HIGHWAY WORK PROPOSAL

Proposal Number: 1 4

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

COUNTY	STATE PROJECT ID	FEDERAL PROJECT ID	PROJECT DESCRIPTION	HIGHWAY
Walworth	3170-08-70	WISC 2016 474	7th St & Geneva St City of Delavan Wisconsin St to Wright St	STH 50
Walworth	3170-08-71		7th St & Geneva St City of Delavan Wisconsin St to Wright St	STH 50

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: December 13, 2016 Time (Local Time): 9:00 AM	Firm Name, Address, City, State, Zip Code **SAMPLE** **NOT FOR BIDDING PURPOSES**
Contract Completion Time November 1, 2017	
Assigned Disadvantaged Business Enterprise Goal 14%	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 Pavement removal, grading, base aggregate dense, concrete pavement, HMA pavement, concrete sidewalk, asphaltic surface, storm sewer, water main, concrete curb and gutter, marking, signing, traffic control, signals and lighting, erosion control.	
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.

Special Provisions

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SPECIAL PROVISIONS

1. General.

Perform the work under this construction contract for Projects 3170-08-70 and 3170-08-71, 7th Street and Geneva Street, City of Delavan, Wisconsin Street to Wright Street, STH 50, Walworth 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, 2017 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 (20160607)

2. Scope of Work.

The work under this contract shall consist of pavement removal, grading, milling, base aggregate dense, concrete pavement, HMA pavement, concrete sidewalk, asphaltic surface, storm sewer, water main, concrete curb and gutter, pavement marking, signing, traffic control, traffic signals, lighting, erosion control, finishing items, 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.

Place a minimum of 18 inches of base aggregate dense over shallow pipes during construction to ensure that the pipes are not damaged before placing HMA or concrete pavement. Replace pipes that are damaged during construction due to inadequate cover at the contractor's expense.

At the beginning of Stage 2 operations, Close STH 50 between E. Wisconsin Avenue and Wright Street/Borg Road to through traffic as detailed in the plans for a maximum of 102 consecutive calendar days. Do not reopen until completing the following work:

- STH 50 Resurfacing Section - E. Wisconsin Street to Park Avenue: local city of Delavan water main and miscellaneous sanitary sewer items under ID 3170-08-71, spot sidewalk, concrete curb and gutter, and intersection curb ramp replacement work, traffic signal modifications at the STH 50 and Tyrrell intersection, removing asphaltic surface milling, HMA paving, signing, and marking.
- STH 50 Reconstruction Section - Park Avenue to Wright Street/Borg Road: HMA paving (lower layers), concrete curb and gutter (outside), concrete pavement, temporary pavement marking, and traffic control (for Stage 3) along eastbound STH 50.

If the contractor fails to complete the work necessary, as defined above, to reopen STH 50 to through traffic within 102 consecutive calendar days, the department will assess the contractor $2,065 in interim liquidated damages for each calendar day the contract work remains incomplete beyond 102 consecutive calendar days. 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.

STH 50 Resurfacing Section - E. Wisconsin Street to Park Avenue
Unless approved otherwise by the engineer, provide temporary means to accommodate local access and prevent grade differences greater than 2 inches between existing/milled/new surfaces. Bridge vertical grade differences exceeding 2 inches using slopes of 12:1 or less.

Existing manholes and valves will remain at their current grade elevations unless otherwise directed by the engineer during milling and paving operations.

Prior to asphaltic surface milling operations, pave all utility trenches with HMA pavement to match the existing surface elevations as detailed in the plans. Maximize the time between paving the utility trenches and mainline milling operations.

Pave the lower layer of HMA Pavement within 72 hours of mainline milling, unless otherwise approved by the engineer.

STH 50 Reconstruction Section - Park Avenue to I-43
Pave the upper layer of HMA Pavement during Stage 5 construction. Bridge vertical grade differences between the new mainline HMA Pavement lower layers and the new mainline concrete pavement with temporary asphalt wedging (paid for as Asphaltic Surface Temporary) at a minimum width of 3 feet adjacent to the concrete edge, or as directed by the engineer.

In HMA Pavement areas, set new manholes at final grade and bridge vertical differences between the top of casting and the HMA Pavement lower layers using temporary asphalt wedging adjacent to the casting (paid for as Asphaltic Surface Temporary) at slopes of 12:1

or less. Remove temporary asphalt wedging adjacent to the casting prior to paving the upper layer of HMA Pavement (paid for as part of Asphaltic Surface Temporary).

In HMA Pavement areas, adjust existing manholes to final grade (paid for as Adjusting Manholes) and bridge vertical differences between the top of casting and the HMA Pavement lower layers using temporary asphalt wedging adjacent to the casting (paid for as Asphaltic Surface Temporary) at slopes of 12:1 or less. Remove temporary asphalt wedging adjacent to the casting prior to paving the upper layer of HMA Pavement (paid for as part of Asphaltic Surface Temporary).

Contractor Coordination
Conduct weekly progress meetings. The contractor's superintendent or representative, designated materials representative, subcontractor's representatives for ongoing subcontract work or subcontract work expected to begin within the next three weeks shall attend. Invite utilities, the city of Delavan, and the Wisconsin & Southern Railroad LLC representatives to attend the meeting. Provide and discuss the schedule and updates at the weekly progress meeting. Agenda items at the meeting shall include, but not be limited to, the following:

- Review of the contractor's schedule and subcontractor's schedule.
- Utility conflicts and relocation schedule.
- Evaluation of progress to date.
- Outstanding Requests for Information (RFIs) or issues that may cause contract modifications.
- Materials submittal status.
- Materials sampling and testing activities and results.
- Lane, sidewalk, and sideroad closure schedules.
- Impacts to businesses and private properties.
- Impacts to emergency services and postal services.
- Shop drawing submittals/review status.
- Equipment status of orders and deliveries.
- Plans and specifications for upcoming work to prevent potential conflicts between contractors.

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

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

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

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

4. Traffic.

General
Accomplish the construction sequence, including the associated traffic control, as described in the article Prosecution and Progress, as detailed in the Construction Staging section of the plans, and as described in this article.

