department designates.

C Waiver of Electronic Submittal

(1) The bidder may request a waiver of the electronic submittal requirements. Submit a written request for a waiver in lieu of bids submitted on the internet or on a printout with accompanying diskette or CD ROM. Use the waiver that was included with the paper bid document sent to the bidder or type up a waiver on the bidder's letterhead. The department will waive the electronic submittal requirements for a bidding entity (individual, partnership, joint venture, corporation, or limited liability company) for up to 4 individual proposals in a calendar year. The department may allow additional waivers for equipment malfunctions.

(2) Submit a schedule of items on paper conforming to section 102 of the standard specifications. The department charges the bidder a $75 administrative fee per proposal, payable at the time and place the department designates for receiving bids, to cover the costs of data entry. The department will accept a check or money order payable to: "Wisconsin, Dept. of Transportation."

(3) In addition to the reasons specified in section 102 of the standard specifications, proposals are irregular and the department may reject them for one or more of the following:

1. The bidder fails to provide the written request for waiver of the electronic submittal requirements.
2. The bidder fails to pay the $75 administrative fee before the time the department designates for the opening of bids unless the bidder requests on the waiver that they be billed for the $75.
3. The bidder exceeds 4 waivers of electronic submittal requirements within a calendar year.

(4) In addition to the reasons specified in section 102 of the standard specifications, the department may refuse to issue bidding proposals for future contracts to a bidding entity that owes the department administrative fees for a waiver of electronic submittal requirements.

PROPOSAL BID BOND

Wisconsin Department of Transportation

DT1303 1/2006

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)

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

(Signature of Attorney-in-Fact)

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

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

Wisconsin Department of Transportation

DT1305 8/2003

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

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

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

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

(Signature of Authorized Contractor Representative) (Date)

March 2010

LIST OF SUBCONTRACTORS

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

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

Name of Subcontractor	Class of Work	Estimated Value

DECEMBER 2000

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

Instructions for Certification

1. By signing and submitting this proposal, the prospective contractor is providing the certification set out below.

2. The inability of a person to provide the certification required below will not necessarily result in denial of participation in this covered transaction. The prospective contractor shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective contractor to furnish a certification or an explanation shall disqualify such person from participation in this transaction.

3. The certification in this clause is a material representation of fact upon which reliance was placed when the department determined to enter into this transaction. If it is later determined that the contractor knowingly rendered an erroneous certification in addition to other remedies available to the Federal Government the department may terminate this transaction for cause or default.

4. The prospective contractor shall provide immediate written notice to the department to whom this proposal is submitted if at any time the prospective contractor learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

5. The terms "covered transaction," "debarred," "suspended," "ineligible," "lower tier covered transaction," "participant," "person," "primary covered transaction," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of the rules implementing Executive Order 12549. You may contact the department to which this proposal is being submitted for assistance in obtaining a copy of those regulations.

6. The prospective contractor agrees by submitting this proposal that, should this contract be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department entering into this transaction.

7. The prospective contractor further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," which is included as an addendum to PR-1273 - "Required Contract Provisions Federal Aid Construction Contracts," without

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

8. The contractor may rely upon a certification of a prospective subcontractor/materials supplier that it is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A contractor may decide the method and frequency by which it determines the eligibility of its principals. Each contractor may, but is not required to, check the Disapproval List (telephone # 608/266/1631).

9. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of a contractor is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

10. Except for transactions authorized under paragraph 6 of these instructions, if a contractor in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department may terminate this transaction for cause or default.

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

(1) The prospective contractor certifies to the best of its knowledge and belief, that it and its principals:

(a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;

(b) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements or receiving stolen property;

(c) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offense enumerated in paragraph (1)(b) of this certification; and

(d) Have not within a three-year period preceding this proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

(2) Where the prospective contractor is unable to certify to any of the statements in this certification, such prospective contractor shall attach an explanation to this proposal.

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SPECIAL PROVISIONS

1. General.

Perform the work under this construction contract for Project 1350-09-70, Stadium Freeway, State Street to Lisbon Avenue, USH 41, 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, 2015 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 (20141107)

2. Scope of Work.

The work under this contract shall consist of milling, HMA overlay, base patching, concrete shoulder repair, concrete barrier repair, bridge deck replacement, bridge deck overlay, pavement marking, lighting, FTMS, signs, and all incidental items necessary to complete the work as shown on the plans and included in the proposal and contract.
104-005 (20090901)

3. Prosecution and Progress.

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

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

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

The contractor shall schedule and conduct weekly progress meetings. Hold the meetings in the field office. Be prepared to discuss the work schedule. Subcontractors shall be in attendance at the weekly progress meetings

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

The contractor is advised that there may be multiple mobilizations for such items as traffic control, detours, signing items, temporary and permanent pavement markings, storm sewer structure and pipe construction, milling, base patching, paving, bridge deck replacement, bridge deck concrete overlay, and other incidental items related to the staging and construction identified in the plans or in this contract. The department will make no additional payment for said mobilizations.

Winter weather work, grading, excavation of frozen ground, high ground water, dewatering during winter months, and mitigation efforts for high water table elevations shall not be considered adverse weather delays to construction. Cost for dewatering is considered incidental to construction.

Anticipate cold weather for concrete paving, concrete masonry, and for all ancillary concrete work. Plan to heat aggregates and water for mixes, and that the heating of the aggregate and water is considered incidental to those concrete items. There will be no adverse weather delay for cold weather construction.

Do not at any time conduct construction operations in the median area and adjacent outside area of the freeway, in the same travel direction, at the same time without the permission of the engineer.

Obtain prior approval from the engineer for the locations of ingress and egress for construction vehicles to prosecute the work within the work zone.

Do not begin or continue work that closes freeway lanes or ramps outside the allowed time periods specified in this article. Do not obstruct the flow of traffic on the freeway with construction vehicles or equipment entering or leaving the work zones during peak traffic periods.

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

Storm sewer rehabilitation work on structures adjacent to or in the existing asphaltic surface must be completed prior to placing traffic control devices for staged construction and before the new asphaltic surface is placed.

Base Patching Concrete and Pavement Replacement bid items need to be replaced the same day they are removed. Open pavement sections will not be allowed.

Work Restrictions
Unless approved by the engineer, construction operations shall not begin until after February 29, 2016.

Unless approved by the engineer, Stage 2 construction operations on the Vliet Street Bridge (B-40-53) cannot begin until daily low temperatures are above 32 degrees Fahrenheit.

Construction operations on Lloyd Street cannot be conducted at the same time as construction operations on Washington Boulevard.

Interim Completion Date
Complete all construction operations on Lloyd Street prior to 12:01 AM June 17, 2016.

If the contractor fails to complete all construction operations on Lloyd Street prior to 12:01 AM June 17, 2016, the department will assess the contractor $1,810 in interim liquidated damages for each calendar day that the roadway remains closed after 12:01 AM, June 17, 2016. An entire calendar day will be charged for any period of time within a calendar day that the road remains closed beyond 12:01 AM.

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

1. Severe weather as specified in standard spec 108.10.2.2.
2. Labor disputes that are not industry wide.
3. Delays in material deliveries.

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.

Project Completion Date
The department will not grant time extensions to the completion date specified above for the following:

1. Severe weather as specified in standard spec 108.10.2.2.
2. Labor disputes that are not industry wide.
3. Delays in material deliveries.

Migratory Birds
Swallow and other migratory birds' nests have been observed on or under the existing bridge. All active nests (when eggs or young are present) of migratory birds are protected under the federal Migratory Bird Treaty Act.

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

Peak Hours – USH 41 Three Lane Section (IH 94 to Washington Boulevard) and USH 41 Two Lane Section (Washington Boulevard to Lisbon Avenue)

6:00 AM to 8:00 PM	Monday, Tuesday, Wednesday, Thursday
6:00 AM to 11:59 PM	Friday
10:00 AM to 7:00 PM	Saturday
Noon to 8:00 PM	Sunday

Peak Hours – Miller Park Milwaukee Brewer Home Games

Four hours prior to the start of game to two hours after the completion of the game or event following the game. No ramp closures shall take place during this time frame.

Peak Hours – Miller Park Events

Four hours prior to event to two hours after event completion. No ramp closures shall take place during this time frame.

Off -Peak Hours - USH 41 Three Lane Section (IH 94 to Washington Boulevard) and USH 41 Two Lane Section (Washington Boulevard to Lisbon Avenue)

12:00 AM to 6:00 AM	Monday, Tuesday, Wednesday, Thursday, Friday
8:00 PM to 11:59 PM	Monday, Tuesday, Wednesday, Thursday
12:00 AM to 10:00 AM	Saturday
7:00 PM to 11:59 AM	Saturday
12:00 AM to Noon	Sunday
8:00 PM to 11:59 PM	Sunday

Wells Street On-Ramp to Northbound USH 41

On-ramp shall only be closed during off-peak hours as defined above for USH 41.

Alois Street On-Ramp to Southbound USH 41 and Southbound USH 41 Off-Ramp at Alois Street

During USH 41 Stage 3, the on-ramp and off-ramp can be temporarily closed one time during off-peak hours as defined above for USH 41 when USH 41 Stage 3 HMA paving operations are taking place adjacent to the ramp. Both ramps shall be closed at the same time.

During USH 41 Stage 5, the on-ramp and off-ramp can be temporarily closed one time during off-peak hours as defined above for USH 41 when USH 41 Stage 5 HMA paving operations are taking place adjacent to the ramp. Both ramps shall be closed at the same time.

During USH 41 Stage 5, the on-ramp and off-ramp shall only be closed two times in order to perform work on the ramp. Both ramps shall be closed at the same time during the time period from 8:00 PM on Friday to 6:00 AM on the proceeding Monday (58 consecutive hours) to perform work on the ramp.

Posted detour routes must be installed prior to any closures of these ramps.

Northbound USH 41 Off-Ramp at Martin Drive and Martin Drive On-Ramp to Northbound USH 41
During USH 41 Stage 3, the on-ramp and off-ramp can be temporarily closed one time during off-peak hours as defined above for USH 41 when USH 41 Stage 3 HMA paving operations are taking place adjacent to the ramp. Both ramps shall be closed at the same time.

During USH 41 Stage 5, the on-ramp and off-ramp can be temporarily closed one time during off-peak hours as defined above for USH 41 when USH 41 Stage 5 HMA paving operations are taking place adjacent to the ramp. Both ramps shall be closed at the same time.

During USH 41 Stage 5, the on-ramp and off-ramp shall only be closed two times in order to perform work on the ramp. Both ramps shall be closed at the same time during the time period from 8:00 PM on Friday to 6:00 AM on the proceeding Monday (58 consecutive hours) to perform work on the ramp.

Posted detour routes must be installed prior to any closures of these ramps.

Northbound USH 41 Off-Ramp to Washington Boulevard
During USH 41 Stage 3, the off-ramp can be temporarily closed one time during off-peak hours as defined above for USH 41 when USH 41 Stage 3 HMA paving operations are taking place adjacent to the ramp.

During USH 41 Stage 5, the off-ramp can be temporarily closed one time during off-peak hours as defined above for USH 41 when USH 41 Stage 5 HMA paving operations are taking place adjacent to the ramp.

During USH 41 Stage 5, the off-ramp shall be closed one time for a maximum of seven consecutive calendar days to perform work on the ramp.

N. 47th Street On-Ramp to Southbound USH 41
During USH 41 Stage 3, the on-ramp can be temporarily closed one time during off-peak hours as defined above for USH 41 when USH 41 Stage 3 HMA paving operations are taking place adjacent to the ramp.

During USH 41 Stage 5, the on-ramp can be temporarily closed one time during off-peak hours as defined above for USH 41 when USH 41 Stage 5 HMA paving operations are taking place adjacent to the ramp.

During USH 41 Stage 5, the on-ramp shall be closed one time for a maximum of seven consecutive calendar days to perform work on the ramp.

Northbound USH 41 Off-Ramp to Lloyd Street
During USH 41 Stage 3, the off-ramp can be temporarily closed one time during off-peak hours as defined above for USH 41 when USH 41 Stage 3 HMA paving operations are taking place adjacent to the ramp.

During USH 41 Stage 5, the off-ramp can be temporarily closed one time during off-peak hours as defined above for USH 41 when USH 41 Stage 5 HMA paving operations are taking place adjacent to the ramp.

During USH 41 Stage 5, the off-ramp shall be closed one time for a maximum of seven consecutive calendar days to perform work on the ramp.

Traffic and Construction Sequencing
Perform the work in accordance to the following stages as shown in the plans:

Wisconsin Avenue Traffic Signal Installation
One lane of traffic in each direction on Wisconsin Avenue shall remain open at all times. Therefore, construct Wisconsin Avenue in stages. Stage 1 shall be the installation of the traffic signal on the north side of the Wisconsin Avenue and N. 46th Street intersection. Stage 2 shall be the installation of the traffic signal in the median on the east side of the Wisconsin Avenue and N. 46th Street intersection.

Wisconsin Avenue Traffic Signal Installation Stage 1

Close the outside westbound lane of Wisconsin Avenue and put all westbound traffic into the median thru lane. Place traffic control devices as shown in the plans or as the engineer directs in order to protect traffic on Wisconsin Avenue from operations and equipment that coincide with the traffic signal installation. The sidewalk within the work zone shall be closed and pedestrian traffic detoured to the south side of Wisconsin Avenue using SDD Traffic Control, Pedestrian Accommodation – Mid-Block Sidewalk Closure and Corner Sidewalk Closure with Temporary Crosswalk, or as directed by the engineer.

Remove lane closure for westbound Wisconsin Avenue when no work is taking place.

Eastbound Wisconsin Avenue shall remain open to two lanes of traffic during this stage.

Wisconsin Avenue Traffic Signal Installation Stage 2

Close the westbound Wisconsin Avenue left turn lane to southbound USH 41. Maintain thru traffic in the outside Wisconsin Avenue thru lane and permit left turns to southbound USH 41 from the outside lane. Close the inside eastbound Wisconsin Avenue thru lane and maintain traffic in the outside thru lane. Place traffic control devices as shown in the plans or as the engineer directs in order to protect traffic on

Wisconsin Avenue from operations and equipment that coincide with the traffic signal installation.

Remove lane closure for westbound and eastbound Wisconsin Avenue when no work is taking place.

Bridge Work on Vliet Street over USH 41 (B-40-53)

One lane of traffic in each direction on Vliet Street shall remain open at all times. Therefore, construct Vliet Street Bridge in stages. Stage 1 shall be the construction of the north side of the Vliet Street structure. Stage 2 shall be the construction of the south side of the Vliet Street structure.

Vliet Street Bridge Deck Replacement Stage 1 (B-40-53)

Close eastbound traffic down to one lane. Close westbound traffic down to one lane. Shift westbound traffic to the south side of Vliet Street. Place traffic control devices as shown in the plans or as the engineer directs in order to protect traffic on Vliet Street from operations and equipment that coincide with bridge deck removal and replacement operations.

The sidewalk within the work zone shall be closed and pedestrian traffic detoured to the south side of Vliet Street using SDD Traffic Control, Pedestrian Accommodation – Mid-Block Sidewalk Closure and Corner Sidewalk Closure with Temporary Crosswalk, or as directed by the engineer.

Work on the north side of the Vliet Street Bridge deck shall be done by closing the lane(s) immediately under the work zone on USH 41 following the lane closure restrictions as outlined above, as shown in the staging plans for USH 41 repaving operations, in the Standard Detail Drawings or as directed by the engineer.

City of Milwaukee traffic signal department will install temporary traffic signals at the intersection of Vliet Street and Alois Street/N. 47th Street. See the "Utilities" article in the special provisions for advanced notification and contact information to schedule the temporary traffic signal work.

Vliet Street Bridge Deck Replacement Stage 2 (B-40-53)

Close westbound traffic down to one lane. Close eastbound traffic down to one lane. Shift eastbound traffic to the north side of Vliet Street. Place traffic control devices as shown in the plans or as the engineer directs in order to protect traffic on Vliet Street from operations and equipment that coincide with bridge deck removal and replacement operations.

The sidewalk within the work zone shall be closed and pedestrian traffic detoured to the north side of Vliet Street using SDD Traffic Control, Pedestrian Accommodation–Mid-Block Sidewalk Closure and Corner Sidewalk Closure With Temporary Crosswalk, or as directed by the engineer.

Work on the south side of the Vliet Street Bridge deck shall be done by closing the lane(s) immediately under the work zone on USH 41 following the lane closure restrictions as outlined above, as shown in the staging plans for USH 41 repaving operations, in the Standard Detail Drawings or as directed by the engineer.

City of Milwaukee traffic signal department will install temporary traffic signals at the intersection of Vliet Street and Alois Street/N. 47th Street. See the "Utilities" article in the special provisions for advanced notification and contact information to schedule the temporary traffic signal work.

Bridge Work on Washington Boulevard over USH 41 (B-40-56)

One lane of traffic in each direction on Washington Boulevard shall remain open at all times. Therefore, construct Washington Boulevard bridge in stages. Stage 1 shall be the construction of the north side of the Washington Boulevard structure. Stage 2 shall be the construction of the south side of the Washington Boulevard structure.

Washington Boulevard Bridge Deck Overlay Stage 1 (B-40-56)

Close eastbound traffic down to one lane. Close westbound traffic down to one lane. Shift westbound traffic to the south side of Washington Boulevard. Place traffic control devices as shown in the plans or as the engineer directs in order to protect traffic on Washington Boulevard from operations and equipment that coincide with bridge operations.

The sidewalk within the work zone shall be closed and pedestrian traffic detoured to the south side of Washington Boulevard using SDD Traffic Control, Pedestrian Accommodation–Mid-Block Sidewalk Closure and Corner Sidewalk Closure With Temporary Crosswalk, or as directed by the engineer.

Full depth deck repair work on the north side of the Washington Boulevard Bridge deck shall be done by closing the lane(s) immediately under the work zone on USH 41 following the lane closure restrictions as outlined above, as shown in the staging plans for USH 41 repaving operations, in the Standard Detail Drawings or as directed by the engineer.

Repair concrete deck as shown in the plans or as directed by the engineer. Clean and prepare deck surface and place deck surface as shown in the plans.

Washington Boulevard Bridge Deck Overlay Stage 2 (B-40-56)

Close westbound traffic down to one lane. Close eastbound traffic down to one lane. Shift eastbound traffic to the north side of Washington Boulevard. Place traffic control devices as shown in the plans or as the engineer directs in order to protect traffic on Washington Boulevard from operations and equipment that coincide with bridge operations.

The sidewalk within the work zone shall be closed and pedestrian traffic detoured to the north side of Washington Boulevard using SDD Traffic Control, Pedestrian Accommodation–Mid-Block Sidewalk Closure and Corner Sidewalk Closure With Temporary Crosswalk, or as directed by the engineer.

Full depth deck repair work on the south side of the Washington Boulevard Bridge deck shall be done by closing the lane(s) immediately under the work zone on USH 41 following the lane closure restrictions as outlined above, as shown in the staging plans for USH 41 repaving operations, in the Standard Detail Drawings or as directed by the engineer.

Repair concrete deck as shown in the plans or as directed by the engineer. Clean and prepare deck surface and joints and place deck surface as shown in the plans.

Lloyd Street Bridge Deck Overlay (B-40-60)

One lane of traffic in each direction on Lloyd Street shall remain open at all times. Therefore, construct Lloyd Street Bridge in stages. Stage 1 shall be the construction of the middle segment of the Lloyd Street structure. Stage 2 shall be the construction of the outside lanes of the Lloyd Street structure.

Notify the City of Milwaukee 10 working days prior to beginning work on Lloyd Street and prior to any staging changes. The City of Milwaukee can then make any signal timing adjustments and/or cover any signal heads at the Lloyd Street and N. 47th Street intersection and the Lloyd Street and N. 46th Street intersection. The field contact for City of Milwaukee Traffic Signals on Lloyd Street is Musa Abu-Khader, Phone (414) 286-2432.

Lloyd Street Bridge Deck Overlay Stage 1 (B-40-60)

Reduce eastbound and westbound lanes from two lanes to one lane in each direction. Shift eastbound and westbound traffic to the outside lanes in each direction. Place traffic control devices as shown in the plans or as the engineer directs in order to protect traffic on Lloyd Street from operations and equipment that coincide with bridge operations.

Sidewalk on both sides of the bridge shall remain open to pedestrian traffic during Stage 1.

Full depth deck repair work on the middle segment of the Lloyd Street Bridge deck shall be done by closing the lane(s) immediately under the work zone on USH 41 following the lane closure restrictions as outlined above, as shown in the staging plans for USH 41 repaving operations, in the Standard Detail Drawings or as directed by the engineer.

Repair concrete deck and replace expansion joints as shown in the plans or as directed by the engineer. Clean and prepare deck surface and joints and place deck surface as shown in the plans.

Lloyd Street Bridge Deck Overlay Stage 2 (B-40-60)

Reduce eastbound and westbound lanes from two lanes to one lane in each direction. Shift eastbound and westbound traffic to the inside lanes in each direction. Place traffic control devices as shown in the plans or as the engineer directs in order to protect traffic on Lloyd Street from operations and equipment that coincide with bridge operations.

The sidewalk within the work zone shall be closed on one side at a time and pedestrian traffic detoured to the other side of Lloyd Street using SDD Traffic Control, Pedestrian Accommodation–Mid-Block Sidewalk Closure and Corner Sidewalk Closure With Temporary Crosswalk, or as directed by the engineer.

Full depth deck repair work on the outside lanes of the Lloyd Street Bridge deck shall be done by closing the lane(s) immediately under the work zone on USH 41 following the lane closure restrictions as outlined above, as shown in the staging plans for USH 41 repaving operations, in the Standard Detail Drawings or as directed by the engineer.

Repair concrete deck and replace expansion joints as shown in the plans or as directed by the engineer. Clean and prepare deck surface and joints and place deck surface as shown in the plans.

Alois Street

Place traffic control devices as shown in the plans or as the engineer directs in order to protect traffic on Alois Street from operations and equipment that coincide with construction operations.

Maintain one lane of traffic in each direction at all times between the USH 41 on/off ramps and Station 10+00 on Alois Street; except during USH 41 Stage 5. When the Alois Street on/off ramps are closed for 58 consecutive hours as described above, close Alois Street from State Street to Vliet Street.

Work on Alois Street between STA 10+00 on Alois Street and Vliet Street shall not take place until USH 41 Stage 5 when the Alois Street on/off ramps are closed for 58 consecutive hours as described above. Alois Street will be closed from State Street to Vliet Street when the on/off ramps are closed for 58 consecutive hours.

Access shall be maintained at all times during the project to the Milwaukee Police Department facility at STA 4+60 RT on Alois Street. When Alois Street is closed from State Street to Vliet Street for 58 consecutive hours as described above, the following access needs to be provided to the Milwaukee Police Department facility:

- One 12-foot northbound lane and one 12-foot southbound lane from State Street to the facility.
- One 12-foot lane from Vliet Street to the facility.

The contractor shall coordinate traffic control and access location with the Milwaukee Police Department.

Repaving Operations on USH 41

All work associated with the repaving of USH 41 shall be conducted after the completion of the Stage 2 Vliet Street bridge deck removal operations.

USH 41 Stage 1

Install traffic control devices for this stage as shown in the plan or as directed by the engineer.

During peak hours, two lanes of USH 41 must remain open at all times. The outside shoulder and the outside lane in the 3-lane section may be closed.

During off-peak hours, one lane of USH 41 must remain open at all times. The outside shoulder and two outside lanes of USH 41 in the 3-lane section may be closed. The outside shoulder and outside lane in the 2-lane section may be closed.

Traffic shall not be placed on the median shoulder.

Remove all concrete shoulder rumble strips along the outside shoulder of USH 41 and replace with concrete pavement SHES. Repair outside concrete shoulder in locations identified in the plans or as the engineer directs.

Remove concrete barrier wall turn-down transitions and replace with energy absorbing terminals. Remove and replace damaged concrete barrier wall at the locations identified on the plans, or as the engineer directs. Remove and replace guardrail and energy absorbing terminals as shown in the plans or as the engineer directs.

Concrete barrier blunt ends exposed during removal operations must be shielded when the blunt ends are within the clear zone of the roadway. The clear zone widths are 30 feet from the edge of traveled way. Conduct removals in accordance to the number of attenuators available so that no blunt ends are unprotected.

Rehabilitate and clean storm sewer structures along the outside shoulders as identified in the plan or as directed by the engineer. Clear and grub areas along the outside of the roadway as shown in the plans.

USH 41 Stage 2

Install traffic control devices for this stage as shown in the plan or as directed by the engineer.

During peak hours, two lanes of USH 41 must remain open at all times. The inside shoulder and the inside lane in the 3-lane section may be closed.

During off-peak hours, one lane of USH 41 must remain open at all times. The inside shoulder and two inside lanes of USH 41 in the 3-lane section may be closed. The inside shoulder and inside lane in the 2-lane section may be closed.

Remove concrete barrier wall turn-down transitions and replace with energy absorbing terminals. Remove and replace damaged concrete barrier wall at the locations identified on the plans, or as the engineer directs. Replace median concrete shoulder and concrete barrier wall as shown in the plans.

Concrete barrier blunt ends exposed during removal operations must be shielded when the blunt ends are within the clear zone of the roadway. The clear zone widths are 30 feet from the edge of traveled way. Conduct removals in accordance to the number of attenuators available so that no blunt ends are unprotected.

Rehabilitate and clean storm sewer structures along the inside shoulders as identified in the plan or as directed by the engineer.

Mill existing HMA pavement, remove existing concrete surface partial depth to the thickness shown in the plans, repair joints and cracks as indicated in the plan or as directed by the engineer, identify concrete base patch locations, place lower layer of HMA, and concrete base patch areas identified during milling operations.

Concrete base patches must be finished to the same level as the top of the lower layer of proposed HMA pavement with a tined surface finish, sufficient to provide proper adhesion of final HMA layer. USH 41 traffic shall not be allowed to drive on milled surface before lower layer of HMA pavement is placed.

If directed by the engineer, grind existing concrete shoulders in low points to provide temporary drainage between the placement of the lower layer of HMA and the placement of the final surface HMA layer as directed by the field engineer. Grinding of existing concrete surfaces in low points for drainage purposes will be paid under the Removing Asphaltic Surface Milling bid item.

Place a temporary asphalt wedge, or concrete wedge if base patched, where differences in pavement surface elevations between lanes is greater than 3/4-inch or as directed by the engineer. No temporary asphalt wedges or concrete wedges may be installed, or asphalt grinding done, on the final surface of HMA pavement. Wedging of concrete base patches is incidental to the concrete base patching bid item.

Place median lighting as shown in the plans.

USH 41 Stage 3

Install traffic control devices for this stage as shown in the plan or as directed by the engineer.

During peak hours, two lanes of USH 41 must remain open at all times. The outside shoulder and the outside lane in the 3-lane section may be closed.

During off-peak hours, one lane of USH 41 must remain open at all times. The outside shoulder and two outside lanes of USH 41 in the 3-lane section may be closed. The outside shoulder and outside lane within the 2-lane section may be closed.

Traffic shall not be placed on the median shoulder.

Mill existing HMA pavement, remove existing concrete surface partial depth to the thickness shown in the plans, repair joints and cracks as identified in the plan or as directed by the engineer, identify concrete base patch locations, place lower layer HMA pavement, and concrete base patch areas identified during milling operations. On-ramps and off-ramps will be allowed to be closed when work is taking place in front of the ramp.

Concrete base patches must be finished to the same level as the top of the lower layer of proposed HMA pavement with a tined surface finish, sufficient to provide proper adhesion of final HMA layer. USH 41 traffic shall not be allowed to drive on milled surface before lower layer of HMA pavement is placed.

Place temporary asphalt wedge, or concrete wedge if base patched, where differences in pavement surface elevations between lanes is greater than 3/4-inch or as directed by the engineer. No temporary asphalt wedges or concrete wedges may be installed, or asphalt grinding done, on the final surface of HMA pavement. Wedging of concrete base patches is incidental to the concrete base patching bid item.

USH 41 Stage 4

Install traffic control devices for this stage as shown in the plans or as directed by the engineer.

During peak hours, two lanes of USH 41 must remain open at all times. The inside shoulder and the inside lane in the 3-lane section may be closed.

During off-peak hours, one lane of USH 41 must remain open at all times. The inside shoulder and two inside lanes of USH 41 in the 3-lane section may be closed. The inside shoulder and inside lane in the 2-lane section may be closed.

If concrete shoulder sections at low points were removed in Stage 2 for temporary drainage purposes, replace with concrete pavement SHES. Placement of concrete pavement SHES shall be paid for under the Concrete Pavement Repair SHES bid item.

Remove temporary asphalt and concrete wedges placed in Stage 2 and Stage 3. Place upper layer of HMA pavement on median lane and middle lane.

Place permanent pavement markings in final locations on median and inside lanes.

USH 41 Stage 5

Install traffic control devices for this stage as shown in the plan or as directed by the engineer.

During peak hours, two lanes of USH 41 must remain open at all times. The outside shoulder and the outside lane in the 3-lane section may be closed.

During off-peak hours, one lane of USH 41 must remain open at all times. The outside shoulder and two outside lanes of USH 41 in the 3-lane section may be closed. The outside shoulder and outside lane within the 2-lane section may be closed.

Traffic shall not be placed on median shoulder.

Remove temporary asphalt and concrete wedges placed in Stage 2 and Stage 3. Place upper layer of HMA pavement on the outside USH 41 lane.

Unless directed otherwise by engineer, USH 41shall receive upper layer of HMA pavement prior to on-ramps and off-ramps receiving upper layer of HMA pavement.

Along on-ramps and off-ramps mill existing HMA pavement, remove existing concrete surface partial depth to the thickness shown in the plans, repair joints and cracks as identified in the plan or as directed by the engineer, replace concrete curb and gutter identified in the plan, identify concrete base patch locations, place lower layer HMA

pavement, concrete base patch areas identified during milling operations, and place upper layer of HMA pavement.

USH 41, on-ramp, and off-ramp traffic shall not be allowed to drive on milled surface before lower layer of HMA pavement is placed.

Remove temporary pavement marking from outside lane. Place permanent pavement markings in final locations on USH 41 and ramps.

4. Lane Rental Fee Assessment.

A General

The contract designates some lane closures to perform the work. No Lane Rental Fee Assessments will be charged for closing lanes during the allowable lane closure times. If a lane is closed outside of the allowable lane closure times, the contractor will be subject to Lane Rental Fee Assessments. If a lane is obstructed at any time due to contractor operations, it is considered a closure. The purpose of lane rental is to enforce compliance of lane restrictions and discourage unnecessary closures.

The allowable lane closure times are listed in the Prosecution and Progress article.

Submit the dates of the proposed lane, ramp, and roadway restrictions to the engineer as part of the progress schedule. The contractor will coordinate lane, ramp, and roadway closures with any concurrent operations on adjacent roadways within 3 miles of the project.

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

A.1 Lane Rental Fee Assessment

The Lane Rental Fee Assessment incurred for each lane closure, each ramp closure, and each full closure of a roadway, per direction of travel, is as follows:

$2,000 per lane per 15 minutes

The Lane Rental Fee Assessment represents the average cost of the interference and inconvenience to the road users for each closure. The Lane Rental Fee Assessment will be measured in 15-minute increments. All lane, roadway, or ramp closure event increments less than 15 minutes will be assessed as a 15-minute increment.

Lane Rental Fee Assessments will be made based on the applicable rate for any and all closures whether work is being performed or not. The engineer, or designated representative, will be the sole authority in determining time period length for the Lane Rental Fee Assessment.

Lane Rental Fee Assessments will not be assessed for closures due to crashes, accidents or emergencies not initiated by the contractor.

B (Vacant)

C (Vacant)

D Measurement

The department will assess Lane Rental Fee Assessment by the dollar under the administrative item Failing to Open Road to Traffic. The total dollar amount of Lane Rental Fee Assessment will be computed by multiplying the Lane Rental Assessment Rate by the number of 15-minute increments of each lane closure event as described above.

Lane Rental Fee Assessment will be in effect from the time of the Notice to Proceed until the department issues final acceptance.

E (Vacant)

5. Traffic.

Complete the construction sequence and the associated traffic control and detours as detailed on the plans and described herein.

Keep lanes, ramps, and shoulders open if no work operations are anticipated to occur during that day.

Do not disturb, remove, or obliterate any traffic control signs, advisory signs, shoulder delineators, or beam guard in place along the traveled roadways not shown on the plans without approval of the engineer.

The traffic requirements are subject to change at the direction of the engineer in the event of an emergency.

Cover all traffic control signs when they are not in use.

Provide new high intensity reflective sheeting on all traffic control drums and barricades.

Yield to through traffic at all locations. Equip all contractors' vehicles or equipment operating in live traffic lanes with a hazard identification beam (flashing yellow signal light). Operate the flashing yellow beam at all time while within the work zone.

Do not park or store equipment, vehicles or construction materials within 30-ft of the edge of roadway carrying traffic during non-working hours except at locations and periods of time approved by the engineer.

Do not leave any slopes steeper than 4:1 within the clear zone or any drop offs at the edge of the traveled way greater than 2 inches. The clear zone is 30 feet.

Definitions
The following definitions apply to this contract for freeway work restrictions:

- System Ramp: Freeway to Freeway ramp
- Service Ramp: Freeway to Local Road ramp

Advanced Notification
Provide the engineer with a schedule of lane and ramp closures for the following week by noon on Thursday of the previous week. In addition, provide the following minimum advance notification to the engineer for incorporation into the Wisconsin Lane Closure System:

Service Ramp Closures	3 business days
System Ramp Closures	7 calendar days
Shoulder/Lane Closures	3 business days
Full Freeway Closures	14 calendar days
Construction Stage Changes	14 calendar days
Detours	14 calendar days

Single lane operation on mainline USH 41 is only permitted during the off-peak hours pending approval of the engineer. Lane closures shall be in accordance to these plans and the standard detail drawings (SDD) and have the approval of the engineer and the region work zone engineer. Notify the engineer and the regional work zone engineer at (262) 548-8728 if there are changes in the schedule, early completions, or cancellations of scheduled work. Coordinate the locations and messages of portable changeable message signs with the engineer and WisDOT STOC. Notify WisDOT Signal Operations, (414) 750-2605 and WisDOT Electrical Field Unit, (414) 266-1170 regarding changes for alternate routes and detours.

Closures
Complete closures of the freeway will not be permitted.

Complete closures of local streets will not be permitted.

Freeway Shoulder Closures
Shoulder closures are allowed as noted in the staging plans and Prosecution and Progress article above. Additional shoulder closures must be approved by the engineer. Do not perform work in a closed shoulder area during peak traffic periods unless otherwise approved by the engineer.

Freeway Ramp Closures
Sign all on-ramp and off-ramp closures and system interchange ramps seven working days in advance of their closure with dates and time of closure. Do not close consecutive ramps. Place a portable changeable message board ahead of preceding ramp, indicating ramp closure ahead.

Coordination with Milwaukee County Sheriff
Notify and request assistance 14 calendar days in advance from Milwaukee County Sheriff's Department for lane closures and stage changes.

Stage Changes
Traffic control for stage changes will only be allowed during off-peak working hours.

Add the following to standard spec 643.3.1:

Have available at all times sufficient experienced personnel to promptly install, remove and reinstall the required traffic control devices to route traffic in order to perform the operations. Provide the Milwaukee County Sheriff's Department, and the engineer a current telephone number for the contractor, or his representative, the traffic control subcontractor, and the City of Milwaukee Traffic Operations department contact.

Replace standard spec 643.3.1(6) with the following:

Place one flashing arrow board in advance of each lane closure taper and place one flashing arrow board within each lane closure taper at locations directed by the engineer.

6. Traffic Meetings and Traffic Control Scheduling.

Every Thursday by 10:00 AM, or as scheduled by the engineer, submit a detailed proposed 2-week look-ahead traffic closure schedule to the engineer. Type the detailed proposed two week look ahead closure schedule into an excel spreadsheet. Enter information such as closure dates, duration, work causing the closure and detours if any are to be used. Also enter information such as emergency contacts and general one month look ahead closure information into the excel spreadsheet.

Meet with the engineer between in a weekly meeting to discuss and answer questions on the proposed schedule. Edit, delete and add closures to the detailed proposed 2-week look-ahead schedule, as directed by the engineer, so that proposed closures meet spec requirements. Other edits, deletions or additions unrelated to meeting spec requirements may also be agreed upon between the contractor and engineer during the 10:00 AM meeting. Upon editing, deleting and adding closures to the proposed schedule due to discussion from the 10:00 AM meeting e-mail the detailed proposed 2-week look ahead closure schedule to the project's list of stakeholders, including the Statewide Traffic Operations Center as provided by the engineer.

Every Thursday at 2:30 PM, or as scheduled by the engineer, attend a weekly traffic meeting. The meeting will bring county officials, project stake holders, contractors, and construction engineering personnel together to discuss traffic staging, closures and general impacts. Upon obtaining feedback from the meeting attendees, edit, delete and add information to the detailed two week look-ahead closure schedule, as needed. Submit the revised two week look ahead to the engineer.

Obtain approval from the engineer for mid-week changes to the closure schedule. Revise the two week look ahead as required and obtain engineer approval.

The contractor's weekly schedule of operations for all actual and anticipated work shall include roadway, lane and ramp closures for the upcoming week beginning on Sunday, 12:01 AM and ending at Saturday, 11:59 PM. This information will be reviewed by the department. Modifications to this schedule will be accepted no later than noon on Thursdays. The final weekly schedule information will be provided to the local media on each Friday at 9:00 AM by department public information personnel.

7. Holiday Work Restrictions.

Do not perform work on, nor haul materials of any kind along or across any portion of the highway carrying USH 41 traffic, and entirely clear the traveled way and shoulders of such portions of the highway of equipment, barricades, signs, lights, and any other material that might impede the free flow of traffic during the following holiday periods:

- From noon Friday, May 27, 2016 to 6:00 AM Tuesday, May 31, 2016 for Memorial Day;
- From noon Friday, July 1, 2016 to 6:00 AM Tuesday, July 5, 2016 for Independence Day;
- From noon Friday, September 2, 2016 to 6:00 AM Tuesday, September 6, 2016 for Labor Day;
- From noon Wednesday, November 23, 2016 to 6:00 AM Monday, November 28, 2016 for Thanksgiving.

107-005 (20050502)

8. Miller Park Events.

Do not perform work on, nor haul materials of any kind along or across any portion of the highway carrying USH 41 traffic, or local side road traffic. Open USH 41 so that, at a minimum, 2 lanes of traffic are opened in each direction. 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. These restrictions are in effect during all Milwaukee Brewers home games from the four hours prior to the start of the game and until two hours after completion of the game or event following the game. No ramp closures are allowed during Milwaukee Brewer home games.

Do not perform work within the project limits on opening day of the Milwaukee Brewers Baseball season.

In addition to the Milwaukee Brewers home games, it is anticipated that throughout the duration of the project, there will be approximately 10 yet-to-be scheduled events at Miller Park that may impact the construction schedule. There are anticipated work restrictions on those days and all work has to be approved by the engineer.

9. Utilities.

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

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 three working days before the site will be ready for the utility to begin its work.

Additional detailed information regarding the location of relocated utility facilities is available on the permits issued to the utility companies. These permits can be viewed at the regional office during normal working hours. Contact the region's Utility Permit Coordinator at (262) 548-8733.

Underground and overhead utility facilities are located within the project limits. Utility adjustments are required for this construction project as noted below. Coordinate construction activities with a call to Diggers Hotline or a direct call to utilities that have facilities in the area as required per statutes. Use caution to insure the integrity of underground facilities and maintain code clearances from overhead facilities at all times. Contact each utility company listed in the plans prior to preparing bids to obtain current information on the status of existing and any new utility relocation work.

The following utility companies have facilities along the project. A summary of their proposed utility alteration work to accommodate construction is summarized below.

ATC Management Inc.
ATC has multiple high voltage power circuits that run east and west and cross USH 41 south of the IH 94/USH 41 interchange. There are no anticipated relocations or potential impacts with these high voltage circuits. All overhead conductors should be considered to be energized at all times. Maintain OSHA Safe Working Clearance from the 138 kV line per the latest OSHA requirements.

The field contact for ATC is Tony Marciniak, (262) 506-6814.

AT&T Corp
AT&T Corp maintain underground duct packages within the project limits.

- Duct package crossing USH 41 at the Wisconsin Avenue Bridge. Duct package is bored under USH 41, and not attached to the structure.
- Duct package crosses USH 41 on the north side of the on and off ramps from IH 94.

There are no anticipated conflicts with these underground facilities.

The field contact for AT&T Corp is Kenneth Nine, (574) 842-8830 / Cell (574) 904-6336.

AT&T Wisconsin
AT&T Wisconsin maintains underground facilities within the project limits as follows:

- Six 4-inch transite ducts attached to the bridge crossing USH 41 at Vliet Street along the centerline of the bridge.
- A manhole at approximately Station 10+05 LT on Vliet Street.
- A manhole at approximately Station 12+85 LT on Vliet Street.
- Four 3 1/2-inch transite ducts attached to the bridge crossing USH 41 at Lloyd Street.

The only anticipated conflict with AT&T Wisconsin is the six 4-inch transite ducts attached to the north side of the Vliet Street Bridge.

Vliet Street Bridge (B-40-53)

During construction on the Vliet Street Bridge, AT&T will remove the six existing transite ducts and replace them with three 4-inch split fiberglass (occupied) ducts and three 4-inch solid fiberglass (vacant) ducts.

The six existing transite ducts contain asbestos. AT&T will utilize the Balestrieri Group for removal of asbestos containing ducts.

AT&T will utilize the contractor traffic control to perform their work and will be responsible for any additional traffic control requirements that would not be provided by the contractor.

AT&T will require a 15 working day notice prior to the start of Stage 1 bridge operations and be provided with a current construction schedule for Stage 1 bridges operations. AT&T will need to acquire a Wisconsin Department of Natural Resources permit. Removal of the transite ducts cannot take place until this permit is obtained.

AT&T will remove the old hanger system, replace with new, and place a support for the cables/conduit when the old hanger system is severed from the bridge. Removal and placement of the support will take four working days. Removal includes removing asbestos.

The contractor shall provide protection for the facilities to prevent damage from falling debris during deck removal and replacement. Installation and removal of the temporary protection will be incidental to the bridge work.

AT&T will remove and replace the facility within each abutment. AT&T will require a five working day notice prior to performing this work. Removal and replacement in each abutment, including asbestos removal, will take two working days per side. The contractor shall support and protect the existing facilities when removing the abutment back wall

around the facility at each location. This work will be incidental to the bridge work. The contractor shall work around the six splayed ducts at the back of the abutment walls when placing temporary shoring for Stage 1 and Stage 2.

AT&T will remove and replace the transite from the manhole at Station 10+05 LT to the west bridge abutment and from the east bridge abutment to the manhole at Station 12+85 LT once the contractor removes the pavement. AT&T will require a five working day notice prior to performing this work. AT&T will use slurry backfill in the trenches within the construction limits, and will use slurry backfill and temporary asphalt outside of the limits for restoration. AT&T will require three working days on each side of the bridge to complete this work.

The bridge contractor shall install the inserts into Structure B-40-53 from which AT&T Wisconsin will install the hanger assembly to support their facility. AT&T Wisconsin will supply the inserts to the contractor. The insert spacing and quantities will be provided by AT&T Wisconsin. Contact AT&T Wisconsin for spacing and quantities prior to preparing final bid. The installation of the inserts shall be incidental to the bid item Concrete Masonry Bridges. The AT&T Wisconsin contact for insert spacing and quantities is Dean Herro, (262) 352-0131, or Jay Bulanek, (262) 896-7669. AT&T will require a three working day notice to deliver eyelets to the contractor.