The traffic requirements are subject to change at the direction of the engineer in the event of an emergency, local event, or significant traffic delays.

Submit to engineer for approval a detailed traffic control plan for any changes to the proposed traffic control as shown on the plans. Submit the plan 14 days before the preconstruction conference, or if after the preconstruction conference, 14 days before the intended use of the revised traffic control. A request does not constitute approval.

Do not disturb, remove, or obliterate any existing signs, traffic control signs or advisory signs in place along the traveled roadways without the approval of the engineer. Immediately repair or replace any damage done to the above during the construction operations at contractor's expense.

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

Do not perform construction operations until all traffic control devices for such work are in the proper location.

Conduct operations in such a manner that causes the least interference and inconvenience to the free flow of vehicles, bicyclists, and pedestrians on the roadways. This includes the following:

- Do not park or store any vehicle, piece of equipment, or construction materials within the roadway lateral clearance or on adjacent streets beyond the project limits without approval of the engineer.
- All construction vehicles and equipment entering or leaving live traffic lanes shall yield to through traffic, bicyclists, and pedestrians.
- Equip all vehicles and equipment entering or leaving the live traffic lanes with a hazard identification beam (flashing yellow signal) capable of being visible on a sunny day when viewed without the sun directly on or behind the device from a distance of 1,000 feet. Activate the beam when merging into or exiting a live traffic lane.
- Do not deliver and store materials and equipment within open travel lanes or open side roads during any stage of construction. Temporary lane closures and/or halting of traffic within open roadways and sidewalks is not permitted.

Within the STH 50 resurfacing section (E. Wisconsin Street to Park Avenue), delineate exposed mainline existing manholes and valves to remain with Traffic Control Drums after mainline Asphaltic Surface Milling operations until the upper HMA Pavement layer is paved.

Maintain areas for turning vehicles as shown on the plans at all times except for specific construction operations in those areas. Undistributed quantities of Base Aggregate Dense 1 1/4-inch are included in this contract to accommodate the turning movements.

Upon switching STH 50 or Wright Street/Borg Road traffic to temporary pavement, designate a representative to monitor the condition of the temporary pavement for a period of not less than 8 hours after the switch and prior to beginning any work that may take place upon the existing roadway after completion of the traffic switch. Should the temporary pavement show signs of failure, immediately notify the engineer.

Remove existing traffic signals only after the temporary traffic signals have been installed, inspected, and are controlling the intersection.

Advance Notification

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

Notify Craig Webster, Wisconsin Department of Natural Resources Transportation Liaison at (262) 574-2141 a minimum of two working days prior to beginning construction.

Notify the city of Delavan Public Works Department at (262) 728-1891 one week before construction to coordinate the removal of local street signs.

Traffic Control Operations

This information is included to assist the contractor and its subcontractors; do not interpret this information as a demonstration of specified means and methods. Coordinate the schedule of operations for the construction staging as shown in the plans and as noted in these special provisions. Do not begin operations for the next construction stage until the work for the current stage is completed. Do not move operations ahead within the proposed construction staging unless modifications to the staging and schedule are approved in writing by the engineer.

Stage 1 Phase I

Traffic

- STH 50: Restrict westbound traffic to the inside travel lane using a single-lane closure between Bauer Parkway and I-43.
- Borg Road: Maintain one northbound/southbound travel lane in each direction.
- Wright Street: Maintain one northbound/southbound travel lane in each direction separated by traffic control flexible tubular marker posts. Restrict left-turn access within the limits of the flexible tubular marker posts unless otherwise indicated in the plans.

Construction

- Install temporary traffic signals at the STH 50 and Wright Street/Borg Road intersection.
- Construct temporary widening along STH 50, Wright Street, and Borg Road.

Stage 1 Phase 2

Traffic

- STH 50:
  - Continue to restrict westbound traffic to the inside travel lane using a single-lane closure between Bauer Parkway and Station 148+50.
  - East of Station 148+50, restrict westbound traffic to the outside travel lane using a single-lane closure.
  - Restrict eastbound traffic to the outside travel lane using a single-lane between Station 147+21 and Station 158+50.
- Borg Road: Continue to maintain one northbound/southbound travel lane in each direction.
- Wright Street: Continue to maintain one northbound/southbound travel lane in each direction separated by traffic control flexible tubular marker posts. Continue to restrict left-turn access within the limits of the flexible tubular marker posts unless otherwise indicated in the plans.

Construction

- Construct the STH 50 temporary median crossover between Station 153+00 and Station 157+50.

Stage 2

Traffic

- STH 50 (E. Wisconsin Street to Wright Street/Borg Road):
  - Close westbound/eastbound STH 50 to through traffic for 102 consecutive calendar days and detour according to the plan details. Between Park Avenue and Wright Street/Borg Road, restrict westbound/eastbound local (non-through) traffic to one travel lane in each direction separated by traffic control flexible tubular marker posts on the existing westbound pavement and temporary widening constructed in Stage 1 to maintain access to businesses. Restrict left-turn access within the limits of the flexible tubular marker posts unless otherwise indicated in the plans.
  - During the storm sewer installation between Station 136+25 and Station 138+50, relocate the westbound/eastbound travel lanes to avoid the storm sewer installation area. Traffic may be restricted to one 12-foot travel lane within the limits of the storm sewer installation with the use of flagging operations. Close Bauer Parkway for 3 consecutive calendar days. Submit to engineer for approval a detailed traffic control plan for proposed traffic control to accommodate the storm sewer installation. Submit the plan 14 days before the intended use.
  - Relocate the westbound/eastbound traffic shifting taper locations near the resurfacing/reconstruction split (Station 131+75) to accommodate water main installation and milling/paving operations within the resurfacing limits. Submit to engineer for approval a detailed traffic control plan for proposed traffic control to accommodate the water main installation and milling/paving operations near the resurfacing/reconstruction split.
- STH 50 (Wright Street/Borg Road to I-43):
  - Restrict westbound/eastbound traffic to one travel lane in each direction separated by traffic control flexible tubular marker posts between Wright Street/Borg Road and the mainline crossover constructed in Stage 1 Phase 2. Restrict left-turn access within the limits of the flexible tubular marker posts unless otherwise indicated in the plans.
  - Continue to restrict westbound traffic to the outside travel lane using a single-lane closure east of the mainline crossover constructed in Stage 1 Phase 2.
- Borg Road:
  - Maintain one northbound/southbound travel lane in each direction separated by traffic control flexible tubular marker posts. Restrict left-turn access within the limits of the flexible tubular marker posts unless otherwise indicated in the plans.
  - Close Borg Road for 14 consecutive calendar days to allow for construction of the southeast quadrant of the STH 50 and Wright Street/Borg Road intersection.
- Wright Street: Maintain one northbound/southbound travel lane in each direction separated by traffic control flexible tubular marker posts. Restrict left-turn access within the limits of the flexible tubular marker posts unless otherwise indicated in the plans.