AT&T will install the proposed hanger system. AT&T will require a five working day notice to perform this work. This work will take four working days to complete.

AT&T will provide an inspector on site when work is performed and give the final approval.

The field contact for AT&T Wisconsin is Dean Herro, (262) 352-0131.

City of Milwaukee – Communication

City of Milwaukee – Communication maintains facilities within the project limits that occupies the following conduit:

- Contains facilities attached to the Wisconsin Avenue Bridge.
- 6-Duct package attached to the south side of the Vliet Street Bridge, underneath the bridge deck.
- 3-Duct package attached to the north side of the Vliet Street Bridge, underneath the bridge deck.
- 4-Duct package poured into to the south side of the Lloyd Street Bridge.

There are anticipated conflicts with City of Milwaukee – Communication facilities within the project limits.

Vliet Street Bridge (B-40-53)

Communications facilities on existing cabling in the project area will be relocated to facilities outside of the project area prior to the start of the project. Cabling through conduit attached to the Vliet Street Bridge will be abandoned in place prior to the start of the project. Facilities will be restored to the Vliet Street Bridge when construction is complete.

Lloyd Street Bridge (B-40-60)

Communications facilities on existing cabling in the project area will be relocated to facilities outside of the project area prior to the start of the project. Cabling through conduit poured into to the Lloyd Street Bridge will be abandoned in place prior to the start of the project. Facilities will be restored to the Lloyd Street Bridge when construction is complete.

The field contact for City of Milwaukee – Communication is DPW / Communications Dispatch and Brian Pawlak, (414) 286-3686.

City of Milwaukee – Sanitary Sewer

The City of Milwaukee maintains sanitary sewer lines within the limits of the project as follows:

- There are facilities along N. 46th Street between the Wells Street southbound USH 41 off ramp and the southbound USH 41 on ramp from Wisconsin Avenue.
- There is a 12-inch diameter concrete sanitary sewer running in the southbound USH 41 on-ramp south of Wisconsin Avenue and crossing under USH 41 south of the Wisconsin Avenue Structure.
- There are facilities along Vliet Street that cross USH 41 at approximately Station 106+50.
- There are facilities along Lloyd Street that cross USH 41 at approximately Station 137+00.
- There are facilities along N. 47th Street from Vliet Street to Lisbon Avenue.
- There are facilities along N. 46th Street from Lloyd Street to Lisbon Avenue.

There are anticipated conflicts with City of Milwaukee Sanitary Sewer.

Two sanitary sewer manhole covers will need to be adjusted on Vliet Street during Stage 2 construction operations as part of this project. The contractor shall adjust the sanitary sewer manhole at STA 10+25 RT and STA 12+48 RT. The work will be paid for under Bid Item *# 611.8110 Adjusting Manhole Covers*.

The field contact for these facilities is Samir Amin, Phone 414-286-2461.

City of Milwaukee – Signals
The City of Milwaukee maintains traffic signals at the following locations:

- Wisconsin Avenue and 46th Street;
- Vliet Street and Alois Street/N. 47th Street;
- Lloyd Street and N. 47th Street;
- Lloyd Street and N. 46th Street.

They only anticipated conflict with City of Milwaukee Traffic Signals is at the intersection of Wisconsin Avenue and N. 46th Street and the intersection of Vliet Street and Alois Street/N. 47th Street.

The City of Milwaukee will utilize the contractor traffic control to perform their work and will be responsible for any additional traffic control requirements that would not be provided by the contractor.

Temporary traffic signals will be installed at the Wisconsin Avenue and N. 46th Street intersection and the Vliet Street and Alois Street/N. 47th Street intersection to ensure no live cable will remain in service within the work area. Traffic signal cable that will be impacted by the project will be placed overhead by City of Milwaukee forces prior to the start of construction.

At the intersection of Wisconsin Avenue and N. 46th Street, the City of Milwaukee will protect and adjust signal cable where necessary. All traffic signal cable will remain live in underground or overhead during construction.

At the Vliet Street and N. 47th Street intersection, the City of Milwaukee will utilize existing lighting poles and a temporary wood pole on the southwest bypass island to install overhead signal cables.

All traffic signals will remain under the jurisdiction of the City of Milwaukee during construction and any hardware, timing, or phasing changes will be coordinated with the contractor before and during construction. Access shall be provided to any signal equipment installed adjacent to or within the work area.

The City of Milwaukee will need five working days prior to construction and for changes in staged traffic to complete temporary traffic signal work at each intersection. The City of Milwaukee will require a three working day notice prior to performing work at each intersection.

All traffic signal equipment and cabling, not installed as part of this contract, will be restored by the City of Milwaukee at the intersection of Wisconsin Avenue and N. 46th Street and the intersection of Vliet Street and N. 47th Street by City of Milwaukee forces both during and following construction operations.

The field contact for City of Milwaukee Traffic Signals is Al Nichols, (414) 286-5941 / (414) 708-5148 cell.

City of Milwaukee – Street Lighting
The City of Milwaukee maintains street lighting facilities at the following locations:

- Along the median of Wisconsin Avenue and along the parapet on the Wisconsin Avenue Bridge over USH 41.
- Along Vliet Street and along the parapet on the Vliet Street Bridge over USH 41.
- Along Washington Boulevard and the parapet on the Washington Boulevard Bridge over USH 41.
- Along Lloyd Street and the parapet on the Lloyd Street Bridge.
- Along N. 47th Street between Vliet Street and Lisbon Avenue.
- Along N. 46th Street between Lloyd Street and Lisbon Avenue.
- The intersection of N. 46th Street and Martin Drive.

There are several anticipated conflicts with City of Milwaukee Street Lighting throughout the project limits.

If any City of Milwaukee street lighting facilities are damaged during construction operations, immediately call the City of Milwaukee Street Lighting Department and allow three working days to schedule and make repairs.

USH 41 Ramp Termini on Martin Drive

City of Milwaukee street lighting facilities are to be protected and adjusted. Notify the City of Milwaukee Street Lighting Department two working days prior to beginning work in this area.

Vliet Street Bridge (B-40-53)

City of Milwaukee street lighting will remain in service on the side of the bridge that is not under construction. City of Milwaukee Street Lighting forces will install wood poles and temporary overhead cable for both stages before the start of construction with potential minor cable work between stages. City of Milwaukee Street Lighting will remove the existing lighting units and disconnect and abandon cables on the side of the bridge being worked on once traffic control is in place but before actual construction begins.

City of Milwaukee Street Lighting forces will utilize the contractor traffic control to perform their work and will be responsible for any additional traffic control requirements that would not be provided by the contractor.

Stage 1 – Vliet Street Bridge

Once traffic control is in place for Stage 1 construction operations, City of Milwaukee Street Lighting forces will install temporary wooden poles and aerial cable. City of Milwaukee Street Lighting forces require five working days to complete this work. Temporary wooden poles will be installed at the following locations:

- The center of the grass area of the right turn bypass island located in the southwest quadrant at the intersection of Alois Street and Vliet Street.
- Approximately 6 feet south of the traffic signal standard in the southeast quadrant at the intersection of Alois Street and Vliet Street.
- Approximately 3 feet north of the traffic signal standard in the northeast quadrant at the intersection of N. 47th Street and Vliet Street.

Provide a six working day notice to the City of Milwaukee Street Lighting Department prior to the contractor placing any permanent pavement, concrete curb and gutter, and sidewalk on the east side of the bridge in Stage 1 to coordinate City of Milwaukee installed lighting conduit. City of Milwaukee Street Lighting forces will be installing conduit to connect up to the conduit installed with the Stage 1 bridge work, along with a sidewalk vault to the west of the light pole at Station 12+84 LT (approximately). The contractor shall have removals completed within the project limits and concrete curb and gutter installed prior to the City of Milwaukee Street Lighting forces installing the conduit.

After Stage 1 bridge work is completed City of Milwaukee Street Lighting forces will require a notice of three working days and then six working days to complete installation of permanent lighting facilities along the north side of the bridge and the removal of the lighting facilities on the south side of the bridge, including abandoning cables feeding them. In addition, City of Milwaukee Street Lighting will require a three day working notice to make final acceptance of all contractor installed conduit and sidewalk vaults installed during Stage 1 operations. This work will need to be done prior to switching to Stage 2 construction activities.

Stage 2 – Vliet Street Bridge

City of Milwaukee Street Lighting forces will require six working day notice before the contractor places any permanent pavement, sidewalk, and curb and gutter at the intersection of Alois Street and Vliet Street and the intersection of Vliet Street and N. 46th Street to coordinate City of Milwaukee installed conduit. City of Milwaukee Street Lighting forces will install conduit and sidewalk vaults at the following locations:

- Conduit will be installed from the light pole at Station 8+65 RT (approximately) to Station 9+25 RT (approximately) at the back of curb & gutter along the outside of the right turn lane to Alois Street. Sidewalk vaults will be installed at Station 8+70 RT (approximately) and Station 9+25 RT (approximately).

- Conduit will be installed from Station 9+25 RT (approximately) to Station 9+42 RT (approximately). This conduit will cross the right turn lane from Vliet Street to Alois Street. A vault will be installed at Station 9+42 RT (approximately) in the island.
- Conduit will be installed at the southwest corner of the Vliet Street and 46th Street intersection that will connect to the conduit installed by the contractor along the south bridge parapet in Stage 2.

The contractor shall have removals completed within the project limits and concrete curb and gutter installed in order for the City of Milwaukee Lighting forces to install the conduit.

After Stage 2 of bridge work is complete but before traffic control is removed, the City of Milwaukee Street Lighting forces will require a notice of three working days and then six working days to complete installation of permanent lighting facilities along the south side of the bridge. In addition, City of Milwaukee Street Lighting will require a three day working notice to make final acceptance of all contractor installed conduit and sidewalk vaults installed during Stage 2 operations. This work will need to be done prior to opening Vliet Street to traffic.

Washington Boulevard (Station 8+00 – Station 14+00)

City of Milwaukee street lighting facilities are to be protected and adjusted. Notify the City of Milwaukee Street Lighting Department two working days prior to beginning work in this area.

N. 47th Street On-Ramp to Southbound USH 41

City of Milwaukee street lighting facilities are to be protected and adjusted. Notify the City of Milwaukee Street Lighting Department two working days prior to beginning work in this area.

Lloyd Street Street Bridge (B-40-60)

From Station 5+00 – Station 9+00 the City of Milwaukee Street Lighting forces will install temporary overhead cable to the existing street light poles and then string over the roadway and the bridge prior Lloyd Street bridge operations taking place. A temporary wood pole will be set behind the east curb of N. 47th Street and approximately 19 feet north of West Lloyd Street. The temporary overhead street lighting cable will remain until after a separate City of Milwaukee street project along Lloyd Street is completed. The City of Milwaukee Street Lighting forces will disconnect and abandon cable on the Lloyd Street Bridge structure prior to bridge operations taking place. City of Milwaukee Street Lighting forces will require six working days to complete this work.

The field contact for City of Milwaukee Street Lighting is Dennis Miller, (414) 286-5942 / Cell (414) 708-4251.

City of Milwaukee – Underground Conduit
City of Milwaukee – Underground Conduit maintains facilities within the project limits as follows:

- Contains facilities attached to the Wisconsin Avenue Bridge.
- 6-Duct package attached to the south side of the Vliet Street Bridge, underneath the bridge deck.
- 3-Duct package attached to the north side of the Vliet Street Bridge, underneath the bridge deck.
- 3-Duct package attached to the south side of the Lloyd Street Bridge, integral with the bridge deck.

There are anticipated conflicts with the facilities on the Vliet Street Bridge and the Lloyd Street Bridge.

Vliet Street Bridge (B-40-53)

There are two City of Milwaukee existing iron pipe conduit packages attached to the Vliet Street Bridge that shall be replaced as part of this project. These pipes carry street lighting, traffic, and communication cables. The existing 3-duct package is attached to the bottom of the bridge along the north side for the bridge structure. The existing 6-duct package is attached to the bottom of the bridge along the south side of the bridge structure.

These existing facilities do not contain asbestos.

Stage 1

City of Milwaukee forces will either remove or cut-off existing cables within the existing 3-duct package prior to Stage 1 bridge deck removal. The City of Milwaukee requires a five working day notice prior to bridge deck removal.

The existing 3-duct iron pipe package shall be replaced with a 3-duct fiberglass pipe package by the contractor under the bid item *Underdeck Utility Structure B-40-53 City of Milwaukee Electrical Conduit, Item # SPV.0105.650*.

Removal of existing 3-duct iron pipe package from between abutments, including within abutments, is incidental to the bridge deck removal. Removal of existing 3-duct iron pipe package from between abutments and manholes is incidental to the bid item *3-Duct Conduit, Cement Encased, 4-inch Rigid Nonmetallic Conduit DB-60, Item # SPV.0090.651*.

The contractor shall install 3-duct cement encased conduit from the manhole at Station 10+20 LT (approximately) to the west Vliet Street Bridge abutment and from east Vliet Street Bridge abutment to the manhole at Station 12+60 LT (approximately) under the bid item *3-Duct Conduit, Cement Encased, 4-inch Rigid Nonmetallic Conduit DB-60, Item #*

SPV.0090.651. The contractor shall install the conduit into the manhole under bid item *Installing Conduit Into Existing Manhole, Item # SPV.0060.651*.

The contractor shall adjust the TES manholes at STA 10+20 LT (approximately) and Station 12+60 LT (approximately) under the bid item *Adjusting TES Manhole Cover, Item # SPV.0060.650*.

The City of Milwaukee will require a five working day advance notification prior to any conduit being installed and ten working days to provide final inspection and acceptance after completion of the conduit installation in its entirety.

Stage 2

City of Milwaukee forces will either remove or cut-off existing cables within the existing 6-duct package prior to Stage 2 bridge deck removal. The City of Milwaukee requires a five working day notice prior to bridge deck removal.

The existing 6-duct iron pipe package shall be replaced with a 6-duct fiberglass pipe package by the contractor under the bid item *Underdeck Utility Structure B-40-53 City of Milwaukee Communications Conduit, Item # SPV.0105.651*.

Removal of existing 6-duct iron pipe package from between abutments, including within abutments, is incidental to the bridge deck removal. Removal of existing 6-duct iron pipe package from between abutments and manholes is incidental to the bid item *6-Duct Conduit, Cement Encased, 4-inch Rigid Nonmetallic Conduit DB-60, Item # SPV.0090.650*.

The contractor shall install 6-duct cement encased conduit from the manhole at Station 10+05 RT (approximately) to the west Vliet Street Bridge abutment and from East Vliet Street Bridge abutment to the manhole at Station 13+00 RT (approximately) under the bid item *6-Duct Conduit, Cement Encased, 4-inch Rigid Nonmetallic Conduit DB-60, Item # SPV.0090.650*. The contractor shall install the conduit into the manhole under bid item *Installing Conduit Into Existing Manhole, Item # SPV.0060.651*.

The contractor shall adjust the TES manholes at Station 9+15 RT (approximately), Station 10+05 RT (approximately), and Station 13+00 RT approximately) under the bid item *Adjusting TES Manhole Cover, Item # SPV.0060.650*.

The City of Milwaukee will require a five working day advance notification prior to any conduit being installed and ten working days to provide final inspection and acceptance after completion of the conduit installation in its entirety.

Lloyd Street Bridge (B-40-60)

There is an existing 3-duct iron pipe conduit package along the south side of the Lloyd Street Bridge deck. The package is poured integral with the bridge deck. These pipes carry traffic and communications cable.

This existing facility does not contain asbestos.

City of Milwaukee forces will either remove or cut-off existing cables within the existing 3-duct package prior to Stage 2 bridge operations. The City of Milwaukee requires a five working day notice prior to Stage 2 bridge operations.

During Stage 2 bridge operations, the contractor shall replace the conduit through the expansion joints at Station 5+39 RT (approximately) and Station 7+36 RT (approximately) in accordance with the structure plans for B-40-60.

The City of Milwaukee will require a five working day advance notification prior to any conduit being installed and ten working days to provide final inspection and acceptance after completion of the conduit installation in its entirety.

The field contact for City of Milwaukee Conduit is Karen Rogney, (414) 286-3243.

Milwaukee Water Works
Milwaukee Water works maintains water lines within the project limits.

- A 12-inch water line crosses Wisconsin Avenue running east and west, and is attached to the underside of the Wisconsin Avenue bridge deck.
- Service laterals cross the USH 41 southbound ramp from Lisbon Avenue.
- A 20-inch water main goes under USH 41 on the south side of the Vliet Street bridge abutments.
- A 6-inch water line runs parallel to Alois Street on the east side of the road, behind the back of curb.

There are anticipated conflicts with Milwaukee Water Works facilities. All water service boxes and water gate valve boxes within the project limits will be adjusted to proposed elevations by Milwaukee Water Works. It is estimated that 3 valve boxes in N. Alois Street at Vliet Street will require adjustment. Provide Milwaukee Water Works a two working day notice for each water valve prior to needing the adjustment. Milwaukee Water Works will need one working day to adjust each valve. Contact Jesse Hernandez, (414) 708-2670 or Dave Goldapp, (414) 286-6301 / Cell (414) 708-2695, for valve adjustments.

The field contact for Milwaukee Water Works is Dave Goldapp, (414) 286-6301/ Cell (414) 708-2695.

Time Warner Cable
Time Warner Cable has known facilities within the project limits.
- An overhead line crosses USH 41 north of Wells Street.
- An overhead line runs along the right-of-way fence along the east side of USH 41 from Martin Drive to Vliet Street.
- Overhead line crosses USH 41 north of Lloyd Street.
- Overhead service runs along the USH 41 west right-of-way fence from the south side of Garfield Avenue towards Lisbon Avenue.

No conflicts are anticipated with this project.

The field contact for Time Warner Cable is Steve Cramer, (414) 277-4045 / Cell (414) 688-2385.

We Energies Electric
We Energies Electric maintains overhead and underground facilities within the project limits.
- An overhead line crosses USH 41 north of Wells Street.
- An overhead line runs along the ROW fence along the east side of USH 41 from Martin Drive to Vliet Street.
- An overhead line crosses Alois Street, north of State Street
- An underground duct provides power for the light poles along the southbound USH 41 off-ramp to Alois Street.
- 6–Duct package on the south side of the Vliet Street Bridge, attached underneath the bridge.
- Duct package on the south side of the Lloyd Street Bridge, attached underneath the bridge.
- Overhead service line crosses over the USH 41 on-ramp from Lisbon Avenue on the south side of Garfield Avenue, then continues north on the east side of the on-ramp towards Lisbon Avenue.

The only anticipated conflict with We Energies Electric are the facilities attached to the south side of the Vliet Street Bridge.

Vliet Street Bridge (B-40-53)

The existing electric facility will be removed and replaced during construction.

The existing facility electric facility does contain asbestos. We Energies will utilize the Balestrieri Group for removal of asbestos containing facilities.

We Energies Electric and the Balestrieri Group will utilize the contractor traffic control to perform their work and will be responsible for any additional traffic control requirements that would not be provided by the contractor.

Stage 1- Vliet Street Bridge

We Energies Electric and the Balestrieri Group must be notified 20 working days prior to the start of Stage 1 bridge operations and be provided with a current construction schedule for Stage 1 bridges operations. This notification needs to include the name of the bridge demolition contractor. We Energies Electric will have the Balestrieri Group provide the Wisconsin Department of Natural Resources with the 14 working day notification required in their permit. The Balestrieri Group cannot start work on the removal of the asbestos containing facilities until this permit requirement is satisfied.

We Energies will de-energize the electrical cable located in the duct package prior to the start of Stage 1 bridge operations from the manhole at Station 10+05 LT to the manhole at Station 12+84 LT.

The Balestrieri Group will remove the transite duct, including asbestos, underneath the bridge deck between abutments during Stage 1. At the same time the Balistrieri Group will remove the entire cable from the manhole at Station 10+05 LT to the manhole at Station 12+84 LT. This work will take two working days to complete.

We Energies Electric and the Balestrieri Group must be notified 20 working days prior to the start of Stage 2 bridge operations and be provided with a current construction schedule for Stage 2 bridges operations.

Stage 2- Vliet Street Bridge

During Stage 2 bridge operations, the Balestrieri Group will remove the duct transition couplings, including asbestos, in the abutments once demolition of the abutments has begun. This work will take one working day at the west abutment and one working day at the east abutment to complete. The Balestrieri Group will require a five working day notice in advance of each abutment being removed.

The contractor shall reinstall the We Energies Electric facilities under the bid item *# SPV.0105.701 Electrical Fiberglass 6 Duct Package Structure # B-40-53*. This shall include deck inserts, hangers, duct package, pier work, and abutment work. We Energies will supply all parts needed to reinstall the electrical duct package. The contractor should notify We Energies Electric at least five working days in advance to coordinate the time and location for the contractor to pick up the materials.

A We Energies representative will be required to be on-site to monitor and accept construction activity during reinstallation of the electrical facilities. The contact person is John Merrick, (414) 540-5781, or Dale Washington, (414) 540-5784.

We Energies Electric will replace the existing ducts from the electric manhole at Station 9+98 RT to the west abutment of Structure B-40-53 and from the east abutment of Structure B-40-53 to the electric manhole at Station 12+94 RT. The contractor shall remove the pavement in these areas so We Energies Electric can excavate down to the

electric facility. We Energies Electric will connect to the new ducts in the abutments. We Energies Electric will use slurry backfill in the trenches within the construction limits, and will use slurry backfill and temporary asphalt outside of the limits for restoration. We Energies will require a five working day notice prior to performing this work, and it will take We Energies one working day per side of the bridge to complete this work. The We Energies Electric contact for this work is John Merrick, (414) 540-5781.

It is imperative that the highway contractor contact We Energies before removing any gas facilities or electrical underground cables, to verify that they have been abandoned and carry no natural gas or electrical current. The contractor must not assume that unmarked facilities have been abandoned. At no time is it acceptable to push, pull, cut or drill an unmarked facility without explicit consent from We Energies. Contractor must call the We Energies 24 hour Dispatch lines to arrange for this verification.

We Energies Electric Dispatch # (800) 662-4797
We Energies Gas Dispatch # (800) 261-5325

We Energies will remove and dispose of the hazardous material in all affected sections which require removal. In all unaffected areas, it is the responsibility of the contractor to remove and dispose of the sections of the abandoned facilities necessary for them to continue with the project after We Energies verifies that the lines are dead. This work is incidental to the project.

The field contact for We Energies Electric is Leonard Wilson, (414) 944-5690 / Cell (414) 588-6674.

The field contact for the Balestrieri Group is Ken Balestrieri, (414) 483-5144.

We Energies – Gas
We Energies – Gas maintains gas facilities within the project limits.
- A 20-inch steel high pressure line crosses under USH 41 on the south side of the Wisconsin Avenue Bridge with 42 inches of minimum cover.
- A facility is attached to the State Street Bridge.
- A 12-inch steel pipe crosses USH 41 on the south side of the Vliet Street Bridge and is attached underneath the bridge to the deck.
- A facility runs along N. 47th Street from Vliet Street to Lisbon Avenue.
- A facility runs along N. 46th Street from Lloyd Street to Lisbon Avenue.

The only anticipated conflict with We Energies Gas is the 12-inch main along the south side of the Vliet Street Bridge and two gas valves on Vliet Street.

Vliet Street Bridge (B-40-53)

The existing 12-inch gas main will remain on the Vliet Street Bridge during construction. The contractor is to provide support and protection during bridge deck removal and replacement operations.

The 12-inch gas main pipe coating does not contain asbestos.

We Energies must be notified three weeks prior to the start of Stage 2 bridge operations and be provided with a current construction schedule for Stage 2 bridges operations.

We Energies will utilize the contractor traffic control to perform their work and will be responsible for any additional traffic control requirements that would not be provided by the contractor.

After the contractor removes the pavement on either side of Structure B-40-53 during Stage 2, We Energies will expose, cut off, and gap the 12-inch gas main at approximately Station 10+48 RT and Station 12+40 RT. The pipe segment between the cut offs, including the portion on Structure B-40-53, will then be pressurized with air by We Energies during deck removal and deck replacement. We Energies will require four working days at Station 10+48 RT and four working days at Station 12+40 RT to expose, cut off, and gap the existing 12-inch gas main.

The contractor shall provide protection for the 12-inch gas main to prevent damage from falling debris during deck removal and replacement. Installation and removal of the temporary protection will be incidental to the bridge work. In addition, the contractor shall support and protect the gas main when removing the abutment back wall around the pipe at each location.

Prior to Stage 2 deck removal and installation of protection material, the contractor shall install three specially designed and fabricated diaphragms, attach the pipe hanger assemblies to permanently support the pipe, and install rollers supports at each pier. Once all appurtenances are in place the existing hangers shall be removed and disposed of by the contractor. The diaphragms, pipe hangers, pipe roller assemblies, and supports will be supplied by We Energies and given to the contractor upon request.

At each pier, the contractor shall box out the opening around the pipe with a 4-inch clearance. After the deck construction the contractor shall install hanger brackets above the pipe and attach to the concrete diaphragms. The pipe roller assemblies shall then be attached to the brackets and under the pipe for support by the contractor.

All temporary and permanent supports, including removal and disposal of existing supports, will be paid under contract bid item *Gas Main Support System B-40-53, Item # SPV.0105.700*.

The 12-inch gas main will be reconnected by We Energies after the Stage 2 bridge deck has been installed and abutment back walls have been completed. We Energies will require five working days at Station 10+48 RT and five working days at Station 12+40 RT to reconnect the gas main. The contractor shall backfill any We Energies trenches with slurry backfill as directed by the engineer.

Because of the importance of this supply link, the 12-inch main will need to be reconnected if the temperature drops below 32 degrees for 2 consecutive weeks. If this occurs, We Energies will require four working days at Station 10+48 RT and four working days at Station 12+40 RT to reconnect the 12-inch main.

A We Energies representative will be required to be on site to monitor construction activity during deck removal and replacement. The contact person is Mark Sobon, Operations Supervisor, (262) 470-5994.

A gas valve exists at Station 10+24 RT and at Station 12+84 RT on Vliet Street. Both gas valves will require adjustment by We Energies prior to Stage 2 paving operations. We Energies requires three working days notification and one working day for adjusting each gas valve.

It is imperative that the highway contractor contact We Energies before removing any gas facilities or electrical underground cables, to verify that they have been abandoned and carry no natural gas or electrical current. The contractor must not assume that unmarked facilities have been abandoned. At no time is it acceptable to push, pull, cut or drill an unmarked facility without explicit consent from We Energies. Contractor must call the We Energies 24 hour Dispatch lines to arrange for this verification.

We Energies Electric Dispatch # (800) 662-4797
We Energies Gas Dispatch # (800) 261-5325

The field contact for We Energies – Gas is Paul Osmanski, (414) 944-5796, Cell (414) 315-1278.

WisDOT Lighting
WisDOT Lighting maintains existing facilities within the project limits as follows:

- Existing lighting units run along the median of USH 41 from the Stadium Interchange to the Lisbon Avenue.
- Existing lighting units run along both sides of Alois Street between State Street and Vliet Street.
- Existing lighting units run along all of the exit and entrance ramps within the project limits.
- Under deck lighting units are attached to the underside of the overpass bridges.

The proposed lighting plan places the new lighting units within the project limits. The work associated with the removal and placement of proposed lighting will be done as part of this contract.

The contact for WisDOT Lighting is Eric Perea, (262) 574-5422.

WisDOT STOC
WisDOT STOC maintains existing facilities within the project limits as follows:

- Microwave detector pole along SB USH 41 at approximately Station 104+75 LT and the underground conduit runs to control cabinet at the southeast corner of Vliet Street and N. Alois Street.
- Underground conduit, pull boxes, and control cabinet (on N. 47th Street) at approximately Station 113+38 LT (SB USH 41).
- Underground conduit, pull boxes, microwave detector pole, and control cabinet (on N. 47th Street) at approximately Station 114+65 LT andRT (Southbound B USH 41).

Conflicts with facilities are not anticipated.

Provide an advanced notification of five working days prior to installing the Concrete Base Type 10 Special at Station 10+38, 38.6' RT on Vliet Street to the STOC. The STOC will have an inspector on site to monitor their facilities when excavating for the monotube.

The contact for WisDOT STOC is Jeff Madson, (414) 225-3723.

10. Other Projects.

The City of Milwaukee is reconstructing Lloyd Street from North 60th Street to West Lisbon Avenue. Construction is anticipated to take place from May 2016 to November 2016. Coordinate staging and traffic control operations with the adjacent Lloyd Street reconstruction project. Contact Lynn Des Jardins at (414) 286-0447 to coordinate operations.

11. Railroad Insurance and Coordination.

A Description
Comply with standard spec 107.17 for all work affecting Canadian Pacific (Soo Line) property and any existing tracks.

A.1 Railroad Insurance Requirements
In addition to standard spec 107.26, provide railroad protective liability insurance coverage as specified in standard spec 107.17.3. Insurance is filed in the name of Soo Line Railroad Company, d/b/a Canadian Pacific Railway Company.

Notify evidence of the required coverage, and duration to Edward Oom, Manager Public Works at Suite 9126, 120 South Sixth Street, Minneapolis, MN 55402; TELEPHONE (612) 330-4553; email oom0001@cpr.ca. Include the following information on the insurance document:

Project: 1350-09-70
Route Name: USH 41
Crossing ID: 390 3491A
Railroad Subdivision: Watertown
Railroad Milepost: 88.8

A.2 Work by Railroad
The railroad will perform the work described in this section, except for work described in other special provisions and will be accomplished without cost to the contractor. None

A.3 Names and addresses of Railroad Representatives for Consultation and Coordination
Contact Edward Oom, Manager Public Works at Suite 9126, 120 South Sixth Street, Minneapolis, MN 55402; TELEPHONE (612) 330-4553; email oom0001@cpr.ca for consultation on railroad requirements during construction.

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

A.4 Temporary Grade Crossing
If a temporary grade crossing is desired, submit a written request to the railroad representative named in A.3 several weeks prior to the time needed. Approval is subject to the discretion of the railroad. The department has made no arrangements for a temporary grade crossing.

A.5 Train Operation
Approximately 2 passenger trains and 25 through freight trains operate daily through the construction site. Passenger trains operate at up to 55 mph. Through freight trains operate at up to 55 mph. In addition to through movements there are switching movements at slower speeds.107-026 (20130615)

12. Erosion Control.

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

Provide the ECIP 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 Ms. Kristina Betzold, Wisconsin Department of Natural Resources, SE Region, 2300 N. Martin Luther King Jr. Drive, Milwaukee, WI 53212, phone (414) 263-8517.

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

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

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.

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

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

13. Notice to Contractor, Notification of Demolition and/or Renovation No Asbestos Found B-40-53.

John Roelke, License Number AII-119523, inspected Structure B-40-56 and B-40-60 for asbestos on February 21, 2012. No regulated Asbestos Containing Material (RACM) was found on this structure. A copy of the inspection report is available from: Nguyen Ly, (262) 548-8739.

In accordance to NR447 and DHS159, ensure that DNR or DHS receives a completed Notification of Demolition and/or Renovation (DNR Form 4500-113 (R 4/11), or subsequent revision) via U.S. mail, hand-delivery, or using the online notification system at least 10 working days prior to beginning any construction or demolition. Pay all associated fees. Provide a copy of the completed 4500-113 form to Andrew Malsom, (262) 548-6705, and DOT BTS-ESS attn: Hazardous Materials Specialist PO Box 7965, Madison, WI, 53707-7965. In addition, comply with all local or municipal asbestos requirements.

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

- Site Name: Structure B-40-53, W. Vliet Street over USH 41 – Stadium Freeway
- Site Address: Section 23, T07N, R21E, City of Milwaukee, Milwaukee County, Latitude - 43 degrees 02’ 55.80” and Longitude 87 degrees 58’ 20.00”
- Ownership Information: Wisconsin Department of Transportation SE Reion, 141 NW Barstow Street, Waukesha, WI 53187
- Contact: Ken Kiepczynski
- Phone: (414) 659-3055
- Age: 56 years old. This structure was constructed in 1959.
- Area: 13,600 SF of deck

Insert the following paragraph in Section 6.g.:

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

107-125 (20120615)

14. Notice to Contractor, Verification of Asbestos Inspection, No Asbestos Found B-40-56 and B-40-60.

John Roelke, License Number AII-119523, inspected Structure B-40-56 and B-40-60 for asbestos on February 21, 2012. No regulated Asbestos Containing Material (RACM) was found on this structure. A copy of the inspection report is available from: Nguyen Ly, (262) 548-8739.
107-127 (20120615)

15. Hauling Restrictions.

Do not haul materials of any kind on any local roads without approval of the local Maintaining Authority and the department. Provide any proposals to haul on local roads with a written agreement between the contractor and the respective Maintaining Authority. Submit a letter to the department from the Maintaining Authority in agreement to the hauling prior to hauling. Contact the respective Maintaining Authority prior to bidding for approval of haul routes.

At all times, conduct operations in a manner that will cause a minimum of disruption to traffic on existing roadways.

This provision does not reduce or eliminate the contractor responsibility from restoring local roads under the item maintenance and repair of haul roads.

16. Coordination with Businesses and Residents.

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

17. Coordination with Milwaukee County Transit System (MCTS).

Provide MCTS the proposed construction start date 14 calendar days prior to the start of construction so that temporary bus stops can be relocated before construction begins. The contact person for MCTS is Melanie MacArthur, (414) 343-1764.

Provide information to the engineer and the engineer will notify and request assistance 14 calendar days in advance from Milwaukee County Transit System for lane closures and stage changes that may affect bus routes and bus stops. Temporary locations of bus stops and temporary bus route detours must be coordinated with MCTS.

18. Clearing and Grubbing.

Complete work in accordance to standard spec 201 and as herein provided.

Revise standard spec 201.3 as follows:

Burning and/or burying of stumps, roots, brush, waste logs and limbs, timber tops, and debris resulting from clearing and grubbing is not allowed.

19. Clearing and Grubbing, Emerald Ash Borer.

This applies to projects in the emerald ash borer (EAB) quarantined zones to include Fond du lac, Kenosha, Milwaukee, Ozaukee, Racine, Sheboygan, Washington and Waukesha counties.

Supplement standard spec 201.3 with the following:

The emerald ash borer (EAB) has resulted in a quarantine of ash trees (*Fraxinus, sp*) by the Wisconsin Department of Agriculture, Trade, and Consumer Protection (DATCP) and the Wisconsin Department of Natural Resources (DNR).

Ash trees species attacked by emerald ash borer include the following:

Green ash *(F. pennsylvanica*) is found throughout the state, but is most common in southern Wisconsin. It may form pure stands or grow in association with black ash, red maple, swamp white oak, and elm. It grows as an associate in upland hardwood stands, but is most common in and around stream banks, floodplains, and swamps.

Black ash *(F. nigra*) is distributed over the entire state but is most frequently found in northern Wisconsin. It is most common in swamps, but is also found in other wet forest types.

Blue ash (*F. quadrangulata*) is a threatened species that is currently found only at a few sites in Waukesha County. The species is at the edge of its range in Wisconsin, but is common in states farther south. The species is not of commercial importance. Blue ash twigs are 4-sided.

White ash (*F. americana*) tends to occur primarily in upland forests, often with *Acer saccharum*

Includes all horticultural cultivars of these species.

(Note: blue ash twigs are 4-sided. All other Wisconsin ash trees have round stems.)

Mountain ash (*Sorbus Americana* and *S. decora*) is not a true ash and is not susceptible to EAB infestation.

The contractor shall be responsible for hiring a certified arborist to identify all ash trees that will be cleared and grubbed for the project. In addition, prior to scheduled clearing and grubbing activities, the arborist shall mark all ash trees with flagging tied around the trunk perimeter (florescent lime is suggested as it isn't identified with other project activities).

Follow and obey the following Wisconsin Department of Agriculture, Trade, and Consumer Protection order:

ATCP 21.17 Emerald ash borer; import controls and quarantine.

· IMPORTING OR MOVING REGULATED ITEMS FROM INFESTED AREAS; PROHIBITION. Except as provided in sub. (3), no person may do any of the following:

(a) Import a regulated item under sub. (2) into this state if that item originates from an emerald ash borer regulated area identified in 7CFR 301.53-3.

(b) Move any regulated item under sub. (2) out of an emerald ash borer regulated area that is identified in 7CFR 301.53-3 and located in this state.

Note: the United States Department of Agriculture-Animal and Plant Health Inspection Service (USDA-APHIS) periodically updates the list of regulated areas in 7CFR 301.53-3. Subsection (1) applies to new regulated areas as those areas are identified in the CFR.

· REGULATED ITEMS. The following are regulated items for purposes of sub. (1):

(a) The emerald ash borer, *Agrilus planipennis* Fairmaire in any living stage.

(b) Ash trees.

(c) Ash limbs, branches, and roots.

(d) Ash logs, slabs or untreated lumber with bark attached.

(e) Cut firewood of all non-coniferous species.

(f) Ash chips and ash bark fragments (both composted and uncomposted) larger than one inch in diameter.

(g) Any other item or substance that may be designated as a regulated item if a DATCP pest control official determines that it presents a risk of spreading emerald ash borer and notifies the person in possession of the item or substance that it is subject to the restrictions of the regulations.

Regulatory considerations
The quarantine means that ash wood products may not be transported out of the quarantined area.

Clearing and grubbing includes all ash trees that are to be removed from within the Project footprint. If ash trees are identified within clearing and grubbing limits of the Project, the following measures are required for the disposal:

Chipped ash trees

1. May be left on site if used as landscape mulch within the project limits. If used as mulch on site, chips may not be applied at a depth greater than standard mulch applications as this will impede germination of seeded areas.
2. May be buried on site within the right-of-way in accordance to standard spec 201.3 (14).
3. May be buried on adjacent properties to projects within the quarantined zone with prior approval of the engineer in accordance to standard spec 201.3 (15).
4. May be trucked to a licensed landfill within the quarantined zone with the engineer's approval in accordance to standard spec 201.3 (15).
5. Burning chips is optional if in compliance with standard spec 201.3.
6. Chips must be disposed of immediately if not used for project mulching and may not be stockpiled and left on site for potential transport by others. Chips may be stockpiled temporarily if they will be used for project mulching and are not readily accessible to the public.
7. Chipper equipment must be cleaned following post-chipping activities to ensure no spread of wood chip debris into non-quarantined counties.

Ash logs, branches, and roots

1. May be buried without chipping within the existing right-of-way or on adjacent properties in accordance to standard spec 201.3 (14)(15).
2. May be trucked to a licensed landfill within the quarantined zone with the engineer's approval in accordance to standard spec 201.3 (15).
3. Burning is optional if in compliance with standard spec 201.3.
4. Ash logs, branches, and roots must be disposed of immediately and may not be stockpiled.

All additional costs will be incidental to clearing and grubbing items.

Do not bury or use mulch in an area that will be disturbed again during later phases of the project.

Anyone moving firewood or ash products from the state or these counties is subject to state and federal fines up to $1,000.00. All fines are the responsibility of the contractor. Obtain updated quarantine information at the DNR Firewood Information Line at (800) 303-WOOD.

Furnishing and Planting Plant Materials
This applies to projects in the emerald ash borer (EAB) quarantined zones to include, Fond du lac, Kenosha, Milwaukee, Ozaukee, Racine, Sheboygan, Washington, and Waukesha, counties.

Supplement standard spec 632.2.2 with the following:

The emerald ash borer (EAB) has resulted in a quarantine of ash trees (*Fraxinus, sp*) by the Wisconsin Department of Agriculture, Trade, and Consumer Protection (DATCP) and the Wisconsin Department of Natural Resources (DNR).

Ash trees may be obtained from inside or outside the quarantine area and planted within the quarantined area. Ash trees from within the quarantine area may not be transported and planted into the non-quarantined area.

Updates for Compliance
Each year, as a service, the Wisconsin department of agriculture, trade and consumer protection distributes an updated federal CFR listing to nursery license holders and other affected persons in this state. More frequent updates, if any, are available on the department's website at ***www.datcp.state.wi.us***. Subsection (1) applies to new regulated areas as those areas are identified in the CFR, regardless of whether affected persons receive update notices from the department. Persons may request update notices by calling (608) 224−4573, by visiting the department's website, or by writing to the following address:

Wisconsin Department of Agriculture, Trade and Consumer Protection
Division of Agricultural Resource Management
P.O. Box 8911
Madison WI 53708−8911

Regulated Items
More frequent updates, if any, are available on the department's website at w*ww.datcp.state.wi.us.* Subsection (1) applies to new regulated areas as those areas are identified in the CFR, regardless of whether affected persons receive update notices from the department. Persons may request update notices by calling (608) 224−4573, by visiting the department's website, or by writing to the above address.

20. Hydro-demolition.

Supplement standard spec 203.3.2.2 and standard spec 509.3.3 to include the following:

At the engineer's option, hydro-demolition equipment meeting the following requirements may be used. The equipment shall consist of filtering and pumping units operating with a remote controlled robotic device. The equipment shall be capable of removing concrete to the specified depth and of removing rust and concrete particles from exposed reinforcing bars. Operation of the hydro-demolition equipment shall be performed and supervised by qualified personnel certified by the equipment manufacturer. Present evidence of

certification to the engineer. When partial-depth removal is required, calibrate and set the equipment to remove sound concrete to the required depth. If sound concrete is being removed below the required depth, the engineer will require the equipment to be recalibrated and reset.

Control the runoff water generated by the various construction activities in such a manner as to minimize, to the maximum extent practicable, the discharge of construction debris into adjacent waters, and properly disposes of the solids generated according to standard specifications. Do not allow runoff water to constitute a hazard on adjacent or underlying roadways, waterways, drainage areas, or railroads, nor be allowed to erode existing slopes.

21. Removing Asphaltic Surface Milling.

Removing Asphaltic Surface Milling includes milling existing or proposed concrete base patch areas and areas where patches are ramped to adjacent pavement. Milling of existing concrete base patches will not be paid as a separate item and the contractor shall mill concrete base patch areas as shown in the plans or as the engineer directs.

Removing Asphaltic Surface Milling includes milling the underlying concrete pavement. Milling the underlying concrete pavement will not be paid as a separate item and the contractor shall mill the underlying concrete pavement as shown in the plans labeled as removing concrete partial surface partial depth or as directed by the engineer.

22. QMP Base Aggregate.

A Description

A.1 General

(1) This special provision describes contractor quality control (QC) sampling and testing for base aggregates, documenting those test results, and documenting related production and placement process changes. This special provision also describes department quality verification (QV), independent assurance (IA), and dispute resolution.

(2) Conform to standard spec 301, standard spec 305, and standard spec 310 as modified here in this special provision. Apply this special provision to material placed under all of the Base Aggregate Dense and Base Aggregate Open Graded bid items, except do not apply this special provision to material classified as reclaimed asphaltic pavement placed under the Base Aggregate Dense bid items.

(3) Do not apply this special provision to material placed under the Aggregate Detours, Salvaged Asphaltic Pavement Base, Breaker Run, Select Crushed, Pit Run, Subbase, or Riprap bid items.

(4) Provide and maintain a quality control program, defined as all activities related to and documentation of the following:
1. Production and placement control and inspection.
2. Material sampling and testing.