Construction

- STH 50 (E. Wisconsin Street to Park Avenue):
  - Install local city of Delavan water main and miscellaneous sanitary sewer items under ID 3170-08-71.
  - Mill and resurface (including upper layer) the existing roadway pavement.
  - Railroad crossing improvements, including new gates, overhead cantilever signal arms, and a new crossing surface, will be completed by Wisconsin & Southern Railroad LLC.
  - Complete traffic signal modifications at the STH 50 and Tyrrell intersection.
- STH 50 (Park Avenue to I-43):
  - Construct the eastbound concrete/HMA pavement (lower layers).
  - Construct the southeast quadrant of the STH 50 and Wright Street/Borg Road intersection.
- Borg Road: Construct the southbound concrete/HMA pavement (lower layers).
- Wright Street: Construct the southbound concrete/HMA pavement (lower layers).

Stage 3

Traffic

- STH 50 (E. Wisconsin Street to Alder Avenue): Maintain two westbound/eastbound travel lanes open to traffic in each direction.
- STH 50 (Alder Avenue to I-43):
  - Restrict the westbound/eastbound lanes to one travel lane in each direction separated by traffic control flexible tubular marker posts. Restrict left-turn access within the limits of the flexible tubular marker posts unless otherwise indicated in the plans.
  - Close the slip lane connection between the private development (located in the northeast quadrant of the I-43 interchange) and the I-43 northbound entrance ramp terminal for the duration of Stage 3.
- Borg Road: Maintain one northbound/southbound travel lane in each direction separated by traffic control flexible tubular marker posts. Restrict left-turn access within the limits of the flexible tubular marker posts unless otherwise indicated in the plans.
- Wright Street:
  - Maintain one northbound/southbound travel lane in each direction separated by traffic control flexible tubular marker posts. Restrict left-turn access within the limits of the flexible tubular marker posts unless otherwise indicated in the plans.
  - Close Wright Street for 14 consecutive calendar days to allow for construction of the northwest quadrant of the STH 50 and Wright Street/Borg Road intersection.

Construction

- STH 50 (Park Avenue to I-43):
  - Construct the westbound concrete/HMA pavement (lower layers).
  - Construct the northwest quadrant of the STH 50 and Wright Street/Borg Road intersection.
  - Construct the multi-use path from Wright Street to the northbound on-ramp for I-43.

  - Construct retaining wall R-64-20.
  - Complete traffic signal modifications at the I-43 southbound exit ramp terminal and the I-43 northbound entrance ramp terminal.
- Borg Road: Construct the northbound concrete/HMA pavement (lower layers).
- Wright Street: Construct the northbound concrete/HMA pavement (lower layers).

Stage 4

Traffic

- STH 50 (E. Wisconsin Street to Park Avenue): Maintain two westbound/eastbound travel lanes open to traffic in each direction.
- STH 50 (Park Avenue to I-43): The westbound/eastbound lanes may be restricted to one travel lane in each direction using temporary single-lane closures. Restrict the westbound/eastbound turn lanes using temporary turn-lane closures.
- Borg Road: Maintain one northbound/southbound travel lane open to traffic in each direction. Restrict the northbound turn lanes using temporary turn-lane closures.
- Wright Street: Maintain one northbound/southbound travel lane open to traffic in each direction. Restrict the southbound turn lanes using temporary turn-lane closures.

Construction

- Construct the concrete curb and gutter median along STH 50 (Park to I-43), Borg Road, and Wright Street.

Stage 5

Traffic

- STH 50 (E. Wisconsin Street to Park Avenue): Maintain two westbound/eastbound travel lanes open to traffic in each direction.
- STH 50 (Park Avenue to Wright Street): The westbound/eastbound lanes may be restricted to one travel lane in each direction using temporary single-lane closures or closures suitable for moving operations. Restrict the westbound/eastbound turn lanes using temporary turn-lane closures west of Station 142+00.
- Borg Road: Close Borg Road for a maximum of 1 calendar day to allow for paving operations of the remaining HMA pavement upper layer.
- Wright Street: Close Wright Street for a maximum of 1 calendar day to allow for paving operations of the remaining HMA pavement upper layer. Do not close Wright Street concurrently with Borg Road.

Construction

- Pave the remaining HMA pavement upper layer on STH 50 (Park Avenue to Wright Street), Borg Road, and Wright Street.

Traffic Control Signs PCMS Advanced Notification

Install Traffic Control Signs PCMS at the project ends (STH 50, Wright Street, Borg Road) to notify motorists of upcoming construction activities two weeks before the start of construction activities.

Provide the following advance notification to motorists using Traffic Control Signs PCMS for the following closures:

Closure Type	Traffic Control Signs PCMS Advance Notification
Stage 2 - STH 50 (posted detour) (102 consecutive calendar days)	7 calendar days
Stage 2 - Bauer Parkway (3 consecutive calendar days)	3 calendar days
Stage 2 - Borg Road (14 consecutive calendar days)	3 calendar days
Stage 3 - Wright Street (14 consecutive calendar days)	3 calendar days
Stage 5 - Borg Road (1 calendar day)	3 calendar days
Stage 5 - Wright Street (1 calendar day)	3 calendar days

Property Access

Maintain continuous access to business and residential driveways on existing pavement, temporary pavement, or base aggregate dense according to the plans or as directed by the engineer. Maintain a minimum travel width of 20 feet for temporary access to business entrances and a minimum travel width of 10 feet for temporary access to residential entrances. Additional intermediate construction staging or staging gaps, not shown on the plans, may be necessary to maintain continuous access to all properties. A minimum of one driveway access shall be maintained at all times for businesses having multiple access points. If the contractor coordinates the closure of any access to a business or private property with the owner(s), provide written documentation of coordination with the owner(s) to the engineer, prior to the start of work regarding the access closure.