(5) Chapter 8 of the department's construction and materials manual (CMM) provides additional detailed guidance for QMP work and describes required sampling and testing procedures. The contractor may obtain the CMM from the department's web site at:

http://roadwaystandards.dot.wi.gov/standards/cmm/index.htm

A.2 Contractor Testing for Small Quantities

(1) The department defines a small quantity, for each individual Base Aggregate bid item, as a plan quantity of 9000 tons or less of material as shown in the schedule of items under that bid item.

(2) The requirements under this special provision apply equally to a small quantity for an individual bid item except as follows:

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

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

[1] If using production tests for acceptance, submit test results to the engineer for review prior to incorporating the material into the work. Production test results are valid for a period of 3 years.

[2] For 3-inch material, obtain samples at load-out.

[3] If the actual quantity overruns 9000 tons, create overrun sublots to test at a rate of one additional placement test for each 3000 tons, or fraction of 3000 tons, of overrun.

3. No control charts are required. Submit aggregate load-out and placement test results to the engineer within one business day of obtaining the sample. Assure that all properties are within the limits specified for each test.
4. Department verification testing is optional for quantities of 6000 tons or less.

(3) Material represented by a sublot with any property outside the specification limits is nonconforming. The department may reject material or otherwise determine the final disposition of nonconforming material as specified in standard spec 106.5.

B Materials

B.1 Quality Control Plan

(1) Submit a comprehensive written quality control plan to the engineer at or before the pre-construction meeting. Do not place base before the engineer reviews and comments on the plan. Construct the project as that plan provides.

(2) Do not change the quality control plan without the engineer's review. Update the plan with changes as they become effective. Provide a current copy of the plan to the engineer and post in each of the contractor's laboratories as changes are adopted. Ensure that the plan provides the following elements:

1. An organizational chart with names, telephone numbers, current certifications and/or titles, and roles and responsibilities of QC personnel.
2. The process used to disseminate QC information and corrective action efforts to the appropriate persons. Include a list of recipients, the communication means that will be used, and action time frames.
3. A list of source and processing locations, section and quarter descriptions, for all aggregate materials requiring QC testing.
4. Test results for wear, sodium sulfate soundness, freeze/thaw soundness, and plasticity index of all aggregates requiring QC testing. Obtain this information from the region materials unit or from the engineer.
5. Descriptions of stockpiling and hauling methods.
6. Locations of the QC laboratory, retained sample storage, and where control charts and other documentation is posted.
7. An outline for resolving a process control problem. Include responsible personnel, required documentation, and appropriate communication steps.

B.2 Personnel

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

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

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

(2) A certified technician must coordinate and take responsibility for the work an ACT performs. Have a certified technician ensure that all sampling and testing is performed correctly, analyze test results, and post resulting data. No more than one ACT can work under a single certified technician.

B.3 Laboratory

(1) Perform QC testing at a department-qualified laboratory. Obtain information on the Wisconsin laboratory qualification program from:

Materials Management Section
3502 Kinsman Blvd.
Madison, WI 53704
Telephone: (608) 246-5388
http://www.dot.state.wi.us/business/engrserv/lab-qualification.htm

B.4 Quality Control Documentation

B.4.1 General

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

B.4.2 Records

(1) Document all placement observations, inspection records, and control adjustments daily in a permanent field record. Also include all test results in the project records. Provide test results to the engineer within 6 hours after obtaining a sample. For 3-inch base, extend this 6-hour limit to 24 hours. Post or distribute tabulated results using a method mutually agreeable to the engineer and contractor.

B.4.3 Control Charts

(1) Plot gradation and fracture on the appropriate control chart as soon as test results are available. Format control charts according to CMM 8.30. Include the project number on base placement control charts. Maintain separate control charts for each base aggregate size, source or classification, and type.

(2) Provide control charts to the engineer within 6 hours after obtaining a sample. For 3-inch base, extend this 6-hour limit to 24 hours. Post or distribute charts using a method mutually agreeable to the engineer and contractor. Update control charts daily to include the following:

1. Contractor individual QC tests.
2. Department QV tests.
3. Department IA tests.
4. Four-point running average of the QC tests.

(3) Except as specified under B.8.2.1 for nonconforming QV tests, include only QC tests in the running average. The contractor may plot process control or informational tests on control charts, but do not include these tests, conforming QV tests, or IA tests in the running average.

B.5 Contractor Testing

(1) Test gradation, fracture, liquid limit and plasticity index during placement for each base aggregate size, source or classification, and type.

(2) Test gradation once per 3000 tons of material placed. Determine random sample locations and provide those sample locations to the engineer. Obtain samples after the material has been bladed, mixed, and shaped but before compacting; except collect 3-inch samples from the stockpile at load-out. Do not sample from material used to maintain local traffic or from areas of temporary base that will not have an overlying pavement. On days when placing only material used to maintain local traffic or only temporary base that will not have an overlying pavement, no placement testing is required.

(3) Split each contractor QC sample and identify it according to CMM 8.30. Retain the split for 7 calendar days in a dry, protected location. If requested for department comparison testing, deliver the split to the engineer within one business day.

(4) The engineer may require additional sampling and testing to evaluate suspect material or the technician's sampling and testing procedures.

(5) Test fracture for each gradation test until the fracture running average is above the lower warning limit. Subsequently, the contractor may reduce the frequency to one test per 10 gradation tests if the fracture running average remains above the warning limit.

(6) Test the liquid limit and plasticity index for the first gradation test. Subsequently, test the liquid limit and plasticity index a minimum of once per 10 gradation tests.

B.6 Test Methods

B.6.1 Gradation

(1) Test gradation using a washed analysis conforming to the following as modified in CMM 8.60:

Gradation..... AASHTO T 27
Material finer than the No. 200 sieve..... AASHTO T 11

(2) For 3-inch base, if 3 consecutive running average points for the percent passing the No. 200 sieve are 8.5 percent or less, the contractor may use an unwashed analysis. Wash at least one sample out of 10. If a single running average for the percent passing the No. 200 sieve exceeds 8.5 percent, resume washed analyses until 3 consecutive running average points are again 8.5 percent passing or less.

(3) Maintain a separate control chart for each sieve size specified in standard spec 305 or standard spec 310 for each base aggregate size, source or classification, and type. Set control and warning limits based on the standard specification gradation limits as follows:

1. Control limits are at the upper and lower specification limits.
2. There are no upper warning limits for sieves allowing 100 percent passing and no lower control limits for sieves allowing 0 percent passing.

3. Dense graded warning limits, except for the No. 200 sieve, are 2 percent within the upper and lower control limits. Warning limits for the No. 200 sieve are set 0.5 percent within the upper and lower control limits.
4. Open graded warning limits for the 1-inch, 3/8-inch, and No. 4 sieves are 2 percent within the upper and lower control limits. Upper warning limits for the No. 10, No. 40, and No. 200 sieves are 1 percent inside the upper control limit.

B.6.2 Fracture

(1) Test fracture conforming to CMM 8.60. The engineer will waive fractured particle testing on quarried stone.

(2) Maintain a separate fracture control chart for each base aggregate size, source or classification, and type. Set the lower control limit at the contract specification limit, either specified in another special provision or in table 301-2 of standard spec 301.2.4.5. Set the lower warning limit 2 percent above the lower control limit. There are no upper limits.

B.6.3 Liquid Limit and Plasticity

(1) Test the liquid limit and plasticity according to AASHTO T 89 and T 90.

(2) Ensure the material conforms to the limits specified in standard spec table 301-2.

B.7 Corrective Action

B.7.1 General

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

B.7.2 Placement Corrective Action

(1) Do not blend additional material on the roadbed to correct gradation problems.

(2) Notify the engineer whenever the running average exceeds a warning limit. When two consecutive running averages exceed a warning limit, the engineer and contractor will discuss appropriate corrective action. Perform the engineer's recommended corrective action and increase the testing frequency as follows:
   1. For gradation, increase the QC testing frequency to at least one randomly sampled test per 1000 tons placed.
   2. For fracture, increase the QC testing frequency to at least one test per gradation test.

(3) If corrective action improves the property in question such that the running average after 4 additional tests is within the warning limits, the contractor may return to the testing frequency specified in B.5.3. If corrective action does not improve the property in question such that the running average after 4 additional individual tests is still in the warning band, repeat the steps outlined above starting with engineer notification.

(4) If the running average exceeds a control limit, material starting from the first running average exceeding the control limit and ending at the first subsequent running average inside the control limit is nonconforming and subject to pay reduction.

(5) For individual test results significantly outside the control limits, notify the engineer, stop placing base, and suspend other activities that may affect the area in question. The engineer and contractor will jointly review data, data reduction, and data analysis; evaluate sampling and testing procedures; and perform additional testing as required to determine the extent of potentially unacceptable material. The engineer may direct the contractor to remove and replace that material. Individual test results are significantly outside the control limits if meeting one or more of the following criteria:

1. A gradation control limit for the No. 200 sieve is exceeded by more than 3.0 percent.
2. A gradation control limit for any sieve, except the No. 200, is exceeded by more than 5.0 percent.
3. The fracture control limit is exceeded by more than 10.0 percent.

B.8 Department Testing

B.8.1 General

(1) The department will conduct verification testing to validate the quality of the product and independent assurance testing to evaluate the sampling and testing. The department will provide the contractor with a listing of names and telephone numbers of all QV and IA personnel for the project, and provide test results to the contractor within 2 business days after the department obtains the sample.

B.8.2 Verification Testing

B.8.2.1 General

(1) The department will have an HTCP technician, or ACT working under a certified technician, perform QV sampling and testing. Department verification testing personnel must meet the same certification level requirements specified in B.2 for contractor testing personnel for each test result being verified. The department will notify the contractor before sampling so the contractor can observe QV sampling.

(2) The department will conduct QV tests of each base aggregate size, source or classification, and type during placement conforming to the following:

1. One non-random test on the first day of placement.
2. At least one random test per 30,000 tons, or fraction of 30,000 tons, placed.

(3) The department will sample randomly, at locations independent of the contractor's QC work, collecting one sample at each QV location. The department will collect QV samples after the material has been bladed, mixed, and shaped but before compacting; except, for 3-inch aggregates, the department will collect samples from the stockpile at load-out. The department will split each sample, test half for QV, and retain half.

(4) The department will conduct QV tests in a separate laboratory and with separate equipment from the contractor's QC tests. The department will use the same methods specified for QC testing.

(5) The department will assess QV results by comparing to the appropriate specification limits. If QV test results conform to the specification, the department will take no further action. If QV test results are nonconforming, add the QV to the QC test results as if it were an additional QC test.

B.8.3 Independent Assurance

(1) Independence assurance is unbiased testing the department performs to evaluate the department's QV and the contractor's QC sampling and testing including personnel qualifications, procedures, and equipment. The department will perform an IA review according to the department's independent assurance program. That review may include one or more of the following:

1. Split sample testing.
2. Proficiency sample testing.
3. Witnessing sampling and testing.
4. Test equipment calibration checks.
5. Reviewing required worksheets and control charts.
6. Requesting that testing personnel perform additional sampling and testing.

(2) If the department identifies a deficiency, and after further investigation confirms it, correct that deficiency. If the contractor does not correct or fails to cooperate in resolving identified deficiencies, the engineer may suspend placement until action is taken. Resolve disputes as specified in B.9.

B.9 Dispute Resolution

(1) The engineer and contractor should make every effort to avoid conflict. If a dispute between some aspect of the contractor's and the engineer's testing program does occur, seek a solution mutually agreeable to the project personnel. The department and contractor may review the data, examine data reduction and analysis methods, evaluate sampling and testing procedures, and perform additional testing. Use ASTM E 178 to evaluate potential statistically outlying data.

(2) Production test results, and results from other process control testing, may be considered when resolving a dispute.

(3) If the project personnel cannot resolve a dispute, and the dispute affects payment or could result in incorporating non-conforming product, the department will use third party testing to resolve the dispute. The department's central office laboratory, or a mutually agreed on independent testing laboratory, will provide this testing. The engineer and contractor will abide by the results of the third party tests. The party in error will pay service charges incurred for testing by an independent laboratory. The department may use third party test results to evaluate the quality of questionable materials and determine the appropriate payment. The department may reject material

or otherwise determine the final disposition of nonconforming material as specified in standard spec 106.5.

C (Vacant)

D (Vacant)

E Payment

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

(2) For material represented by a running average exceeding a control limit, the department will reduce pay by 10 percent of the contract price for the affected Base Aggregate bid items listed in subsection A. The department will administer pay reduction under the Nonconforming QMP Base Aggregate Gradation or Nonconforming QMP Base Aggregate Fracture Administrative items. The department will determine the quantity of nonconforming material as specified in B.7.2.

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23. Base Patching Concrete SHES.

Supplement standard spec 390.2 with the following:

Determine all materials and proportions of the concrete mixture to obtain a minimum compressive strength in the concrete of 2500 pounds per square inch prior to opening lane to traffic.

Supplement standard spec 390.3 with the following:

For concrete base patches within the limits of HMA overlay, provide a tined surfaced conforming to the requirements in standard spec 415.3.8.3. For concrete base patches that will not have a concrete overlay, provide a finished surface conforming to the requirements in standard spec 415.3.8.2.

24. QMP Ride; Incentive IRI Ride, Item 440.4410.S.

A Description

(1) This special provision describes profiling pavements with a non-contact profiler, locating areas of localized roughness, and determining the International Roughness Index (IRI) for each wheel path segment.

(2) Profile the final riding surface of all mainline pavements**.** Include auxiliary lanes in Category I and II segments; crossroads with county, state or U.S. highway designations greater than 1500 feet in continuous length; bridges, bridge approaches; and railroad

crossings. Exclude roundabouts and pavements within 150 feet of the points of curvature of roundabout intersections.

(3) The engineer may direct straightedging under standard spec 415.3.10 for pavement excluded from localized roughness under C.5.2 (1); for bridges; and for roundabouts and pavements within 150 feet of the points of curvature of roundabout intersections. Other surfaces being tested under this provision are exempt from straightedging requirements.

B (Vacant)

C Construction

C.1 Quality Control Plan

(1) Submit a written quality control plan to the engineer at or before the pre-pave meeting. Ensure that the plan provides the following elements:

1. An organizational chart with names, telephone numbers, current certifications and/or titles, and roles and responsibilities of all quality control personnel.
2. The process by which quality control information and corrective action efforts will be disseminated to the appropriate persons. Include a list of recipients, the communication means that will be used, and action time frames.
3. The methods and timing used for monitoring and/or testing ride quality throughout the paving process. Also indicate the approximate timing of acceptance testing in relation to the paving operations.
4. The segment locations of each profile run used for acceptance testing.
5. Traffic Control Plan

C.2 Personnel

(1) Have a profiler operator, certified under the department's highway technician certification program (HTCP), operate the equipment, collect the required data, and analyze the results using the methods taught in the HTCP profiling course. Ensure that an HTCP-certified profiler operator supervises data entry into the material records system (MRS).

C.3 Equipment

(1) Furnish a profile-measuring device capable of measuring IRI from the list of department-approved devices published on the department's web site:

http://roadwaystandards.dot.wi.gov/standards/qmp/index.htm

(2) Unless the engineer and contractor mutually agree otherwise, arrange to have a calibrated profiler available when paving the final riding surface.

(3) Perform daily calibration verification of the profiler using test methods according to the manufacturer's recommendations. Notify the engineer before performing the calibration verification. If the engineer requests, arrange to have the engineer observe the calibration verification and operation. Maintain records of the calibration verification activities, and provide the records to the engineer upon request.

C.4 Testing

C.4.1 Run and Reduction Parameters

(1) Enter the equipment-specific department-approved filter settings and parameters given in the approved profilers list on the department's QMP ride web site.

http://roadwaystandards.dot.wi.gov/standards/qmp/profilers.pdf

C.4.2 Contractor Testing

(1) Operate profilers within the manufacturer's recommended speed tolerances. Perform all profile runs in the direction of travel. Measure the longitudinal profile of each wheel track of each lane. The wheel tracks are 6.0 feet apart and centered in the traveled way of the lane.

(2) Coordinate with the engineer to schedule profile runs for acceptance. The department may require testing to accommodate staged construction or if corrective action may be required.

(3) Measure the profiles of each standard or partial segment. Define primary segments starting at a project terminus and running contiguously along the mainline to the other project terminus. Field-locate the beginning and ending points for each profile run. When applicable, align segment limits with the sublot limits used for testing under the QMP Concrete Pavement specification. Define segments one wheel path wide and distinguished by length as follows:

1. Standard segments are 500 feet long.
2. Partial segments are less than 500 feet long.

(4) Treat partial segments as independent segments.

The department will categorize each standard or partial segment as follows:

Segments with a Posted Speed Limit of 55 MPH or Greater	
Category	**Description**
HMA I	Asphalt pavement with multiple opportunities to achieve a smooth ride. The following operations performed under this contract are considered as opportunities: a layer of HMA, a leveling or wedging layer of HMA, and diamond grinding or partial depth milling of the underlying pavement surface.
HMA II	Asphalt pavement with a single opportunity to achieve a smooth ride.
HMA III	Asphalt pavement segments containing any portion of a bridge, bridge approach, railroad crossing, or intersection. An intersection is defined as the area within the points of curvature of the intersection radii.
PCC II	Concrete pavement.
PCC III	Concrete pavement segments containing any portion of a bridge, bridge approach, railroad crossing, intersection or gap. An intersection is defined as the area within the points of curvature of the intersection radii.

Segments with Any Portion Having a Posted Speed Limit Less Than 55 MPH	
Category	**Description**
HMA IV	Asphalt pavement including intersections, bridges, approaches, and railroad crossings.
PCC IV	Concrete pavement including gaps, intersections, bridges, approaches, and railroad crossings.

C.4.3 Verification Testing

(1) The department may conduct verification testing (QV) to validate the quality of the product. A HTCP certified profiler operator will perform the QV testing. The department will provide the contractor with a listing of the names and telephone numbers of all verification personnel for the project.

(2) The department will notify the contractor before testing so the contractor can observe the QV testing. Verification testing will be performed independent of the contractor's QC work using separate equipment from the contractor's QC tests. The department will provide test results to the contractor within 1 business day after the department completes the testing.

(3) The engineer and contractor will jointly investigate any testing discrepancies. The investigation may include additional testing as well as review and observation of both the department's and contractor's testing procedures and equipment. Both parties will document all investigative work.

(4) If the contractor does not respond to an engineer request to resolve a testing discrepancy, the engineer may suspend production until action is taken. Resolve disputes as specified in C.6.

C.4.4 Documenting Profile Runs

(1) Compute the IRI for each segment and analyze areas of localized roughness using the ProVAL software. Also, the contractor shall prepare the ProVAL Ride Quality Module Reports, showing the IRI for each segment and the areas of localized roughness exceeding an IRI of 200 in/mile. Use ride quality module report as follows:

	Fixed Interval	Continuous (Localized Roughness)
Base-length	500'	25'
Threshold	140"/Mile	200"/Mile

The ProVAL software is available for download at:
http://www.roadprofile.com.

(2) As part of the profiler software outputs and ProVAL reports, document the areas of localized roughness. Field-locate the areas of localized roughness prior to the engineer's assessment for corrective actions. Document the reasons for areas excluded and submit to the engineer.

(3) Within five business days after completing profiling of the pavement covered under this special provision, unless the engineer and contractor mutually agree to a different timeline, submit the electronic ProVAL project file containing the .pdf files for each profiler acceptance run data and Ride Quality Module Reports, in .pdf format using the department's Materials Reporting System (MRS) software available on the department's web site:

http://www.atwoodsystems.com/mrs

Notify the engineer when the Profiler Acceptance Run data and the Ride Quality Report have been submitted to the MRS system.

C.5 Corrective Actions

C.5.1 General

(1) Analyze the data from the PROVAL reports and make corrective action recommendations to the department. The department will independently assess whether a repair will help or hurt the long-term pavement performance before deciding on corrective action. Correct the ride as the engineer directs in writing.

C.5.2 Corrective Actions for Localized Roughness

(1) Apply localized roughness requirements to all pavements, including HMA III, PCC III, HMA IV, and PCC IV; except localized roughness requirements will not be applied to pavements within 25 feet of the following surfaces if they are not constructed under this contract: bridges, bridge approaches, or railroad crossings. The department may direct the contractor to make corrections to the pavement within the 25-foot exclusionary zones.

(2) The engineer will review each individual wheel track for areas of localized roughness. The engineer will assess areas of localized roughness within five (5) business days of receiving notification that the reports were uploaded. The engineer will analyze the report documenting areas that exceed an IRI of 200 in/mile and do one of the following for each location:

1. Direct the contractor to correct the area to minimize the effect on the ride.
2. Leave the area of localized roughness in place with no pay reduction.
3. Except for HMA IV and PCC IV segments, assess a pay reduction as follows for each location in each wheel path:

Localized Roughness IRI (in/mile)	**Pay Reduction[1] (dollars)**
> 200	(Length in Feet) x (IRI –200)

[1] A maximum $250 pay reduction may be assessed for locations of localized roughness that are less than or equal to 25 feet long. Locations longer than 25 feet may be assessed a maximum pay reduction of $10 per foot.

(3) The engineer will not direct corrective action or assess a pay reduction for an area of localized roughness without independent identification of that area as determined by physically riding the pavement. For corrections, use only techniques the engineer approves.

(4) Re-profile corrected areas to verify that the IRI is less than 140 in/mile after correction. Submit a revised ProVAL ride quality module report to the reference documents section of the MRS for the corrected areas to validate the results.

C.5.3 Corrective Actions for Excessive IRI

(1) If an individual segment IRI exceeds 140 in/mile for HMA I, HMA II, and PCC II pavements after correction for localized roughness, the engineer may require the contractor to correct that segment. Correct the segment final surface as follows:

HMA I:	Correct to an IRI of 60 in/mile using whichever of the following methods as approved by the engineer: Mill and replace the full lane width of the riding surface excluding the paved shoulder. Continuous diamond grinding or fine-tooth milling the full lane width, if required, of the riding surface including adjustment of the paved shoulders.
HMA II:	Correct to an IRI of 85 in/mile using whichever of the following methods as approved by the engineer: Mill and replace the full lane width of the riding surface excluding the paved shoulder. Continuous diamond grinding or fine-tooth milling of the full lane width, if required, of the riding surface including adjustment of the paved shoulders
PCC II:	Correct to an IRI of 85 in/mile using whichever of the following methods as approved by the engineer: Continuous diamond grinding of the full lane width, if required, of the riding surface including adjustment of the paved shoulders. Conform to sections C.1 through C.4 of Concrete Pavement Continuous Diamond Grinding Special provision contained elsewhere in the contract. Remove and replace the full lane width of the riding surface.

(2) Re-profile corrected segments to verify that the final IRI meets the above correction limits and there are no areas of localized roughness. Enter a revised ProVAL ride quality module report for the corrected areas to the reference documents section of the MRS. Segments failing these criteria after correction are subject to the engineer's right to adjust pay for non-conforming work under standard spec 105.3.

C.6 Dispute Resolution

(1) The engineer and contractor should make every effort to avoid conflict. If a dispute between some aspect of the contractor's and the engineer's testing program does occur, seek a solution mutually agreeable to the project personnel. The department and contractor may review the data, examine data reduction and analysis methods, evaluate testing procedures, and perform additional testing.

(2) If the project personnel cannot resolve a dispute and the dispute affects payment or could result in incorporating nonconforming pavement, the department will use third party testing to resolve the dispute. The department's Quality Assurance Unit, or a mutually agreed on independent testing company, will provide this testing. The engineer and contractor will abide by the results of the third party tests. The party in error will pay service charges incurred for testing by an independent tester. The department may use third party tests to evaluate the quality of questionable pavement and determine the appropriate payment.

D Measurement

(1) The department will measure Incentive IRI Ride by the dollar, adjusted as specified in E.2.

E Payment

E.1 Payment for Profiling

(1) Costs for furnishing and operating the profiler, documenting profile results, and correcting the final pavement surface are incidental to the contract. The department will pay separately for engineer-directed corrective action performed within the 25-foot exclusionary zones under C.5.2 as extra work.

E.2 Pay Adjustment

(1) The department will pay incentive for ride under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
440.4410.S	Incentive IRI Ride	DOL

(2) Incentive payment is not limited, either up or down, to the amount the schedule of items shows.

(3) The department will administer disincentives for ride under the Disincentive IRI Ride administrative item.

(4) The department will not assess disincentive on HMA III or PCC III segments. Incentive pay for HMA III and PCC III segments will be according to the requirements for the category of the adjoining segments.

(5) The department will adjust pay for each segment based on the initial IRI for that segment. If corrective action is required, the department will base disincentives on the IRI after correction for pavement meeting the following conditions:

All Pavement:	The corrective work is performed in a contiguous, full lane width section 500 feet long, or a length as agreed with the engineer.
HMA Pavements:	The corrective work is a mill and inlay or full depth replacement and the inlay or replacement layer thickness conforms to standard spec 460.3.2.
Concrete Pavements:	The corrective work is a full depth replacement and conforms to standard spec 415.

(6) The department will adjust pay for 500-foot long standard segments nominally one wheel path wide using equation "QMP 1.04" as follows:

HMA I	
Initial IRI (inches/mile)	**Pay Adjustment[1] (dollars per standard segment)**
< 30	250
≥ 30 to <35	1750 – (50 x IRI)
≥ 35 to < 60	0
≥ 60 to < 75	1000 – (50/3 x IRI)
≥ 75	-250

HMA II and PCC II	
Initial IRI (inches/mile)	**Pay Adjustment[1] [2] (dollars per standard segment)**
< 50	250
≥ 50 to < 55	2750 – (50 x IRI)
≥ 55 to < 85	0
≥ 85 to < 100	(4250/3) – (50/3 x IRI)
≥ 100	-250

HMA IV and PCC IV	
Initial IRI (inches/mile)	**Pay Adjustment[1] [2] (dollars per standard segment)**
< 35	250
≥ 35 to < 45	1125-(25xIRI)
≥ 45	0

[1] The department will not assess a ride disincentive for HMA pavement placed in cold weather because of a department-caused delay as specified in 450.5(4) of the contract additional special provisions (ASP 6).

[2] If the engineer directs placing concrete pavement for department convenience, the department will not adjust pay for ride on pavement the department orders the contractor to place when the air temperature falls below 35 F.

(7) The department will prorate the pay adjustment for partial segments based on their length.

25. QMP HMA Pavement Nuclear Density.

A Description

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

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

(2) Provide and maintain a quality control program defined as all activities and documentation of the following:
1. Selection of test sites.
2. Testing.
3. Necessary adjustments in the process.
4. Process control inspection.

(3) Chapter 8 of the department's construction and materials manual (CMM) provides additional detailed guidance for QMP work and describes required procedures. Obtain the CMM from the department's web site at:

http://roadwaystandards.dot.wi.gov/standards/cmm/index.htm

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

http://www.atwoodsystems.com/mrs

B Materials

B.1 Personnel

(1) Perform HMA pavement density (QC, QV) testing using a HTCP certified nuclear technician I, or a nuclear assistant certified technician (ACT-NUC) working under a certified technician.

(2) If an ACT is performing sampling or testing, a certified technician must coordinate and take responsibility for the work an ACT performs. Have a certified technician ensure that all sampling and testing is performed correctly, analyze test results, and post resulting data. No more than one ACT can work under a single certified technician.

B.2 Testing

(1) Conform to ASTM D2950 and CMM 8.15 for density testing and gauge monitoring methods. Perform nuclear gauge measurements using gamma radiation in the backscatter position. Perform each test for 4 minutes of nuclear gauge count time.

B.3 Equipment

B.3.1 General

(1) Furnish nuclear gauges from the department's approved product list at:
http://www.dot.wisconsin.gov/business/engrserv/approvedprod.htm.

(2) Have the gauge calibrated by the manufacturer or an approved calibration service within 12 months of its use on the project. Retain a copy of the manufacturer's calibration certificate with the gauge.

(3) Prior to each construction season, and following any calibration of the gauge, the contractor must perform calibration verification for each gauge using the reference blocks located in the department's central office materials laboratory. To obtain information or schedule a time to perform calibration verification, contact the department's Radiation Safety Officer at:

Materials Management Section
3502 Kinsman Blvd.
Madison, Wisconsin 53704
Telephone: (608) 243-5998

B.3.2 Correlation of Nuclear Gauges

B.3.2.1 Correlation of QC and QV Nuclear Gauges

(1) Select a representative section of the compacted pavement prior to or on the first day of paving for the correlation process. The section does not have to be the same mix design.

(2) Correlate the 2 or more gauges used for density measurement (QC, QV). The QC and QV gauge operators will perform the correlation on five test sites jointly located. Record each density measurement of each test site for the QC, QV and back up gauges.

(3) Calculate the average of the difference in density of the fuve test sites between the QC and QV gauges. Locate an additional five test sites if the average difference exceeds 1.0 lb/ft^3. Measure and record the density on the five additional test sites for each gauge.

(4) Calculate the average of the difference in density of the ten test sites between the QC and QV gauges. Replace one or both gauges if the average difference of the 10 tests exceeds 1.0 lb/ft^3 and repeat correlation process from B.3.2.1 (2).

(5) Furnish one of the QC gauges passing the allowable correlation tolerances to perform density testing on the project.

B.3.2.2 Correlation Monitoring

(1) After performing the gauge correlation specified in B.3.2.1, establish a project reference site approved by the department. Clearly mark a flat surface of concrete or asphalt or other material that will not be disturbed during the duration of the project.

Perform correlation monitoring of the QC, QV, and all back-up gauges at the project reference site.

(2) Conduct an initial ten density tests with each gauge on the project reference site and calculate the average value for each gauge to establish the gauge's reference value. Use the gauge's reference value as a control to monitor the calibration of the gauge for the duration of the project.

(3) Check each gauge on the project reference site a minimum of one test per day if paving on the project. Calculate the difference between the gauge's daily test result and its reference value. Investigate if a daily test result is not within 1.5 lb/ft^3 of its reference value. Conduct five additional tests at the reference site once the cause of deviation is corrected. Calculate and record the average of the five additional tests. Remove the gauge from the project if the 5-test average is not within 1.5 lb/ft^3 of its reference value established in B.3.2.2(2).

(4) Maintain the reference site test data for each gauge at an agreed location.

B.4 Quality Control Testing and Documentation

B.4.1 Lot and Sublot Requirements

B.4.1.1 Mainline Traffic Lanes, Shoulders, and Appurtenances

(1) A lot consists of the tonnage placed each day for each layer and target density specified in standard spec 460.3.3.1. A lot may include partial sublots.

(2) Divide the roadway into sublots. A sublot is 1500 lane feet for each layer and target density.

(3) A sublot may include HMA placed on more than one day of paving. Test sublots at the pre-determined random locations regardless of when the HMA is placed. No additional testing is required for partial sublots at the beginning or end of a day's paving.

(4) If a resulting partial quantity at the end of the project is less than 750 lane feet, include that partial quantity with the last full sublot of the lane. If a resulting partial quantity at the end of the project is 750 lane feet or more, create a separate sublot for that partial quantity.

(5) Randomly select test locations for each sublot as specified in CMM 8.15 prior to paving and provide a copy to the engineer. Locate and mark QC density test sites when performing the tests. Perform density tests prior to opening the roadway to traffic.

(6) Use Table 1 to determine the number of tests required at each station, depending on the width of the lane being tested. When more than one test is required at a station, offset the tests 10 feet longitudinally from one another to form a diagonal testing row across the lane.

Lane Width	No. of Tests	Transverse Location
5 ft or less	1	Random
Greater than 5 ft to 9 ft	2	Random within 2 equal widths
Greater than 9 ft	3	Random within 3 equal widths

Table 1

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

(1) A lot represents a combination of the total daily tonnage for each layer and target density.

(2) Each side road, crossover, turn lane, ramp, and roundabout must contain at least one sublot for each layer.

(3) If a side road, crossover, turn lane, or ramp is 1500 feet or longer, determine sublots and random test locations as specified in B.4.1.1.

(4) If a side road, crossover, turn lane, or ramp is less than 1500 feet long, determine sublots using a maximum of 750 tons per sublot and perform the number of random tests as specified in Table 2.

Side Roads, Turn Lanes, Crossovers, Ramps, Roundabouts: Sublot/Layer tonnage	Minimum Number of Tests Required
25 to 100 tons	1
101 to 250 tons	3
251 to 500 tons	5
501 to 750 tons	7

Table 2

B.4.2 Pavement Density Determination

B.4.2.1 Mainline Traffic Lanes and Appurtenances

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

(2) If all sublot averages are no more than one percent below the target density, calculate the daily lot density by averaging the results of each random QC test taken on that day's material.

(3) If any sublot average is more than one percent below the target density, do not include the individual test results from that sublot when computing the lot average density and remove that sublot's tonnage from the daily quantity for incentive. The tonnage from any such sublot is subject to disincentive pay according to standard spec 460.5.2.2.

B.4.2.2 Mainline Shoulders

B.4.2.2.1 Width Greater Than 5 Feet

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

B.4.2.2.2 Width of 5 Feet or Less

(1) If all sublot test results are no more than 3.0 percent below the minimum target density, calculate the daily lot density by averaging all individual test results for the day.

(2) If a sublot test result is more than 3.0 percent below the target density, the engineer may require the unacceptable material to be removed and replaced with acceptable material or allow the nonconforming material to remain in place with a 50 percent pay reduction. Determine the limits of the unacceptable material according to B.4.3.

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

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

B.4.2.4 Documentation

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

B.4.3 Corrective Action

(1) Notify the engineer immediately when an individual test is more than 3.0 percent below the specified minimum in standard spec 460.3.3.1. Investigate and determine the cause of the unacceptable test result.

(2) The engineer may require unacceptable material specified in B.4.3(1) to be removed and replaced with acceptable material or allow the nonconforming material to remain in place with a 50 percent pay reduction. Determine limits of the unacceptable area by measuring density of the layer at 50-foot increments both ahead and behind the point of unacceptable density and at the same offset as the original test site. Continue testing at 50-foot increments until a point of acceptable density is found as specified in standard spec 460.5.2.2(1). Removal and replacement of material may be required if extended testing is in a previously accepted sublot. Testing in a previously accepted sublot will not be used to recalculate a new lot density.

(3) Compute unacceptable pavement area using the product of the longitudinal limits of the unacceptable density and the full sublot width within the traffic lanes or shoulders.

(4) Retesting and acceptance of replaced pavement will be according to standard spec 105.3.

(5) Tests indicating density more than 3.0 percent below the specified minimum, and further tests taken to determine the limits of unacceptable area, are excluded from the computations of the sublot and lot densities.

(6) If 2 consecutive sublot averages within the same paving pass and same target density are more than one percent below the specified target density, notify the engineer and take necessary corrective action. Document the locations of such sublots and the corrective action that was taken.

B.5 Department Testing

B.5.1 Verification Testing

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

(2) The QV tester will test each selected sublot using the same testing requirements and frequencies as the QC tester.

(3) If the verification sublot average is not more than one percent below the specified minimum target density, use the QC tests for acceptance.

(4) If the verification sublot average is more than one percent below the specified target density, compare the QC and QV sublot averages. If the QV sublot average is within 1.0 lb/ft^3 of the QC sublot average, use the QC tests for acceptance.

(5) If the first QV/QC sublot average comparison shows a difference of more than 1.0 lb/ft^3 each tester will perform an additional set of tests within that sublot. Combine the additional tests with the original set of tests to compute a new sublot average for each tester. If the new QV and QC sublot averages compare to within 1.0 lb/ft^3, use the original QC tests for acceptance.

(6) If the QV and QC sublot averages differ by more than 1.0 lb/ft^3 after a second set of tests, resolve the difference with dispute resolution specified in B.6. The engineer will notify the contractor immediately when density deficiencies or testing precision exceeding the allowable differences are observed.

B.5.2 Independent Assurance Testing

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

B.6 Dispute Resolution

(1) The testers may perform investigation in the work zone by analyzing the testing, calculation, and documentation procedures. The testers may perform gauge correlation according to B.3.2.1.

(2) The testers may use correlation monitoring according to B.3.2.2 to determine if one of the gauges is out of tolerance. If a gauge is found to be out of tolerance with its reference value, remove the gauge from the project and use the other gauge's test results for acceptance.

(3) If the testing discrepancy cannot be identified, the contractor may elect to accept the QV sublot density test results or retesting of the sublot in dispute within 48 hours of paving. Traffic control costs will be split between the department and the contractor.

(4) If investigation finds that both gauges are in error, the contractor and engineer will reach a decision on resolution through mutual agreement.

B.7 Acceptance

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

C (Vacant)

D (Vacant)

E Payment

E.1 QMP Testing

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

E.2 Disincentive for HMA Pavement Density

(1) The department will administer density disincentives according to standard spec 460.5.2.2.

E.3 Incentive for HMA Pavement Density

(1) Delete standard spec 460.5.2.3.

(2) If the lot density is greater than the minimum specified in standard spec table 460-3 and all individual air voids test results for that mixture are within +1.0 percent or -0.5 percent of the design target in standard spec table 460-2, the department will adjust pay for that lot as follows:

Percent Lot Density Above Minimum	Pay Adjustment Per Ton
From -0.4 to 1.0 inclusive	$0
From 1.1 to 1.8 inclusive	$0.40
More than 1.8	$0.80

(3) The department will adjust pay under the Incentive Density HMA Pavement bid item. Adjustment under this item is not limited, either up or down, to the bid amount shown on the schedule of items.

(4) If a traffic lane meets the requirements for disincentive, the department will not pay incentive on the integrally paved shoulder.

(5) Submit density results to the department electronically using the MRS software. The department will validate all contractor data before determining pay adjustments.

460-020 (20100709)

26. Backfill Slurry.

A Description

This work shall consist of furnishing and placing backfill slurry for storm sewer pipes and storm sewer structures as shown on the plans.

B Materials

Use fine aggregate and number 1 coarse aggregate conforming to standard spec 501.2.5.3, and water conforming to standard spec 501.2.4 in the Backfill Slurry mix. Weigh aggregates at a batch plant suitable for batching concrete masonry. Mix and deliver to the project site using a truck mixer. Add enough water to enable the mixture to flow readily. Submit a mix design for the engineer's review prior to placement. Backfill Slurry is considered as mix class III and the department accepts the mix by certification. Mix acceptance and testing in the field is not required.

C Construction

Prior to placement of backfill slurry provide for positive drainage of the area to be backfilled. Discharge from the truck in a manner to prevent segregation. Consolidation or compaction effort will not be required. Wait twelve hours before paving over the backfill.

D (Vacant)

E Payment

Backfill slurry used for storm sewer pipes and storm sewer structures shall be incidental to pipes and structures. No separate payment will be made for backfill slurry. Non-conforming slurry will be replaced at no additional cost to the department.

27. Concrete Masonry Bridges.

The bridge contractor shall install the inserts into Structure B-40-53 from which AT&T Wisconsin will install the hanger assembly to support their facility. AT&T Wisconsin will supply the inserts to the contractor. The insert spacing and quantities will be provided by AT&T Wisconsin. Contact AT&T Wisconsin for spacing and quantities prior to preparing final bid. The AT&T Wisconsin contact for insert spacing and quantities is Dean Herro, (262) 352-0131, or Jay Bulanek, (262) 896-7669.

The installation of the inserts shall be incidental to the bid item Concrete Masonry Bridges.

28. Expansion Device, B-40-60.

A Description

This special provision describes furnishing and installing an expansion device in accordance to standard spec 502, as shown on the plans, and as hereinafter provided.

B Materials

The minimum thickness of the polychloroprene strip seal shall be ¼-inch for non-reinforced elastomeric glands and 1/8-inch for reinforced glands. Furnish the strip seal gland in lengths suitable for a continuous one-piece installation at each individual expansion joint location. Provide preformed polychloroprene strip seals that conform to the requirements ASTM D3542, and have the following physical properties:

Property Requirements	Value	Test Method
Tensile Strength, min.	2000 psi	ASTM D412
Elongation @ Break, min	250%	ASTM D412
Hardness, Type A, Durometer	60 ± 5 pts.	ASTM D2240
Compression Set, 70 hours @212˚F, max.	35%	D395 Method B Modified
Ozone Resistance, after 70 hrs. at 100˚F under 20% Strain with 100 pphm ozone	No Cracks	ASTM D1149 Method A
Mass Change in Oil 3 after 70 hr. 212˚F Mass Change, max.	45%	ASTM D471

Install the elastomeric strip seal gland with tools recommended by the manufacturer, and with a lubricant adhesive conforming to the requirements of ASTM D4070.

The manufacturer and model number shall be one of the following approved strip seal expansion device products:

	Model Number Strip Seal Gland Size*		
Manufacturer	**4-Inch**	**5-Inch**	**6-Inch**
D.S. Brown	SSA2-A2R-400	SSA2-A2R-XTRA	SSA2-A2R-XTRA
R.J. Watson	RJA-RJ400	RJA-RJ500	RJA-RJ600
Watson Bowman Acme	A-SE400	A-SE500	A-SE800
Commercial Fabricators	A-AS400	-----	-----

*Expansion device strip seal gland size requirement of 4”, 5”, and 6” shall be as shown on the plans.

Furnish manufacturer’s certification for production of polychloroprene represented showing test results for the cured material supplied, and certifying that it meets all specified requirements.

The steel extrusion or retainer shall conform to ASTM designation A 709 grade 36 steel. After fabrication, steel shall be galvanized conforming to the requirements ASTM A123.

Manufacturer's certifications for adhesive and steel shall attest that the materials meet the specification requirements.
502-020 (20110615)

29. Concrete Barrier Type S32.

Concrete Barrier Type S32 may need to be hand poured at the southeast corner of the Alois Street and Vliet Street intersection due to STOC cabinet and temporary traffic signal/lighting poles.

30. Concrete Barrier Transition Section 32-Inch.

The Concrete Barrier Single-Faced 32-Inch transition to the Modified MGS Thrie Beam Transition shall be in accordance to SDD: Concrete Barrier, Single-Faced (With Anchorage). The transition will be paid for under the contract bid item Concrete Barrier Transition Section 32-Inch.

Connecting the Modified MGS Thrie Beam Transition to the Concrete Barrier Single-Faced is incidental to the bid items Modified MGS Thrie Beam Transition and Concrete Barrier Transition Section 32-Inch.

31. Adjusting Manhole Covers.

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

Revise standard spec 611.3.7 by deleting the last paragraph.

Set the manhole frames so that they comply with the surface requirements of standard spec 450.3.2.9. At the completion of the paving, a 6-foot straightedge shall be placed over the centerline of each manhole frame parallel to the direction of traffic. A measurement shall be made at each side of the frame. The two measurements shall be averaged. If this average is greater than 5/8 inches, reset the manhole frame to the correct plane and elevation. If this average is 5/8 inches or less but greater than 3/8 inches, the manhole frame shall be allowed to remain in place but shall be paid for at 50 percent of the contract unit price.

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

32. Fence Safety, Item 616.0700.S.

A Description

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

B Materials

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

Furnish fence fabric meeting the following requirements.

Color:	International orange (UV stabilized)
Roll Height:	4 feet
Mesh Opening:	1 inch min to 3 inch max
Resin/Construction:	High density polyethylene mesh
Service Temperature:	-60° F to 200° (ASTM D648)
Tensile Yield:	Avg. 2000 lb per 4 ft. width (ASTM D638)
Ultimate Tensile Strength:	Avg. 3000 lb per 4 ft. width (ASTM D638)
Elongation at Break (%):	Greater than 100% (ASTM D638)
Chemical Resistance:	Inert to most chemicals and acids

C Construction

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

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

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

D Measurement

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

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
616.0700.S	Fence Safety	LF

Payment is full compensation for furnishing and installing fence and posts; maintaining the fence and posts in satisfactory condition; and for removing and disposing of fence and posts at project completion.

616-030 (20070510)

33. Signs Type I and II.

Furnish and install new mounting brackets per approved product list for type II signs on overhead sign supports incidental to sign. For type II signs on sign bridges use aluminum vertical support beams noted above incidental to sign. New mounting brackets are incidental to the sign being installed.

Add the following to standard spec 637.2.4:

Use stainless steel bolts, washers and nuts for type I and type II signs mounted on sign bridges or type I signs mounted on overhead sign supports. Use clips on every joint for Sign Plate A 4-6 when mounted on a sign bridge or overhead sign support. Inspect installation of clips and assure bolts and nuts are tightened to manufacturers recommended torque values.

Use aluminum vertical sign support beams that have a 5-inch wide flange and weigh 3.7 pounds per foot, if the L-brackets are 4 inches wide then use 4 inch wide flange beams weighing 3.06 pounds per foot. Contractor shall measure the width of the L-brackets on existing structures of determine the width needed for sign support beams

Use beams a minimum of 6 feet in length or equal to the height of the sign to be supported, whichever is greater. Use U-bolts that are made of stainless steel, 1/2 inch diameter and of the proper size to fit the truss cords of each sign bridge. Install vertical sign support beams on each sign and use new U-bolts to attach each beam to the top and bottom cord of the sign bridge truss.

For type II signs on overhead sign supports follow the approved product list for mounting brackets.

Replace standard spec 637.2.4.1(2)2 with the following:

Clips may be either stainless steel or ASTM B 108, aluminum alloy, 356.0-T6.

Add the following to standard spec 637.3.3.2(2):

Install Type I Signs at the offset stated in the plan, which shall be the clear distance between the edge of mainline pavement right edgeline and the near edge of the sign.

Add the following to standard spec 637.3.3.3(3):

Furnish and install new aluminum vertical sign support beams on each sign and new U-bolts to attach each beam to the top and bottom cord of the sign bridge truss for Type I or Type II Signs and Type I signs on overhead sign supports incidental to sign. New I-beams are incidental to the sign being installed.

Add the following to standard spec 641.2.9(3):

Submit shop drawings for sign bridges and overhead sign supports to SE Region, Traffic Operations Engineer
637-SER1 (20120401)

34. Nighttime Work Lighting-Stationary.

A Description
Provide portable lighting as necessary to complete nighttime work. Nighttime operations consist of work specifically scheduled to occur after sunset and before sunrise.

B (Vacant)

C Construction
C.1 General
This provision shall apply when providing, maintaining, moving, and removing portable light towers and equipment-mounted lighting fixtures for nighttime stationary work operations, for the duration of nighttime work on the contract.

At least 14 days prior to the nighttime work, furnish a lighting plan to the engineer for review and acceptance. Address the following in the plan:

1. Layout, including location of portable lighting – lateral placement, height, and spacing. Clearly show on the layout the location of all lights necessary for every aspect of work to be done at night.

2. Specifications, brochures, and technical data of all lighting equipment to be used.

3. The details on how the luminaires will be attached.

4. Electrical power source information.

5. Details on the louvers, shields, or methods to be employed to reduce glare.

6. Lighting calculations. Provide illumination with average to minimum uniformity ratio of 5:1 or less throughout the work area.

7. Detail information on any other auxiliary equipment.

C.2 Portable Lighting
Provide portable lighting that is sturdy and free standing and does not require any guy wires, braces, or any other attachments. Furnish portable lighting capable of being moved as necessary to keep up with the construction project. Position the portable lighting and trailers to minimize the risk of being impacted by traffic on the roadway or by construction traffic or equipment. Provide lightning protection for the portable lighting. Portable lighting shall withstand up to 60 mph wind velocity.

If portable generators are used as a power source, furnish adequate power to operate all required lighting equipment without any interruption during the nighttime work. Provide wiring that is weatherproof and installed according to local, state, federal (NECA and OSHA) requirements. Equip all power sources with a ground-fault circuit interrupter to prevent electrical shock.

C.3 Light Level and Uniformity
Position (spacing and mounting height) the luminaires to provide illumination with an average to minimum uniformity ratio of 5:1 or less throughout the work area.

Illuminate the area as necessary to incorporate construction vehicles, equipment, and personnel activities.

C.4 Glare Control
Design, install, and operate all lighting supplied under these specifications to minimize or avoid glare that interferes with all traffic on the roadway or that causes annoyance or discomfort for properties adjoining the roadway. Locate, aim, and adjust the luminaires to provide the adequate level of illumination and the specified uniformity in the work area without the creation of objectionable glare.

Provide louvers, shields, or visors, as needed, to reduce any objectionable levels of glare. As a minimum, ensure the following requirements are met to avoid objectionable glare on the roadways open to traffic in either direction or for adjoining properties:

1. Aim tower-mounted luminaires, either parallel or perpendicular to the roadway, so as to minimize light aimed toward approaching traffic.

2. Aim all luminaires such that the center of beam axis is no greater than 60 degrees above vertical (straight down).

If lighting does not meet above-mentioned criteria, adjust the lighting within 24 hours.

C.5 Continuous Operation
Provide and have available sufficient fuel, spare lamps, generators, and qualified personnel to ensure that the lights will operate continuously during nighttime operation. In the event of any failure of the lighting system, discontinue the operation until the adequate level of illumination is restored. Move and remove lighting as necessary.

D (Vacant)

E Payment
Costs for furnishing a lighting plan, and for providing, maintaining, moving, and removing portable lighting, tower mounted lighting, and equipment-mounted lighting required under this special provision are incidental to the contract.
643-010 (20100709)

35. Truck or Trailer-Mounted Attenuator, Item 643.1055.S.

A Description

(1) This special provision describes protecting work operations with a truck or trailer-mounted attenuator (TMA).

B Materials

(1) Furnish and maintain a TMA conforming to NCHRP Report 350 test level 3 or to MASH crashworthiness criteria. Submit written certification from the manufacturer that the host vehicle/attenuator configuration provided conforms to crashworthiness criteria. Include the federal-aid reimbursement eligibility letter with that submittal.

(2) Provide a host vehicle and mount the attenuator conforming to the attenuator manufacturer's specifications. Provide the engineer a copy of the manufacturer's specifications and installation instructions.

C Construction

(1) Coordinate with the engineer at least 72 hours before its intended use so the engineer can determine if the work operation requires TMA protection.

(2) Position the attenuator at a manufacturer-recommended location in advance of a stationary work operation. Position and maintain the attenuator consistently at the manufacturer-recommended distance from a mobile work operation. Ensure that an operator stays with the host vehicle while protecting a mobile work operation.

D Measurement

(1) The department will measure Truck or Truck-Trailer-Mounted Attenuator by the day, acceptably completed, measured to the 1/2-day based on the engineer-determined time the attenuator is required to protect work operations. The department will measure 4 or less hours per calendar day as a half day and over 4 hours as a full day.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
643.1055.S	Truck or Trailer-Mounted Attenuator	DAY

(2) Payment is full compensation for providing the portable attenuator, host vehicle, and operator.

643-015 (20140630)

36. Removing Raised Pavement Markers, Item 646.0790.S.

A Description

This special provision describes removing raised pavement markers.

B (Vacant)

C Construction
Remove raised pavement markers as shown on the plans.

D Measurement
The department will measure Removing Raised Pavement Markers by each raised pavement marker, acceptably removed.

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

ITEM NUMBER	DESCRIPTION	UNIT
646.0790.S	Removing Raised Pavement Markers	Each

Payment is full compensation for removing and properly disposing of raised pavement markers.
646-070 (20070904)

37. Pavement Marking Grooved Wet Reflective Contrast Tape 4-Inch, Item 646.0841.S; 8-Inch, Item 646.0843.S.

A Description
This special provision describes furnishing, grooving and installing preformed wet reflective pavement marking contrast tape for grooved applications as shown on the plans, according to standard spec 646, and as hereinafter provided.

B Materials
Furnish wet reflective pavement marking contrast tape and adhesive material, per manufacturer's recommendation if required, from the department's approved products list.

Furnish a copy of the manufacturer's recommendations to the engineer before preparing the pavement marking grooves.

C Construction
C.1 General
For quality assurance, provide the engineer and the region's Marking Section evidence of manufacturer training in the proper placement and installation of pavement marking contrast tape.

Plane the grooved lines according to details in the plan and per manufacturer's recommendations. Use grooving equipment with a free-floating, independent cutting head. Plane a minimum number of passes to create a grooved surface per manufacturer's recommendations.

C.2 Groove Depth

Cut the groove to a depth of 120 mils ± 10 mils from the pavement surface or, if tined, from the high point of the tined surface. To measure the depth, the contractor may use a depth plate placed in the groove and a straightedge placed across the plate and groove, or the contractor may use a straightedge placed perpendicular to the groove. The department may periodically check groove depths.

C.3 Groove Width – Longitudinal Markings

Cut the groove 1-inch wider than the width of the tape.

C.4 Groove Position

Position the groove edge according to plan details. Groove a minimum of 4 inches, but not greater than, 12 inches from both ends of the tape segment. Achieve straight alignment with the grooving equipment.

C.5 Groove Cleaning

C.5.1 Concrete

Cooling the cutting head with water may be necessary for some applications and equipment. If cooling water is necessary, flush the groove immediately with high-pressure water after cutting to remove any build-up of cement dust and water slurry. If this is not done, the slurry may harden in the groove.

If water is used in the grooving process, allow the groove to dry a minimum of 24 hours after groove cleaning, and prior to pavement marking application. The groove surface shall be clean and dry before applying the adhesive, and the pavement marking tape. Use a high-pressure air blower with at least 185 ft^3/min air flow and 120 psi air pressure to clean the groove; use of the air blower does not decrease the amount of time required for the groove to dry.

C.5.2 New Asphalt

Groove pavement five or more days after paving.

Use a high-pressure air blower with at least 185 ft^3/min air flow and 90 psi air pressure to clean the groove.

C.5.3 Existing Asphalt

Check for structural integrity in supporting grooving operations. If the structural integrity of the asphalt pavement is inadequate to support grooving operations, immediately notify the engineer.

Use a high-pressure air blower with at least 185 ft^3/min air flow and 90 psi air pressure to clean the groove.

C.6 Tape Application
Apply the tape when both the air and surface temperature are 40 degrees F and rising.

Apply tape in the groove as per manufacturer's recommendations. If manufacturer's recommendations require surface preparation adhesive

1) For the Southeast Region and the ozone non-attainment Northeast Region counties of Sheboygan, Manitowoc, and Kewaunee:

    · Apply SPA-60 during May 1 to September 30, both dates inclusive due to Volatile Organic Compound Limitations.

    · Apply P-50 during October 1 to April 30, both dates inclusive. –

2) For the remainder counties:

    · Apply either adhesive.

Refer to the manufacturer's instructions for determining when the surface preparation adhesive is set.

Tamp the wet reflective pavement marking contrast tape with a tamper cart roller, with a minimum of a 200-lb load, cut to fit the groove. Tamp a minimum of three complete cycles (6 passes) with grooved modified tamper roller cart.

D Measurement
The department will measure Pavement Marking Grooved Wet Reflective Contrast Tape (Width) for grooved applications in length by the linear foot of tape placed according to the contract and accepted.

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

ITEM NUMBER	DESCRIPTION	UNIT
646.0841.S	Pavement Marking Grooved Wet Reflective Contrast Tape 4-Inch	LF
646.0843.S	Pavement Marking Grooved Wet Reflective Contrast Tape 8-Inch	LF

Payment is full compensation for cleaning and preparing the pavement surface; furnishing and installing the material; and for removing temporary pavement marking, if necessary.
646-022 (20120615)

38. Freeway Lighting System.

General

Revise standard specs 651, 652, 653, 654, 655, 656, 657 and 659 as follows.

All the work necessary to comply with revisions to standards specifications mentioned herewith shall be incidental to associated pay items or to the project including coordination, materials, and labor. No additional payment shall be made to the contractor.

Add the following to standard spec 651.2:

Materials indicated to be returned to the department shall be hauled to one of the following two locations:

State Electrical Shop at 935 South 60th street, West Allis, as directed by Mr. Mike Prebish, (414) 266-1170.

Milwaukee County Grounds, 10191 West Watertown Plank Road, Wauwatosa, as directed by Mr. Pat Stoetzel, (414) 750-5306.

Arrange pickups and deliveries three days in advance and during regular business hours (Monday – Thursday 7:00 AM to 3:45 PM).

Add the following to standard spec 651.3.1:

Any circuit that the contractor does not personally tag out at the disconnect shall be considered live, and will be subject to being activated by another person with no notice to the contractor. Make tagouts with manufactured tags, and endorse them with the date and the name of the contractor. Clear tagouts at the end of the workday. The department does not employ a load dispatcher and has no intent to do so. Each electrical worker is responsible for their own protection from automatic switching and from switching by others.

The plans show required disconnections of existing lighting circuits, most in the form of abandoning existing underground conductors in place. The contractor may need to mobilize several times per each existing lighting distribution center. The contractor is expected to build these costs into the various paid items for removals and installations.

Replace all existing slotted junction box cover screws with stainless hex head cover screws at each location where it is required to open the cover of an existing lighting junction box.

Add the following to standard spec 651.5:

Work to disconnect and connect conductors will be incidental to the paid measurement of footage.

There will be no measurement for payment for abandoning conductors or removing conductors for scrap.

Work to disconnect and connect electrical system, splice through, or to connect conductors are incidental to the installation or removal of the freeway lighting pay items included in this contract. The department will not measure conductors or conduits that have been abandoned in place or removed for scrap. The department will allow, at the contractor's discretion, for the salvaging of conductors to be abandoned, if possible.

The department will not measure for the removal of electrical facilities; except, the department will measure and pay for the removal and disposal of lamps from sign bridges, as shown on the plans, using bid item Lamp Disposal High Intensity Discharge.

Add the following to standard spec 652.3.1:

Install minimum 3-inch diameter PVC conduit elbows in a ground mounted concrete bases to accommodate Cable in Duct (CID) type cable.

Add the following to standard spec 652.3.1.2:

Furnish and install an UL-listed liquid tight flexible metallic conduit transition wherever a conduit exits from below grade.

Furnish a UL-listed fitting appropriate for the purpose at each transition from one type of conduit to another type. Couplings will not be individually measured for payment.

Add the following to standard spec 652.3.1.4:

Support conductors at the top of the vertical raceway or as close as practical if the vertical rise exceeds 40-feet. Provide additional supports as shown; in no case shall the distance between supports exceed that shown in Table 300.19(A) of the Wisconsin State Electric Code.

Add the following to standard spec 653.3(1):

This provision modifies the standard detail drawing for pull boxes and thereby both the standard items and SPV pay item for pull boxes. Lighting pull box covers shall read "LIGHTING".

Add the following to standard spec 655.3.1:

Wet location splices are not anticipated on this project and not shown in the plans. In the event that the engineer allows wet location splices, make pull box splices with engineer approved epoxy kit.

At each pull point or access point, indicate the line side bundle with a lap of blue tape.

Add the following to standard spec 655.3.7(4):

Where two or more wire networks pass through a pull point, tag each circuit network (i.e. A/B/N and C/D/N) with approved all-weather tags.

Add the following to standard spec 657.2.1:

Non-breakaway poles (mounted on structures, concrete bases or behind noise wall barriers without transformer base), as well as at stems of sign bridges containing electrical wires are to be double nutted and contractor shall install galvanized rat screen enclosing the bottom of pole area; extra nuts and screen incidental.

Add the following to standard specs 657.3.1 and 657.3.5:

Corrosion protection measures described in standard specs 657.3.1 and 657.3.5 are invoked for breakaway transformer bases and aluminum light poles. The contractor shall avoid contact of dissimilar metals in erecting the pole on its foundation and/or breakaway device. Any concern of trapped moisture or potential corrosion cell shall be resolved to the satisfaction of the engineer.

Manufacturer's Warranty for LED luminaires: The manufacturer shall warrant to the department that each complete luminaire (consisting of the housing, optical assembly, LED drivers, surge protection and wiring) will be free from defects in material and workmanship for five years from the date that the luminaire are put into service. Luminaires shall be installed within one year of manufacture.

If any luminaires fail to meet the above warranty, the department shall provide the manufacturer with a written notice of any defect within 30 days after discovery of the defect. The manufacturer shall provide all materials, luminaires, replacement component parts, labor and all incidentals necessary to restore the luminaire to a fully operational, installed condition.

Submittal Requirements for LED luminaires: Considering the rapid advancement in LED technology, the overall project construction and duration of construction, within 10 calendar days after contract execution, the contractor is responsible to coordinate the lead time for LED luminaires purchase and installation schedule for LED luminaires with the engineer and the department's Lighting Engineer, Eric Perea, at eric.perea@dot.wi.gov or at (262) 574-5422 prior to order LED luminaires. The LED luminaires purchasing may be done during later stage of construction as directed by the department which shall not delay the construction.

Add the following to standard spec 659.3:

Install Plaques Light Pole on all poles located in the median at a mounting height of 6-inch above the highest adjacent safety barrier or obstruction.

39. Anchor Assemblies Light Poles on Structures, Item 657.6005.S.

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

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

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

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

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

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

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

40. Lighting Control Cabinets 240/480 30 – Inch, Item 659.2230.

Add the following to standard spec 659.2:

The lighting control cabinets 240/480V 30 – Inch shall be equipped with 1.5KVA, single phase, 60Hz, encapsulated, NEMA 1 rated and UL listed step-down transformer. The primary voltage shall be 240V and secondary voltage shall be 120V with 5% tapping. The transformer shall be capable of mounting inside the cabinet. SPST, 20 amp switch for the door shall be single pole single throw type heavy duty, temper resistant, rated for 125V, UL listed.

The cabinets shall be furnished with LED strip light.

Control breaker shall be 15 amps, single pole 120V, bolt on, UL listed. The circuit breaker shall have 10K AIR rating at 120V, terminal for minimum wire size 14 AWG and maximum wire size 8 AWG.

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

41. Sawing Concrete.

Supplement standard spec 690.3.3, Sawing Concrete, as follows:

Contain sawing sludge on site until it can be properly disposed. Do not allow sawing sludge to enter waterways or wetlands.

42. Sawing Concrete Barrier, Item SPV.0060.001.

A Description
Saw, full depth, existing concrete barrier in accordance to the pertinent requirements of standard spec 690, as shown on the plans, and as hereinafter provided.

B (Vacant)

C Construction
This work includes transverse full depth sawing of the concrete barrier wall, and transverse full depth sawing of the concrete barrier footing extending a distance of 2-feet out perpendicular to the front barrier face.

Contain sawing sludge on site until it can be properly disposed. Do not allow sawing sludge to enter waterways or wetlands.

D Measurement
The department will measure Sawing Concrete Barrier as each individual existing barrier saw cut, 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	Sawing Concrete Barrier	Each

Payment is full compensation for transverse full-depth sawing of concrete barrier wall and for concrete barrier footing.

43. Welding Manhole Access Covers, Item SPV.0060.002.

A Description
This special provision describes installing, maintaining, and removing welds on manhole access covers subjected to live freeway traffic during staged construction.

B Materials
Furnish nickel alloy electrodes stored in hermetically sealed containers. Utilize Lincoln Ferroweld, Crown 255, ESAB Nickel-Arc 99, MG289 ACDC Super Strength Electrode for Contaminated cast iron, or other nickel alloy stick electrodes as approved by the engineer.

C Construction
Remove material that will interfere with weld connections. Clean the weld locations on the cover and casting to bright metal with a steel grinding wheel.

Weld conforming to AWS A5.15 using certified operators. Preheat the casting/cover in the area of the weld to a minimum of 100 degrees F.

For round covers make a minimum of six single-pass, 2-Inch-long welds at the 12, 6, 10, 4, 8, and 2 o'clock positions in that order.

For rectangular covers make a minimum of eight single-pass, 2-Inch-long welds in a similar alternating order with welds at the 1/3 and 2/3 points of each side.

Cover each weld with a 2-Inch thick layer of clean, dry, sand in a temperature range of 70 to 90 degrees F immediately after welding to slow cooling. Do not cool with water or compressed air.

Maintain the work by promptly rewelding failed welds. The engineer may allow alternative fastening methods if welds fail repeatedly. Repair or replace damaged covers as the engineer directs.

Remove welds previously placed, flush to the frame and cover surface.

D Measurement
The department will measure Welding Manhole Access Covers as each individual 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.0060.002	Welding Manhole Access Covers	Each

Payment is full compensation for cleaning covers, weldings and re-welding failed welds, maintenance of welds, and removing welds from current contract. Payment also includes repairing or replacing covers damaged due to welding.

44. Storm Sewer Structure Rehabilitation, Item SPV.0060.003.

A Description
This special provision describes rehabilitating the existing storm sewer structure at inside median locations. The work consists of removing existing shoulder pavement by saw

cutting, removing, handling, storing and reinstalling existing storm sewer structure frames, grates or lids, excavating and filling voids with granular backfill material and compacting, replacing shoulder pavement with high early strength concrete and drilled tie bars, HMA overlay, and details as shown on the plans.

B Materials
This work shall be in accordance to the pertinent provisions of standard spec 611.

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

Clean out all soil, debris, other accumulated matter, and materials deposited or lodged due to the contractor's operations from the structure prior to placing the frame and cover on the structure. Storm sewer rehabilitation work on structures adjacent to or in the existing asphaltic surface must be completed before the new asphaltic surface is laid.

D Measurement
The department will measure Storm Sewer Structure Rehabilitation as each individual storm sewer structure rehabilitation, 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.0060.003	Storm Sewer Structure Rehabilitation	Each

Payment is full compensation for furnishing all required materials, saw cutting and removing shoulder pavement; furnishing and installing any or all adjustment rings or bricks needed; backfilling and compacting with granular backfill; excavation, removing, handling, storing reinstalling frames, grates or lids; disposing of surplus material, and for cleaning out and restoring the work site; for placing pavement drilled ties in existing shoulder; for furnishing, placing, finishing, protection and curing high early strength concrete. Replace all covers that are unusable due to the contractor's operations, at no expense to the department. Removing and replacing existing concrete barrier and existing concrete curb and gutter is paid under separate bid item.

45. Cleaning Storm Sewer, Item SPV.0060.004.

A Description
This special provision describes cleaning drainage structures and the pipes connecting to the drainage structure where shown on the plans and as directed by the engineer.

B (Vacant)

C Construction
Remove drainage structure cover, completely remove all solids removed from the sewer system and haul them off the project for disposal. Silts resulting from any flushing or jetting operation must be prevented from escaping into sewers or waterways. Inspect the drainage structure for repair work and reinstall cover.

D Measurement
The department will measure Cleaning Storm Sewer by the unit of completed and accepted work.

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.004	Cleaning Storm Sewer	Each

Payment is full compensation for furnishing all materials to clean out drainage structures including silt and solid retention; for removing and properly disposing materials; paying all associated fees for permits, licenses or disposal of materials; and for furnishing all labor, tools, equipment and incidentals necessary to complete this item of work. Storm sewer structure covers damaged by the contractors operations shall be replaced by the contractor, with no expense to the department.

46. Mobilizations Emergency Pavement Repair, Item SPV.0060.005.

A Description
This item shall consist of furnishing and mobilizing personnel, equipment, traffic control, and materials to the project site to repair the existing pavement or Asphaltic Surface Temporary on an emergency basis as the engineer directs.

B (Vacant)

C Construction
Mobilize with sufficient personnel, equipment, traffic control, materials and incidentals on the jobsite within 4 hours of the engineer's written order to repair the existing pavement on an emergency basis.

An emergency is a sudden occurrence of a serious and urgent nature, beyond normal maintenance of the existing pavement or the Asphaltic Surface Temporary. Under this definition, an emergency mobilization requires immediate action to move necessary personnel, equipment, and materials to the emergency site followed by immediate repairs of the existing pavement or the Asphaltic Surface Temporary.

D Measurement
The department will measure Mobilizations Emergency Pavement Repair as each individual mobilization, acceptably completed. The department will not include delivering and installing pavement repair or maintenance materials provided for in specific contract

bid items. All traffic control items used for each mobilization will be considered incidental to the mobilization.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.005	Mobilizations Emergency Pavement Repair	Each

Payment for Mobilizations Emergency Pavement Repair is full compensation for the staged moving of personnel, moving equipment, setting up and removing traffic control, traffic control materials, and moving materials. The department will pay separately for delivery and installation of pavement repair materials under the other bid items in this contract. The department will not pay separately for traffic control items even though they may be included in other bid items in this contract and will consider them incidental to each mobilization.

47. Pavement Marking Grooved Preformed Thermoplastic Arrows Type 1, Item SPV.0060.006; Arrows Type 2, Item SPV.0060.007; Arrows Type 3, Item SPV.0060.008; Arrows Type 4, Item SPV.0060.009; Words, Item SPV.0060.010; Yield Line 18-Inch, Item SPV.0060.013; Stop Line 18-Inch, Item SPV.0090.001; Crosswalk 6-Inch, Item SPV.0090.002.

A Description

This special provision describes grooving the pavement surface, and furnishing and installing preformed thermoplastic pavement marking as shown on the plans, in accordance with standard spec 647, and as hereinafter provided.

B Materials

Furnish preformed thermoplastic pavement marking and sealant material, if required, from the department's approved products list.

C Construction

C.1 General

For quality assurance, provide the project engineer and the region's Marking Section evidence of manufacturer training in the proper placement and installation of preformed thermoplastic pavement marking.

Plane the grooved lines in accordance with the plan details. Use grooving equipment with a free-floating, independent cutting or grinding head. Plane a minimum number of passes to create a smooth groove.

C.2 Groove Depth

Cut the groove to a depth of 120 mils ±10 mils deeper than the thermoplastic thickness, from the pavement surface or, if tined, from the high point of the tined surface. Measure

depth using a straightedge placed perpendicular to the groove. The department may periodically check groove depths.

C.3 Groove Width – Linear Markings
Cut the groove 1-inch wider than the width of the thermoplastic.

C.4 Groove Position
Position the groove edge in accordance with the plan details.

C.4.1 Linear Marking
Groove at a minimum of 4-inches, but not greater than, 12-inches from both ends of the line segment. Achieve straight alignment with the grooving equipment.

C.4.2 Special Marking
Groove a box around the special marking up to 4- inches from the perimeter of the special marking.

C.5 Groove Cleaning
C.5.1 Concrete
Cooling the cutting head with water may be necessary for some applications and equipment. If cooling water is necessary, flush the groove immediately with water after cutting to remove any build-up of cement dust and water slurry. If this is not done, the slurry may harden in the groove.

If water is used in the grooving process, allow the groove to dry a minimum of twenty-four (24) hours after groove cleaning, after removal of excess water, and prior to pavement marking application. Clean and dry the groove for proper application of the sealant, and placement of the pavement marking. Use a high-pressure air blower with at least 185 ft^3/min air flow and 90 psi air pressure to clean the groove; use of the air blower does not decrease the amount of time required for the groove to dry.

C.5.2 New Asphalt
Groove pavement five or more days after paving. Use a high-pressure air blower with at least 185 ft^3/min air flow and 90 psi air pressure to clean the groove.

C.5.3 Existing Asphalt
Check for structural integrity in supporting grooving operations. If the structural integrity of the asphalt pavement is inadequate to support grooving operations, immediately notify the engineer.

C.5.2 Asphalt
Use a high-pressure air blower with at least 185 ft^3/min air flow and 90 psi air pressure to clean the groove.

C.6 Preformed Thermoplastic Application
Preheat the surface if necessary based on manufacturer's recommendation.

Application of the preformed thermoplastic in the groove without sealant will be as follows:

- May 1 to September 30, both dates inclusive – the Southeast Region and the ozone non-attainment or maintenance Northeast Region counties of Sheboygan, Manitowoc, Kewaunee, and Door.
- June 1 to August 31 – the Southwest Region, and the Northeast, North Central, and Northwest Regions except for the ozone non-attainment or maintenance Northeast Region counties of Sheboygan, Manitowoc, Kewaunee, and Door.

Application of the preformed thermoplastic in the groove with sealant materials will be as follows:

- October 1 to April 30, both dates inclusive – the Southeast Region and the ozone non-attainment or maintenance Northeast Region counties of Sheboygan, Manitowoc, Kewaunee, and Door.
- September 1 to May 31, both dates inclusive – the Southwest Region and the Northeast, North Central, and Northwest Regions, except for the ozone non-attainment or maintenance Northeast Region counties of Sheboygan, Manitowoc, Kewaunee, and Door.

The sealant must be wet.

D Measurement

The department will measure Pavement Marking Grooved Preformed Thermoplastic (Type) by each individual unit, acceptably completed, or in length by the linear foot of tape placed, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.006	Pavement Marking Grooved Preformed Thermoplastic Arrows Type 1	Each
SPV.0060.007	Pavement Marking Grooved Preformed Thermoplastic Arrows Type 2	Each
SPV.0060.008	Pavement Marking Grooved Preformed Thermoplastic Arrows Type 3	Each
SPV.0060.009	Pavement Marking Grooved Preformed Thermoplastic Arrows Type 4	Each
SPV.0060.010	Pavement Marking Grooved Preformed Thermoplastic Words	Each
SPV.0060.013	Pavement Marking Grooved Preformed Thermoplastic Yield Line 18-Inch	Each
SPV.0090.001	Pavement Marking Grooved Preformed Thermoplastic Stop Line 18-Inch	LF
SPV.0090.002	Pavement Marking Grooved Preformed Thermoplastic Crosswalk 6-Inch	LF

Payment is full compensation for cleaning and preparing the pavement surface, furnishing and installing the material; and for furnishing all labor, tools, equipment, and incidentals necessary to complete the contract work.

48. Reconnect Pipe Underdrain 4-Inch, Item SPV.0060.011.

A Description
This special provision describes reconnecting existing drain tile connected to existing inlets, to proposed replacement inlets as shown in the plans, in accordance to standard spec 612.

B Materials
Furnish pipe underdrain 4-inch that is in accordance to the pertinent requirements of standard spec 612.2.5.

C Construction
Remove existing underdrain damaged by construction operations. Connect new underdrain to the existing underdrain, and reconnect existing drain tile to the new inlet at the proposed elevations as shown in the plans.

Backfill in accordance to standard spec 612.3.5.

D Measurement
The department will measure Reconnect Pipe Underdrain 4-Inch as each individual drain tile reconnection, 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.0060.011	Reconnect Pipe Underdrain 4-Inch	Each

Payment is full compensation for providing underdrain; for excavation; laying pipe; backfilling; for making connections to new or existing pipe; and for connecting drain pipe to new inlets.

49. Concrete Barrier Transition Type V27 to S32, Item SPV.0060.012.

A Description
This special provision describes transitioning from vertical faced parapet to single sloped concrete barrier as shown in the plans and hereinafter provided.

B Materials
Furnish materials conforming to standard spec 603.2.

C Construction
Construct in accordance to standard spec 603.3.

D Measurement
The department will measure the Concrete Barrier Transition Type V27 to S32 as each individual transition, 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.0060.012	Concrete Barrier Transition Type V27 to S32	Each

Payment is in accordance to standard spec 603.5.

50. Removing Concrete Bases Type C, Item SPV.0060.201.

A Description
The work under this item consists of the complete removal of existing gravity-type light pole bases in the freeway median, generally consisting of about two cubic yards of reinforced concrete masonry.

B (Vacant)

C Construction
Dispose of materials off the site. In the case that removal results in a depression below adjacent grade, backfill with granular material as directed by the engineer.

D Measurement
The department will measure Removing Concrete Bases Type C 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.0060.201	Removing Concrete Bases Type C	Each

Payment is full compensation for removing, hauling, and disposing of materials; for any required granular backfill; and for furnishing all labor, tools, and materials.

51. Removing Lighting Units, Item SPV.0060.202.

A Description

This special provision describes the removing lighting units (pole, arm, luminaire, wires, breakaway device, and associated hardware and appurtenances). Removed lighting units shall become the property of the contractor and shall be disposed of off the project site. Lamp disposal and ground mounted concrete bases removal shall be paid separately.

B (Vacant)

C Construction

No removal work will be permitted without approval from the engineer. Removal shall start as soon as the temporary lighting or permanent lighting, as applicable, is placed in approved operation. An inspection and approval by the engineer will take place before any associated proposed permanent or temporary lighting is approved for operation.

All materials shall be removed as described on the plans and as directed by the engineer. The disposal of removed item shall be done in accordance to pertinent requirements of standard spec 203.3.4.

D Measurement

The department will measure Removing Lighting Units 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.0060.202	Removing Lighting Units	Each

Payment is full compensation for removing lighting units; and for disposal of all removed materials.

52. Removing Sign Lighting, Item SPV.0060.203.

A Description

The work under this item shall consist of removing luminaires, conduit and wiring associated with existing sign lighting.

B (Vacant)

C Construction

Dispose of all materials off the site, except mercury vapor lamps. Lamps shall be disposed of under the requirements of a separate pay item.

D Measurement
The department will measure Removing Sign Lighting by each unit, acceptably completed, where a unit is all the electrical work on one sign structure.

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.203	Removing Sign Lighting	Each

Payment is full compensation for removing, hauling, and properly disposing of materials.

53. Removing Luminaires, Item SPV.0060.204.

A Description
The work under this item shall consist of removing existing luminaires from light poles intended to remain in service.

B (Vacant)

C Construction
Dispose of all materials off the site, except sodium vapor lamps. Lamps shall be disposed of under the requirements of a separate pay item.

D Measurement
The department will measure Removing Luminaires 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.0060.204	Removing Luminaires	Each

Payment is full compensation for removing, hauling, and properly disposing of materials.

54. Removing Distribution Centers, Item SPV.0060.205.

A Description
The work under this item consists of Removing Distribution Centers including electric service pedestal at locations shown in the plans, removing the meter pedestals and disposing of off the site.

B (Vacant)

C Construction
Existing distribution centers shall not be removed until they have been identified by the engineer. Completely remove the distribution cabinet and its base from the surrounding soil and properly dispose of off the job site.

The Removed Lighting Distribution Center shall be returned to the department or disposed of off the site as directed by the engineer. Notify department's lighting engineer before disposal.

Coordinate with the utility for disconnection of service. The department will pay any fees charged by the utility.

Remove any fencing that is specific to the removed distribution center, incidental to this pay item.

D Measurement
The department will measure Removing Distribution Centers by each individual unit removed, acceptably completed.

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.205	Removing Distribution Centers	Each

Payment is full compensation for removal of the cabinet and service; and for delivery of the cabinet to the department or disposal.

55. Removing Underdeck Lighting, Item SPV.0060.206.

A Description
This special provision describes the removing underdeck lighting (luminaires, attached conduits, wires, attached junction boxes, and associated hardware and appurtenances) at locations described. Removed materials shall become the property of the contractor and shall be disposed of off the project site. Lamp disposal shall be paid separately.

B (Vacant)

C Construction
No removal work will be permitted without approval from the engineer. Removal shall start as soon as the temporary lighting or permanent lighting, as applicable, is placed in approved operation. An inspection and approval by the engineer will take place before any associated proposed permanent or temporary lighting is approved for operation.

All materials shall be removed as described on the plans and as directed by the engineer. The disposal of removed item shall be done in accordance to pertinent requirements of standard spec 203.3.4.

All embedded conduits, junction boxes and hardware shall be either removed as part of structure or remain in place. Associated items included for each underdeck lighting system may vary by locations as shown on the plans.

D Measurement
The department will measure Removing Underdeck Lighting by each unit per location removed, acceptably completed.

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.206	Removing Underdeck Lighting	Each

Payment is full compensation for removing and disposing of luminaires, attached conduits, attached junction boxes, and hardware.

56. Lamp Disposal High Intensity Discharge, Item SPV.0060.207.

A Description
This special provision describes packaging, palletizing, and returning HID (metal halide; mercury vapor and high-pressure sodium) lamps removed under this contract to the department at one of the facilities as directed by the engineer.

B (Vacant)

C Construction
Lamps, which the contractor turns in to the department, will be considered the property of the department for proper future disposal. The contractor will have no further obligation for their disposal. The department will reject improperly packaged lamps.

Deliveries to the department shall be prearranged. Consolidate deliveries into a truckload or more, except that where all the lamps removed under a contract measure less than a truckload, deliver all of them as one load at one time.

Pack intact lamps in the packaging of the new lamps used to replace the old lamps, or packaging affording the equivalent protection. Deliver in full, stackable cartons with the name of the contractor written on each carton.

Pack broken lamps into thick plastic bags, and in turn place the bags inside sturdy cardboard boxes or the equivalent. Mark the outer packaging "broken lamps." The department will reject metal containers.

Deliver all broken lamps, as noted above. The department will not pay for broken lamps above a level of 10 percent of the total number in the contract. Deliver broken lamps above the 10 percent level to the department for no compensation.

If palletized, pile cartons no more than two high and secure them to prevent shifting or falling loads.

The department will reject any lamps not removed as part of a contract pay item or otherwise required under this contract.

D Measurement
The department will measure Lamp Disposal High Intensity Discharge by each unit, delivered to the department properly packaged, acceptably completed.

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.207	Lamp Disposal High Intensity Discharge	Each

Payment is full compensation for packaging, palletizing and delivering lamps without breakage.

57. Concrete Bases Type B, Item SPV.0060.208; Type C, Item SPV.0060.209.

A Description
This work shall consist of installing concrete light pole bases as shown in the plan details.

B Materials
Conform to standard spec 654.2.1.

C Construction
Conform to standard specs 654.3(1) and (3).

D Measurement
The department will measure Concrete Bases Type B and Concrete Bases Type C by each unit installed, acceptably completed.

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.208	Concrete Bases Type B	Each
SPV.0060.209	Concrete Bases Type C	Each

Payment is full compensation conforming to standard spec 654.5(2).

58. Poles Type 9, Item SPV.0060.450.

A Description

Work under this item consists of furnishing and installing monotube poles.

B Materials

Design support structures conforming to the minimum wall thickness the plan details show and to AASHTO design and fabrication standards for structural supports for highway signs, luminaries, and traffic signals. Use a design life of 50 years. Design to withstand a three second gust wind speed of 90 mph (145 km/h). Do not use the methods of Appendix C of those AASHTO standards.

Use category III criteria for 15 to 30-foot arms.

For structures requiring a fatigue analysis, use 45 mph (72 km/h) for truck-induced gusts.

After welding and before zinc coating, clean the exterior surface of each steel pole free of all loose rust and mill scale, dirt, oil or grease, and other foreign substances.

Apply a zinc coating conforming to the process specified for steel sign bridges in standard spec 641.2.8. Ensure that the zinc coating is tight, free from rough areas or slag, and presents a uniform appearance.

After completing manufacturing, clean the exterior surfaces of each pole free of all loose scale, dirt, oil or grease, and other foreign substances.

Provide a reinforced hand hold measuring 4 inches by 6 inches (100 mm by 150 mm) as the plans show. Locate the hand hole 18 inches (450 mm) from the bottom of the pole base to the center of the door.

For the hand hole, include an access cover mounted to the pole by two 1/4” -20 x 3/4” (m6 x 1.00 x 19 mm) hex-head stainless steel bolts.

Provide a grounding lug complete with mounting hardware, as required, inside the pole as the plans show.

Provide access to the grounding lug from the hand hole. Weld the ground lug directly opposite the hand hole on the inside wall of the pole.

Equip the top of the shaft with a removable, ventilated cap held securely in place by at least three 1/4” -20 x 3/4” (m6 x 1.00 x 19 mm) hex-head stainless steel set screws.

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

Attach base plates firmly to the pole shaft by welding or other approved method.

Include anchor bolts meeting AASHTO standards applicable to the pole type and loading. Provide a mounting template that ensures correct installation of anchor bolts in foundation.

C Construction
Install poles as specified in the plan details and using appropriate contractor-furnished anchor bolts and hardware. Use the appropriate anchor bolt template to ensure correct installation. Secure pole to anchor assembly and document tensioning procedures conforming to standard spec 657.3.2 and provide completed copies of form DT2321 for each structure to the engineer for inclusion in the permanent record.

After completing erection using normal pole shaft raking techniques, ensure the centerline of the shaft appears vertical.

D Measurement
The department will measure Poles Type 9 as each individual 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.0060.450	Poles Type 9	Each

Payment is full compensation for providing and installing poles and for providing grounding lugs, fittings, shims, hardware, and other required components necessary to install the poles.

59. Poles Type 12 Special, Item SPV.0060.451; Poles Type 13 Special, Item SPV.0060.452.

A Description
Work under this item consists of furnishing and installing monotube poles.

B Materials
Design support structures conforming to the minimum wall thickness the plan details show and to AASHTO design and fabrication standards for structural supports for highway signs, luminaries, and traffic signals. Use a design life of 50 years. Design to withstand a three second gust wind speed of 90 mph (145 km/h). Do not use the methods of Appendix C of those AASHTO standards.

Use category II criteria for 35 to 55-foot arms.

For structures requiring a fatigue analysis, use 45 mph (72 km/h) for truck-induced gusts.

After welding and before zinc coating, clean the exterior surface of each steel pole free of all loose rust and mill scale, dirt, oil or grease, and other foreign substances.

Apply a zinc coating conforming to the process specified for steel sign bridges in standard spec 641.2.8. Ensure that the zinc coating is tight, free from rough areas or slag, and presents a uniform appearance.

After completing manufacturing, clean the exterior surfaces of each pole free of all loose scale, dirt, oil or grease, and other foreign substances.

Provide a reinforced hand hold measuring 4 inches by 6 inches (100 mm by 150 mm) as the plans show. Locate the hand hole 18 inches (450 mm) from the bottom of the pole base to the center of the door.

For the hand hole, include an access cover mounted to the pole by two 1/4" -20 x 3/4" (m6 x 1.00 x 19 mm) hex-head stainless steel bolts.

Provide a grounding lug complete with mounting hardware, as required, inside the pole as the plans show.

Provide access to the grounding lug from the hand hole. Weld the ground lug directly opposite the hand hole on the inside wall of the pole.

Equip the top of the shaft with a removable, ventilated cap held securely in place by at least three 1/4" -20 x 3/4" (m6 x 1.00 x 19 mm) hex-head stainless steel set screws.

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

Attach base plates firmly to the pole shaft by welding or other approved method.

Include anchor bolts meeting AASHTO standards applicable to the pole type and loading. Provide a mounting template that ensures correct installation of anchor bolts in foundation.

C Construction

Install poles as specified in the plan details and using appropriate contractor-furnished anchor bolts and hardware. Use the appropriate anchor bolt template to ensure correct installation. Secure pole to anchor assembly and document tensioning procedures conforming to standard spec 657.3.2 and provide completed copies of form DT2321 for each structure to the engineer for inclusion in the permanent record.

After completing erection using normal pole shaft raking techniques, ensure the centerline of the shaft appears vertical.

D Measurement

The department will measure each Poles Type 12 Special, and Poles Type 13 Special as each individual 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.0060.451	Poles Type 12 Special	Each
SPV.0060.452	Poles Type 13 Special	Each

Payment is full compensation for providing and installing poles and for providing grounding lugs, fittings, shims, hardware, and other required components necessary to install the poles.

60. Monotube Arms 25-FT, Item SPV.0060.453; Monotube Arms 35-FT, Item SPV.0060.454.

A Description

Work under this item consists of furnishing and installing monotube arms.

B Materials

Design support structures conforming to the minimum wall thickness the plan details show and to AASHTO design and fabrication standards for structural supports for highway signs, luminaires, and traffic signals. Use a design life of 50 years. Design to withstand a 3 second gust wind speed of 90 mph (145 km/h). Do not use the methods of appendix C of those AASHTO standards.