Pedestrian Access

Maintain pedestrian access, according to the current Americans with Disabilities Act (ADA) Accessibility Guidelines (ADAAG), within the project limits by means of existing sidewalk, Temporary Pedestrian Surface Asphalt bid item, Temporary Pedestrian Surface Plywood bid item, Temporary Pedestrian Surface Plate bid item, Temporary Curb Ramp bid item, or new sidewalk at a minimum width of 5 feet. Preserve the existing sidewalk as long as practicable to maintain pedestrian access. Place Temporary Pedestrian Safety Fence along sidewalks as shown in the plans and as directed by the engineer.

When required, close sidewalks according to the standard detail drawing “Traffic Control, Pedestrian Accommodation.” Provide temporary pedestrian access as detailed in the plans and as directed by the engineer.

Within the resurfacing section of STH 50 (E. Wisconsin Street to Park Avenue), sequence the spot sidewalk and intersection curb ramp replacement work to allow for west-east pedestrian movements on at least one side of STH 50 and north-south pedestrian movements

on at least one side of the local sideroads. Within the reconstruction section of STH 50 (Park Avenue to I-43), maintain west-east pedestrian movements along STH 50 and north-south pedestrian movements along Bauer Parkway/Wright Street/Borg Road as detailed in the plans on the pedestrian routing construction staging overview sheet. The bid items Temporary Pedestrian Surface Asphalt, Temporary Pedestrian Surface Plywood, Temporary Pedestrian Surface Plate, Temporary Curb Ramp, and Temporary Pedestrian Safety Fence have been provided to complete this work.

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

TABLE 108-1 CLOSURE TYPE AND REQUIRED MINIMUM ADVANCE NOTIFICATION

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

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

5. Holiday Work Restrictions.

Do not perform work on, nor haul materials of any kind along or across any portion of the highway carrying STH 50 traffic, and entirely clear the traveled way and shoulders of such portions of the highway of equipment, barricades, signs, lights, and any other material that might impede the free flow of traffic during the following holiday periods:

- From noon Friday, May 26, 2017 to 6:00 AM Tuesday, May 30, 2017 for Memorial Day;
- From 6:00 AM Tuesday, July 4, 2017 to 6:00 AM Wednesday, July 5, 2017 for Independence Day;
- From noon Friday, September 1, 2017 to 6:00 AM Tuesday, September 5, 2017 for Labor Day.

107-005 (20050502)

6. Utilities.

This contract does not come under the provision of Administrative Rule Trans 220.
107-065 (20080501)

There are known utility facilities located near or within the project limits. Coordinate construction activities by calling Diggers Hotline and/or a direct call to the utilities known to have facilities in the area as required by state statutes. Use caution to ensure the integrity of underground facilities at all times.

Prospective bidders are cautioned that the arrangements set forth in this article represent the utility companies' best estimate of their plans to relocate and/or adjust conflicting facilities. Contact the utility companies listed in the plans, prior to preparing the bid, to obtain current information on existing and new locations and the status of any utility relocation work stated herein.

Alliant Energy

Alliant Energy Utility Description:
Electric facilities are located throughout the project. Underground electric facilities are located near the intersection of STH 50 (Geneva Street) and Wright/Borg Street. In the southeast quadrant, an underground line feeds the traffic signal cabinet from the adjacent power pole. From the northeast quadrant power pole, an underground line crosses Wright Street and heads to the northwest. The same power pole also has an underground line that runs east approximately 200 feet to a transformer. Overhead electric facilities cross STH 50 (Geneva Street) in multiple locations and run along the east side of STH 50 (Seventh Street) on the north side of the project, and along the east side of Wright/Borg Street. An overhead facility also runs along the south side of STH 50 (Geneva Street) east of the intersection, and continues east leaving the project limits.

Alliant Energy Relocation Plans to Address Identified Conflicts:

Railroad Crossing Area
Alliant's overhead electric line that runs parallel to the railroad tracks will be in close proximity to the railroad gate arm on the northwest corner of the railroad tracks and S. 7th Street. Notify Alliant Energy 2 weeks prior to arm installation so that measurements can be taken for code clearances after the arm is installed. If clearances are not able to be met, Alliant will relocate the overhead lines after the railroad gate arm is installed.

The overhead electric lines that run parallel to S. 7th Street are in conflict with the proposed railroad gate arm on the east side of S. 7th Street. Alliant will relocate these lines during construction, and will take approximately 24 days to complete relocations. Provide a 2 week notification to Alliant prior to overhead lines needing to be relocated. The preferred relocation is to go in easement with overhead electric lines. If easements cannot be obtained, Alliant will relocate the facilities underground within the right-of-way, parallel to the eastern terrace of S. 7th Street from Station 101+50 LT to Station 103+75 LT.

Wright Street Area

Alliant will relocate the existing utility poles that are in conflict with the proposed plan. New facilities have been installed that will eliminate the existing underground electric crossing at Station 18+00 BG. The existing facility has been discontinued in place. Once roadway work, and rough grading is complete, and prior to sidewalk installation and final restoration, Alliant will install new 12.4 Kv underground electric from the transformer located near the northerly right-of-way at approximately Station 148+50 and follow the right-of-way going west to Wright Street, then north along Wright Street to the duct installed at Station 17+80 BG. The cable will be installed in this duct and continue west beyond the right-of-way limits of this project. This is a replacement of the existing crossing at Station 18+00 BG that is in conflict. Provide 2 weeks advanced notice to Alliant Energy. Alliant Energy will need 1 week to complete this work.