Use category III criteria for 15 to 30-foot arms. Use category II criteria for 35 to 55-foot arms.

For structures requiring a fatigue analysis, use 45 mph (72 km/h) for truck-induced gusts.

Base the designs on the completed maximum loading configuration the standard detail drawing shows. Along with the materials list, submit a certificate of compliance certifying that the arms as furnished conform to the above structural performance requirements. Ensure that the certificate of compliance is on the manufacturer's letterhead, signed by an authorized company officer, and notarized. Send a copy of the certificate and a copy of the monotube arm shop drawings to the City of Milwaukee construction engineer.

Furnish monotube arms conforming to the following:

Consist of zinc coated steel round or oval members.

Have a mounting device welded to the pole end of the monotube arm that allows the attachment of the arm to a pole as the plans show.

Have stiffeners or gussets if required between the arm tube and the arm mounting device to provide adequate strength to resist side loads.

Have a clean, uniform natural finish. No paint or other corrosion preventive maintenance coating is required.

After welding and before zinc coating, clean exterior surfaces of each arm free of all loose rust and mill scale, dirt, oil or grease, and other foreign substances.

Apply zinc coating as specified for sign bridge components in standard spec 641.2.8. Ensure that the zinc coating is tight, free from rough areas or slag, and presents a uniform appearance.

After manufacturing is complete, clean the exterior surfaces of each pole free of all loose scale, dirt, oil, or grease, and other foreign substances.

Provide incidental Cable Traffic Signal 9-14 AWG as required under section C.

C Construction

Install monotube arms as specified in the plan details and using appropriate contractor-furnished hardware.

Prior to installation of each monotube arm, a 1 1/4-inch hole shall be drilled into the bottom of the arm approximately centered over each driving lane as shown on the plans. Where emergency vehicle pre-emption (EVP) is installed, a separate 1 1/4-inch hole shall be drilled in the bottom of the arm approximately centered over the roadway approach, but a minimum of four feet from the nearest drilled hole.

The contractor shall provide 9-14 AWG traffic signal cable spooled 5 feet outside the arm from each drilled hole in the arm, including the hole for EVP if applicable, to the base of the pole below the hand hole. A separate nylon pull rope shall also be provided for the EVP hole to the base of the pole below the hand hole where applicable.

D Measurement

The department will measure Monotube Arms (Length) as each individual arm, 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.0060.453	Monotube Arms 25-FT	Each
SPV.0060.454	Monotube Arms 35-FT	Each

Payment is full compensation for furnishing and installing all materials, for providing high-strength bolt/nut/washer assemblies and DTI washers including those required for testing, and for providing related mounting hardware, leveling shims, incidental cabling, and other required components.

61. Concrete Base Type 10 Special, Item SPV.0060.455.

A Description
This special provision describes constructing a concrete base type 10 special with a 36-inch diameter for monotube mast arm structures in accordance to standard spec 654 with modifications as shown on the plans, and as hereinafter provided.

B Materials
Replace paragraph (4) of 654.2 as follows:

Contractor shall supply templates, anchor rods, nuts, and washers for installation as shown on the plans.

C Construction
Construction of this item shall conform with standard spec 654.

Contact City of Milwaukee sewer engineering three (3) working days prior to excavating any concrete bases. Please contact Mr. Bob Brooks at (414) 286-3241 or Ms. Nancy Alvarado at (414) 286-2013 to confirm lateral clearance with sewer facilities.

D Measurement
The department will measure Concrete Base Type 10 Special as each individual concrete 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.0060.455	Concrete Base Type 10 Special	Each

Payment is full compensation for providing concrete bases; for embedded conduit and electrical components; for anchor bolts, nuts, and washers; for bar steel reinforcement, if required; and for excavating, backfilling, and disposing of surplus materials.

62. Rectangular Polymer Concrete Vault 13-Inch x 24-Inch x 18-Inch, Item SPV.0060.456.

A Description
This special provision describes furnishing and installing Rectangular Polymer Concrete Vaults in accordance to the Traffic Signal or Street Lighting Vault Detail drawings for the Typical Vault Installations. All work shall be in accordance to standard spec 651 general requirements for electrical work, in the State of Wisconsin Standard Specifications.

B Materials

B.1

Polymer Concrete shall be manufactured from one of the general types and grades defined in polymers in concrete structural applications state of the art report, ACI 548.6R-96 for structural uses. Thermoplastics will not be acceptable.

B.2

Enclosure walls shall be made from pattern cut structural fiberglass cloths to assure uniform, pre-measurable fiberglass content on all areas. Chopper gun fiberglass construction is not acceptable.

B.3

Binding polymers used in the manufacture of the polymer concrete and the fiber reinforced polyester shall be of the same formulation or from formulations with demonstrated chemical compatibility to assure complete chemical bonding of all components. Fiber reinforced polyester wall sections must be cast integrally into and chemically bonded within the upper polymer concrete casting.

B.4 Testing

Meet ANSI/SCTE 77 2010 (Tier 15 or greater), ASTM C 857, and WUC 3.6 structural requirements.

Compressive Modulus of Elasticity (fiberglass reinforced polymer): 5.6×10^6 PSI tested in accordance to procedures outlined in ASTM D-695.

Comprehensive Strength (fiberglass reinforced polymer): 22,500 PSI tested in accordance to ASTM D-695.

Flexural Strength (fiberglass reinforced polymer): 18,700 PSI tested in accordance to ASTM D-790.

Tensile Strength (fiberglass reinforced polymer): 12,100 PSI tested in accordance to procedures outlined in ASTM D-638.

Tensile Modulus of Elasticity (fiberglass reinforced polymer): 8.6×10^5 PSI tested in accordance to procedures outlined in ASTM D-638

Splitting Tensile Strength (polymer concrete): Tested in accordance to procedures outlined in ASTM C-496.

Accelerated Service: Tested in accordance to procedure E outlined in ASTM D-756

Water Absorption: Tested in accordance to ASTM D-570 outlined in sections 6.1 and 6.5

Impact Resistance (fiberglass reinforced polymer concrete): 72 foot pounds in accordance to ASTM D-2444 administered with a “C” tup.

Skid Resistance: 0.60 coefficient of friction in accordance to ASTM C-1028

Flammability Test: Tested in accordance to ASTM D-635

Ultraviolet Exposure: Tested in accordance to ASTM test method G-53

Chemical Resistance

1. Sodium Chloride 5%
2. Sodium Carbonate 0.1 N
3. Hydrochloric Acid 0.2 N
4. Acetic Acid 5%
5. Sulfuric Acid 0.1N
6. Sodium Sulfate 0.1 N
7. Sodium Hydroxide 0.1N
8. Kerosene Oil per ASTM D-543
9. Transformer Oil per ASTM D-543

B.5

The street lighting vaults and covers shall be gray in color and shall be flared wall as indicated on the drawings. Covers shall be provided with two stainless steel bolts. Each cover shall have the words "STREET LIGHTING" cast into its surface along the longest dimension. The words shall be permanently recessed into the surface.

B.6

Submit a certificate of compliance certifying that the rectangular polymer concrete vault as furnished conform to the above structural performance requirements. Allow for 2 to 3 working days for review and response for submitted certificate. Send a copy of the certificate of the rectangular polymer concrete vault to:

Denis Kozelek
City of Milwaukee
Infrastructure Services Division
Transportation Section - Street Lighting
841 N. Broadway (Room 920)
Milwaukee, WI. 53202
Denis.kozelek@milwaukee.gov

C Construction

Install Rectangular Polymer Concrete Vaults in accordance to the Traffic Signal or Street Lighting Vault Detail drawings for the Typical Vault Installations. Provisions for inserting conduit into any side or the bottom of the vault shall be included.

D Measurement
The department will measure Rectangular Polymer Concrete Vault 13-Inch x 24-Inch x 18-Inch 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.0060.456	Rectangular Polymer Concrete Vault 13-Inch x 24-Inch x 18-Inch	Each

Payment is full compensation for furnishing labor, equipment, coordination and all materials and incidentals necessary to complete the work.

63. Adjusting TES Manhole Cover, Item SPV.0060.650.

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 in accordance to the standard specifications, the provisions of the article Adjusting Manhole Covers, as shown on the plans, and as hereinafter specified.

B Material
Furnish and install materials that conform to the requirements of standard spec 519. Reference all plan sheets to provide additional clarification on material requirements. Salvage and reinstall existing covers on the manholes. The city will supply covers designated for replacement. Contact Ricardo Lopez, Inventory Clerk at (414) 286-6123 prior to obtaining the frames and lids from the DPW Field Headquarters at 3850 N. 35th Street. Contractor must have the "Castings Requisitions Form" which shall be supplied by the City of Milwaukee at the Preconstruction Meeting to obtain the covers.

C Construction
Report any pre-existing problems to Ms. Karen Rogney of City Underground Conduits Section at (414) 286-3243 three working days in advance of any construction on manholes.

Before removing the pavement around the manhole, the contractor shall place a 3/4-inch plywood cover or equal over existing active Street Lighting, Traffic Control, Communication 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. Remove wedges/shims. Fill voids with grout. Do not back plaster inside walls.

After completion of paving, remove the temporary 3/4-inch plywood cover or equal which is over the existing electrical cables in the manhole as mentioned above.

Notify Ms. Rogney three 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 TES Manhole Cover by each individual unit, acceptably completed.

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.0060.650	Adjusting TES Manhole Cover	Each

Payment for Adjusting TES Manhole Cover 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 in accordance 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.

64. Installing Conduit Into Existing Manhole, Item SPV.0060.651.

A Description
This special provision describes 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 in accordance to the pertinent provisions of the standard specifications, and as hereinafter provided.

B Materials
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.

Repair and Restore all disturbed areas in kind.

D Measurement
The department will measure Installing Conduit Into Existing Manhole Item by each unit, acceptably completed. 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.0060.651	Installing Conduit Into Existing Manhole	Each

Payment is full compensation for drilling holes; 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; and for making inspections.

65. Cleaning Bearings, Item SPV.0060.700.

A Description
This special provision describes cleaning the existing steel bearings on structures as shown on the plans, as directed by the engineer.

B (Vacant)

C Construction
Clean areas of loose paint and rust by wire brushing, grinding, or other mechanical means. Sound paint does not need to be removed.

Furnish adequate containment methods as required to contain and collect waste material. All cleanup activities should minimize dust. Store waste materials in hazardous waste containers provided by the department.

D Measurement
The department will measure Cleaning Bearings as each individual bearing, 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.0060.700	Cleaning Bearings	Each

Payment is full compensation for cleaning the designated bearings; cleaning up, and containing and collecting all waste materials.

66. Bearing Replacement B-40-53, Item SPV.0060.701.

A Description
This special provision describes raising the girders, removing the existing bearings, and furnishing and placing new bearings as shown on the plans and as hereinafter provided.

B Materials
Furnish ASTM A709 Grade 36 steel bearing plates as shown in the plans.

C Construction
Raise the structure's girders, remove the existing bearings, and furnish and place the bearings as shown in the plans.

D Measurement
The department will measure Bearing Replacement B-40-53 by each bearing, acceptably completed.

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.701	Bearing Replacement B-40-53	Each

Payment is full compensation for raising the bridge, removing the old bearings, and furnishing and placing new bearings.

67. Embedded Galvanic Anodes, Item SPV.0060.702.

A Description

This special provision describes furnishing all labor, materials, and equipment necessary to properly install embedded galvanic anodes in concrete.

B Materials

Furnish pre-manufactured galvanic anodes designed for cathodic protection when embedded in concrete and tied to steel reinforcing. The core of the anode shall consist of a minimum of 1.3 ounces of electrolytic high grade zinc in compliance with ASTM B418 cast around a pair of steel tie wires and encased in a highly alkaline cementitious shell with a pH of 14. The anodes shall have one side that is less than 1 1/2-inches in height.

Submit the product information to the engineer for approval. Supply a certification of compliance to the engineer before starting work. Deliver, store, and handle all materials according to the manufacturer's instructions.

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

Product Name	Manufacturer/Supplier	Telephone Number
Galvashield	Vector Corrosion Technologies	(319) 364-5355
Sentinel	Euclid Chemical Company	(800) 321-7628
Emaco CP Intact	BASF Building Systems	(262) 227-4045

C Construction

C.1 Concrete Repair

Repair the concrete and prepare the exposed reinforcing steel in accordance to standard spec 509. Use Portland cement based repair concrete materials with suitable electrical conductivity.

C.2 Galvanic Anode Installation

Install embedded galvanic anodes in accordance to manufacturer's recommendations, as shown on the plans, and as listed in this specification.

C.2.2 Install galvanic anodes to existing reinforcement along the perimeter of the repair at spacing as specified on the plans. In no case shall the distance between anodes exceed 24-inches.

C.2.3 Provide 3/4-inch clearance between anodes and substrate to allow repair material to encase anode.

C.2.4 Secure the galvanic anodes as close as possible to the patch edge using the anode tie wires. Tighten the tie wires to allow little or no free movement.

If the anode is to be tied onto a single bar, or if less than 1 1/2-inch of concrete cover is expected, place anode beneath the uncoated bar and secure to reinforcing steel.

If 1 1/2-inch concrete cover will exist over the anode, the anode may be placed at the intersection between two bars and secured to each bar.

C.3 Electrical Continuity
Confirm electrical connection between anode tie wire and uncoated reinforcing steel with a multi-meter. The maximum DC resistance shall be 1 Ohm. Confirm electrical continuity of the exposed uncoated reinforcing steel within the repair area. Steel reinforcement shall be considered continuous when the DC resistance is 1 Ohm or less. If necessary, establish the electrical continuity with uncoated steel tie wire.

C.4 Inspection
The engineer will verify proper installation of the galvanic anodes prior to placement of the concrete.

D Measurement
The department will measure Embedded Galvanic Anodes as each individual anode, 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.0060.702	Embedded Galvanic Anodes	Each

Payment is full compensation for furnishing and for properly installing; and for establishing and checking electrical continuity.

Concrete repair work will be paid for separately.

68. Crack Sealing, Item SPV.0085.001.

A General
This special provision describes cleaning, drying, and filling the longitudinal and transverse cracks in asphaltic pavement. The work shall conform to the plan details and as hereinafter provided.

B Materials
Furnish material that conforms to the requirements of the Specifications for Joint Sealants, Hot-Poured, for Concrete and Asphalt Pavements, ASTM Designation: D 6690, Type II, modified to require that the bond strength test be run at –20 degrees F. (The unmodified ASTM D 6690, Type II allows this test to be run at either 0 degrees F or –20 degrees F.). Deliver each lot or batch of sealing compound to the jobsite in the manufacturer's original sealed container. Mark each container with the manufacturer's name, batch or lot number, and the recommended safe heating temperature range. Prior to applying the sealant, furnish

to the engineer a certificate of material compliance and a copy of the manufacturer's recommendations on heating and applying the sealant.

C Construction

C.1 Equipment

Heat the sealing compound to the pouring temperature recommended by the manufacturer in an approved kettle or tank, constructed as a double boiler, with the space between the inner and outer shells filled with oil or other satisfactory heat transfer medium. If and when using the heating kettle on concrete or asphaltic pavement, properly insulate the heating kettle to ensure heat is not radiated to the pavement surface. Use a pressure distributor for applying sealing material through a hand–operated wand or nozzle in accordance to sealant manufacturer's instructions. The contractor must supply lighting equipment sufficient for locating and identifying cracks as directed by the engineer.

C.2 Methods

Immediately prior to sealing, blow out the dried crack with a blast of compressed air, 80-psi minimum. If a pneumatic tool lubricator is used, it must be bypassed and a filter installed on the discharge valve to keep water and oil out of the lines. Continue cleaning until the joint is dry, and until all dirt, dust, or deleterious matter is removed from the joint and adjacent pavement to the satisfaction of the engineer. If the air compressor produces dirt or other residue in the joint cavity, the contractor is required to clean the joint again. If cleaning operations could cause damage to, or interfere with, traffic in adjacent lanes, or both, provide protective screening that is subject to the approval of the engineer to the cleaning operation.

Provide positive temperature control and mechanical agitation. Do not heat the sealant to more than 20 degrees F below the maximum safe heating temperature. Provide a direct connecting pressure type extruding device with nozzles shaped for insertion into the joint. Immediately remove sealant spilled on the surface of the pavement.

Perform crack filling only when the ambient air and pavement surface temperatures are above 40 degrees F or the manufacturer's recommended temperature, whichever is greater. When near this minimum, additional air blasting or drying time or both may be necessary to assure satisfactory bond to the crack surfaces. Seal the joints when the sealant material is at the pouring temperature recommended by the manufacturer. Fill the joint such that after cooling, the sealant is flush with the adjacent pavement surface. Do not overfill the joint. Allow sealant to cure and be tack free before opening to traffic. Do not spread sand on sealed joints to allow for opening of traffic.

D Measurement

The department will measure Crack Sealing, completed in accordance to the contract and accepted, by the pound of sealant compound applied. Prior to starting work each shift, the contractor will supply and visually verify with the engineer an inventory, in containers, of sealant material. At the end of each shift, the contractor shall supply and visually verify with the engineer the ending inventory, in containers, of sealant material. The quantity of

sealant used shall be determined by counting the number of containers used each night multiplied by the indicated pounds of sealant contained in each container.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0085.001	Crack Sealing	LB

Payment is full compensation for cleaning the joint; and for furnishing and installing all materials, including sealant.

69. Joint and Crack Repair, Item SPV.0090.003.

A Description

This work consists of removing any loose or spalled concrete and asphaltic patching, cleaning the joints and cracks, and filling them with asphaltic material as shown on the plans and as herein provided.

B Materials

Asphaltic surface used to fill in the joints and cracks shall be in conformance with standard spec 460; asphaltic tack coat shall be in conformance with standard spec 455.

C Construction

Clean out all joints and cracks, place asphaltic tack coat, and fill voids with new asphaltic material. Repair of joints and cracks to be done after HMA milling operations.

D Measurement

The department will measure Joint and Crack Repair by the linear foot of asphalt used in longitudinal and transverse joints and cracks repaired, acceptably completed. The department will measure asphaltic materials and asphaltic tack coat per their respective bid items.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.003	Joint and Crack Repair	LF

Payment is full compensation for removing and disposing of all loose or spalled concrete and asphaltic patching; for cleaning joints and cracks; for placing asphaltic tack coat; for furnishing asphaltic material; and for filling the joints and cracks.

70. Mending Fence, Item SPV.0090.004.

A Description
This special provision describes removing, replacing, and attaching fence fabric for chain link right-of-way fence in accordance to the plans, as directed by the engineer, and as hereinafter provided.

B Materials
Furnish materials that conform to the applicable provisions of standard spec 616.

C Construction
Removed damaged fence fabric by cutting a line parallel to existing posts.

Attach new fence fabric to the existing fence fabric in accordance to the applicable provisions of standard spec 616.3.3.3.

D Measurement
The department will measure Mending Fence by the linear foot acceptably completed.

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.004	Mending Fence	LF

Payment is full compensation for removing and disposing of damaged fence fabric; for excavating; for providing all other materials required to erect new fencing and attach to existing fabric or posts; for removing and disposing of all debris, excess excavation, and surplus materials.

Clearing and grubbing will be paid for by separate items in the contract.

71. Concrete Curb and Gutter 31-Inch Type A Full Depth, Item SPV.0090.005; Concrete Curb and Gutter 32-Inch Type A Special, Item SPV.0090.006.

A Description
This special provision describes constructing concrete curb and gutter with reinforcement as shown on the plans and as hereinafter provided.

B Materials
Furnish materials according to the pertinent requirements of standard spec 601.2.

C Construction
Use construction methods in accordance to the requirements of standard spec 601.3.

D Measurement
The department will measure concrete curb and gutter by the linear foot, acceptably completed, measured along the gutter flow line.

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.005	Concrete Curb and Gutter 31-Inch Type A Full Depth	LF
SPV.0090.006	Concrete Curb and Gutter 32-Inch Type A Special	LF

The department will adjust pay for crack repairs on concrete built under this article as specified in standard spec 416.5.2 for ancillary concrete.

Payment is full compensation for furnishing all foundation excavation and preparation; all special construction required at driveway and alley entrances, or curb ramps; for providing all materials, including concrete, expansion joints; for placing, finishing, protecting, and curing; for sawing joints; and for disposing of surplus excavation material, and restoring the work site. However, if the contract provides a bid item for excavation, then the department will pay for excavation required for this work as specified in the contract. Payment also included providing tie bars in unhardened concrete. For tie bars provided in concrete not placed under the contract, the department will pay separately under the Drilled Tie Bars bid item as specified in 416.5.

72. Concrete Barrier Single-Faced 42-Inch, Item SPV.0090.007.

A Description
This special provision describes constructing permanent concrete barrier for existing barrier spot replacements, as shown in the plan and in accordance to standard spec 603 in the standard specifications.

B Materials
Furnish material that is in accordance to the pertinent requirements of standard spec 603.2.

C Construction
Construct in accordance to the pertinent requirements of standard spec 603.3

D Measurement
The department will measure Concrete Barrier Single-Faced 42-Inch by the linear foot, acceptably completed, measured along the base of the barrier.

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.007	Concrete Barrier Single-Faced 42-Inch	LF

Payment is full compensation according to standard spec 603.5.2.

73. Concrete Curb and Gutter 31-Inch Type A Full Depth HES, Item SPV.0090.008

A Description

This special provision describes constructing concrete curb and gutter HES. The work under this item shall be in accordance to the requirements of standard spec 601 for concrete curb and gutter.

B Materials

Furnish materials conforming to standard spec 601.2.

C Construction

All construction methods shall conform to standard spec 601.3.

Conform to standard spec 415.3.15 for opening to service.

D Measurement

The department will measure Concrete Curb and Gutter 31-Inch Type A Full Depth HES 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.0090.008	Concrete Curb and Gutter 31-Inch Type A Full Depth HES	LF

Payment is full compensation according to standard spec 601.5 and for furnishing all foundation excavation and preparation; for providing all materials, including concrete, expansion joints; for placing, finishing, protecting, and curing; for sawing joints; and for disposing of surplus excavation material, and restoring the work site. Payment also includes providing tie bars.

74. Pavement Marking Grooved Contrast Preformed Plastic Tape 4-Inch, Item SPV.0090.009.

A Description

This special provision describes furnishing, grooving, and installing contrast preformed plastic pavement marking tape as shown on the plans, in accordance to standard spec 646, and as hereinafter provided.

B Materials

Furnish grooved contrast preformed plastic pavement marking tape and adhesive material, if required, from the department's approved products list.

Furnish a copy of the manufacturer's recommendations to the engineer before preparing the pavement marking grooves.

C Construction

C.1 General

For quality assurance, provide the engineer and the region's Marking Section evidence of manufacturer training in the proper placement and installation of pavement marking tape.

Plane the grooved lines in accordance to details in the plan. Use grooving equipment with a free-floating, independent cutting or grinding head. Plane a minimum number of passes to create a smooth groove.

C.2 Groove Depth

Cut the groove to a depth of 120 mils ±10 mils from the pavement surface or, if tined, from the high point of the tined surface. Measure depth using a straightedge placed perpendicular to the groove. The department may periodically check groove depths.

C.3 Groove Width – Longitudinal Markings

Cut the groove one-inch wider than the width of the tape.

C.4 Groove Position

Position the groove edge in accordance to plan details. Groove a minimum of 4 inches, but not greater than, 12 inches from both ends of the tape segment. Achieve straight alignment with the grooving equipment.

C.5 Groove Cleaning

C.5.1 Concrete

Cooling the cutting head with water may be necessary for some applications and equipment. If cooling water is necessary, flush the groove immediately with water after cutting to remove any build-up of cement dust and water slurry. If this is not done, the slurry may harden in the groove.

If water is used in the grooving process, allow the groove to dry a minimum of 24 hours after groove cleaning, after removal of excess water, and prior to pavement marking application. Clean and dry the groove for proper application of the adhesive, and placement of the pavement marking. Use a high-pressure air blower with at least 185 ft^3/min air flow and 90 psi air pressure to clean the groove; use of the air blower does not decrease the amount of time required for the groove to dry.

C.5.2 New Asphalt

Groove pavement five or more days after paving.

If opening to traffic an asphalt lane that is not grooved, place temporary pavement marking. For asphalt lanes not open to traffic, temporary pavement marking is not required.

Use a high-pressure air blower with at least 185 ft^3/min air flow and 90 psi air pressure to clean the groove.

C.5.3 Existing Asphalt

Check for structural integrity in supporting grooving operations. If the structural integrity of the asphalt pavement is inadequate to support grooving operations, immediately notify the engineer.

Use a high-pressure air blower with at least 185 ft^3/min air flow and 90 psi air pressure to clean the groove.

C.6 Tape Application

Apply the tape when both the air and surface temperature are 40 degrees F and rising.

Apply the tape in the groove as per manufacturer's recommendations. If manufacturer's recommendations require surface preparation adhesive, apply an adhesive with lower than 91g/l VOC during the following period of time due to Volatile Organic Compound Limitations:

May 1 to September 30, both dates inclusive – the Southeast Region and the ozone non-attainment Northeast Region counties of Sheboygan, Manitowoc, and Kewaunee.

Use any adhesive from the preformed plastic approved products list in the remainder counties and for the remainder of the year.

The adhesive must be dry (feels tacky but is no longer in liquid form) and have a matte finish rather than a glossy wet appearance.

Tamp the contrast pavement marking tape with a tamper cart roller cut to fit the groove. Tamp three complete cycles with grooved modified equipment.

D Measurement

The department will measure Pavement Marking Grooved Contrast Preformed Plastic Tape (Width) in length by the linear foot of tape, placed in accordance to the contract and accepted.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.009	Pavement Marking Grooved Contrast Preformed Plastic Tape 4-Inch	LF

Payment is full compensation for cleaning and preparing the pavement surface; furnishing and installing the material; and for furnishing, placing, and removing temporary pavement marking, if necessary.

75. Modified MGS Thrie Beam Transition, Item SPV.0090.010.

A Description

This special provision describes furnishing and installing modified MGS thrie beam transitions, with concrete curb and gutter and without concrete curb and gutter, as shown on the plans and as hereinafter provided.

B Materials

Furnish material that is according to the pertinent requirements of standard spec 614.2 and as shown in the plans.

C Construction

Install modified MGS thrie beam transitions according to the pertinent requirements of standard spec 614.3 and as shown in the plans.

Modified MGS Thrie Beam Transition shall connect to Concrete Barrier Single-Faced 32-Inch in accordance to Construction Detail: Modified MGS Thrie Beam Transition (With Concrete Curb and Gutter), Thrie Beam Connection To Bridge Parapet with Square Ends.

D Measurement

The department will measure Modified MGS Thrie Beam Transitions by the linear foot acceptably completed, measured along the face of the rail element.

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	Modified MGS Thrie Beam Transition	LF

Payment is full compensation for providing rail, posts and offset blocks, terminal connectors, fittings, and hardware; for repairing damaged zinc coatings; for setting and driving posts; and for excavation, backfilling, and disposing of surplus material.

76. 6-Duct Conduit, Cement Encased, 4-inch Rigid Nonmetallic Conduit DB-60, Item SPV.0090.650; 3-Duct Conduit, Cement Encased, 4-inch Rigid Nonmetallic Conduit DB-60, Item SPV.0090.651.

A Description

This work consists of 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

The contractor shall furnish 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.

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

The contractor shall furnish and install nonmetallic Snap-Loc 4 x 1 base spacer (part number S288NFN) and intermediate spacer (part number S289NFN) manufactured by Carlon or engineer (City of Milwaukee) approved equal.

B.3 Conduit Bed

The contractor shall 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 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%

The materials shall be mixed and 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.

The materials shall be mixed with water to inundate the aggregate sufficiently to provide an approximate 3 inch slump. The mix shall be deposited 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 Rogney 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:

No. of Ducts Wide	Minimum	Maximum
2	14 1/8"	16 5/8"
3	19 3/4"	22 1/4"
4	25 3/8"	27 7/8"
5	31"	33 1/2"
6	36 5/8"	39 1/8"
7	42 1/4"	44 3/4"
8	47 7/8"	50 3/8"

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.

Open-cut trenches shall be sheathed and braced 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.

Previous to excavating trenches, the contractor shall expose the existing manhole and conduit lines. The object of this is to permit adjustments in line and grade to avoid special construction methods. The exposed manhole and conduit shall be protected from damage.

The conduit shall be laid 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 shall be 28 inches.

The standard cover shall be maintained wherever possible and any deviation less than the minimum may be allowed only with specific approval of the engineer.

The trench shall be graded so that it will have a minimum pitch of three 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 Inspector (City of Milwaukee) 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, the bottom of the trench shall be prepared to receive the conduit. The duct bed shall be brought to the final grade and graded uniformly from the high point to the low or drainage points. Stone chips or crushed stone screenings shall be used for grading the trench. The duct bed shall be a minimum of 2” in depth.

C.2 Placing of Duct

Placing of the duct is to proceed as soon as the duct bed has been completed. 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.

The duct shall be placed 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, the cut end shall be placed at the manhole. The base spacers shall be located within 2 feet of the end of each duct and one base spacer located in the middle of the duct.

Full length pieces shall be used 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 twenty foot lengths is laid, the next higher tier of ducts shall then be placed on the intermediate spacers. These intermediate spacers shall be placed on top of the base spacers located within two feet from each duct end and one in the middle of each duct. The intermediate spacers and ducts shall be placed for the remaining tiers. Each length shall be glued into the adjoining coupling. A twist and push on the duct being placed will suffice for a water tight joint. Caution must be exercised 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, wood trench and duct bracing shall be placed 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. A standard end bell fitting shall be installed flush with the wall on all duct access points.

A #10 copper tracer wire shall be installed 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.

A pull rope shall be installed 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. The pull rope shall be anchored at each access point in a manner acceptable to the engineer.

C.3. Concreting
After sufficient conduit has been laid and the trench and duct have been inspected, concreting is to begin. The minimum concrete encasement of the ducts shall be 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.

Concrete encasement shall be allowed to set for a minimum of 6 hours before backfilling is commenced.

C.4 Slurry Backfill
The backfilling of the conduit shall commence immediately after the duct has been inspected (City of Milwaukee), approved and has had sufficient time to 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 6-Duct and 3-Duct Conduit Cement Encased, 4-Inch Rigid Non-Metallic Conduit DB-60, by the linear foot, acceptably completed. 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 shall 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.0090.650	6-Duct Conduit Cement Encased 4-Inch Rigid Nonmetallic Conduit DB-60;	LF
SPV.0090.651	3-Duct Conduit Cement Encased 4-Inch Rigid Nonmetallic Conduit DB-60	LF

Payment is full compensation for furnishing the conduit, conduit bodies, conduit fittings, conduit spacers, end caps, pull rope 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; for making inspections, and for installing the conduit.

77. City of Milwaukee Conduit Rigid Nonmetallic Schedule 40 3-Inch, Item SPV.0090.652.

A Description

This special provision describes furnishing and installing City of Milwaukee PVC conduits in accordance to standard spec 652, as shown on the plans and as hereinafter provided.

B Materials

Furnish material that is according to the pertinent requirements of standard spec 652.2.

Add the following to standard spec 652.2.1, General:

(2) Submit a certificate of compliance certifying that the conduit rigid nonmetallic schedule 40, 3-Inch as furnished conforms to the above requirements. Allow for 2 to 3 working days for review and response for submitted certificate. Send a copy of the certificate of the conduit rigid nonmetallic schedule 40, 3-Inch to:

Denis Kozelek
City of Milwaukee
Infrastructure Services Division
Transportation Section - Street Lighting
841 N. Broadway (Room 920)
Milwaukee, WI. 53202
Denis.kozelek@milwaukee.gov

C Construction

All work shall be in accordance to the requirements of standard spec 652.3.

Add the following to standard spec 652.3.1.1, General:

(7) Locations of the conduits where they are required are identified in the plans. However, installation will require integration with existing field conditions. Appropriate adjustment on conduit locations may be made if the field conditions are such that the pipes cannot be installed at the specified locations. Any relocation of greater than 5 feet must be approved by the engineer.

(8) Field design changes for "Street Lighting or Communications" must be approved by a City of Milwaukee Electric Services Supervisor.

The primary contacts are:

Dennis Miller, Street Lighting Supervisor	(414) 286-5942 office (414) 708-4251 cell
George Berdine, Street Lighting Supervisor	(414) 286-5943 office (414) 708-4245 cell
Thomas Hughes, Street Lighting Supervisor	(414) 286-3457 office (414) 708-3175 cell
Bryan Pawlak, Communications Supervisor	(414) 286-5970 office (414) 708-2118 cell

D Measurement

The department will measure City of Milwaukee Conduit Rigid Nonmetallic Schedule 40 3-Inch by the linear foot, acceptably completed, measured along the conduit centerline from centerline of fittings or, where there are no fittings, from the free ends of the conduit. The department will measure engineer-specified drain duct from a pull box to a ditch or sewer.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.652	City of Milwaukee Conduit Rigid Nonmetallic Schedule 40 3-Inch	LF

Payment is full compensation for providing the conduit, conduit bodies, and fittings; for providing all conduit hangers, clips, attachments, and fittings used to support conduit on structures; for pull wires or ropes; for expansion fittings and caps; for excavating, bedding, and backfilling, including any sand, concrete, or other required materials; for disposing of surplus materials; and for making inspections.

Payment also includes pull box drain duct the engineer directs under the 653 Pull Box bid items.

The department will not pay extra for conduit the contractor substitutes under standard spec 652.3.1.1. The department will pay separately for tracer wires under the appropriate Electrical Wire bid items specified in standard spec 655.5.

78. City of Milwaukee Conduit Special 3-Inch, Item SPV.0090.653.

A Description

This special provision describes furnishing and installing City of Milwaukee PVC conduits in accordance to standard spec 652, as shown on the plans and as hereinafter provided.

B Materials

Furnish material that is according to the pertinent requirements of standard spec 652.2.

Add the following to standard spec 652.2.1, General:

(2) Contractor must submit a certificate of compliance certifying that the conduit rigid nonmetallic as furnished conform to the above requirements. Allow for two to three working days for review and response for submitted certificate. Send a copy of the certificate of the conduit special 3-Inch to:

Denis Kozelek
City of Milwaukee
Infrastructure Services Division
Transportation Section - Street Lighting
841 N. Broadway (Room 920)
Milwaukee, WI. 53202
Denis.kozelek@milwaukee.gov

C Construction

All work shall be in accordance to the requirements of standard spec 652.3.

Add the following to standard spec 652.3.1.3, Installing Conduit Special Underground:

(2) Locations of the conduits where they are required are identified in the plans. However, installation will require integration with existing field conditions. Appropriate adjustment on conduit locations may be made if the field conditions are such that the pipes cannot be installed at the specified locations. Any relocation of greater than 5 feet must be approved by the engineer.

(3) Field design changes must be approved by the City of Milwaukee Electric Services Supervisor.

The primary contacts are:

Dennis Miller, Street Lighting Supervisor	(414) 286-5942 office (414) 708-4251 cell
George Berdine, Street Lighting Supervisor	(414) 286-5943 office 414) 708-4245 cell
Thomas Hughes, Street Lighting Supervisor	(414) 286-3457 office (414) 708-3175 cell

D Measurement
The department will measure City of Milwaukee Conduit Special 3-Inch by the linear foot, acceptably completed, measured from pull box to pull box.

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.653	City of Milwaukee Conduit Special 3-Inch	LF

Payment is full compensation for providing the conduit, conduit bodies, and fittings; for providing all conduit hangers, clips, attachments, and fittings used to support conduit on structures; for pull wires or ropes; for expansion fittings and caps; for excavating, bedding, and backfilling, including any sand, concrete, or other required materials; for disposing of surplus materials; and for making inspections.

Payment also includes repairing overlaying pavement, curb and gutter, or sidewalk the contractor disturbs or damages.

The department will not pay extra for conduit the contractor substitutes under standard spec 652.3.1.1. The department will pay separately for tracer wires under the appropriate Electrical Wire bid items specified in standard spec 655.5.

79. Removing Sand Barrel Array and Concrete Pad STA 115+50 RT, Item SPV.0105.001; STA 127+15, Item SPV.0105.002.

A Description
This special provision describes removing and disposing of the array of sand barrels, and the concrete pad on which they sit, shielding the overhead sign structure along the outside shoulder of northbound US 41, located outside the limits of proposed grading, for backfilling in accordance to standard spec 204.3.1.2, for restoring the disturbed ground, and as hereinafter provided.

B (Vacant)

C Construction
Excavate, remove, and backfill in accordance to the pertinent requirements of standard specs 204 and 205, and as shown on the plans.

Restore the disturbed ground with topsoil, mulch, fertilizer, and seed.

D Measurement
The department will measure Removing Sand Barrel Array and Concrete Pad STA 115+50 RT and STA 127+15 RT as a single lump sum unit of work, acceptably completed.

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.001	Removing Sand Barrel Array and Concrete Pad STA 115+50 RT	LS
SPV.0105.002	Removing Sand Barrel Array and Concrete Pad STA 127+15 RT	LS

Payment is full compensation for removing and disposing of the sand barrel array and associated concrete pad; for backfilling the area vacated by the concrete pad removal; and for restoring the disturbed ground with topsoil, mulch, fertilizer, and seeding.

80. Milling And Removing Temporary Joint, Item SPV.0105.003.

A Description
This special provision describes the milling and removing of the upper layer HMA wedge joint and any other temporary longitudinal or transverse joints, including sweeping and cleaning of the affected area prior to the abutting pavement placement.

B (Vacant)

C Construction
Immediately prior to the placement of the adjoining lane, mill any temporary wedge joint to a true line with a face perpendicular to the surface of the existing asphaltic surface pavement.

Immediately prior to continuation of paving operations, mill any temporary transverse joint to a true line with a face perpendicular to the surface of the existing asphaltic surface pavement.

The contractor becomes the owner of the removed asphaltic pavement and is responsible for the disposal as specified for disposing of materials under standard spec 204.3.1.3.

D Measurement
The department will measure Milling And Removing Temporary Joint as a single lump sum unit of work for removing all wedge joints, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.003	Milling And Removing Temporary Joint	LS

Payment is full compensation for milling, removing, sweeping, cleaning, and disposing of materials.

81. Maintenance of Lighting Systems, Item SPV.0105.201.

A Description

Maintain existing and proposed lighting system beginning on the date that the contractor's activities (electrical or otherwise) at the job site begin. Take responsibility for the proper operation and maintenance of all existing and proposed lighting systems which are part of, or which may be affected by, the work until final acceptance or as otherwise determined by the engineer.

Before performing any excavation, removal, or installation work (electrical or otherwise) at the site, initiate a request for a maintenance transfer and preconstruction inspection, as specified elsewhere herein, to be held in the presence of the engineer and a representative of the party or parties responsible for maintenance of any lighting systems which may be affected by the work. Make the request for the maintenance preconstruction inspection no less than seven calendar days prior to the desired inspection date.

Existing lighting systems, when depicted on the plans, are intended only to indicate the general equipment installation of the systems involved and shall not be construed as an exact representation of the field conditions. Visit the site to confirm and ascertain the exact condition of the electrical equipment and systems to be maintained. Condition issues found during contractor assessment can be discussed and addressed by contacting the SE Region Lighting Engineer (Eric Perea) prior to maintenance responsibility being transferred to the contractor.

B (Vacant)

C Construction

C.1 Existing Lighting Systems

Existing lighting systems are defined as any lighting system or part of a lighting system in service prior to this contract. The contract drawings indicate the general extent of any existing lighting. Ascertain the extent of effort required for compliance with these specifications; failure to do so will not be justification for extra payment or reduced responsibilities. Clear and replace any knockdowns or damage caused to the existing lighting system, regardless of who causes the damage. Maintain existing lighting system as follows:

Partial Maintenance: Only maintain the affected circuits if the number of circuits affected by the contract is equal to or less than 40% of the total number of circuits in a given controller and the controller is not part of the contract work unless otherwise indicated. Ensure engineer approval to isolate the affected circuits by means of in-line waterproof fuse holders as specified elsewhere.

Full Maintenance: Maintain the entire controller and all associated circuits if the number of circuits affected by the contract is greater than 40% of the total number of circuits in a given controller, or if the controller is modified in any way under the contract work.

C.2 Proposed Lighting Systems

Proposed lighting systems are any temporary or final lighting systems or part of a lighting system to be constructed under this contract.

Maintain all items installed under this contract, including, but not be limited to, any equipment failures or malfunctions as well as equipment damage either by the motoring public, contractor operations, or other means.

Excluding damage due to contractor operations, the contractor will be reimbursed for replaced equipment, materials only, if the invoice paid for the individual piece of equipment is greater than $500. The cost of maintaining equipment installed under this contract, labor, mobilization, tools and incidentals along with repairs due to contractor operations are incidental to this bid item.

C.3 Maintenance Operations

Maintain lighting units (including sign lighting), cable runs, and lighting controls. In the case of a pole knockdown or sign light damage caused by normal vehicular traffic, promptly clear the lighting unit and circuit discontinuity and restore the system to service. Reinstall the lighting unit (if salvageable), or install a new one.

Provide weekly night-time patrol of the lighting system, with patrol reports filed immediately with the engineer and copied to the region lighting coordinator with deficiencies corrected within 24 hours of the patrol. Present patrol reports on standard forms as designated by the engineer. Uncorrected deficiencies may be designated by the engineer as necessitating emergency repairs as described elsewhere herein.

Perform corrective action on specific lighting system equipment according to the following chart. The chart lists the maximum response, service restoration, and permanent repair time.

Incident or Problem	Service Response Time	Service Restoration Time	Permanent Repair Time
Control cabinet out	1 hour	4 hours	7 Calendar days
Hanging mast arm	1 hour to clear	n/a	7 Calendar days
Motorist caused damage or leaning light pole 10 degrees or more	1 hour to clear	4 hours	7 Calendar days
Circuit out – Needs to reset breaker	1 hour	4 hours	na
Circuit out – Cable trouble	1 hour	24 hours	21 Calendar days
Outage of 3 or more successive lights	1 hour	4 hours	na
Outage of 75% of lights on one tower	1 hour	4 hours	na
Outage of light nearest RR crossing approach, Islands and gores	1 hour	4 hours	na
Outage (single or multiple) found on night outage survey	n/a	n/a	7 Calendar days

C.4 Lighting

1. **Serve Response Time:** The amount of time from the initial notification to the contractor until a patrolman physically arrives at the location.
2. **Service Restoration Time**: The amount of time from the initial notification to the contractor until the time the system is fully operational again. (In cases of motorist caused damage, the undamaged portions of the system are operational.)
3. **Permanent Repair Time**: The amount of time from initial notification to the contractor until the time permanent repairs are made if the contractor was required to make temporary repairs to meet the service restoration requirement.

Failure to provide this service will result in liquidated damages of $500 per day per occurrence. In addition, the department reserves the right to assign any work not completed within this timeframe to the State Electrical Engineering and Electronics Unit. Reimburse all costs associated to repair this uncompleted work. Failure to pay these costs to the State Electrical Engineering and Electronics Unit within one month after the incident will result in additional liquidated damages of $500 per month per occurrence. Unpaid bills will be deducted from the cost of the contract. Repeated failures and/or a gross failure of maintenance shall result in the State's Electrical Engineering and Electronics Unit being directed to correct all deficiencies and the resulting costs deducted from any monies owed the contractor.