Multiple poles will be in conflict along the east side of Wright Street. Alliant will install a new pole at the southeastern quadrant of STH 50/Wright Street near Station 147+95/105' RT. New underground primary cable will be installed heading north to the existing transformer located in the southeast corner of the Walgreens property. The remaining underground primary cable will be discontinued in place. A new pole will be installed at Station 13+00/80' RT with temporary anchoring to the north. A temporary anchor will be installed on the existing pole at Station 21+60 BG/32' RT and will be located approximately 30 feet south of the existing pole. A new pole will be installed at Station 14+40 BG/120'RT with anchoring installed at 24 feet and 30 feet to the west of this pole. Prior to construction, Alliant will install temporary poles for use by Charter along the eastern side of Wright Street to allow for Charter to vacate the existing Alliant poles between Station 16+00BG and 21+00BG. Two weeks prior to the start of construction of the temporary widening on the east side of Wright Street, Alliant will remove the existing poles and overhead lines that are in conflict with the temporary widening. Immediately following the removal of the temporary widening and prior to final grading and restoration, Alliant will install new poles and anchors along the east side of Wright Street. Charter will then transfer their cables to the newly installed poles, allowing for the removal of the temporary poles that were placed for their use. Notify two weeks prior to removal of temporary lanes, so that temporary anchors can be removed and new poles/anchors can be installed prior to final grading and restoration. This work is anticipated to take 24 days to complete.

Contact Information: Bruce Murray, 400 Koopman Lane Suite B, Elkhorn, WI 53121, (262) 741-0937, brucemurray@alliantenergy.com.

AT&T

General AT&T Utility Description:
AT&T Wisconsin has numerous telephone and fiber optic lines along the project corridor. A telephone line begins approximately 75 feet south of the railroad crossing and continues south along STH 50 (Seventh Street) along the east side of the roadway. This line terminates at the Alliant Energy pole approximately 185 feet north of Geneva Street. At the intersection of STH 50 (Geneva Street) and Wright/Borg Street, telephone lines are located in both the northeast and south east quadrant. In the southeast quadrant, the telephone line begins at the Alliant Energy power pole and one line continues east along the south side of STH 50 and continues out of the project limits, the other line crosses STH 50 and heads north along the east side of Wright Street and eventually crossing under Wright Street. In the northeast quadrant of the intersection, a telephone line heads east along the north side of STH 50. Approximately 750 feet east of the intersection, a fiber line enters the project and both lines continue east, crossing under the interstate, and leaving the project limits.

AT&T Utility Relocation Plans to Address Identified Conflicts:
AT&T Wisconsin has relocated their underground facilities adjacent to the new and existing right-of-way out of conflict. Two pedestals (Station 17+75 BG (RT), Station 21+65 BG (RT)) will be permanently buried into a manholes at these locations prior to construction. Notify AT&T 5 working days prior to paving of the temporary lanes. AT&T will need 3 working days to adjust the 2 manhole frames and covers to the temporary asphalt elevation. Notify AT&T 5 working days prior to final grading, after the removal of temporary lanes, to coordinate manhole frame and cover adjustments. AT&T will need 3 working days for fame and cover adjustments.

Contact Information: Carol Anason, 316 W Washington Ave, Madison, WI 53703, (608) 252-2385, ca2624@att.com.

ATC

General ATC Utility Description:
ATC has an overhead **138 kV** electric line running along the railroad corridor crossing STH 50 near Station 102+75. No conflicts are anticipated as part of this project.

The following guidelines must be followed when working around ATC facilities:

1. Maintain safe working clearance to the 138 KV conductors at all times based on the latest OSHA clearances.
2. Exercise caution when working and driving near transmission line structures to avoid damage.
3. No stockpiling or staging of equipment or materials under or near the ATC transmission lines and structures.

Contact Information: Anthony Marciniak, W234 N2000 Ridgeview Parkway Ct., Waukesha, WI 53188, (920) 338-6582, amerciniak@atcllc.com.

Charter Communications

General Charter Communications Utility Description:
Aerial television cable and fiber-optic cable are present throughout the project corridor and utilize Alliant Energy power poles as attachments. Overhead communication facilities cross STH 50 (Geneva Street) in multiple locations and run along the east side of STH 50 (7th Street) on the north side of the project, and along the east side of Wright/Borg Street. An overhead facility also runs along the south side of STH 50 (Geneva Street) east of the intersection, and continues east leaving the project limits.

Charter Utility Relocation Plans to Address Identified Conflicts:
Prior to construction, Charter Communications will relocate to the temporary poles placed by Alliant Energy along the east side of Wright Street. The proposed work plan will be the same as Alliant Energy and they will be in contact to coordinate all relocations as necessary. After removal of the temporary pavement, and before finished grading, Charter will relocate from the temporary poles to the new poles placed by Alliant Energy. This work is expected to take 21 days.

Contact Information: Brandon Opheim, 510 Beloit St., Walworth, WI 53184, (608) 209-3195, Brandon.opheim@chartercom.com.

City of Delavan

City of Delavan Utility Description:
The city of Delavan owns and maintains storm sewer and lighting within the project limits.

City of Delavan Plans to Address Identified Conflicts:
The storm sewer and lighting located within the reconstruction limits will be replaced as part of this project per the project plans.

Contact Information: Mark Wendorf, 123 South Second St., Delavan, WI 53115, (262) 728-5585, delavandpw@ci.delavan.wi.us.

Delavan Utilities

Delavan Utilities Utility Description:
Delavan Utilities maintains sanitary sewer mains and water mains within thin the project limits. A sanitary sewer runs along STH 50 for the entire length of the project between Wisconsin Street and the northbound I-43 ramp terminal, varying from 8-inch diameter to 30-inch diameter. Various sanitary manholes will be within the reconstruction limit. A water main runs along STH 50 for the entire length of the project between Wisconsin Street and the northbound I-43 ramp terminal, varying from 4-inch diameter to 12-inch diameter. Various hydrants are anticipated to be relocated and/or adjusted along with numerous water valves located in the reconstruction limits.