C.5 Operation of Lighting

Maintain operational lighting every night, dusk to dawn. Do not operate duplicate lighting systems (such as temporary lighting and proposed new lighting) simultaneously. Do not keep lighting systems in operation during long daytime periods. Ensure that the lighting system is fully operational and approved by the engineer prior to submitting a pay request. Failure to do so will be grounds for denying the pay request.

D Measurement

The department will measure Maintenance of Lighting Systems as a single lump sum unit of work, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.201	Maintenance of Lighting Systems	LS

Payment is full compensation for Maintenance of Lighting Systems, both existing and proposed, weekly night-time patrol of the lighting system, mobilization, and filed patrol reports. No payment will be considered for damage or repairs due to contractor operations.

82. Lighting System Integrator, Item SPV.0105.202.

A Description

This special provision describes coordinating freeway lighting with various parties; record keeping, and documentation. Where the department is responsible for freeway lighting operation, maintenance, or utility locates on existing systems or systems overlapping project boundaries, the contractor's freeway lighting integrator will serve as the contractor's liaison to the department's electrical operations unit.

B Personnel Qualifications

Assign personnel experienced in underground utility construction and department freeway lighting specifications and practices.

C Construction

At any one time during the project, the contractor shall assign one individual person as the freeway lighting integrator.

The freeway lighting integrator shall:

1. Familiarize their selves with the location and nature of existing lighting circuits. This familiarity shall include the extent of any lighting system that overlaps project limits.
2. Maintain a file of applicable permits or licenses issued to the contractor, and convey copies to the engineer.
3. Keep with them at all times a contact list of affected lighting personnel.
4. Maintain a record of tagouts and the clearance of tagouts.

5. Interface with department electrical personnel to determine how contract limits might affect maintenance or operation of existing systems.
6. Maintain ongoing contact with the department's Diggers' Hotline coordinator to ensure that each of the two persons knows that all requested utility locates are marked in the field by the appropriate party. The intent here is to assure coordination. This special provision does not transfer additional utility locating responsibilities to the contractor, beyond those responsibilities already assigned to them by other provisions of the contract.
7. Inform the department of any lighting outages, including outside the project limits, where a lighting system crosses the project boundary.
8. Maintain real-time records of existing, removed and new lighting facilities. Include utility service extensions. Additional required records will include temporary connections and their ultimate removal. Contact SE Region lighting engineer for record formatting.
9. Maintain records of tests, including: "meg" tests, amperage draw per circuit leg, voltage reading at disconnect, and voltage reading at the furthest pole per circuit leg. Convey these records at time of acceptance or partial acceptance.
10. At the time of acceptance or partial acceptance, convey as-built drawings in both the following formats: plan redlines and .dgn and/or .pdf electronic as directed by the engineer. Include utility service extensions.
11. Secure copies of operator's manuals, tear sheets, and other literature as may be provided by manufacturers of some lighting materials, and convey a minimum of three sets to the department.
12. Work with the engineer to notify department electrical personnel of acceptance or partial acceptance.
13. Perform related duties as may be needed to ensure continuity of freeway lighting during construction, and orderly transfer upon completion.
14. Contractor must use GPS to provide longitude and latitudes coordinates of each light pole, pull box and control cabinet. The data must be entered into a Microsoft Excel 2007 (or newer version) spreadsheet along with other required fields as specified by WisDOT.

D Measurement

The department will measure Freeway Lighting Integrator as a single complete lump sum unit of work, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.202	Lighting System Integrator	LS

Payment will be full compensation for personnel costs; and for all required coordination, record-keeping, and documentation.

83. Lighting System Survey, Item SPV.0105.203.

A Description

These special provisions describe performing lighting system survey using Global Position System (GPS).

B (Vacant)

C Construction

Locate and survey using GPS all the lighting units, Pull boxes and control cabinets. Maintain neat, orderly, and complete survey notes. Enter the Latitude and Longitude Coordinates into a Microsoft Excel 2007 (or newer version) spreadsheet along with other required fields as specified by WisDOT and convey these records at time of acceptance or partial acceptance to the regional lighting engineer.

D Measurement

The department will measure Lighting System Survey for all lighting units and control cabinets as a single lump sum unit of work, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.203	Lighting System Survey	LS

Payment will be full compensation for locating and surveying all the lighting units and control cabinets.

84. Underdeck Utility Structure B-40-53 City of Milwaukee Electrical Conduit, Item SPV.0105.650.

A Description

This section describes furnishing and installing a duct package of three 4-inch diameter, Reinforced Thermosetting Resin Conduit (RTRC), the Fiberglass Reinforced Plastic (FRP) conduit support system including all deck inserts and hangars, and the abutment penetrations to the underside of the deck of Structure B-40-53 as shown on the plans.

B Materials

Use material conforming to the class of material named and as specified. Conduit shall be non-metallic, filament-wound epoxy, suitable for direct burial, concrete encasement, and suspended from bridge members without regard to outdoor ambient light. The product shall contain carbon black to provide ultraviolet protection.

The conduit shall have an interference joint system consisting of an integral bell and spigot with interlocking male and female threads. Epoxy adhesive shall be applied on joints per manufacturer's specifications prior to use.

Product shall be listed by Underwriters Laboratories and conform to the National Electrical Code.

The ID dimension shall be full, actual trade size.

All adaptors, couplings, expansion joints, and suspended hangers shall be RTRC fittings corresponding to and manufactured for use with RTRC conduit as specified on the plans. The suspended hanger assemblies shall include stainless steel threaded rods and concrete inserts as specified on the plans.

Epoxy coated reinforcement tie bar shall conform to standard spec 505.

C Construction

Construct according to the pertinent provisions of standard specs 502 and 652.

The duct package to be installed on B-40-53 consists of three 4-inch ducts, one high by three wide.

Install the conduit 5 feet beyond the back of the bridge abutment walls. Install a fiberglass to PVC adaptor on the end of each duct and temporarily cap.

Coupling of the duct sections shall be accomplished and secured by first applying epoxy adhesive then mating a spigot end into an integral bell end with a blow to the open end of the duct section.

Field verify the length of the hanger rods prior to submitting shop drawing.

Submit shop drawings for all deck inserts, hangers, braced hangers, expansion couplings and hanger spacing to Ms. Karen Rogney at (414) 286-3243 of the City of Milwaukee for review 30 business days in advance of the bridge deck placement.

Install all RTRC duct and components according to the manufacturer's instructions.

D Measurement

The department will measure Underdeck Utility Structure B-40-53 City of Milwaukee Electrical Conduit, as a single lump sum unit of work, acceptably completed. 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.0105.650	Underdeck Utility Structure B-40-53 City of Milwaukee Electrical Conduit	LS

Payment is full compensation for furnishing and installing the Underdeck Utility Structure B-40-53 City of Milwaukee Electrical Conduit; including the RTRC conduit, the FRP conduit support system including the stainless steel deck inserts and hangars, epoxy coated hanger tie bar, and for the abutment penetrations. Duct and associated fittings rendered unfit for use by the contractor through the contractor's operations shall be replaced by the contractor in kind at the contractor's own cost and expense.

85. Underdeck Utility Structure B-40-53 City of Milwaukee Communications Conduit, Item SPV.0105.651.

A Description

This section describes furnishing and installing a duct package of six, 4-inch diameter, Reinforced Thermosetting Resin Conduit (RTRC), the Fiberglass Reinforced Plastic (FRP) conduit support system including all deck inserts and hangars, and the abutment penetrations to the underside of the deck of Structure B-40-53 as shown on the plans.

B Materials

Use material conforming to the class of material named and as specified. Conduit shall be non-metallic, filament-wound epoxy, suitable for direct burial, concrete encasement, and suspended from bridge members without regard to outdoor ambient light. The product shall contain carbon black to provide ultraviolet protection.

The conduit shall have an interference joint system consisting of an integral bell and spigot with interlocking male and female threads. Epoxy adhesive shall be applied on joints per manufacturer's specifications prior to use.

Product shall be listed by Underwriters Laboratories and conform to the National Electrical Code.

The ID dimension shall be full, actual trade size.

All adaptors, couplings, expansion joints and suspended hangers shall be RTRC fittings corresponding to and manufactured for use with RTRC conduit as specified on the plans. The suspended hanger assemblies shall include stainless steel threaded rods and concrete inserts as specified on the plans.

Epoxy coated reinforcement tie bar shall conform to standard spec 505.

Contractor shall reference all plan sheets to provide additional clarification on material requirements.

C Construction

Construct according to the pertinent provisions of standard specs 502 and 652.

The six-duct package to be installed on B-40-53 consists of six 4-inch ducts, two high by three wide.

Install the conduit 5 feet beyond the back of the bridge abutment walls. Install a fiberglass to PVC adaptor on the end of each duct and temporarily cap.

Coupling of the duct sections shall be accomplished and secured by first applying epoxy adhesive then mating a spigot end into an integral bell end with a blow to the open end of the duct section.

Submit shop drawings for all deck inserts, hangers, braced hangers, expansion couplings and hanger spacing to Ms. Karen Rogney at (414) 286-3243 of the City of Milwaukee for review 30 business days in advance of the bridge deck placement.

Install all RTRC duct and components according to the manufacturer's instructions.

D Measurement
The department will measure Underdeck Utility Structure B-40-53 City of Milwaukee Communications Conduit, as a single lump sum unit of work, acceptably completed. 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.0105.651	Underdeck Utility Structure B-40-53 City of Milwaukee Communications Conduit	LS

Payment is full compensation for furnishing and installing the Underdeck Utility Structure B-40-53 City of Milwaukee Conduit; including the RTRC conduit, the FRP conduit support system including the stainless steel deck inserts and hangars, epoxy coated hanger tie bar, and for the abutment penetrations. Duct and associated fittings rendered unfit for use by the contractor through the contractor's operations shall be replaced by the contractor in kind at the contractor's own cost and expense.

86. Construction Staking City of Milwaukee Underground Conduit, Signals, and Lighting, Item SPV.0105.652.

A Description
This special provision describes the contractor-performed construction staking required for all City of Milwaukee Underground Conduit, Traffic Signals, and Lighting items installed under this contract.

B (Vacant)

C Construction
Construction shall be in accordance to standard specs 650.3.1 and 650.3.11.

D Measurement
The department will measure Construction Staking City of Milwaukee Underground Conduit, Signals, and Lighting as single lump sum unit of work, acceptably completed.

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.652	Construction Staking City of Milwaukee Underground Conduit, Signals, and Lighting	LS

Payment is full compensation according to standard specs 650.5(2) and 650.5(3).

87. Gas Main Support System B-40-53, Item SPV.0105.700.

A Description
This special provision describes installing We Energies provided pipe supports and hanger supports to connect the gas main to Bridge Structure # B-40-53.

B Materials
All materials will be provided by We Energies and in accordance to the plans.

C Construction
Prior to deck removal and installation of protection media for existing gas main, install three specially designed and fabricated diaphragms and attach the pipe hanger assemblies to permanently support the pipe. At each pier, install roller supports to temporarily support the pipe at each pier.

Once the support system is installed and accepted by We Energies, remove and dispose of the existing pipe hangar assemblies.

At each pier, a box out shall be formed at the pier diaphragm around the pipe with 4 inch clearance at both sides and the top. After deck construction, install hanger brackets above the pipe and attach to the concrete diaphragms. The pipe roller assemblies will then be attached to the brackets and under the pipe for support.

D Measurement
The department will measure Gas Main Support System B-40-53 as a single lump sum unit of work, acceptably completed.

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.700	Gas Main Support System B-40-53	LS

Payment is full compensation for installing the Gas Main Support System as detailed in the plans, and removal and disposal of the existing pipe hanger assemblies. Fabricated pipe supports, pipe hanger assemblies, hanger supports, and associated fittings rendered unfit for use by the contractor through the contractor's operations shall be replaced by the contractor in kind at the contractor's own cost and expense.

88. Electrical Fiberglass 6 Duct Package Structure # B-40-53, Item SPV.0105.701.

A Description

This special provision describes installing We Energies Electric provided hangers, duct package, abutment box outs, pier box outs, expansion sleeves, couplings, conduit anchors, and deck inserts.

B Materials

All materials will be provided by We Energies Electric. Notify We Energies Electric at least 5 working days in advance to coordinate the time and location for the pick up the materials.

The We Energies Electric contact for coordinating materials pick up is Leonard Wilson, (414) 944-5690.

C Construction

Contact We Energies Electric to obtain an information package regarding construction placement, measurements, and requirements for the installation of the hangers, duct package, abutment box outs, pier box outs, expansion sleeves, couplings, conduit anchors, deck inserts, and other incidentals. The information package shall be obtained prior to submitting bids for the project.

The We Energies Electric contact for the information packet is Leonard Wilson, (414) 944-5690.

A We Energies representative will be required to be on site to monitor and accept construction activity during reinstallation. Contact John Merrick at (414) 540-5781 or Dale Washington at (414) 540-5784 to schedule an inspection.

D Measurement

The department will measure Electrical Fiberglass 6 Duct Package Structure #B-40-53 as a single lump sum unit of work, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.701	Electrical Fiberglass 6 Duct Package Structure #B-40-53	LS

Payment is full compensation for installing the Electrical Fiberglass 6 Duct Package Structure #B-40-53 in accordance to the We Energies Electric information packet, including pickup of materials, and any adjustments, repairs, replacement or modifications requested by We Energies inspector.

89. Concrete Cure and Seal Treatment, Item SPV.0165.700.

A Description
This work includes treating all existing piers and full-height retaining abutments, as well as surface repair to these substructure units, with a surface cure and seal treatment as shown on plans, and as hereinafter provided.

B Materials
The treating material shall conform to ASTM C1315, ASTM C309, and AASHTO M148 specifications and be produced by a manufacturer on the approved list.

C Construction
Application rates for the treating material shall be in accordance to the manufacturer's specifications.

D Measurement
The department will measure Concrete Cure and Seal Treatment 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.0165.700	Concrete Cure and Seal Treatment	SF

Payment is full compensation for providing Concrete Cure and Seal Treatment.

90. ROW Fence Based Clearing, Item SPV.0180.001.

A Description
This special provision describes cutting and disposing of trees, brush, windfalls, logs, stumps, branches entangled in the fence, other vegetation occurring within the clearing limits, branches growing from the right-of-way into the fence, and stump removal.

B (Vacant)

C Construction
Clear within 10 feet of the right-of-way fence as shown in the plans or as directed by the engineer. Construction shall be according to standard spec 201.3 pertaining to clearing only, except that burning and/or burying of stumps, roots, brush, waste logs and limbs, timber tops, and debris resulting from clearing is not allowed.

Maintain code clearances from all overhead utility facilities within clearing limits.

D Measurement
The department will measure ROW Fence Based Clearing by the square yard, acceptably completed according to standard spec 201.4.3(1).

The department will not measure incidental clearing according to standard spec 201.4.1 (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.0180.002	ROW Fence Based Clearing	SY

Payment for ROW Fence Based Clearing is full compensation for the following:

- All clearing required under this section and performed within the clearing limits as defined above.
- Handling, hauling, piling, trimming, chipping, wound treatment, rehandling, and disposing of waste and debris.

91. Cold Patch, Item SPV.0195.001.

A Description
This special provision describes furnishing, stockpiling, placing, and maintaining cold patch material. The cold patch material shall be used for short term maintenance purposes to fill potholes/voids in the existing pavement surface that the engineer deems necessary.

B Materials
B.1 General
Furnish cold patch that is a combination of coarse aggregate, natural sand and bituminous material MC-250. The mixture shall be designed to have a workability range of 15ºF-100º F without the addition of heat. The mixture shall have good adhesion to wet surfaces and be resistant to damage by water, salt and deicing products. The mixture shall be uniform and not require any mixing or special handling prior to use.

B.2 Gradations
Conform to the following gradation requirements:

SIEVE SIZE	PERCENT PASSING (by weight)
3/8 Inch (9.5mm)	96 - 100
No. 4 (4.75 mm)	76 - 82
No. 8 (2.38mm)	50 - 60
No. 50 (.297mm)	15 - 20
No. 200 (.074mm)	2 - 5
Bitumen	4.8 - 5.2

C Construction
C.1 General
Choose a smooth, firm, and well-drained area for an on-site stockpile that is cleared of vegetation and foreign material that may contaminate the cold patch. The stockpile shall be easily accessible and able to be maintained and replenished at any time during the duration of the project.

Application of the cold patch must be able to be accomplished by hand labor. Prior to filling any potholes/voids all ponded water and loose debris shall be removed. Place material into the pothole/void and compact flush with a tamper, roller, or vehicle tire. Traffic must be able to travel over the patch immediately after installation.

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

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0195.005	Cold Patch	Ton

Payment for cold patch is full compensation for the patch; furnishing and providing a stockpile of material; preparing the pothole/void for material placement, stockpiling, placing, compacting, and maintaining, and all incidentals necessary to complete the contract work.

The contractor shall be compensated for any unused stockpile quantities remaining on site at the completion of the project, thus the stockpile is not to exceed 10 tons on site at any given time unless approved by the engineer. Payment for this unused stockpile is full compensation for removing and hauling stockpile.

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

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

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

I. BASIC CONCEPTS

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

1) **On-the-Job Training, Item ASP.1T0G, ASP 1 Graduate.** At the rate of $5.00 per hour on federal aid projects when TrANS graduates are initially hired, or seasonally rehired, as unskilled laborers or the equivalent.

   Eligibility and Duration: To the employing contractor, for up to 2000 hours from the point of initial hire as a TrANS program placement.

   Contract Goal: To maintain the intent of the Equal Employment Opportunity program, it is a goal that __6__ *(number)* TrANS Graduate(s) be utilized on this contract.

2) **On-the-Job Training, Item ASP.1T0A, ASP 1 Apprentice.** At the rate of $5.00 per hour on federal aid projects at the point when an employee who came out of the TrANS Program is subsequently entered into an apprenticeship contract in an underutilized skilled trade (this will include the Skilled Laborer Apprenticeship when that standard is implemented).

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

Contract Goal: To maintain the intent of the Equal Employment Opportunity program, it is a goal that __3__ *(number)* TrANS Apprentice(s) be utilized on this contract.

3) The maximum duration of reimbursement is two years as a TrANS graduate plus time in apprentice status.

4) If a TrANS program is not available in the contractor's area and another training program is utilized, payment of On-the-Job Training hours may be approved by the Wisconsin Department of Transportation (WisDOT) if the training program meets the established acceptance criteria. Only On-the-Job Training Hours accumulated after WisDOT approval will be reimbursed as specified under Items ASP.1T0G and ASP.1T0A. For more information, contact the Disadvantaged Business Enterprise Office at the phone numbers listed above.

5) WisDOT reserves the right to deny payments under items ASP.1T0G and ASP.1T0A if the contractor either fails to provide training or there is evidence of a lack of good faith in meeting the requirements of this training special provision.

I. RATIONALE AND SPECIAL NOTE

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

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.*

II. IMPLEMENTATION

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

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

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

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

IV. *TRANS TRAINING*

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

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

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

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

V. APPRENTICESHIP TRAINING

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

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

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

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

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

ADDITIONAL SPECIAL PROVISION 3
DISADVANTAGED BUSINESS ENTERPRISE PROGRAM

1. Description

General

a. The disadvantaged business enterprise (DBE) requirements of 49 CFR Part 26 apply to this contract. The department's DBE goal is shown on the cover of the bidding proposal. The contractor can meet the specified contract DBE goal by procuring services or materials from a DBE or by subcontracting work to a DBE. The department calculates the DBE participation as the dollar value of DBE participation included in the bid expressed as a percentage of the total contract bid amount.

b. Under the contract, the contractor agrees to provide the assistance to participating DBE's in the following areas:

   i. Produce accurate and complete quotes.
   ii. Understand highway plans applicable to their work.
   iii. Understand specifications and contract requirements applicable to their work.
   iv. Understand contracting reporting requirements.

c. The department encourages the contractor to assist and develop DBE firms to become fully knowledgeable contractors to successfully perform on its contracts.

d. For information on the disadvantaged business program, visit the department's Civil Rights and Compliance Section website at:

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

2. Definitions

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

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

3. DBE Percentage Required at Bid Submission

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

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

4. Department's DBE Evaluation Process

a. Documentation Submittal

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

i. Bidder Meets DBE Goal

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

ii. Bidder Does Not Meet DBE Goal

(1) If the bidder indicates a bid percentage on the Commitment to Subcontract to DBE Form [DT1506] that does not meet the contract DBE goal, the bidder must submit a Good Faith Waiver Form [DT1202] and supporting documentation. After award and before execution, the department will evaluate the bidder's DBE commitment and consider the bidder's good faith waiver request.

(2) The department will review the bidder's good faith waiver request and notify the bidder of one of the following:

a. If the department grants a good faith waiver, the bid is eligible for contract execution with respect to DBE commitment.

b. If the department rejects the good faith waiver request, the department may declare the bid ineligible for execution. The department will provide a written explanation of why the good faith waiver request was rejected. The bidder may appeal the department's rejection as allowed under 7 a. & b.

5. Department's Criteria for Good Faith Effort

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

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

have aggressively solicited DBE participation in an attempt to meet the contract DBE goal and attaining the stated DBE goal is not feasible.

b. The department, in conjunction with industry stakeholders, has developed the following guidance for contractor good faith effort. The guidance and the attached appendices provide a framework for the actions required by all parties in the processing and evaluation of bidder's total efforts to achieve the project specific DBE goal prior to the bid letting date.

c. Prime Contractors should:

i. Document all efforts and decisions made toward achieving the DBE goal on the contract. The bidder should use the Civil Rights & Compliance System [CRCS] and related WisDOT-approved DBE outreach tools, including the Bid Express Small Business Network, to foster DBE participation on all applicable contracts.

ii. Request quotes by identifying potential items to subcontract and solicit. Prime contractors are strongly encouraged to include in their initial contacts a single page including a detailed list of items for which they are accepting quotes, by project, within a letting. *See attached sample entitled "Sample Contractor Solicitation Letter" in Appendix A*. Prime contractors should also indicate a willingness to accept quotes in areas they are planning to perform themselves, ***as required by federal rules***. In some cases, it might be appropriate to use DBE's to do work in a prime contractor's area of specialization.

(1) Solicit quotes through all reasonable and available means from certified DBE firms who match 'possible items to subcontract' and send copies to DBESS office, highlighting areas in which you are seeking quotes. Email is acceptable.

(2) SBN is the preferred outreach tool. https://www.bidx.com/wi/main Other acceptable means include postal mail, email, fax, phone call.

a. Primes must ask DBE firms for a response in their solicitations. See *Sample Contractors Solicitation Letter* in Appendix. This letter can be included as an attachment to the SBN sub-quote request.

b. Solicit quotes at least 10 calendar days prior to the letting date {ideally two Fridays before the letting} to allow DBE firms sufficient time to respond. Prime contractors should contact DBE firms early, asking them if they need help in putting together a quote, or helping to arrange for equipment needs, or solve other problems.

(3) Second solicitation should take place within 5 days

a. An email solicitation is highly recommended for this second solicitation

(4) Upon request, provide interested DBE firms with adequate information about plans, specifications and the requirements of the contract by letter, information session, email, phone call and/or referral.

(5) When potential exists, advise interested DBE firms on how to obtain bonding, line of credit or insurance as may be requested.

(6) Document DBE firm's interest in quoting by taking appropriate steps to follow up initial solicitation with:

a. Email to all prospective DBE firms in relevant work areas
b. Phone call log to DBE firms who express interest via written response or call.
c. Fax/letter confirmation
d. Copy of the DBE quotes
e. Signed copy of Bid Express SBN Record of Subcontractor Outreach Effort.

d. Evaluate DBE quotes as documentation is critical if the prime does not utilize the DBE firm's quote for any reason.

   i. Evaluate DBE firm's capability to perform 'possible items to subcontract' using legitimate reasons, including but not limited to, ***a discussion with the DBE firm*** regarding its capabilities prior to the bid letting. If lack of capacity is your reason for not utilizing the DBE quote, you are required to contact the DBE directly regarding their ability to perform the work indicated in the UCP directory as their work area [NAICS code]; only the work area and/or NAICS code listed in the UCP directory will be counted for DBE credit. Documentation of the conversation is required.

   ii. In striving to meet a DBE conscious contract goal, prime contractors are expected to use DBE quotes that are responsive and reasonable. This includes DBE quotes that are not the low quote.

   iii. **Special Circumstance:** Evaluation of DBE quotes with tied bid items. "Tied quotes are the condition in which a subcontractor submits quotes including multiple areas of expertise across multiple work areas noting that the items and price are tied. Typically this type of quoting represents a cost saving to the prime but is not clearly stated as a discount; tied quotes are usually presented as 'all or none' quote to the prime." When non-DBE subcontractors submit tied bid items in their quotes to the prime, the DBE firms' quote may seem not competitive. In such a case, the following steps are taken in comparing the relevant quotes. These are qualitative examples.

      (1) Compare bid items common to both quotes, noting the reasonableness in the price comparison.

      (2) Review quotes from other firms for the bid items not quoted by the DBE firm to see if combining both can provide the same competitive advantage that the tied bid items offered.

e. After notification of contract award, submit **'Commitment to Subcontract'** form within the time period specified in the contract.

   i. Provide the following information along with department form DT1202:

      (1) The names, addresses, e-mail addresses, telephone numbers of DBE's contacted. The dates of both initial and follow-up contact. A printed copy of SBN solicitation is acceptable.

      (2) A description of information provided to the DBE's regarding the plans, specifications, and estimated quantities for portions of the work to be performed by that DBE.

      (3) Photocopies or electronic copies of all written solicitations to DBE's.

      (4) Documentation of each quote received from a DBE and, if rejected, the reason for that rejection.

      (5) Bidder attendance at any pre-solicitation or pre-bid meetings the department held to inform DBE's of participation opportunities available on the project.

f. The department's DBE Support Services Office is available by phone, email or in writing to request assistance in meeting the DBE goal:

DBE Support Services Office
6150 Fond du Lac Ave.
Milwaukee, WI 53218
Phone: 414-438-4583 / 608-266-6961
Fax: 414-438-5392
E-mail: DOTDBESupportServices@dot.wi.gov

6. Bidder's Appeal Process

a. A bidder can appeal the department's decision to deny the bidder's good faith waiver request. The bidder must provide written documentation refuting the specific reasons for rejection as stated in the department's rejection notice. The bidder may meet in person with the department if so requested. Failure to appeal within 7 calendar days after receiving the department's written notice of rejection of a good faith waiver request under constitutes a forfeiture of the bidder's right of appeal. If the bidder does not appeal, the department may declare the bid ineligible for execution.

b. The department will appoint a representative, who did not participate in the original determination, to assess the bidder's appeal. The department will issue a written decision within 7 calendar days after the bidder presents all written and oral testimony. In that written decision, the department will explain the basis for finding that the bidder did or did not meet the contract DBE goal or make an adequate good faith effort to meet the contract DBE goal. The department's decision is final. If the department finds that the bidder did not meet the contract DBE goal or did not make adequate efforts to meet the DBE goal, the department may declare the bid ineligible for execution.

7. Department's Criteria for DBE Participation

Department's DBE List

a. The department maintains a DBE list on the department's website

http://wisconsindot.gov/Documents/doing-bus/civil-rights/dbe/ucp-directory.xlsx

b. The DBE office is also available to assist at 414-438-4583 or 608-266-6961.

8. Counting DBE Participation

Assessing DBE Work

a. The department will only count the DBE usage towards the contract DBE goal if the DBE firm is certified as a DBE by one of the unified certification program agencies. If a firm becomes DBE certified before entering into a subcontract, the department may consider that DBE usage towards the contract goal. The department only counts the value of the work a DBE actually performs towards the DBE goal. The department assesses the DBE work as follows:

b. The department counts work performed by the DBE's own resources. The department includes the cost of materials and supplies the DBE obtains for the work. The department also includes the cost of equipment the DBE leases for the work. The department will not include the cost of materials, supplies, or equipment the DBE purchases or leases from the prime contractor or its affiliate, except the department will count non-project specific leases the DBE has in place before the work is advertised.

c. The department counts fees and commissions the DBE charges for providing a bona fide professional, technical, consultant, or managerial services. The department also counts fees and commissions the DBE charges for providing bonds or insurance. The department will only count costs the engineer deems reasonable based on experience or prevailing market rates.

d. If a DBE subcontracts work, the department counts the value of the subcontracted work only if the DBE's subcontractor is also a DBE.

e. The contractor shall maintain records and may be required to furnish periodic reports documenting its performance under this item.

f. It is the prime contractor's responsibility to determine the DBE's ability to perform the work with the use of the UCP directory.

9. Commercially Useful Function

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

10. Trucking

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

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

11. Manufacturers and Suppliers

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

12. DBE Prime

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

13. Joint Venture

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

14. Mentor Protégé

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

15. DBE Replacement

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

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

16. Changes to the approved DBE Commitment Form DT1506

If there are any changes to the approved Commitment to Subcontract to DBE Form DT1506, the prime contractor must submit a revised DBE Commitment Form DT1506 and relevant attachment A(s) to the DBE Programs Office within 5 business days.

17. Contract Modifications

When additional opportunity is available by contract modifications, the Prime Contractor shall utilize DBE Subcontractors that were committed to equal work items, in the original contract.

18. Payment

Costs for conforming to this Additional Special Provision (ASP) and any associated DBE requirements are incidental to the contract.

APPENDIX A
Sample Contractor Solicitation Letter Page 1
This sample is provided as a guide not a requirement

GFW SAMPLE MEMORANDUM

TO: DBE FIRMS

FROM: POTENTIAL PRIME CONTRACTOR OR MAJOR SUBCONTRACTOR

SUBJECT: **REQUEST FOR DBE QUOTES**

LET DATE & TIME

DATE: MONTH DAY YEAR

CC: DBE OFFICE ENGINEER

Our company is considering bidding on the projects indicated on the next page, as a prime and/or a subcontractor for the Wisconsin Department of Transportation Month- date -year Letting. Page 2 lists the projects and work items that we may subcontract for this letting. We are interested in obtaining subcontractor quotes for these projects and work categories. Also note that we are willing to accept quotes in areas we may be planning to perform ourselves as required by federal rules.

Please review page 2, respond whether you plan to quote, highlight the projects and work items you are interested in performing and return it via fax or email within 3 days. Plans, specifications and addenda are available through WisDOT at the DBE Support Services office or at the Highway Construction Contract Information (HCCI) site at http://roadwaystandards.dot.wi.gov/hcci/

Your quote should include all of the costs required to complete the items you propose to perform including labor, equipment, material, and related bonding or insurance. The quote should note items that you are DBE certified to perform, tied items, and any special terms. Page 2, with the indicated projects and items you plan to quote, should be used as a cover sheet for your quote.

Please make every effort to have your quotes into our office by time deadline the prior to the letting date. ***Make sure the correct letting date, project ID and proposal number, unit price and extension are included in your quote.*** We prefer quotes be sent via SBN but prime's alternative's are acceptable. Our office hours are include hours and days. Please call our office as soon as possible prior to the letting if you need information/clarification to prepare your quote at contact number.

If you wish to discuss or evaluate your quote in more detail, contact us after the contract is awarded. Status of the contract can be checked at WisDOT's HCCI site at http://roadwaystandards.dot.wi.gov/hcci/

All questions should be directed to:

Project Manager, John Doe,
Phone: (000) 123-4567
Email: Joe@joetheplumber.com
Fax: (000) 123- 4657

Sample Contractor Solicitation Letter Page 2

This sample is provided as a guide not a requirement

REQUEST FOR QUOTATION

Prime's Name: _____

Letting Date: _____

Project ID: _____

Please check all that apply

- ☐ Yes, we will be quoting on the projects and items listed below
- ☐ No, we are not interested in quoting on the letting or its items referenced below
- ☐ Please take our name off your monthly DBE contact list
- ☐ We have questions about quoting this letting. Please have some one contact me at this number

Prime Contractor 's Contact Person		DBE Contractor Contact Person	
Phone:		Phone	
Fax:		Fax	
Email:		Email	

Please circle the jobs and items you will be quoting below

Proposal No.	1	2	3	4	5	6	7
County							

WORK DESCRIPTION:

Clear and Grub	X		X	X		X	X
Dump Truck Hauling	X		X	X		X	X
Curb & Gutter/Sidewalk, Etc.	X		X	X		X	X
Erosion Control Items	X		X	X		X	X
Signs and Posts/Markers	X		X	X		X	X
Traffic Control		X	X	X		X	X
Electrical Work/Traffic Signals		X	X	X		X	
Pavement Marking		X	X	X	X	X	X
Sawing Pavement		X	X	X	X	X	X
QMP, Base	X	X		X	X	X	X
Pipe Underdrain	X			X			
Beam Guard				X	X	X	X
Concrete Staining							X
Trees/Shrubs	X						X

Again please make every effort to have your quotes into our office by time deadline prior to the letting date.

We prefer quotes be sent via SBN but prime's preferred alternative's are acceptable.

If there are further questions please direct them to the prime contractor's contact person at phone number.

APPENDIX B
BEST PRACTICES FOR PRIME CONTRACTOR & DBE SUBCONTRACTOR GOOD FAITH EFFORT

This list is not a set of requirements; it is a list of potential strategies

Primes

- 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 do as thorough a job as possible in communicating with DBE firms before the bid and provide any assistance requested to assure best possible bid.

DBE

- DBE firms should contact primes as soon as possible with questions regarding their quotes or bid; seven days prior is optimal.
- Continually check for contract addendums on the HCCI website through the Thursday prior to letting to stay abreast of changes.
- Review the status of contracts on the HCCI website reviewing the 'apparent low bidder' list, and bid tabs at a minimum.
- Prepare a portfolio or list of related projects and prime and supplier references; be sure to note transportation-related projects of similar size and scope, firm expertise and staffing.
- Participate in DBE office assessment programs
- Participate on advisory and mega-project committees
- Sign up to receive the DBE Contracting Update
- Consider membership in relevant industry or contractor organizations
- Active participation is a must. Quote as many projects as you can reasonably work on; quoting the primes and bidding as a prime with the department are the only ways to get work.

APPENDIX C
Types of Efforts considered in determining GFE
This list represents concepts being assessed; analysis requires additional steps

1. Whether the contractor attended any pre-solicitation or pre-bid meetings that were scheduled by WisDOT to inform DBEs of contracting and subcontracting opportunities;
2. Whether the contractor provided written notice to a reasonable number of specific DBEs that their interest in the contract was being solicited, in sufficient time to allow the DBEs to participate effectively;
3. Whether the contractor followed up initial solicitations of interest by contacting DBEs to determine if the DBEs were interested; returned the phone calls of interested DBE firms.
4. Whether the contractor selected portions of the work to be performed by DBEs in order to increase the likelihood of meeting the DBE goal;
5. Whether the contractor provided interested DBEs with adequate information about the plans, specifications and requirements of the contract;
6. Whether the contractor negotiated in good faith with interested DBEs, not rejected DBEs as unqualified without sound reasons based on a thorough investigation of their capabilities;
7. Whether the contractor made efforts to assist interested DBEs in being more competitive.
8. Whether the contractor effectively used the services of available minority community organizations: minority contractors groups, local, state, and Federal minority business assistance offices, and other organizations that provide assistance to small businesses and DBE firms.
9. Whether Prime used CRCS to identify DBE who specialize in relevant work areas.
10. Whether the contractor used available resources including contacting the DBE office, using WisDOT's website
11. Whether the contractor returned calls of firms expressing interest in a timely manner.

APPENDIX D
Good Faith Effort Evaluation Guidance
Excerpt from Appendix A of 49 CFR Part 26

APPENDIX A TO PART 26 -- GUIDANCE CONCERNING GOOD FAITH EFFORTS

I. When, as a recipient, you establish a contract goal on a DOT assisted contract, a bidder must, in order to be responsible and/or responsive, make good faith efforts to meet the goal. The bidder can meet this requirement in either of two ways. First, the bidder can meet the goal, documenting commitments for participation by DBE firms sufficient for this purpose. Second, even if it doesn't meet the goal, the bidder can document adequate good faith efforts. This means that the bidder must show that it took all necessary and reasonable steps to achieve a DBE goal or other requirement of this part which, by their scope, intensity, and appropriateness to the objective, could reasonably be expected to obtain sufficient DBE participation, even if they were not fully successful.

II. In any situation in which you have established a contract goal, part 26 requires you to use the good faith efforts mechanism of this part. As a recipient, it is up to you to make a fair and reasonable judgment whether a bidder that did not meet the goal made adequate good faith efforts. It is important for you to consider the quality, quantity, and intensity of the different kinds of efforts that the bidder has made. The efforts employed by the bidder should be those that one could reasonably expect a bidder to take if the bidder were actively and aggressively trying to obtain DBE participation sufficient to meet the DBE contract goal. Mere pro forma efforts are not good faith efforts to meet the DBE contract requirements. We emphasize, however, that your determination concerning the sufficiency of the firm's good faith efforts is a judgment call: meeting quantitative formulas is not required.

III. The Department also strongly cautions you against requiring that a bidder meet a contract goal (i.e., obtain a specified amount of DBE participation) in order to be awarded a contract, even though the bidder makes an adequate good faith efforts showing. This rule specifically prohibits you from ignoring bona fide good faith efforts.

IV. The following is a list of types of actions which you should consider as part of the bidder's good faith efforts to obtain DBE participation. It is not intended to be a mandatory checklist, nor is it intended to be exclusive or exhaustive. Other factors or types of efforts may be relevant in appropriate cases.

A. Soliciting through all reasonable and available means (e.g. attendance at pre-bid meetings, advertising and/or written notices) the interest of all certified DBEs who have the capability to perform the work of the contract. The bidder must solicit this interest within sufficient time to allow the DBEs to respond to the solicitation. The bidder must determine with certainty if the DBEs are interested by taking appropriate steps to follow up initial solicitations.

B. Selecting portions of the work to be performed by DBEs in order to increase the likelihood that the DBE goals will be achieved. This includes, where appropriate, breaking out contract work items into economically feasible units to facilitate DBE participation, even when the prime contractor might otherwise prefer to perform these work items with its own forces.

C. Providing interested DBEs with adequate information about the plans, specifications, and requirements of the contract in a timely manner to assist them in responding to a solicitation.

D. (1) Negotiating in good faith with interested DBEs. It is the bidder's responsibility to make a portion of the work available to DBE subcontractors and suppliers and to select those portions of the work or material needs consistent with the available DBE subcontractors and suppliers, so as to facilitate DBE participation. Evidence of such negotiation includes the names, addresses, and telephone numbers of DBEs that were considered; a description of the information provided regarding the plans and specifications for the work selected for subcontracting; and evidence as to why additional agreements could not be reached for DBEs to perform the work.

(2) A bidder using good business judgment would consider a number of factors in negotiating with subcontractors, including DBE subcontractors, and would take a firm's price and capabilities as well as contract goals into consideration. However, the fact that there may be some additional costs involved in finding and using DBEs is not in itself sufficient reason for a bidder's failure to meet the contract DBE goal, as long as such costs are reasonable. Also, the ability or desire of a prime contractor to perform the work of a contract with its own organization does not relieve the bidder of the responsibility to make good faith efforts. Prime contractors are not, however, required to accept higher quotes from DBEs if the price difference is excessive or unreasonable.

E. Not rejecting DBEs as being unqualified without sound reasons based on a thorough investigation of their capabilities. The contractor's standing within its industry, membership in specific groups, organizations, or associations and political or social affiliations (for example union vs. non-union employee status) are not legitimate causes for the rejection or non solicitation of bids in the contractor's efforts to meet the project goal.

F. Making efforts to assist interested DBEs in obtaining bonding, lines of credit, or insurance as required by the recipient or contractor.

G. Making efforts to assist interested DBEs in obtaining necessary equipment, supplies, materials, or related assistance or services.

H. Effectively using the services of available minority/women community organizations; minority/women contractors' groups; local, state, and Federal minority/women business assistance offices; and other organizations as allowed on a case-by-case basis to provide assistance in the recruitment and placement of DBEs.

V. In determining whether a bidder has made good faith efforts, you may take into account the performance of other bidders in meeting the contract. For example, when the apparent successful bidder fails to meet the contract goal, but others meet it, you may reasonably raise the question of whether, with additional reasonable efforts, the apparent successful bidder could have met the goal. If the apparent successful bidder fails to meet the goal, but meets or exceeds the average DBE participation obtained by other bidders, you may view this, in conjunction with other factors, as evidence of the apparent successful bidder having made good faith efforts.

Appendix E
Small Business Network [SBN] Overview

The Small Business Network is a part of the Bid Express® service that was created to ensure that prime bidders have a centralized online location to find subs - including small and disadvantaged business enterprises (DBEs). It is available for prime bidders to use as part of their Basic Service subscription. Within the Small Business Network, **Prime Contractors** can:

1. Easily select proposals, work types and items:
    a. After adding applicable work types, select items that you wish to quote. Enter the sub-quote quantities and add comments, if desired. Adding or removing items and work types can be done quickly. If needed, you can save the sub-quote for completion at a later time.
2. Create sub-quotes for the subcontracting community:
    a. Create sub-quotes with ease using the intuitive sub-quote creator. In seven short steps, you can rapidly create a custom sub-quote directed to all subcontractors that bid on the applicable work types. Steps include: provide contact information and sub-quote expiration date, select letting and proposal, add work types and items, specify terms and conditions, upload attachments, and select vendors.
    b. Create a sub-quote to send to subcontractors or suppliers that lists the items in a proposal that you want quoted
    c. Create an unlimited number of sub-quotes for items you want quoted, and optionally mark them as a DBE-preferred request
    d. Add attachments to sub-quotes
3. View sub-quote requests & responses:
    a. After logging into the Bid Express service, you can quickly review all of your sub-quote requests and all unsolicited sub-quote requests from subcontractors. To simplify the Small Business Network home screen, sub-quote requests can be hidden with one click if they are not applicable.
    b. View or receive unsolicited sub-quotes that subcontractors have posted, complete with terms, conditions and pricing
4. View Record of Subcontractor Outreach Effort:
    a. For each sub-quote produced, a *Record of Subcontractor Outreach Effort* is generated that shows the response statistics for a particular sub-quote. If accepted by the letting agency, this report may serve as proof of a "Good Faith" effort in reaching out to the DBE community.
    b. Easily locate pre-qualified and certified small and disadvantaged businesses
    c. Advertise to small and disadvantaged businesses more efficiently and cost effectively
    d. Document your interactions with subs/DBEs by producing an Outreach Report (may be accepted as proof of DBE outreach at the discretion of each agency)

The Small Business Network is a part of the Bid Express® service that was created to ensure that small businesses have a centralized area to access information about upcoming projects. It can help small businesses learn more about opportunities, compete more effectively, network with other contractors and subcontractors, and win more jobs.

1. View and reply to sub-quote requests from primes:
    a. After logging into the Bid Express service, you can quickly review all incoming sub-quote requests and all unsolicited sub-quotes created by your company. Receive notifications by selected work type. To simplify on the Small Business Network home screen, sub-quote requests can be filtered by work types relevant to your interests, or hidden with one click if they are not applicable.
2. Select items when responding to sub-quote requests from primes:
    a. You have the freedom to choose and price any number of items when responding to a sub-quote request. Quantities can be modified, and per-item comments are also available.
    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 an per-item basis as well.
    b. Create an unsolicited sub-quote that lists the items from a proposal that you want to quote, include pricing, terms and conditions, and send it to selected prime/plan holder
    c. Add attachments to a sub-quote
    d. Add unsolicited work items to sub-quotes that you are responding to
5. Easy Access to Valuable Information
    a. Receive a confirmation that your sub-quote was opened by a prime
    b. View Bid Tab Analysis data from past bids, including the high, average and low prices of items.
    c. View important notices and publications from DOT targeted to small and disadvantaged businesses
6. Accessing Small Business Network for WisDOT contracting opportunities
    a. If you are a contractor not yet subscribing to the Bid Express service, go to **www.bidx.com** and select "Order Bid Express." The Small Business Network is a part of the Bid Express Basic Service.
    b. DBE firms can request a Bid Express Small Business Network Account at no cost by calling 414-438-4588

ADDITIONAL SPECIAL PROVISION 4

Payment to First-Tier Subcontractors

Within 10 calendar days of receiving a progress payment for work completed by a subcontractor, pay the subcontractor for that work. The prime contractor may withhold payment to a subcontractor if, within 10 calendar days of receipt of that progress payment, the prime contractor provides written notification to the subcontractor and the department documenting "just cause" for withholding payment.