Delavan Utilities Plans to Address Identified Conflicts:
The construction project will replace the existing water main within the project limits per the project utility plans. The water main replacement will begin at Station 101+30 and continue south along 7th Street. At the intersection of 7th Street and STH 50 (Geneva Street), the water main replacement heads east down STH 50 (Geneva Street) and connects back into an existing main at Station 132+25. Various hydrants and service laterals will be removed and replaced along this stretch of the resurfacing section of the project. Three hydrants will be removed and replaced within the reconstruction limits: Station 11+80 LT, Station 19+65 RT, Station 146+50 LT. Sanitary manholes will be adjusted along the project after final grading and a new manhole will be installed at Station 101+00.

Contact Information: Jim Piester, 123 South Second St., Delavan, WI 53115, (262) 728-5585, utilmanager@ci.delavan.wi.us.

WE Energies Gas

General WE Energies Gas Utility Description:
Gas mains of various sizes are present throughout the project corridor. A gas main enters the east limits of the project along the south side of the roadway, travels west, and crosses STH 50 near Station 148+05. The main then heads west leaving the reconstruction limits along the north side of STH 50. From a valve located at Station 144+50, a main leaves the intersection north along the west side of Wright Street leaving the project limits. There are numerous valves and gas laterals throughout the project.

WE Energies Gas Relocation Plans to Address Identified Conflicts:
The existing 4-inch distribution main on the south side of STH 50 (Geneva Street) starting at Station 131+75 will be relocated 3 feet off the new right-of-way to Station 145+04. The main will continue 3 feet off the new right-of-way along the west side of Borg Road to Station 12+80. The main will cross Borg Road at Station 12+80 and tie into the existing 2-inch main on the east side of Borg Road. The existing 2-inch main on the east side of Borg Road will be cut and capped at Station 13+00.

The existing 6-inch high pressure main on the north side of STH 50 (Geneva Street) starting at Station 142+00 will be relocated to the center of the proposed sidewalk heading east, then continuing north along the west side of Wright Street to Station 21+68 remaining in the center of the proposed sidewalk. The main will cross Wright Street at Station 21+68. This main will head south down the east side of Wright Street to Station 20+00 being placed 3 feet off the right-of-way. The main continues south, running down the center of the proposed sidewalk, to Station 146+28 (67’ LT). A new main will begin at Station 146+28 (67’ LT) and head east along STH 50 (Geneva Street) to Station 148+07, head south and tie into the existing road crossing.

A 2-inch distribution main on the west side of Wright Street from Station 17+50 to Station 21+68 will be relocated in the same trench as the high pressure main stated above.

We Energies Gas plans to relocate all facilities prior to construction.

Contact Information: Scott Holstein, 700 S Kane Street, Burlington, WI 53105, (262) 763-1084, scott.holstein@we-energies.com.

7. Hauling Restrictions.

Do not haul on local roads without prior written approval from the appropriate jurisdiction and engineer.

Provide the necessary flagging and signing to control construction equipment movements when hauling across public roads. Do not impede traffic flow on the public roads during flagging operations.

Equip all vehicles traveling on public roads that are hauling materials subject to spillage, by either wind or vibration, with tailgates and adequate sideboards. Use canvas covers and other protective devices to prevent spillage as determined necessary by the engineer. Comply with all local ordinances.

8. Environmental Protection, Erosion Control.

Provide the Erosion Control Implementation Plan (ECIP) 14 days before the Pre-Construction Conference. Provide 1 copy of the ECIP to WisDOT and 1 copy of the ECIP to the WDNR Liaison (Craig Webster). 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.

Supplement standard spec 107.20 with the following:

Pursue operations in a timely and diligent manner, continuing all construction operations methodically from the initial topsoil stripping operation through the subsequent grading, re-topsoiling, and installation of erosion control devices in order to minimize the period of exposure to possible erosion.

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.

WDNR mandates that appropriate erosion control measures be applied to borrow and waste areas during and following construction. Following completion of the project, restore borrow and waste areas and properly seed, mulch, and protect them from the effects of erosion.

When engaged in roadway clearing operations, the contractor shall 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 a suitable self-contained particulate collector to prevent discharge from the collector bin into the atmosphere.

If any dewatering operations take place, properly treat the pumped water before discharging it to wetlands or waterways. Use the Wisconsin Department of Natural Resources Technical Standard on Dewatering (standard number 1061) as found on their website at http://www.dnr.wi.gov/runoff/stormwater/techstds.htm for the appropriate best management practice and proper application and sizing of such practice. As part of the Erosion Control Implementation Plan (ECIP) submittal, supply all pertinent information and calculations used to determine the best management practice for dewatering at each location it is required. Prior to construction, obtain approval from the engineer for the proposed method of treatment including supporting calculations. Dewatering activities will not be paid for separately under this contract.

Re-topsoil 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.

Erosion control BMPs are at suggested locations. The actual locations will be determined by the contractors ECIP and by the engineer. Erosion Control BMPs shall be maintained until permanent vegetation is established or until the engineer determines that the BMP is no longer required.

9. General Requirements for Incident Management.

Incidents within the construction zone will be handled by the local city of Delevan first responders (police, fire, EMS) or the Walworth County Sheriff's Department according to standard operating protocol.

Provide the city of Delavan first responders (police, fire, EMS), Walworth County Sheriff's Department, and the engineer a current telephone number for at least three individuals which the contractor or his representative can be contacted 24 hours-a-day in the event a safety hazard develops. Supply the three contact names and numbers before starting any work.

Invite the following agencies or individuals to the preconstruction and bi-weekly construction information meeting:

City of Delavan–Public Works	Mark Wendorf	(262) 728-1891
City of Delavan–Fire Department/EMS	Chief Timothy O'Neill	(262) 728-6311
City of Delavan–Police	Chief Timothy O'Neill	(262) 728-6311
Walworth County Sheriff's Department	Sheriff Kurt Picknell	(262) 741-4400
Walworth County Dept. of Public Works	Commissioner Kevin Brunner	(262) 741-3114

Provide 24 hours-a-day availability of equipment and forces to expeditiously restore lights, signs, or other traffic control devices that are damaged or disturbed. The cost to maintain and restore the traffic control devices shall be considered incidental to the item as bid and no additional payment will be made.

10. Field Facilities.

Provide field facilities for 60 calendar days beyond the project completion date.

Replace standard spec 642.2.1(1) with the following:

Provide a field office that is a permanent/fixed facility with a minimum 1,200 square feet of office space and which has a no fee parking lot with a minimum capacity to accommodate 15 passenger vehicles. Provide space that includes a meeting room with a minimum interior space of 350 square feet. The facility shall be located within two miles of the construction project.

Replace standard spec 642.2.2.4(1) with the following:

Under the bid item Field Office Type D, furnish a permanent/fixed facility with a minimum 1,200 square feet of office space; equipped as specified in standard spec 642.2.2.1; and with the following: 5 suitable office desks, 5 suitable office chairs, 6 6-foot folding tables, 1 ten foot folding tables, 5 two-drawer file cabinets, 3 four-shelf bookcases, a refrigerator, and 20 folding chairs.

11. Municipality Acceptance of Sanitary Sewer and Water Main Construction.

Both the department and the city of Delavan personnel will inspect construction of sanitary sewer and water main under this contract. However, construction staking, testing, and acceptance of the sanitary sewer and water main construction will be by the city of Delavan.
105-001 (20140630)

12. Referenced Construction Specifications.

Construct the city of Delevan sanitary sewer and water main work under Project 3170-08-71 conforming to the Standard Specifications for Sewer and Water Construction in Wisconsin, Sixth Edition 2003, Addendum No. 1, dated December 22, 2004 and Addendum No. 2, dated April 22, 2008. If there is a discrepancy or conflict between the referenced specification and the standard specifications regarding contract administration, part 1 of the standard specifications governs.
105-002 (20130615)

13. Railroad Insurance and Coordination.

A Description

Comply with standard spec 107.17 for all work affecting Wisconsin Department of Transportation (Leased to Wisconsin & Southern Railroad LLC) property and any existing tracks.

A.1 Railroad Insurance Requirements

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

Notify evidence of the required coverage, and duration to Preston Nelson, Superintendent of Operations, Wisconsin & Southern Railroad LLC, 1890 East Johnson St., Madison, WI 53704; telephone (608) 620-2075; email pnelson@watcocompanies.com. Include the following information on the insurance document:

Project: 3170-08-70/71
Route Name: STH 50
Crossing ID: 388 191L
Railroad Subdivision: Elkhorn Subdivision
Railroad Milepost: Milepost 46.25

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. The railroad will be installing new gates, overhead cantilever signal arms, and a new crossing surface at this crossing location.

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

Preston Nelson, Superintendent of Operations, Wisconsin & Southern Railroad LLC, 1890 East Johnson St., Madison, WI 53704; telephone (608) 620-2075; email pnelson@watcocompanies.com 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 six through freight trains operate weekly through the construction site. This consists of two trains daily on Monday, Wednesday, and Friday. Through freight trains operate at up to 25 mph.

14. Notice to Contractor – Work by Others.

Wisconsin & Southern Railroad LLC plans to install new gates, overhead cantilever signal arms, and a new crossing surface at the existing railroad crossing near Station 103+00 concurrent with Stage 2 construction operations.

Contact Preston Nelson, Superintendent of Operations, Wisconsin & Southern Railroad LLC, 1890 East Johnson St., Madison, WI 53704; telephone (608) 620-2075; email pnelson@watcocompanies.com to coordinate the timing of the Wisconsin & Southern Railroad LLC crossing improvements, including the Wisconsin & Southern Railroad LLC anticipated start date, end date, and duration.

Invite the designated Wisconsin & Southern Railroad LLC representative to the preconstruction and weekly construction progress meetings.

15. Notice to Contractor – Contamination Beyond Construction Limits.

The department completed testing for soil and ground water contamination for locations within this project where excavation is required. Testing indicated that petroleum-contaminated soil and groundwater is not present at the locations tested within the project limits but may be present beyond the project limits at the following locations:

1. Station 138+00 to 141+25, beyond project limits right (Country Ford, 1234 E. Geneva St., WDNR BRRTS No. 03-65-001275, WDNR FID No. 265050390, Closed LUST Site).

2. Station 141+25 to 142+70, beyond project limits right (Delavan McDonald's, 1224 E. Geneva St., WDNR BRRTS No. 03-65-562787, WDNR FID No. Not Available, Closed LUST Site).

3. Station 142+70 to 145+00, beyond project limits right (Mobil Mart, 502 Borg Rd., WDNR BRRTS No. 03-65-305143, WDNR FID No. 265148730, Closed LUST Site).

4. Station 12+00 to 15+00, beyond project limits left (Mobil Mart, 502 Borg Rd., WDNR BRRTS No. 03-65-305143, WDNR FID No. 265148730, Closed LUST Site).

Contaminated soil and/or groundwater at the above sites is expected to be beyond the excavation limits necessary to complete the work under this project. Control construction operations at these locations to ensure that they do not extend beyond the excavation limits indicated in the plans. If contaminated soil and/or groundwater are encountered at these sites

or elsewhere on the project during excavation, terminate excavation in the area and notify the engineer.

The Hazardous Materials Report is available by contacting:

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

107-100 (20050901)

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 unless the department determines that the schedule can be changed. 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. Abandoning Sewer, Item 204.0291.S.

A Description

This special provision describes abandoning existing sewer by filling it with cellular concrete according to the pertinent requirements of standard spec 204 and 501, as shown in the plans, and as hereinafter provided.

B Materials

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

C Construction

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

D Measurement
The department will measure Abandoning Sewer in volume by the cubic yard according to standard spec 109.1.3.

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

ITEM NUMBER	DESCRIPTION	UNIT
204.0291.S	Abandoning Sewer	CY

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

18. Removing Inlet Covers, Item 204.9060.S.001.

A Description
This special provision describes removing inlet covers according to the pertinent provisions of standard spec 204 and as hereinafter provided.

B (Vacant)

C (Vacant)

D Measurement
The department will measure Removing Inlet Covers as each removing inlet cover, acceptably completed.

E Payment
Add the following to standard spec 204.5:

ITEM NUMBER	DESCRIPTION	UNIT
204.9060.S.001	Removing Inlet Covers	Each

204-025 (20150630)

19. Removing Commercial Sign, Item 204.9060.S.002.

A Description
This special provision describes removing commercial signs according to the pertinent provisions of standard spec 204 and as hereinafter provided.