The prime contractor may also withhold routine retainage from payments due subcontractors.

Payment to Lower-Tier Subcontractors

Ensure that subcontracting agreements at all tiers provide prompt payment rights to lower-tier subcontractors that parallel those granted first-tier subcontractors in this provision.

Release of Routine Retainage

After granting substantial completion the department may reduce the routine retainage withheld from the prime contractor to 75 percent of the original total amount retained.

When the Department sends the semi-final estimate the department may reduce the routine retainage withheld from the prime contractor to 10 percent of the original total amount retained.

Within 30 calendar days of receiving the semi-final estimate from the department, submit written certification that subcontractors at all tiers are paid in full for acceptably completed work and that no routine retainage is being withheld. The department will pay the prime contractor in full and reduce the routine retainage withheld from the prime contractor to zero when the department approves the final estimate.

This special provision does not limit the right of the department, prime contractor, or subcontractors at any tier to withhold payment for work not acceptably completed or work subject to an unresolved contract dispute.

ADDITIONAL SPECIAL PROVISION 6
ASP 6 - Modifications to the standard specifications

Make the following revisions to the standard specifications:

450.3.2.1 General

Replace the entire text with the following effective with the January 2015 letting:

(1) Do not place asphaltic mixture when the air temperature approximately 3 feet above grade, in shade, and away from artificial heat sources is less than 36 F for upper layers or 32 F for lower layers unless the engineer allows in writing. The contractor should place HMA pavement for projects on or north of STH 29 between May 1 and October 15 inclusive and for projects south of STH 29 between April 15 and November 1 inclusive. Notify the engineer at least one business day before paving.

(2) Unless the contract specifies otherwise, conform to the following:

- Keep the road open to all traffic during construction.
- Prepare the existing foundation for treatment as specified in 211.
- Incorporate loose roadbed aggregate as a part of preparing the foundation, in shoulder construction, or dispose of as the engineer approves.

(3) Place asphaltic mixture only on a prepared, firm, and compacted base, foundation layer, or existing pavement substantially surface-dry and free of loose and foreign material. Do not place over frozen subgrade or base, or where the roadbed is unstable.

450.5 Payment

Replace the entire text with the following effective with the May 2015 letting:

(1) All costs of furnishing, maintaining, and operating the truck scale or other weighing equipment and furnishing the weigh tickets are incidental to the contract.

(2) Nonconforming material allowed to remain in place is subject to price adjustment under 105.3.2.

(3) Full-depth sawing to remove integrally placed safety edge where not required is incidental to the contract.

(4) The contractor is responsible for the quality of HMA pavement placed in cold weather. If because of an excusable compensable delay under 108.10.3, the engineer directs the contractor to pave when the temperature is less than 36 F for the upper layer or less than 32 F for lower layers, the department:

- Will relieve the contractor of responsibility for damage and defects the engineer attributes to cold weather paving.
- Will not assess disincentives for density or ride.

455.3.2.1 General

Replace the paragraphs one and two with the following effective with the January 2015 letting:

(1) Apply tack coat only when the air temperature is 32 F or more unless the engineer approves otherwise in writing. Before applying tack coat ensure that the surface is dry and reasonably free of loose dirt, dust, or other foreign matter. Do not apply if weather or surface conditions are unfavorable or before impending rains.

(2) Use tack material of the type and grade the contract specifies. The contractor may, with the engineer's approval, dilute tack material as allowed under 455.2.4. Provide calculations using the asphalt content as-received from the supplier and subsequent contractor dilutions to show that as-placed material has 50 percent or more residual asphalt content. Apply at 0.050 to 0.070 gallons per square yard, after dilution, unless the contract designates otherwise. The engineer may adjust the application rate based on surface conditions. Limit application each day to the area the contractor expects to pave during that day.

460.2.2.3 Aggregate Gradation Master Range

Replace paragraph one with the following effective with the December 2014 letting:

(1) Ensure that the aggregate blend, including recycled material and mineral filler, conforms to the gradation requirements in table 460-1. The values listed are design limits; production values may exceed those limits.

TABLE 460-1 AGGREGATE GRADATION MASTER RANGE AND VMA REQUIREMENTS

SIEVE	PERCENTS PASSING DESIGNATED SIEVES						
	NOMINAL SIZE						
	37.5 mm	25.0 mm	19.0 mm	12.5 mm	9.5 mm	SMA 12.5 mm	SMA 9.5 mm
50.0-mm	100						
37.5-mm	90 –100	100					
25.0-mm	90 max	90 -100	100				
19.0-mm	___	90 max	90 -100	100		100	
12.5-mm	___	___	90 max	90 -100	100	90 - 97	100
9.5-mm	___	___	___	90 max	90 -100	58 - 72	90 - 100
4.75-mm	___	___	___	___	90 max	25 - 35	35 - 45
2.36-mm	15 – 41	19 - 45	23 - 49	28 - 58	20 - 65	15 - 25	18 - 28
75-µm	0 – 6.0	1.0 - 7.0	2.0 - 8.0	2.0 - 10.0	2.0 - 10.0	8.0 - 12.0	10.0 - 14.0
% MINIMUM VMA	11.0	12.0	13.0	14.0[1]	15.0[2]	16.0	17.0

[1] 14.5 for E-0.3 and E-3 mixes.

[2] 15.5 for E-0.3 and E-3 mixes.

460.3.4 Cold Weather Paving

Add a new subsection as follows effective with the May 2015 letting:

460.3.4 Cold Weather Paving

460.3.4.1 Cold Weather Paving Plan

(1) Submit a written cold weather paving plan to the engineer at the preconstruction meeting. In that plan outline material, operational, and equipment changes for paving when the air temperature approximately 3 feet above grade, in shade, and away from artificial heat sources is less than 40 F. Include the following:

- Use a department-accepted HMA mix design that incorporates a warm mix additive from the department's approved products list. Do not use a foaming process that introduces water into the mix.
- Use additional rollers.

(2) Engineer written acceptance is required for the cold weather paving plan. Engineer acceptance of the plan does not relieve the contractor of responsibility for pavement performance except as specified in 450.5(4).

460.3.4.2 Cold Weather Paving Operations

(1) Do not place asphaltic mixture when the air temperature approximately 3 feet above grade, in shade, and away from artificial heat sources is less than 40 F unless a valid engineer-accepted cold weather paving plan is in effect.

(2) If the national weather service forecast for the construction area predicts ambient air temperature less than 40 F at the projected time of paving within the next 24 hours, confirm or submit revisions to a previously engineer-accepted cold weather paving plan for engineer validation. Upon validation of the plan, the engineer will allow paving for the next day. Once in effect, pave conforming to the engineer-accepted cold weather paving plan for the balance of that work day or shift regardless of the temperature at the time of paving.

460.4 Measurement

Add paragraph two as follows effective with the January 2015 letting:

(2) The department will measure HMA Cold Weather Paving by the ton of HMA mixture for pavement placed conforming to an engineer-accepted cold weather paving plan.

460.5.1 General

Revise paragraph one as follows effective with the January 2015 letting:

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

ITEM NUMBER	DESCRIPTION	UNIT
460.1100	HMA Pavement Type E-0.3	TON
460.1101	HMA Pavement Type E-1	TON
460.1103	HMA Pavement Type E-3	TON
460.1110	HMA Pavement Type E-10	TON
460.1130	HMA Pavement Type E-30	TON
460.1132	HMA Pavement Type E-30X	TON
460.1700	HMA Pavement Type SMA	TON
460.2000	Incentive Density HMA Pavement	DOL
460.4000	HMA Cold Weather Paving	TON

460.5.2.2 Disincentive for HMA Pavement Density

Revise paragraph two as follows effective with the January 2015 letting:

(2) The department will not assess density disincentives for pavement placed in cold weather because of a department-caused delay as specified in 450.5(4).

460.5.2.4 Cold Weather Paving

Add a new subsection as follows effective with the May 2015 letting:

460.5.2.4 Cold Weather Paving

(1) Payment for HMA Cold Weather Paving is full compensation for additional materials and equipment specified for cold weather paving under 460.3.4 including costs for preparing, administering, and following the contractor's cold weather paving plan. The department will not pay for HMA Cold Weather Paving for HMA placed on days when the department is assessing liquidated damages.

(2) If HMA pavement is placed under 460.3.4 and the HMA Cold Weather Paving bid item is not in the contract, the department will pay for the additional costs specified in 460.5.2.4(1) as extra work. The department will pay separately for HMA pavement under the appropriate HMA Pavement bid items.

465.2 Materials

Replace paragraph two with the following effective with the December 2014 letting:

(2) Under the other 465 bid items, the contractor need not submit a mix design. Furnish aggregates mixed with a type AC asphaltic material, except under the Asphaltic Curb bid item furnish PG58-28 asphaltic material. Use coarse and fine mineral aggregates uniformly coated and mixed with the asphaltic material in an engineer-approved mixing plant. The contractor may include reclaimed asphaltic pavement materials in the mixture.

506.3.2 Shop Drawings

Replace the entire text with the following effective with the May 2015 letting:

(1) Ensure that shop drawings conform to the contract plans and provide additional details, dimensions, computations, and other information necessary for completely fabricating and erecting the work. Include project and structure numbers on each shop drawing sheet.

(2) Check shop drawings and submit electronically to the department for review before beginning fabrication. For primary fabrication items, also certify that shop drawings conform to quality control standards by submitting department form DT2333. Department review does not relieve the contractor from responsibility for errors or omissions on shop drawings.

(3) Shop drawings are part of the contract. The department must approve differences between shop drawings and contract plans. The contractor bears the costs of department-approved substitutions. Do not deviate from or revise drawings without notifying the department and resubmitting revised drawings.

(4) Ensure that the fabricator delivers 3 sets of shop drawings for railroad structures to the railroad company upon contract completion.

Bid Items Added

Add the following new bid item effective with the January 2015 letting:

ITEM NUMBER	DESCRIPTION	UNIT
460.4000	HMA Cold Weather Paving	TON

Errata

Make the following corrections to the standard specifications:

501.3.2.4.4 Water Reducer

Correct errata by deleting the reference to footnote 6 for grade D concrete.

(1) Add a water reducing admixture conforming to 501.2.3. Determine the specific type and rate of use based on the atmospheric conditions, the desired properties of the finished concrete and the manufacturer's recommended rate of use. The actual rate of use shall at least equal the manufacturer's recommended rate, and both the type and rate used require the engineer's approval before use.

506.5 Payment

Correct errata by changing the reference to 506.3.22.

(9) The department will limit costs for inspections conducted under 506.3.22 to $0.05 per pound of material and deduct costs in excess of that amount from payment due the contractor. The department will determine costs for in-house inspections based on hourly rates for department staff plus overhead and use invoiced costs for contracted-out inspections. The department will administer deductions for the contractor's share of the total inspection cost under the Excess Costs For Fabrication Shop Inspection administrative item.

ADDITIONAL SPECIAL PROVISION 7

A. Reporting 1st Tier and DBE Payments During Construction

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

B. Costs for conforming to this special provision are incidental to the contract.

ADDITIONAL SPECIAL PROVISION 9
Electronic Certified Payroll Submittal

(1) Use the department's Civil Rights Compliance System (CRCS) to submit certified payrolls electronically. Details are available online through the department's highway construction contractor information (HCCI) site on the Labor, Wages, and EEO Information page at:

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

(2) Ensure that all tiers of subcontractors, as well as all trucking firms, submit their weekly certified payrolls electronically through CRCS. These payrolls are due within seven calendar days following the close of the payroll period. Every firm providing physical labor towards completing the project is a subcontractor under this special provision.

(3) Upon receipt of contract execution, promptly make all affected firms aware of the requirements under this special provision and arrange for them to receive CRCS training as they are about to begin payrolls. The department will provide training either in a classroom setting at one of our regional offices or by telephone. Contact Tess Mulrooney at 608-267-4489 to schedule the training.

(4) The department will reject all paper submittals of forms DT-1816 and DT-1929 for information required under this special provision. All costs for conforming to this special provision are incidental to the contract.

(5) Firms wishing to export payroll data from their computer system into CRCS should have their payroll coordinator send several sample electronic files to Tess two months before a payroll needs to be submitted. Not every contractor's payroll system is capable of producing export files. For details, see pages 17-22 of the CRCS System Background Information manual available online on the Labor, Wages, and EEO Information page at:

http://wisconsindot.gov/Documents/doing-bus/civil-rights/labornwage/crcs-payroll-manual.pdf

REQUIRED CONTRACT PROVISIONS
FEDERAL-AID CONSTRUCTION CONTRACTS

I. General
II. Nondiscrimination
III. Nonsegregated Facilities
IV. Davis-Bacon and Related Act Provisions
V. Contract Work Hours and Safety Standards Act Provisions
VI. Subletting or Assigning the Contract
VII. Safety: Accident Prevention
VIII. False Statements Concerning Highway Projects
IX. Implementation of Clean Air Act and Federal Water Pollution Control Act
X. Compliance with Governmentwide Suspension and Debarment Requirements
XI. Certification Regarding Use of Contract Funds for Lobbying

ATTACHMENTS

A. Employment and Materials Preference for Appalachian Development Highway System or Appalachian Local Access Road Contracts (included in Appalachian contracts only)

I. GENERAL

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under Title 23 (excluding emergency contracts solely intended for debris removal). The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services).

The applicable requirements of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The prime contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Form FHWA-1273 must be included in all Federal-aid design-build contracts, in all subcontracts and in lower tier subcontracts (excluding subcontracts for design services, purchase orders, rental agreements and other agreements for supplies or services). The design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Contracting agencies may reference Form FHWA-1273 in bid proposal or request for proposal documents, however, the Form FHWA-1273 must be physically incorporated (not referenced) in all contracts, subcontracts and lower-tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services related to a construction contract).

2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract.

3. A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.

4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by convicts who are on parole, supervised release, or probation. The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors.

II. NONDISCRIMINATION

The provisions of this section related to 23 CFR Part 230 are applicable to all Federal-aid construction contracts and to all related construction subcontracts of $10,000 or more. The provisions of 23 CFR Part 230 are not applicable to material supply, engineering, or architectural service contracts.

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR 60, 29 CFR 1625-1627, Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The contractor and all subcontractors must comply with: the requirements of the Equal Opportunity Clause in 41 CFR 60-1.4(b) and, for all construction contracts exceeding $10,000, the Standard Federal Equal Employment Opportunity Construction Contract Specifications in 41 CFR 60-4.3.

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR 60, and 29 CFR 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), and Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The following provision is adopted from 23 CFR 230, Appendix A, with appropriate revisions to conform to the U.S. Department of Labor (US DOL) and FHWA requirements.

1. Equal Employment Opportunity: Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (28 CFR 35, 29 CFR 1630, 29 CFR 1625-1627, 41 CFR 60 and 49 CFR 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140 shall constitute the EEO and specific affirmative action standards for the contractor's project activities under

this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract.

b. The contractor will accept as its operating policy the following statement:

"It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, pre-apprenticeship, and/or on-the-job training."

2. EEO Officer: The contractor will designate and make known to the contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active EEO program and who must be assigned adequate authority and responsibility to do so.

3. Dissemination of Policy: All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:

a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer.

b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.

c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minorities and women.

d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.

e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

4. Recruitment: When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.

a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish with such identified sources procedures whereby minority and women applicants may be referred to the contractor for employment consideration.

b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.

c. The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such applicants will be discussed with employees.

5. Personnel Actions: Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, national origin, age or disability. The following procedures shall be followed:

a. The contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.

b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.

c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.

d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of their avenues of appeal.

6. Training and Promotion:

a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are

applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.

b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).

c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.

d. The contractor will periodically review the training and promotion potential of employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.

7. Unions: If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:

a. The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.

b. The contractor will use good faith efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age or disability.

c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the contracting agency and shall set forth what efforts have been made to obtain such information.

d. In the event the union is unable to provide the contractor with a reasonable flow of referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age or disability; making full efforts to obtain qualified and/or qualifiable minorities and women. The failure of a union to provide sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.

8. Reasonable Accommodation for Applicants / Employees with Disabilities: The contractor must be familiar with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established there under. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.

9. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment: The contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.

a. The contractor shall notify all potential subcontractors and suppliers and lessors of their EEO obligations under this contract.

b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

10. Assurance Required by 49 CFR 26.13(b):

a. The requirements of 49 CFR Part 26 and the State DOT's U.S. DOT-approved DBE program are incorporated by reference.

b. The contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the contracting agency deems appropriate.

11. Records and Reports: The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.

a. The records kept by the contractor shall document the following:

(1) The number and work hours of minority and non-minority group members and women employed in each work classification on the project;

(2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and

(3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women;

b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on Form FHWA-1391. The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor

will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

III. NONSEGREGATED FACILITIES

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of $10,000 or more.

The contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color, religion, sex, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location, under the contractor's control, where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

IV. DAVIS-BACON AND RELATED ACT PROVISIONS

This section is applicable to all Federal-aid construction projects exceeding $2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size). The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. Contracting agencies may elect to apply these requirements to other projects.

The following provisions are from the U.S. Department of Labor regulations in 29 CFR 5.5 “Contract provisions and related matters” with minor revisions to conform to the FHWA-1273 format and FHWA program requirements.

1. Minimum wages

a. All laborers and mechanics employed or working upon the site of the work, will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph 1.d. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph 1.b. of this section) and the Davis-Bacon poster (WH–1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

b.(1) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

(i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(ii) The classification is utilized in the area by the construction industry; and

(iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(2) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(3) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. The Wage and Hour Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or

will notify the contracting officer within the 30-day period that additional time is necessary.

(4) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs 1.b.(2) or 1.b.(3) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

c. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

d. If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

2. Withholding

The contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor under this contract, or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the contracting agency may, after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

3. Payrolls and basic records

a. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

b.(1) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the contracting agency. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g. , the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH–347 is available for this purpose from the Wage and Hour Division Web site at http://www.dol.gov/esa/whd/forms/wh347instr.htm or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the contracting agency for transmission to the State DOT, the FHWA or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the contracting agency..

(2) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(i) That the payroll for the payroll period contains the information required to be provided under §5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under §5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;

(ii) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;

(iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH–347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(2) of this section.

(4) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.

c. The contractor or subcontractor shall make the records required under paragraph 3.a. of this section available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the FHWA may, after written notice to the contractor, the contracting agency or the State DOT, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

4. Apprentices and trainees

a. Apprentices (programs of the USDOL).

Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice.

The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

b. Trainees (programs of the USDOL).

Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration.

The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration.

Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

c. Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.

d. Apprentices and Trainees (programs of the U.S. DOT).

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeymen shall not be greater than permitted by the terms of the particular program.

5. Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.

6. Subcontracts. The contractor or subcontractor shall insert Form FHWA-1273 in any subcontracts and also require the subcontractors to include Form FHWA-1273 in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.

7. Contract termination: debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

8. Compliance with Davis-Bacon and Related Act requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.

9. Disputes concerning labor standards. Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

10. Certification of eligibility.

a. By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

c. The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

The following clauses apply to any Federal-aid construction contract in an amount in excess of $100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.

1. Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

2. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (1.) of this section, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1.) of this section, in the sum of $10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1.) of this section.

3. Withholding for unpaid wages and liquidated damages. The FHWA or the contacting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2.) of this section.

4. Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1.) through (4.) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1.) through (4.) of this section.

VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System.

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).

a. The term “perform work with its own organization” refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions:

(1) the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;
(2) the prime contractor remains responsible for the quality of the work of the leased employees;
(3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and
(4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.

b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract.

2. The contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.

3. The contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.

4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.

5. The 30% self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements.

VII. SAFETY: ACCIDENT PREVENTION

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract.

2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).

3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C.3704).

VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR 635) in one or more places where it is readily available to all persons concerned with the project:

18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 1, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined under this title or imprisoned not more than 5 years or both."

IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

By submission of this bid/proposal or the execution of this contract, or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

1. That any person who is or will be utilized in the performance of this contract is not prohibited from receiving an award due to a violation of Section 508 of the Clean Water Act or Section 306 of the Clean Air Act.
2. That the contractor agrees to include or cause to be included the requirements of paragraph (1) of this Section X in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements.

X. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost $25,000 or more – as defined in 2 CFR Parts 180 and 1200.

1**. Instructions for Certification – First Tier Participants:**

a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.

b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction.

c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default.

d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

e. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. “First Tier Covered Transactions” refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). “Lower Tier Covered Transactions” refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). “First Tier Participant” refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). “Lower Tier Participant” refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.

g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the $25,000 threshold.

h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (https://www.epls.gov/), which is compiled by the General Services Administration.

i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

j. Except for transactions authorized under paragraph (f) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

* * * * *

2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:

a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:

(1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency;

(2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

(3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (a)(2) of this certification; and

(4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

2. **Instructions for Certification - Lower Tier Participants:**

(Applicable to all subcontracts, purchase orders and other lower tier transactions requiring prior FHWA approval or estimated to cost $25,000 or more - 2 CFR Parts 180 and 1200)

a. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.

b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.

d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. “First Tier Covered Transactions” refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). “Lower Tier Covered Transactions” refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). “First Tier Participant” refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). “Lower Tier Participant” refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.

f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the $25,000 threshold.

g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (https://www.epls.gov/), which is compiled by the General Services Administration.

h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the

department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

* * * * *

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:

1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency.

2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

* * * * *

XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts which exceed $100,000 (49 CFR 20).

1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier subcontracts, which exceed $100,000 and that all such recipients shall certify and disclose accordingly.

ATTACHMENT A - EMPLOYMENT AND MATERIALS PREFERENCE FOR APPALACHIAN DEVELOPMENT HIGHWAY SYSTEM OR APPALACHIAN LOCAL ACCESS ROAD CONTRACTS

This provision is applicable to all Federal-aid projects funded under the Appalachian Regional Development Act of 1965.

1. During the performance of this contract, the contractor undertaking to do work which is, or reasonably may be, done as on-site work, shall give preference to qualified persons who regularly reside in the labor area as designated by the DOL wherein the contract work is situated, or the subregion, or the Appalachian counties of the State wherein the contract work is situated, except:

a. To the extent that qualified persons regularly residing in the area are not available.

b. For the reasonable needs of the contractor to employ supervisory or specially experienced personnel necessary to assure an efficient execution of the contract work.

c. For the obligation of the contractor to offer employment to present or former employees as the result of a lawful collective bargaining contract, provided that the number of nonresident persons employed under this subparagraph (1c) shall not exceed 20 percent of the total number of employees employed by the contractor on the contract work, except as provided in subparagraph (4) below.

2. The contractor shall place a job order with the State Employment Service indicating (a) the classifications of the laborers, mechanics and other employees required to perform the contract work, (b) the number of employees required in each classification, (c) the date on which the participant estimates such employees will be required, and (d) any other pertinent information required by the State Employment Service to complete the job order form. The job order may be placed with the State Employment Service in writing or by telephone. If during the course of the contract work, the information submitted by the contractor in the original job order is substantially modified, the participant shall promptly notify the State Employment Service.

3. The contractor shall give full consideration to all qualified job applicants referred to him by the State Employment Service. The contractor is not required to grant employment to any job applicants who, in his opinion, are not qualified to perform the classification of work required.

4. If, within one week following the placing of a job order by the contractor with the State Employment Service, the State Employment Service is unable to refer any qualified job applicants to the contractor, or less than the number requested, the State Employment Service will forward a certificate to the contractor indicating the unavailability of applicants. Such certificate shall be made a part of the contractor's permanent project records. Upon receipt of this certificate, the contractor may employ persons who do not normally reside in the labor area to fill positions covered by the certificate, notwithstanding the provisions of subparagraph (1c) above.

5. The provisions of 23 CFR 633.207(e) allow the contracting agency to provide a contractual preference for the use of mineral resource materials native to the Appalachian region.

6. The contractor shall include the provisions of Sections 1 through 4 of this Attachment A in every subcontract for work which is, or reasonably may be, done as on-site work.

SEPTEMBER 2002

NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY (EXECUTIVE ORDER 11246)

1. The Offeror's or Bidder's attention is called to the "Employment Practices" and "Equal Opportunity Clause" set forth in the Required Contract Provisions, FHWA 1273.

2. The goals and timetables for minority and female participation expressed in percentage terms for the contractor's aggregate work force in each trade, on all construction work in the covered area, are as follows:

Goals for Minority Participation for Each Trade:

County	%	County	%	County	%
Adams	1.7	Iowa	1.7	Polk	2.2
Ashland	1.2	Iron	1.2	Portage	0.6
Barron	0.6	Jackson	0.6	Price	0.6
Bayfield	1.2	Jefferson	7.0	Racine	8.4
Brown	1.3	Juneau	0.6	Richland	1.7
Buffalo	0.6	Kenosha	3.0	Rock	3.1
Burnett	2.2	Kewaunee	1.0	Rusk	0.6
Calumet	0.9	La Crosse	0.9	St. Croix	2.9
Chippewa	0.5	Lafayette	0.5	Sauk	1.7
Clark	0.6	Langlade	0.6	Sawyer	0.6
Columbia	1.7	Lincoln	0.6	Shawano	1.0
Crawford	0.5	Manitowoc	1.0	Sheboygan	7.0
Dane	2.2	Marathon	0.6	Taylor	0.6
Dodge	7.0	Marinette	1.0	Trempealeau	0.6
Door	1.0	Marquette	1.7	Vernon	0.6
Douglas	1.0	Menominee	1.0	Vilas	0.6
Dunn	0.6	Milwaukee	8.0	Walworth	7.0
Eau Claire	0.5	Monroe	0.6	Washburn	0.6
Florence	1.0	Oconto	1.0	Washington	8.0
Fond du Lac	1.0	Oneida	0.6	Waukesha	8.0
Forest	1.0	Outagamie	0.9	Waupaca	1.0
Grant	0.5	Ozaukee	8.0	Waushara	1.0
Green	1.7	Pepin	0.6	Winnebago	0.9
Green Lake	1.0	Pierce	2.2	Wood	0.6

Goals for female participation for each trade: 6.9%

These goals are applicable to all the contractor's construction work, (whether or not it is federal or federally assisted), performed in the covered area. If the contractor performs construction work in the geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the contractor also is subject to the goals for both its federally involved and nonfederally involved construction.

The contractor's compliance with the Executive Order and the Regulations in 41 CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3(a), and its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from contractor to contractor or from project to project for the sole purpose of meeting the contractor's goals shall be a violation of the contract, the Executive Order and the Regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

3. The contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs within ten (10) working days of award of any construction subcontract in excess of $10,000.00 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address and telephone number of the subcontractor, employer identification number of the subcontractor; estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the subcontract is to be performed.

   As referred to in this section, the Director means:

   Director
   Office of Federal Contract Compliance Programs
   Ruess Federal Plaza
   310 W. Wisconsin Ave., Suite 1115
   Milwaukee, WI 53202

   The "Employer Identification Number" means the Federal Social Security number used on the Employer's Quarterly Federal Tax Return, U.S. Treasury Department Form 941.

4. As used in this notice, and in the contract resulting from solicitation, the "covered area" is the county(ies) in Wisconsin to which this proposal applies.

APRIL 2013

ADDITIONAL FEDERAL-AID PROVISIONS

NOTICE TO ALL BIDDERS

To report bid rigging activities call:

1-800-424-9071

The U.S. Department of Transportation (DOT) operates the above toll-free "hotline" Monday through Friday, 8:00 a.m. to 5:00 p.m., Eastern Time. Anyone with knowledge of possible bid rigging, bidding collusion, or other fraudulent activities should use the "hotline" to report such activities.

The "hotline" is part of the DOT's continuing effort to identify and investigate highway construction contract fraud and abuse and is operated under the direction of the DOT Inspector General. All information will be treated confidentially and caller anonymity will be respected.

Effective August 2015 letting

BUY AMERICA PROVISION

All steel and iron materials permanently incorporated in this project shall be domestic products and all manufacturing and coating processes for these materials from smelting forward in the manufacturing process must have occurred within the United States. Coating includes epoxy coating, galvanizing, painting and any other coating that protects or enhances the value of a material subject to the requirements of Buy America. The exemption of this requirement is the minimal use of foreign materials if the total cost of such material permanently incorporated in the product does not exceed one-tenth of one percent (1/10 of 1%) of the total contract cost or $2,500.00, whichever is greater. For purposes of this paragraph, the cost is that shown to be the value of the subject products as they are delivered to the project. The contractor shall take actions and provide documentation conforming to CMM 2-28.5 to ensure compliance with this “Buy America” provision.

http://wisconsindot.gov/rdwy/cmm/cm-02-28.pdf

Upon completion of the project certify to the engineer, in writing using department form WS4567, that all steel, iron, and coating processes for steel or iron incorporated into the contract work conform to these "Buy America" provisions. Attach a list of exemptions and their associated costs to the certification form. Department form WS4567 is available at:

http://wisconsindot.gov/rdwy/worksheets/ws4567.doc

Effective with September 2004 Letting

WISCONSIN DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS AND TRANSPORTATION FACILITIES

SUPPLEMENTAL REQUIRED CONTRACT PROVISIONS

I. Wage Rates, Hours of labor and payment of Wages
II. Payroll Requirements
III. Postings at the Site of the Work
IV. Affidavits
V. Wage Rate Redistribution
VI. Additional Classifications

I. WAGE RATES, HOURS OF LABOR AND PAYMENT OF WAGES

The schedule of "Minimum Wage Rates" attached hereto and made a part hereof furnishes the prevailing wage rates that have been determined pursuant to Section 103.50 of the Wisconsin Statutes. These wage rates are the minimum required to be paid to the various laborers, workers, mechanics and truck drivers employed by contractors and subcontractors on the construction work embraced by the contract and subject to prevailing hours and wages under Section 103.50, Stats. If necessary to employ laborers, workers, mechanics or truck drivers whose classification is not listed on the schedule, they shall be paid at rates conformable to those listed for similar classifications. Apprentices shall be paid at rates not less than those prescribed in their state indenture contacts.

While the wage rates shown are the minimum rates required by the contract to be paid during its life, this in not a representation that labor can be obtained at these rates. It is the responsibility of bidders to inform themselves as to the local labor conditions and prospective changes or adjustments of wage rates. No increase in the contract price shall be allowed or authorized on account of the payment of wage rates in excess of those listed herein.

Pursuant to Section 103.50 of the Wisconsin Statutes, the prevailing hours of labor have been determined to be up to 10 hours per day and 40 hours per calendar week Monday through Friday. If any laborer, worker, mechanic or truck driver is permitted or required to work more than the prevailing number of hours per day or per calendar week on this contract, they shall be paid for all hours in excess of the prevailing hours at a rate of at least one and one-half (1 1/2) times their hourly rate of pay. All work on Saturday, Sunday and the following holidays is to be paid at time and a half: (1) January 1, (2) the last Monday in May, (3) July 4, (4) the first Monday in September, (5) the fourth Thursday in November, (6) December 25, (7) the day before if January 1, July 4 or December 25 falls on a Saturday and (8) the day following if January 1, July 4 or December 25 falls on a Sunday.

All laborers, workers, mechanics and truck drivers shall be paid unconditionally not less often than once a week. Persons who own and operate their own trucks must receive the prevailing truck driver rate for the applicable type of truck (i.e. 2 axle, 3 or more axle, articulated, eculid or dumptor) he or she operates, plus an agreed upon amount for the use of his or her truck. Every owner-operator MUST be paid separately for their driving and for the use of their truck.

For those projects subject to the requirements of the Davis-Bacon Act, the Secretary of Labor will also have determined "Minimum Wage Rates" for work to be performed under the contract. These rates are, for all or most of the labor, worker, mechanic or truck driver classifications, identical to those established under Section 103.50 of the Wisconsin Statutes. In the event the rates are not identical, the higher of the two rates will govern.

II. PAYROLL REQUIREMENTS

All contractors and subcontractors must submit weekly Certified Payrolls and Compliance Statement verifying that all laborers, workers, mechanics and truck drivers working on the project have been paid the prevailing wage rates for all work performed under the contract required by Section 103.50 of the Wisconsin Statutes.

III. POSTINGS AT THE SITE OF THE WORK

In addition to the required postings furnished by the Department, the contractor shall post the following in at least one conspicuous place at the site of work:

a. "NOTICE TO EMPLOYEES," which provides information required to be posted by the provisions of Section 103.50 of the Wisconsin Statutes.

b. A copy of the State of Wisconsin Minimum Wages Rates. (Four pages.)

c. A copy of the contractor's Equal Employment Opportunity Policy.

d. On any project involving federal aid, in addition to the furnished postings, the contractor shall post a copy of the "Davis-Bacon Act, Minimum Wage Rates". (Three pages.)

IV. WAGE RATE REDISTRIBUTION

The amount specified as the hourly basic rate of pay and the amount(s) specified as the fringe benefit contribution(s), for all classes of laborers, workers, mechanics or truck drivers may be redistributed, when necessary, to conform to those specified in any applicable collective bargaining agreement, provided that both parties to such agreement

request and receive the approval for any such redistribution from both the Department of Transportation and the Department of Workforce Development prior to the implementation of such redistribution.

V. ADDITIONAL CLASSIFICATIONS

Any unlisted laborer or mechanic classification that is needed to perform work on this project, and is not included within the scope of any of the classifications listed in the application prevailing wage rate determination, may be added after award only if all of the following criteria have been met:

1. The affected employer(s) must make a written request to WisDOT Central Office to utilize the unlisted classification on this project.

2. The request must indicate the scope of the work to be performed by the unlisted classification and must indicate the proposed wage/fringe benefit package that the unlisted classification is to receive.

3. The work to be performed by the unlisted classification must not be performed by a classification that is included in the applicable prevailing wage rate determination.

4. The unlisted classification must be commonly employed in the area where the project is located.

5. The proposed wage/fringe benefit package must bear a reasonable relationship to those set forth in the applicable prevailing wage rate determination.

6. The request should be made prior to the actual performance of the work by the unlisted classification.

7. DWD must approve the use of the unlisted classification and the proposed wage/fringe benefit package. USDOL also must approve the use of the unlisted classification and the proposed wage/fringe benefit package on federal aid projects.

8. WisDOT and DWD may amend the proposed wage/fringe benefit package, as deemed necessary, and may set forth specific employment ratios and scope of work requirements in the approval document.

The approved wage/fringe benefit package shall be paid to all laborers, workers, mechanics or truck drivers performing work within the scope of that performed by the unlisted classification, from the first day on which such work is performed. In the event that work is performed by the unlisted classification prior to approval, the wage/fringe benefit package to be paid for such work must be in conformance with the wage/fringe

benefit package approved for such work. Under this arrangement a retroactive adjustment in wages and/or fringe benefits may be required to be made to the affected laborers, workers, mechanics or truck drivers by the affected employer(s).

ANNUAL PREVAILING WAGE RATE DETERMINATION
FOR ALL STATE HIGHWAY PROJECTS
MILWAUKEE COUNTY

Compiled by the State of Wisconsin - Department of Workforce Development
for the Department of Transportation
Pursuant to s. 103.50, Stats.
Issued on May 1, 2015

CLASSIFICATION: Contractors are required to call the Department of Workforce Development if there are any questions reqarding the proper trade or classification to be used for any worker on a public works project.

OVERTIME: Time and one-half must be paid for all hours worked over 10 hours per day and 40 hours per calendar week and for all hours worked on Saturday, Sunday and the following six (6) holidays: January 1; the last Monday in May; July 4; the 1st Monday in September; the 4th Thursday in November; December 25; the day before if January 1, July 4 or December 25 falls on a Saturday; the day following if January 1, July 4 or December 25 falls on a Sunday.

FUTURE INCREASE: If indicated for a specific trade or occupation, the full amount of such increase MUST be added to the "TOTAL" indicated for such trade or occupation on the date(s) such increase(s) becomes effective.

PREMIUM PAY: If indicated for a specific trade or occupation, the full amount of such pay MUST be added to the "HOURLY BASIC RATE OF PAY" indicated for such trade or occupation, whenever such pay is applicable.

SUBJOURNEY: Wage rates may be available for some of the classifications indicated below. Any employer that desires to use any subjourney classification on a project MUST request the applicable wage rate from the Department of Workforce Development PRIOR to the date such classification is used on such project. Form ERD-10880 is available for this purpose and can be obtained by writing to the Department of Workforce Development, Equal Rights Division, P.O. Box 8928, Madison, WI 53708.

TRADE OR OCCUPATION	HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
	$	$	$
Bricklayer, Blocklayer or Stonemason	35.37	17.99	53.36
Carpenter	33.68	19.99	53.67
Cement Finisher	32.75	19.21	51.96
Future Increase(s): Add $1.87 on 6/1/15; Add $1.75 on 6/1/16. Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add $1.40/hr when the Wisconsin Department of Transportation or responsible governing agency requires that work be performed at night under artificial illumination with traffic control and the work is completed after sunset and before sunrise.			
Electrician	33.93	22.77	56.70
Premium Pay: DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day.			
Fence Erector	23.73	19.09	42.82
Ironworker	30.77	23.97	54.74
Premium Pay: DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day.			
Line Constructor (Electrical)	37.43	18.19	55.62
Painter	29.22	16.69	45.91
Pavement Marking Operator	30.27	18.79	49.06
Piledriver	30.11	26.51	56.62
Future Increase(s): Add $1.50/hr on 6/1/2015; Add $1.60/hr on 6/1/2016. Premium Pay: Add $.65/hr for Piledriver Loftsman; Add $.75/hr for Sheet Piling Loftsman. DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day.			
Roofer or Waterproofer	29.40	17.05	46.45
Teledata Technician or Installer	24.89	17.15	42.04
Tuckpointer, Caulker or Cleaner	33.76	17.82	51.58

TRADE OR OCCUPATION	HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
	$	$	$
Underwater Diver (Except on Great Lakes)	35.40	15.90	51.30
Heavy Equipment Operator - ELECTRICAL LINE CONSTRUCTION ONLY	35.55	15.57	51.12
Light Equipment Operator -ELECTRICAL LINE CONSTRUCTION ONLY	31.60	14.64	46.24
Heavy Truck Driver - ELECTRICAL LINE CONSTRUCTION ONLY	27.65	13.44	41.09
Light Truck Driver - ELECTRICAL LINE CONSTRUCTION ONLY	25.68	12.83	38.51
Groundman - ELECTRICAL LINE CONSTRUCTION ONLY	21.75	11.63	33.38
TRUCK DRIVERS			
Single Axle or Two Axle	25.18	18.31	43.49
Future Increase(s): Add $1.15/hr on 6/1/2015. Premium Pay: DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day.			
Three or More Axle	25.28	18.31	43.59
Future Increase(s): Add $1.15/hr on 6/1/2015. Premium Pay: DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day.			
Articulated, Euclid, Dumptor, Off Road Material Hauler	30.27	21.15	51.42
Future Increase(s): Add $1.25/hr on 6/1/2015; Add $1.30/hr on 6/1/2016; Add $1.25/hr on 6/1/2017. Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add $1.50/hr night work premium. See DOT'S website for details about the applicability of this night work premium at: http:/ / www.dot.wi.gov/ business/ civilrights/ laborwages/ pwc. htm.			
Pavement Marking Vehicle	23.16	17.13	40.29
Shadow or Pilot Vehicle	24.37	17.77	42.14
Truck Mechanic	24.52	17.77	42.29
LABORERS			
General Laborer	27.06	20.03	47.09
Future Increase(s): Add $1.05/hr eff. 06/01/2015; Add $1.00/hr eff. 06/01/2016; Add $1.00/hr eff. 06/01/2017 Premium Pay: Add $.15/hr for air tool operator, joint sawer and filler (pavement), vibrator or tamper operator (mechanical hand operated), chain saw operator and demolition burning torch laborer; Add $.35/hr for bituminous worker (raker and luteman), formsetter (curb, sidewalk and pavement) and strike off man; Add $.50/hr for line and grade specialist; Add $.65/hr for blaster and powderman; Add $2.01/hr for topman; Add $2.46/hr for bottomman; Add $3.23/hr for pipelayer. / DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add $1.25/hr for work on projects involving temporary traffic control setup, for lane and shoulder closures, when work under artificial illumination conditions is necessary as required by the project provisions (including prep time prior to and/or cleanup after such time period).			
Asbestos Abatement Worker	22.05	18.41	40.46
Landscaper	27.06	20.03	47.09
Future Increase(s): Add $1.05/hr eff. 06/01/2015; Add $1.00/hr eff. 06/01/2016; Add $1.00/hr eff. 06/01/2017 Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add $1.25/hr for work on projects involving temporary traffic control setup, for lane and shoulder closures, when work under artificial illumination conditions is necessary as required by the project provisions (including prep time prior to and/or cleanup after such time period).			
Flagperson or Traffic Control Person	22.55	19.37	41.92

TRADE OR OCCUPATION	HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
	$	$	$
Fiber Optic Laborer (Outside, Other Than Concrete Encased)	17.71	16.01	33.72
Railroad Track Laborer	14.50	4.39	18.89
HEAVY EQUIPMENT OPERATORS			
Crane, Tower Crane, Pedestal Tower or Derrick, With Boom, Leads &/or Jib Lengths Measuring 176 Ft or Over; Crane, Tower Crane, Pedestal Tower or Derrick, With or Without Attachments, With a Lifting Capacity of Over 100 Tons, Self-Erecting Tower Crane With a Lifting Capacity Of Over 4,000 Lbs., Crane With Boom Dollies; Traveling Crane (Bridge Type). Future Increase(s): Add $1.25/hr on 6/1/2015; Add $1.30/hr on 6/1/2016; Add $1.25/hr on 6/1/2017. Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add $1.50/hr night work premium. See DOT'S website for details about the applicability of this night work premium at: http:/ / www.dot.wi.gov/ business/ civilrights/ laborwages/ pwc. htm.	37.72	21.15	58.87
Backhoe (Track Type) Having a Mfgr.'s Rated Capacity of 130,000 Lbs. or Over; Caisson Rig; Crane, Tower Crane, Portable Tower, Pedestal Tower or Derrick, With Boom, Leads &/or Jib Lengths Measuring 175 Ft or Under; Crane, Tower Crane, Portable Tower, Pedestal Tower or Derrick, With or Without Attachments, With a Lifting Capacity of 100 Tons or Under, Self-Erecting Tower Crane With A Lifting Capacity Of 4,000 Lbs., & Under; Dredge (NOT Performing Work on the Great Lakes); Licensed Boat Pilot (NOT Performing Work on the Great Lakes); Pile Driver. Future Increase(s): Add $1.25/hr on 6/1/2015; Add $1.30/hr on 6/1/2016; Add $1.25/hr on 6/1/2017. Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add $1.50/hr night work premium. See DOT'S website for details about the applicability of this night work premium at: http:/ / www.dot.wi.gov/ business/ civilrights/ laborwages/ pwc. htm.	37.22	21.15	58.37
Air Track, Rotary or Percussion Drilling Machine &/or Hammers, Blaster; Asphalt Heater, Planer & Scarifier; Asphalt Milling Machine; Asphalt Screed; Automatic Subgrader (Concrete); Backhoe (Track Type) Having a Mfgr.'s Rated Capacity of Under 130,000 Lbs., Backhoe (Mini, 15,000 Lbs. & Under); Bituminous (Asphalt) Plant & Paver, Screed; Boatmen (NOT Performing Work on the Great Lakes); Boring Machine (Directional, Horizontal or Vertical); Bridge (Bidwell) Paver; Bulldozer or Endloader; Concrete Batch Plant, Batch Hopper; Concrete Breaker (Large, Auto, VIbratory/Sonic, Manual or Remote); Concrete Bump Cutter, Grinder, Planing or Grooving Machine; Concrete Conveyor System; Concrete Laser/Screed; Concrete Paver (Slipform); Concrete Pump, Concrete Conveyor (Rotec or Bidwell Type); Concrete Slipform Placer Curb & Gutter Machine; Concrete Spreader & Distributor; Crane (Carry Deck, Mini) or Truck Mounted Hydraulic Crane (10 Tons or Under); Crane WIth a Lifting Capacity of 25 Tons or Under; Forestry Equipment, Timbco, Tree Shear, Tub Grinder, Processor; Gradall (Cruz-Aire Type); Grader or Motor Patrol; Grout Pump; Hydro-Blaster (10,000 PSI or Over); Loading Machine (Conveyor); Material or Stack Hoist; Mechanic or Welder; Milling Machine; Post Hole Digger or Driver; Roller (Over 5 Ton); Scraper (Self Propelled or Tractor Drawn) 5 cu yds or More Capacity; Shoulder Widener; Sideboom; Skid Rig; Stabilizing or Concrete Mixer (Self-Propelled or 14S or Over); Straddle Carrier or Travel Lift; Tractor (Scraper, Dozer, Pusher, Loader); Tractor or Truck Mounted Hydraulic Backhoe; Trencher (Wheel Type or Chain Type);	36.72	21.15	57.87

TRADE OR OCCUPATION	HOURLY BASIC RATE OF PAY $	HOURLY FRINGE BENEFITS $	TOTAL $
Tube Finisher; Tugger (NOT Performing Work on the Great Lakes); Winches & A- Frames. Future Increase(s): Add $1.25/hr on 6/1/2015; Add $1.30/hr on 6/1/2016; Add $1.25/hr on 6/1/2017. Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add $1.50/hr night work premium. See DOT'S website for details about the applicability of this night work premium at: http:/ / www.dot.wi.gov/ business/ civilrights/ laborwages/ pwc. htm.			
Belting, Burlap, Texturing Machine; Broom or Sweeper; Compactor (Self-Propelled or Tractor Mounted, Towed & Light Equipment); Concrete Finishing Machine (Road Type); Environmental Burner; Farm or Industrial Type Tractor; Fireman (Asphalt Plant, Pile Driver & Derrick NOT Performing Work on the Great Lakes); Forklift; Greaser; Hoist (Tugger, Automatic); Jeep Digger; Joint Sawer (Multiple Blade); Launch (NOT Performing Work on the Great Lakes); Lift Slab Machine; Mechanical Float; Mulcher; Power Subgrader; Robotic Tool Carrier (With or Without Attachments); Roller (Rubber Tire, 5 Ton or Under); Self Propelled Chip Spreader; Shouldering Machine; Skid Steer Loader (With or WIthout Attachments); Telehandler; Tining or Curing Machine. Future Increase(s): Add $1.25/hr on 6/1/2015; Add $1.30/hr on 6/1/2016; Add $1.25/hr on 6/1/2017. Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add $1.50/hr night work premium. See DOT'S website for details about the applicability of this night work premium at: http:/ / www.dot.wi.gov/ business/ civilrights/ laborwages/ pwc. htm.	36.46	21.15	57.61
Air Compressor (&/or 400 CFM or Over); Air, Electric or Hydraulic Jacking System; Augers (Vertical & Horizontal); Automatic Belt Conveyor & Surge Bin; Boiler (Temporary Heat); Concrete Proportioning Plant; Crusher, Screening or Wash Plant; Generator (&/or 150 KW or Over); Heaters (Mechanical); High Pressure Utility Locating Machine (Daylighting Machine); Mudjack; Oiler; Prestress Machine; Pug Mill; Pump (3 Inch or Over) or Well Points; Rock, Stone Breaker; Screed (Milling Machine); Stump Chipper; Tank Car Heaters; Vibratory Hammer or Extractor, Power Pack. Future Increase(s): Add $1.25/hr on 6/1/2015; Add $1.30/hr on 6/1/2016; Add $1.25/hr on 6/1/2017. Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add $1.50/hr night work premium. See DOT'S website for details about the applicability of this night work premium at: http:/ / www.dot.wi.gov/ business/ civilrights/ laborwages/ pwc. htm.	36.17	21.15	57.32
Fiber Optic Cable Equipment.	28.89	17.95	46.84
Work Performed on the Great Lakes Including Diver; Wet Tender or Hydraulic Dredge Engineer.	41.65	21.71	63.36
Work Performed on the Great Lakes Including 70 Ton & Over Tug Operator; Assistant Hydraulic Dredge Engineer; Crane or Backhoe Operator; Hydraulic Dredge Leverman or Diver's Tender; Mechanic or Welder.	41.65	21.71	63.36
Work Performed on the Great Lakes Including Deck Equipment Operator or Machineryman (Maintains Cranes Over 50 Tons or Backhoes 115,000 Lbs. or More); Tug, Launch or Loader, Dozer or Like Equipment When Operated on a Barge, Breakwater Wall, Slip, Dock or Scow, Deck Machinery.	35.72	17.85	53.57
Work Performed on the Great Lakes Including Deck Equipment Operator, Machineryman or Fireman (Operates 4 Units or More or Maintains Cranes 50 Tons or Under or Backhoes 115,000 Lbs. or Under); Deck Hand, Deck Engineer or Assistant Tug Operator; Off Road Trucks-Great Lakes ONLY.	35.46	20.40	55.86

SUPERSEDES DECISION WI20120010
U. S. DEPARTMENT OF LABOR
(DAVIS-BACON ACT, MINIMUM WAGE RATES)

STATE: Wisconsin
GENERAL DECISION NUMBER: WI150010
DATE: June 26, 2015
DESCRIPTION OF WORK: Highways and Airport Runway and Taxiway Construction

LABORERS CLASSIFICATION:	Basic Hourly Rates	Fringe Benefits
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, Utility Man); Batch Truck Dumper; or Cement Handler; Bituminous Worker; (Dumper, Ironer, Smoother, Tamper); Concrete Handler	$27.51	19.35
Group 2: Air Tool Operator; Joint Sawer and Filler (Pavement); Vibrator or Tamper Operator (Mechanical Hand Operated); Chain Saw Operator; Demolition Burning Torch Laborer	27.66	19.35
Group 3: Bituminous Worker (Raker and Luteman); Formsetter (Curb, Sidewalk, and Pavement); Strike Off man	27.86	19.35
Group 4: Line and Grade Specialist	28.01	19.35
Group 5: Blaster and Powderman	28.16	19.35
Group 6: Flagperson traffic control person	24.00	19.35

CLASSES OF LABORER AND MECHANICS

	Basic Hourly Rates	Fringe Benefits
Bricklayer	35.37	18.47
Carpenter	30.52	14.41
Piledriverman	27.25	19.46
Ironworker	30.77	23.96
Cement Mason/Concrete Finisher	30.69	17.53
Electrician		See Page 3
Line Construction		
Lineman	40.81	32% + 5.00
Heavy Equipment Operator	38.77	32% + 5.00
Equipment Operator	32.65	32% + 5.00
Heavy Groundman Driver	26.78	14.11
Light Groundman Driver	24.86	13.45
Groundsman	22.45	32% + 5.00
Millwrights	26.32	13.98
Painter, Brush	29.52	20.04
Painter, Spray and Sandblaster	30.27	20.04
Painter, Bridge	29.87	20.04
Well Drilling:		
Well Driller	16.52	3.70

Truck Drivers:	Basic Hourly Rates	Fringe Benefits
1 & 2 Axles	25.18	18.31
Three or More Axles; Euclids, Dumptor & Articulated, Truck Mechanic	25.38	18.31

Notes: Welders receive rate prescribed for craft performing operation to which welding is incidental. Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29 CFR, 5.5(a)(1)(ii)). Includes Modification #0 dated January 2, 2015; Modification #1 dated January 16, 2015; Modification #2 dated March 20, 2015; Modification #3 dated April 10, 2015; Modification #4 dated May 22, 2015; Modification #5 dated June 12, 2015; Modification #6 dated June 26, 2015.

SUPERSEDES DECISION WI20120010
U. S. DEPARTMENT OF LABOR
(DAVIS-BACON ACT, MINIMUM WAGE RATES)

STATE: Wisconsin
GENERAL DECISION NUMBER: WI150010
DATE: June 26, 2015
DESCRIPTION OF WORK: Highways and Airport Runway and Taxiway Construction

POWER EQUIPMENT OPERATORS CLASSIFICATION:	Basic Hourly Rates	Fringe Benefits
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	$38.27	$21.55
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 jib lengths measuring 175 feet or less, and backhoes (excavators) having a manufacturer's rated capacity of 3 cu. yds. and over, caisson rigs, pile driver, dredge operator, dredge engineer.	$37.77	$21.55
Group 3: Mechanic or welder - heavy duty equipment, cranes with a lifting capacity of 25 tons or less, concrete breaker (manual or remote); vibrator/sonic concrete breaker; concrete laser screed; concrete slipform paver; concrete batch plant operator; concrete pavement spreader - heavy duty (rubber tired); concrete spreader and distributor, automatic subgrader (concrete); concrete grinder and planing machine; concrete slipform curb and gutter machine; slipform concrete placer; tube finisher; hydro blaster (10,000 psi and over); bridge paver; concrete conveyor system; concrete pump; stabilizing mixer (self propelled); shoulder widener; asphalt plant engineer; bituminous paver; bump cutter and grooving machine; milling machine; screed (bituminous paver); asphalt heater, planer and scarifier; backhoes (excavators) having a manufacturers rated capacity of under 3 cu. yds.; grader or motor patrol; tractor		

POWER EQUIPMENT OPERATORS CLASSIFICATION: (Continued)	Basic Hourly Rates	Fringe Benefits
(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 and A-frames; post driver; material hoist operator.	$37.27	$21.55
Group 4: Greaser, roller steel (5 tons or less); roller (pneumatic tired) - self-propelled; tractor (mounted or towed compactors and light equipment); shouldering machine; self-propelled chip spreader; concrete spreader; finishing machine; mechanical float; curing machine; power subgrader; joint saw (multiple blade) belting machine; burlap machine; texturing machine; tractor, endloader (rubber tired) - light; jeep digger; fork lift; mulcher; launch operator; fireman; environmental burner.	$37.01	$21.55
Group 5: Air compressor; power pack; vibratory hammer and extractor; heavy equipment, leadman; tank car heaters; stump chipper; curb machine operator; concrete pro-portioning 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 helper.	$36.72	$21.55
Group 6: Off – road material hauler with or without ejector	$30.82	$21.55

Premium Pay:
EPA Level "A" protection - $3.00 per hour
EPA Level "B" protection - $2.00 per hour
EPA Level "C" protection - $1.00 per hours

SUPERSEDES DECISION WI20120010
U. S. DEPARTMENT OF LABOR
(DAVIS-BACON ACT, MINIMUM WAGE RATES)

STATE: Wisconsin
GENERAL DECISION NUMBER: WI150010
DATE: June 26, 2015
DESCRIPTION OF WORK: Highways and Airport Runway and Taxiway Construction

LABORERS CLASSIFICATION:	Rates	Benefits
Electricians		
Area 1	$29.00	26.5%+ 9.15
Area 2:		
Electricians	30.59	18.43
Area 3:		
Electrical contracts under $130,000	26.24	16.85
Electrical contracts over $130,000	29.41	16.97
Area 4:	29.32	28.50% + 9.27
Area 5	28.96	24.85% + 9.70
Area 6	35.25	19.30
Area 8		
Electricians	31.30	24.93% + 10.40
Area 9:		
Electricians	34.82	19.575
Area 10	29.64	20.54
Area 11	32.54	24.07
Area 12	32.87	19.23
Area 13	33.93	22.67
Teledata System Installer		
Area 14		
Installer/Technician	22.50	12.72
Sound & Communications		
Area 15		
Installer	16.47	14.84
Technician	26.00	17.70

Area 1 - 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 & Springfield), OUTAGAMIE, WAUPACA, WAUSHARA and WINNEBAGO COUNTIES.

Area 2 - ASHLAND, BARRON, BAYFIELD, BUFFALO, BURNETT, CHIPPEWA, CLARK (except Mayville, Colby, Unity, Sherman, Fremont, Lynn and Sherwood), CRAWFORD, DUNN, EAU CLAIRE, GRANT, IRON, JACKSON, LA CROSSE, MONROE, PEPIN, PIERCE, POLK, PRICE, RICHLAND, RUSK, ST. CROIX, SAWYER, TAYLOR, TREMPEALEAU, VERNON and WASHBURN COUNTIES

Area 3 - FLORENCE (townships of Aurora, Commonwealth, Fern, Florence and Homestead), MARINETTE (Niagara township)

Area 4 - BROWN, DOOR, KEWAUNEE, MANITOWOC (except Schleswig), MARINETTE (Wausauke and area south thereof), OCONTO, MENOMINEE (East of a line 6 miles West of the West boundary of Oconto County), SHAWANO (except area North of Townships of Aniwa and Hutchins) COUNTIES.

Area 5 - ADAMS, CLARK (Colby, Freemont, Lynn, Mayville, Sherman, Sherwood, Unity), FOREST, JUNEAU, LANGLADE, LINCOLN, MARATHON, MARINETTE (Area North of the town of Wausaukee), MENOMINEE (Area West of a line 6 miles West of the West boundary of Oconto County), ONEIDA, PORTAGE, SHAWANO (Area North of the townships of Aniwa and Hutchins), VILAS AND WOOD COUNTIES

Area 6 - KENOSHA COUNTY

Area 8 - DODGE, (Emmet Township only), GREEN, JEFFERSON, LAFAYETTE, RACINE (Burlington township), ROCK and WALWORTH COUNTIES

Area 9 - COLUMBIA, DANE, DODGE, (area west of Hwy. 26, except Chester & Emmet Townships), GREEN LAKE (except townships of Berlin, Seneca and St. Marie), IOWA, MARQUETTE (except townships of Neshkoka, Crystal Lake, Newton and Springfield), and SAUK COUNTIES

Area 10 - CALUMET (Township of New Holstein), DODGE (East of Hwy. 26 including Chester Township), FOND DU LAC, MANITOWOC (Schleswig), and SHEBOYGAN COUNTIES

Area 11 - DOUGLAS COUNTY

Area 12 - RACINE (except Burlington township) COUNTY

Area 13 - MILWAUKEE, OZAUKEE, WASHINGTON and WAUKESHA COUNTIES

Area 14 - Statewide.

Area 15 - DODGE (East of Hwy 26 including Chester Twp, excluding Emmet Twp), FOND DU LAC (Except Waupun), MILWAUKEE, OZAUKEE, MANITOWOC (Schleswig), WASHINGTON, AND WAUKESHA COUNTIES.

FEBRUARY 1999

NOTICE TO BIDDERS
WAGE RATE DECISION

The wage rate decision of the Secretary of Labor which has been incorporated in these advertised specifications is incomplete in that the classifications may be omitted from the Secretary of Labor's decision.

Since the bidder is responsible, independently, for ascertaining area practice with respect to the necessity, or lack of necessity, for the use of these classifications in the prosecution of the work contemplated by this project, no inference may be drawn from the omision of these classifications concerning prevailing area practices relative to their use. Further, this omission will not, per se, be construed as establishing any governmental liability for increased labor cost if it is subsequently determined that such classifications are required.

There may be omissions and/or errors in the federal wage rates. The bidder is responsible for evaluating and determining the correct applicable rate. The higher of state or federal rate will apply.

CONTRACT: 20150915003 PROJECT(S): 1350-09-70 FEDERAL ID(S): WISC 2015485

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
	SECTION 0001 Roadway					
0010	201.0105 Clearing	112.000 STA		.		.
0020	201.0110 Clearing	576.000 SY		.		.
0030	201.0120 Clearing	100.000 ID		.		.
0040	201.0205 Grubbing	112.000 STA		.		.
0050	201.0210 Grubbing	576.000 SY		.		.
0060	201.0220 Grubbing	100.000 ID		.		.
0070	203.0200 Removing Old Structure (station) 001. 11+45.92	LUMP	LUMP			.
0080	204.0100 Removing Pavement	1,015.000 SY		.		.
0090	204.0110 Removing Asphaltic Surface	43.000 SY		.		.
0100	204.0115 Removing Asphaltic Surface Butt Joints	1,540.000 SY		.		.

CONTRACT: 20150915003 PROJECT(S): 1350-09-70 FEDERAL ID(S): WISC 2015485

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
0110	204.0125 Removing Asphaltic Surface Milling	14,520.000 TON		.		.
0120	204.0150 Removing Curb & Gutter	2,877.000 LF		.		.
0130	204.0155 Removing Concrete Sidewalk	186.000 SY		.		.
0140	204.0157 Removing Concrete Barrier	1,520.000 LF		.		.
0150	204.0165 Removing Guardrail	895.000 LF		.		.
0160	204.0170 Removing Fence	12.000 LF		.		.
0170	204.0195 Removing Concrete Bases	71.000 EACH		.		.
0180	204.0220 Removing Inlets	9.000 EACH		.		.
0190	204.0245 Removing Storm Sewer (size) 001. 12-Inch	5.000 LF		.		.
0200	205.0100 Excavation Common	270.000 CY		.		.
0210	206.1000 Excavation for Structures Bridges (structure) 001. B-40-53	LUMP	LUMP			.

CONTRACT: 20150915003 PROJECT(S): 1350-09-70 FEDERAL ID(S): WISC 2015485

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
0220	209.0100 Backfill Granular	15.000 CY		.		.
0230	210.0100 Backfill Structure	160.000 CY		.		.
0240	213.0100 Finishing Roadway (project) 001. 1350-09-70	1.000 EACH		.		.
0250	305.0110 Base Aggregate Dense 3/4-Inch	16.000 TON		.		.
0260	305.0120 Base Aggregate Dense 1 1/4-Inch	1,800.000 TON		.		.
0270	320.0145 Concrete Base 8-Inch	690.000 SY		.		.
0280	390.0403 Base Patching Concrete Shes	3,747.000 SY		.		.
0290	416.0610 Drilled Tie Bars	5,740.000 EACH		.		.
0300	416.0620 Drilled Dowel Bars	3,720.000 EACH		.		.
0310	416.1715 Concrete Pavement Repair SHES	2,000.000 SY		.		.
0320	416.1725 Concrete Pavement Replacement SHES	420.000 SY		.		.

CONTRACT: 20150915003 PROJECT(S): 1350-09-70 FEDERAL ID(S): WISC 2015485

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
0330	440.4410.S Incentive IRI Ride	14,612.000 DOL	1.00000		14612.00	
0340	455.0120 Asphaltic Material PG64-28	901.000 TON		.		.
0350	455.0605 Tack Coat	3,660.000 GAL		.		.
0360	460.1110 HMA Pavement Type E-10	16,125.000 TON		.		.
0370	460.2000 Incentive Density HMA Pavement	10,320.000 DOL	1.00000		10320.00	
0380	460.4000 HMA Cold Weather Paving	4,000.000 TON		.		.
0390	465.0125 Asphaltic Surface Temporary	25.000 TON		.		.
0400	502.0100 Concrete Masonry Bridges	731.000 CY		.		.
0410	502.3100 Expansion Device (structure) 001. B-40-60	LUMP	LUMP			.
0420	502.3200 Protective Surface Treatment	4,521.000 SY		.		.
0430	502.5005 Masonry Anchors Type L No. 5 Bars	275.000 EACH		.		.

CONTRACT: 20150915003 PROJECT(S): 1350-09-70 FEDERAL ID(S): WISC 2015485

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
0440	505.0605 Bar Steel Reinforcement HS Coated Bridges	133,345.000 LB		.		.
0450	505.0905 Bar Couplers No. 5	12.000 EACH		.		.
0460	505.0906 Bar Couplers No. 6	36.000 EACH		.		.
0470	506.4000 Steel Diaphragms (structure) 001. B-40-53	25.000 EACH		.		.
0480	509.0301 Preparation Decks Type 1	168.000 SY		.		.
0490	509.0302 Preparation Decks Type 2	35.000 SY		.		.
0500	509.0500 Cleaning Decks	2,781.000 SY		.		.
0510	509.1000 Joint Repair	73.000 SY		.		.
0520	509.1200 Curb Repair	36.000 LF		.		.
0530	509.1500 Concrete Surface Repair	620.000 SF		.		.
0540	509.2000 Full-Depth Deck Repair	5.000 SY		.		.

CONTRACT: 20150915003 PROJECT(S): 1350-09-70 FEDERAL ID(S): WISC 2015485

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
0550	509.2500 Concrete Masonry Overlay Decks	170.000 CY		.		.
0560	511.1200 Temporary Shoring (structure) 001. B-40-53	440.000 SF		.		.
0570	516.0500 Rubberized Membrane Waterproofing	32.000 SY		.		.
0580	520.8000 Concrete Collars for Pipe	10.000 EACH		.		.
0590	522.0312 Culvert Pipe Reinforced Concrete Class IV 12-Inch	112.000 LF		.		.
0600	522.1012 Apron Endwalls for Culvert Pipe Reinforced Concrete 12-Inch	4.000 EACH		.		.
0610	601.0331 Concrete Curb & Gutter 31-Inch	400.000 LF		.		.
0620	601.0551 Concrete Curb & Gutter 4-Inch Sloped 36-Inch Type A	1,282.000 LF		.		.
0630	601.0555 Concrete Curb & Gutter 6-Inch Sloped 36-Inch Type A	54.000 LF		.		.
0640	601.0574 Concrete Curb & Gutter 4-Inch Sloped 30-Inch Type G	1,112.000 LF		.		.
0650	601.0600 Concrete Curb Pedestrian	60.000 LF		.		.

CONTRACT: 20150915003 PROJECT(S): 1350-09-70 FEDERAL ID(S): WISC 2015485

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
0660	602.0410 Concrete Sidewalk 5-Inch	1,490.000 SF		.		.
0670	602.0515 Curb Ramp Detectable Warning Field Natural Patina	48.000 SF		.		.
0680	603.0105 Concrete Barrier Single-Faced 32-Inch	639.000 LF		.		.
0690	603.0405 Concrete Barrier Transition Section 32-Inch	39.000 LF		.		.
0700	603.1132 Concrete Barrier Type S32	72.000 LF		.		.
0710	603.8000 Concrete Barrier Temporary Precast Delivered	790.000 LF		.		.
0720	603.8125 Concrete Barrier Temporary Precast Installed	790.000 LF		.		.
0730	608.0412 Storm Sewer Pipe Reinforced Concrete Class IV 12-Inch	72.000 LF		.		.
0740	608.0415 Storm Sewer Pipe Reinforced Concrete Class IV 15-Inch	8.000 LF		.		.
0750	611.0627 Inlet Covers Type HM	1.000 EACH		.		.
0760	611.0648 Inlet Covers Type R	1.000 EACH		.		.

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
0770	611.0651 Inlet Covers Type S	8.000 EACH		.		.
0780	611.3220 Inlets 2x2-FT	8.000 EACH		.		.
0790	611.3230 Inlets 2x3-FT	1.000 EACH		.		.
0800	611.3253 Inlets 2.5x3-FT	1.000 EACH		.		.
0810	611.8110 Adjusting Manhole Covers	2.000 EACH		.		.
0820	611.8115 Adjusting Inlet Covers	5.000 EACH		.		.
0830	614.0010 Barrier System Grading Shaping Finishing	11.000 EACH		.		.
0840	614.0397 Guardrail Mow Strip Emulsified Asphalt	1,285.000 SY		.		.
0850	614.2300 MGS Guardrail 3	1,775.000 LF		.		.
0860	614.2310 MGS Guardrail 3 HS	50.000 LF		.		.
0870	614.2320 MGS Guardrail 3 QS	50.000 LF		.		.

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
0880	614.2500 MGS Thrie Beam Transition	39.500 LF		.		.
0890	614.2610 MGS Guardrail Terminal EAT	11.000 EACH		.		.
0900	614.2620 MGS Guardrail Terminal Type 2	3.000 EACH		.		.
0910	616.0204 Fence Chain Link 4-FT	133.000 LF		.		.
0920	616.0208 Fence Chain Link 8-FT	333.000 LF		.		.
0930	616.0329 Gates Chain Link (width) 001. 12-Ft	2.000 EACH		.		.
0940	616.0700.S Fence Safety	1,400.000 LF		.		.
0950	619.1000 Mobilization	1.000 EACH		.		.
0960	620.0100 Concrete Corrugated Median	240.000 SF		.		.
0970	625.0500 Salvaged Topsoil	23,000.000 SY		.		.
0980	627.0200 Mulching	11,000.000 SY		.		.

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
0990	628.1104 Erosion Bales	25.000 EACH		.		.
1000	628.1504 Silt Fence	2,050.000 LF		.		.
1010	628.1520 Silt Fence Maintenance	4,100.000 LF		.		.
1020	628.1905 Mobilizations Erosion Control	15.000 EACH		.		.
1030	628.1910 Mobilizations Emergency Erosion Control	8.000 EACH		.		.
1040	628.2004 Erosion Mat Class I Type B	23,000.000 SY		.		.
1050	628.2006 Erosion Mat Urban Class I Type A	2,000.000 SY		.		.
1060	628.7005 Inlet Protection Type A	5.000 EACH		.		.
1070	628.7010 Inlet Protection Type B	115.000 EACH		.		.
1080	628.7015 Inlet Protection Type C	119.000 EACH		.		.
1090	628.7020 Inlet Protection Type D	20.000 EACH		.		.

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
1100	628.7504 Temporary Ditch Checks	75.000 LF		.		.
1110	628.7555 Culvert Pipe Checks	15.000 EACH		.		.
1120	628.7570 Rock Bags	50.000 EACH		.		.
1130	629.0210 Fertilizer Type B	23.000 CWT		.		.
1140	630.0130 Seeding Mixture No. 30	663.000 LB		.		.
1150	630.0200 Seeding Temporary	182.000 LB		.		.
1160	634.0618 Posts Wood 4x6-Inch X 18-FT	77.000 EACH		.		.
1170	635.0300 Sign Supports Replacing Base Connection Bolts	14.000 EACH		.		.
1180	637.1220 Signs Type I Reflective SH	2,773.000 SF		.		.
1190	637.2210 Signs Type II Reflective H	1,098.410 SF		.		.
1200	637.2230 Signs Type II Reflective F	283.000 SF		.		.

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
1210	638.2102 Moving Signs Type II	3.000 EACH		.		.
1220	638.2601 Removing Signs Type I	19.000 EACH		.		.
1230	638.2602 Removing Signs Type II	97.000 EACH		.		.
1240	638.3000 Removing Small Sign Supports	65.000 EACH		.		.
1250	638.3100 Removing Structural Steel Sign Supports	6.000 EACH		.		.
1260	642.5201 Field Office Type C	1.000 EACH		.		.
1270	643.0100 Traffic Control (project) 001. 1350-09-70	1.000 EACH		.		.
1280	643.0300 Traffic Control Drums	60,984.000 DAY		.		.
1290	643.0410 Traffic Control Barricades Type II	3,112.000 DAY		.		.
1300	643.0420 Traffic Control Barricades Type III	8,674.000 DAY		.		.
1310	643.0500 Traffic Control Flexible Tubular Marker Posts	145.000 EACH		.		.

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
1320	643.0600 Traffic Control Flexible Tubular Marker Bases	145.000 EACH		.		.
1330	643.0705 Traffic Control Warning Lights Type A	3,468.000 DAY		.		.
1340	643.0715 Traffic Control Warning Lights Type C	9,630.000 DAY		.		.
1350	643.0800 Traffic Control Arrow Boards	211.000 DAY		.		.
1360	643.0900 Traffic Control Signs	26,124.000 DAY		.		.
1370	643.0910 Traffic Control Covering Signs Type I	46.000 EACH		.		.
1380	643.0920 Traffic Control Covering Signs Type II	182.000 EACH		.		.
1390	643.1000 Traffic Control Signs Fixed Message	860.000 SF		.		.
1400	643.1050 Traffic Control Signs PCMS	685.000 DAY		.		.
1410	643.1055.S Truck or Trailer Mounted Attenuator	50.000 DAY		.		.
1420	643.2000 Traffic Control Detour (project) 001. 1350-09-70	1.000 EACH		.		.

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
1430	643.3000 Traffic Control Detour Signs	2,870.000 DAY		.		.
1440	646.0106 Pavement Marking Epoxy 4-Inch	49,920.000 LF		.		.
1450	646.0126 Pavement Marking Epoxy 8-Inch	774.000 LF		.		.
1460	646.0600 Removing Pavement Markings	80,500.000 LF		.		.
1470	646.0790.S Removing Raised Pavement Markers	93.000 EACH		.		.
1480	646.0841.S Pavement Marking Grooved Wet Reflective Contrast Tape 4-Inch	6,410.000 LF		.		.
1490	646.0843.S Pavement Marking Grooved Wet Reflective Contrast Tape 8-Inch	9,220.000 LF		.		.
1500	647.0606 Pavement Marking Island Nose Epoxy	1.000 EACH		.		.
1510	647.0726 Pavement Marking Diagonal Epoxy 12-Inch	1,925.000 LF		.		.
1520	647.0746 Pavement Marking Diagonal Epoxy 24-Inch	2,300.000 LF		.		.

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
1530	647.0776 Pavement Marking Crosswalk Epoxy 12-Inch	125.000 LF		.		.
1540	647.0856 Pavement Marking Concrete Corrugated Median Epoxy	36.000 SF		.		.
1550	647.0955 Removing Pavement Markings Arrows	3.000 EACH		.		.
1560	647.0965 Removing Pavement Markings Words	3.000 EACH		.		.
1570	649.0200 Temporary Pavement Marking Reflective Paint 4-Inch	83,500.000 LF		.		.
1580	649.0400 Temporary Pavement Marking Removable Tape 4-Inch	51,700.000 LF		.		.
1590	649.0701 Temporary Pavement Marking 8-Inch	9,800.000 LF		.		.
1600	649.0801 Temporary Pavement Marking Removable Tape 8-Inch	8,230.000 LF		.		.
1610	649.1700 Temporary Pavement Marking Arrows	2.000 EACH		.		.
1620	649.1900 Temporary Pavement Marking Words	2.000 EACH		.		.

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
1630	650.4000 Construction Staking Storm Sewer	8.000 EACH		.		.
1640	650.4500 Construction Staking Subgrade	95.000 LF		.		.
1650	650.5000 Construction Staking Base	95.000 LF		.		.
1660	650.5500 Construction Staking Curb Gutter and Curb & Gutter	3,585.000 LF		.		.
1670	650.6000 Construction Staking Pipe Culverts	2.000 EACH		.		.
1680	650.6500 Construction Staking Structure Layout (structure) 001. B-40-53	LUMP	LUMP			.
1690	650.6500 Construction Staking Structure Layout (structure) 002. B-40-60	LUMP	LUMP			.
1700	650.8000 Construction Staking Resurfacing Reference	19,062.000 LF		.		.
1710	650.8500 Construction Staking Electrical Installations (project) 001. 1350-09-70	LUMP	LUMP			.
1720	650.9910 Construction Staking Supplemental Control (project) 001. 1350-09-70	LUMP	LUMP			.

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
1730	652.0225 Conduit Rigid Nonmetallic Schedule 40 2-Inch	10,862.000 LF		.		.
1740	652.0230 Conduit Rigid Nonmetallic Schedule 40 2 1/2-Inch	411.000 LF		.		.
1750	652.0235 Conduit Rigid Nonmetallic Schedule 40 3-Inch	272.000 LF		.		.
1760	652.0615 Conduit Special 3-Inch	1,335.000 LF		.		.
1770	653.0140 Pull Boxes Steel 24x42-Inch	26.000 EACH		.		.
1780	653.0222 Junction Boxes 18x12x6-Inch	2.000 EACH		.		.
1790	653.0905 Removing Pull Boxes	11.000 EACH		.		.
1800	654.0105 Concrete Bases Type 5	43.000 EACH		.		.
1810	654.0108 Concrete Bases Type 8	7.000 EACH		.		.
1820	654.0230 Concrete Control Cabinet Bases Type L30	3.000 EACH		.		.
1830	655.0144 Cable In Duct 4-4 AWG	2,203.000 LF		.		.

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
1840	655.0610 Electrical Wire Lighting 12 AWG	18,560.000 LF		.		.
1850	655.0615 Electrical Wire Lighting 10 AWG	5,890.000 LF		.		.
1860	655.0620 Electrical Wire Lighting 8 AWG	41,013.000 LF		.		.
1870	655.0630 Electrical Wire Lighting 4 AWG	21,820.000 LF		.		.
1880	655.0640 Electrical Wire Lighting 1 AWG	54.000 LF		.		.
1890	656.0400 Electrical Service Main Lugs Only Meter Pedestal (location) 001. HL-40-AZ	LUMP	LUMP			.
1900	656.0400 Electrical Service Main Lugs Only Meter Pedestal (location) 002. HL-40-VL	LUMP	LUMP			.
1910	656.0400 Electrical Service Main Lugs Only Meter Pedestal (location) 003. HL-40-LA	LUMP	LUMP			.
1920	657.0210 Transformer Bases Breakaway 15-17 Inch Bolt Circle	25.000 EACH		.		.

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
1930	657.0255 Transformer Bases Breakaway 11 1/2-Inch Bolt Circle	43.000 EACH		.		.
1940	657.0322 Poles Type 5-Aluminum	43.000 EACH		.		.
1950	657.0375 Poles Type A	15.000 EACH		.		.
1960	657.0380 Poles Type E	10.000 EACH		.		.
1970	657.0610 Luminaire Arms Single Member 4 1/2-Inch Clamp 6-FT	29.000 EACH		.		.
1980	657.0620 Luminaire Arms Single Member 6-Inch Clamp 4-FT	30.000 EACH		.		.
1990	657.0635 Luminaire Arms Single Member 6-Inch Clamp 10-FT	7.000 EACH		.		.
2000	657.0715 Luminaire Arms Truss Type 4 1/2-Inch Clamp 15-FT	14.000 EACH		.		.
2010	657.0720 Luminaire Arms Truss Type 6-Inch Clamp 20-FT	6.000 EACH		.		.
2020	657.6005.S Anchor Assemblies Light Poles on Structures	2.000 EACH		.		.
2030	659.0600 Underdeck Lighting (location) 001. B-40-53	LUMP	LUMP			.

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
2040	659.0600 Underdeck Lighting (location) 002. B-40-56	LUMP	LUMP			.
2050	659.0600 Underdeck Lighting (location) 003. B-40-60	LUMP	LUMP			.
2060	659.0802 Plaques Sequence Identification	15.000 EACH		.		.
2070	659.1120 Luminaires Utility LED B	37.000 EACH		.		.
2080	659.1125 Luminaires Utility LED C	15.000 EACH		.		.
2090	659.1130 Luminaires Utility LED D	57.000 EACH		.		.
2100	659.1215 Luminaires Underdeck LED C	12.000 EACH		.		.
2110	659.2230 Lighting Control Cabinets 240/480 30-Inch	3.000 EACH		.		.
2120	690.0150 Sawing Asphalt	170.000 LF		.		.
2130	690.0250 Sawing Concrete	17,820.000 LF		.		.
2140	715.0502 Incentive Strength Concrete Structures	4,230.000 DOL	1.00000		4230.00	

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
2150	ASP.1T0A On-the-Job Training Apprentice at $5.00/HR	2,000.000 HRS	5.00000		10000.00	
2160	ASP.1T0G On-the-Job Training Graduate at $5.00/HR	3,600.000 HRS	5.00000		18000.00	
2170	SPV.0060 Special 001. Sawing Concrete Barrier	130.000 EACH		.		.
2180	SPV.0060 Special 002. Welding Manhole Access Covers	3.000 EACH		.		.
2190	SPV.0060 Special 003. Storm Sewer Structure Rehabilitation	34.000 EACH		.		.
2200	SPV.0060 Special 004. Cleaning Storm Sewer	44.000 EACH		.		.
2210	SPV.0060 Special 005. Mobilizations Emergency Pavement Repair	2.000 EACH		.		.
2220	SPV.0060 Special 006. Pavement Marking Grooved Preformed Thermoplastic Arrows Type 1	2.000 EACH		.		.
2230	SPV.0060 Special 007. Pavement Marking Grooved Preformed Thermoplastic Arrows Type 2	17.000 EACH		.		.
2240	SPV.0060 Special 008. Pavement Marking Grooved Preformed Thermoplastic Arrows Type 3	4.000 EACH		.		.

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
2250	SPV.0060 Special 009. Pavement Marking Grooved Preformed Thermoplastic Arrows Type 4	8.000 EACH		.		.
2260	SPV.0060 Special 010. Pavement Markings Grooved Preformed Thermoplastic Words	8.000 EACH		.		.
2270	SPV.0060 Special 011. Reconnect Pipe Underdrain 4-Inch	7.000 EACH		.		.
2280	SPV.0060 Special 012. Concrete Barrier Transition Type V27 to S32	1.000 EACH		.		.
2290	SPV.0060 Special 013. Pavement Marking Grooved Preformed Thermoplastic Yield Line 18-Inch	24.000 EACH		.		.
2300	SPV.0060 Special 201. Removing Concrete Bases Type C	7.000 EACH		.		.
2310	SPV.0060 Special 202. Removing Lighting Units	78.000 EACH		.		.
2320	SPV.0060 Special 203. Removing Sign Lighting	6.000 EACH		.		.
2330	SPV.0060 Special 204. Removing Luminaires	4.000 EACH		.		.
2340	SPV.0060 Special 205. Removing Distribution Centers	1.000 EACH		.		.

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
2350	SPV.0060 Special 206. Removing Underdeck Lighting	3.000 EACH		.		.
2360	SPV.0060 Special 207. Lamp Disposal High Intensity Discharge	124.000 EACH		.		.
2370	SPV.0060 Special 208. Concrete Bases Type B	18.000 EACH		.		.
2380	SPV.0060 Special 209. Concrete Bases Type C	1.000 EACH		.		.
2390	SPV.0060 Special 450. Poles Type 9	1.000 EACH		.		.
2400	SPV.0060 Special 451. Poles Type 12 Special	1.000 EACH		.		.
2410	SPV.0060 Special 452. Poles Type 13 Special	1.000 EACH		.		.
2420	SPV.0060 Special 453. Monotube Arms 25-FT	1.000 EACH		.		.
2430	SPV.0060 Special 454. Monotube Arms 35-Ft	2.000 EACH		.		.
2440	SPV.0060 Special 455. Concrete Bases Type 10 Special	2.000 EACH		.		.
2450	SPV.0060 Special 456. Rectangular Polymer Concrete Vault 13x24x18-Inch	5.000 EACH		.		.

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
2460	SPV.0060 Special 650. Adjusting TES Manhole Cover	4.000 EACH		.		.
2470	SPV.0060 Special 651. Installing Conduit Into Existing Manhole	4.000 EACH		.		.
2480	SPV.0060 Special 700. Cleaning Bearings	42.000 EACH		.		.
2490	SPV.0060 Special 701. Bearing Replacement B-40-53	20.000 EACH		.		.
2500	SPV.0060 Special 702. Embedded Galvanic Anodes	539.000 EACH		.		.
2510	SPV.0085 Special 001. Crack Sealing	5,620.000 LB		.		.
2520	SPV.0090 Special 001. Pavement Markings Grooved Preformed Thermoplastic Stop Line 18-Inch	272.000 LF		.		.
2530	SPV.0090 Special 002. Pavement Marking Grooved Preformed Thermoplastic Crosswalk 6-Inch	239.000 LF		.		.
2540	SPV.0090 Special 003. Joint And Crack Repair	7,000.000 LF		.		.
2550	SPV.0090 Special 004. Mending Fence	500.000 LF		.		.

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
2560	SPV.0090 Special 005. Concrete Curb & Gutter 31-Inch Type A Full-Depth	190.000 LF		.		.
2570	SPV.0090 Special 006. Concrete Curb and Gutter 32-Inch Type A Special	308.000 LF		.		.
2580	SPV.0090 Special 007. Concrete Barrier Single-Faced 42-Inch	104.000 LF		.		.
2590	SPV.0090 Special 008. Concrete Curb & Gutter 31-Inch Type A Full Depth HES	389.000 LF		.		.
2600	SPV.0090 Special 009. Pavement Markings Grooved Contrast Preformed Plastic Tape 4-Inch	20.000 LF		.		.
2610	SPV.0090 Special 010. Modified MGS Thrie Beam Transition	276.500 LF		.		.
2620	SPV.0090 Special 650. 6-Duct Conduit, Cement Encased, 4-Inch Rigid Nonmetallic Conduit DB-60	115.000 LF		.		.
2630	SPV.0090 Special 651. 3-Duct Conduit, Cement Encased, 4-Inch Rigid Nonmetallic Conduit DB-60	56.000 LF		.		.

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
2640	SPV.0090 Special 652. City of Milwaukee Conduit Rigid Nonmetallic Schedule 40 3-Inch	30.000 LF		.		.
2650	SPV.0090 Special 653. City of Milwaukee Conduit Special 3-Inch	320.000 LF		.		.
2660	SPV.0105 Special 001. Removing Sand Barrel Array And Concrete Pad Sta 115+50 Rt	LUMP	LUMP			.
2670	SPV.0105 Special 002. Removing Sand Barrel Array And Concrete Pad Sta 127+15 Rt	LUMP	LUMP			.
2680	SPV.0105 Special 003. Milling and Removing Temporary Joint	LUMP	LUMP			.
2690	SPV.0105 Special 201. Maintenance Of Lighting Systems	LUMP	LUMP			.
2700	SPV.0105 Special 202. Lighting System Integrator	LUMP	LUMP			.
2710	SPV.0105 Special 203. Lighting System Survey	LUMP	LUMP			.
2720	SPV.0105 Special 650. Underdeck Utility Structure B-40-53 City of Milwaukee Electrical Conduit	LUMP	LUMP			.

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
2730	SPV.0105 Special 651. Underdeck Utility Structure B-40-53 City of Milwaukee Comminications Conduit	LUMP	LUMP			.
2740	SPV.0105 Special 652. Construction Staking City of Milw Underground Conduit, Signals, & Lighting	LUMP	LUMP			.
2750	SPV.0105 Special 700. Gas Main Support System B-40-53	LUMP	LUMP			.
2760	SPV.0105 Special 701. Electrical Fiberglass 6 Duct Package Structure # B-40-53	LUMP	LUMP			.
2770	SPV.0165 Special 700. Concrete Cure And Seal Treatment	15,250.000 SF	.			.
2780	SPV.0180 Special 001. ROW Fence Based Clearing	12,033.000 SY	.			.
2790	SPV.0195 Special 001. Cold Patch	10.000 TON	.			.
	SECTION 0001 TOTAL					.
	TOTAL BID					.

PLEASE ATTACH SCHEDULE OF ITEMS HERE