B (Vacant)

C Construction
Remove commercial sign, including the sign, supports, and bases according to the applicable portions of standard spec 204 and as herein provided.

De-energize and remove wiring necessary to remove commercial sign and lights. Remove wiring to proposed finish grade and abandon the remaining portion in compliance with State Electric Code.

The removed commercial sign, supports, and mounting hardware are the property of the contractor.

D Measurement
The department will measure Removing Commercial Sign as each removing commercial sign, acceptably completed.

E Payment
Add the following to standard spec 204.5:

ITEM NUMBER	DESCRIPTION	UNIT
204.9060.S.002	Removing Commercial Sign	EACH

204-025 (20150630)

20. Removing Light Pole, Item 204.9060.S.003.

A Description
This special provision describes removing light pole according to the pertinent provisions of standard spec 204 and as hereinafter provided.

B (Vacant)

C Construction
Remove light pole, including any signs, supports, and cameras according to the applicable portions of standard spec 204 and as herein provided.

De-energize and remove wiring necessary to remove light pole and lights. Remove wiring to proposed finish grade and abandon the remaining portion in compliance with State Electric Code.

The removed light pole, signs, cameras, supports, and mounting hardware are the property of the contractor.

D Measurement
The department will measure Removing Light Pole as each light pole, acceptably completed.

E Payment
Add the following to standard spec 204.5:

ITEM NUMBER	DESCRIPTION	UNIT
204.9060.S.003	Removing Light Pole	EACH

204-025 (20150630)

21. Removing Block Retaining Wall, Item 204.9090.S.001.

A Description
This special provision describes removing block retaining wall according to the pertinent provisions of standard spec 204 and as hereinafter provided.

B (Vacant)

C (Vacant)

D Measurement
The department will measure Removing Block Retaining Wall in length by the linear foot, acceptably completed.

E Payment
Supplement standard spec 204.5 to include the following:

ITEM NUMBER	DESCRIPTION	UNIT
204.9090.S.001	Removing Block Retaining Wall	LF

204-025 (20041005)

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

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

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

(5) Chapter 8 of the department's construction and materials manual (CMM) provides additional detailed guidance for QMP work and describes required sampling and testing procedures. The contractor may obtain the CMM from the department's web site at: http://wisconsindot.gov/Pages/doing-bus/eng-consultants/cnslt-rsrces/rdwy/default.aspx

A.2 Contractor Testing for Small Quantities

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

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

Plan Quantity	Minimum Required Testing
≤ 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://wisconsindot.gov/Pages/doing-bus/eng-consultants/cnslt-rsrces/tools/appr-prod/qual-labs.aspx

B.4 Quality Control Documentation

B.4.1 General

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

B.4.2 Records

(1) Document all placement observations, inspection records, and control adjustments daily in a permanent field record. Also include all test results in the project records. Provide test results to the engineer within 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 specs 305 or 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 table 301-2 of the standard specifications.

B.7 Corrective Action

B.7.1 General

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

B.7.2 Placement Corrective Action

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

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

(3) If corrective action improves the property in question such that the running average after 4 additional tests is within the warning limits, the contractor may return to the testing frequency specified in B.5.3. If corrective action does not improve the property in

question such that the running average after 4 additional individual tests is still in the warning band, repeat the steps outlined above starting with engineer notification.

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

(5) For individual test results significantly outside the control limits, notify the engineer, stop placing base, and suspend other activities that may affect the area in question. The engineer and contractor will jointly review data, data reduction, and data analysis; evaluate sampling and testing procedures; and perform additional testing as required to determine the extent of potentially unacceptable material. The engineer may direct the contractor to remove and replace that material. Individual test results are significantly outside the control limits if meeting one or more of the following criteria:
1. A gradation control limit for the No. 200 sieve is exceeded by more than 3.0 percent.
2. A gradation control limit for any sieve, except the No. 200, is exceeded by more than 5.0 percent.
3. The fracture control limit is exceeded by more than 10.0 percent.

B.8 Department Testing

B.8.1 General

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

B.8.2 Verification Testing

B.8.2.1 General

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

(2) The department will conduct QV tests of each base aggregate size, source or classification, and type during placement conforming to the following:
1. One non-random test on the first day of placement.
2. At least one random test per 30,000 tons, or fraction of 30,000 tons, placed.

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

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

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

B.8.3 Independent Assurance

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

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

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

B.9 Dispute Resolution

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

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

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

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

C (Vacant)

D (Vacant)

E Payment

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

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

301-010 (20151210)

23. Base Aggregate Dense 1¼-Inch for Lower Base Layers.

Replace standard spec 305.2.2.1(2) with the following:

1. Use 1¼-inch base throughout the full base depth.
2. Use ¾-inch base in the top 3 inches of the unpaved portion of shoulders. Use ¾-inch base or 1¼-inch base elsewhere in shoulders.

305-020 (20080902)

24. Reheating HMA Pavement Longitudinal Joints, Item 460.4110.S.

A Description

This special provision describes reheating the abutting edge of the previously compacted layer in the adjacent lane while paving mainline asphalt pavements.

B (Vacant)

C Construction

C.1 Equipment

Provide a self-contained heating unit that heats by convection only. Do not use forced air to enhance the flame. Provide a fireproof barrier between the flame and the heater's fuel source. The heater must produce a uniform distribution of heat within the heat box. Provide automatic controls to regulate the heater output and shutoff the heater when the paver stops or the heater control system loses power.

Mount the heater on the paver inside the paver's automatic leveling device.

C.2 Reheating Joints
Evenly reheat at least an 8 inch (200 mm) wide strip of the previously compacted layer in the adjacent lane as follows:

- Reheat the joint to within 60 degrees F (15 degrees C) of the mix temperature at the paver auger. Measure joint temperature immediately behind the heater.

The engineer may allow the required joint reheat temperatures to be cooler than specified to adjust for weather, wind, and other field conditions. Coordinate the heater output and paver speed to achieve the required joint reheat temperature without visible smoke emission.

D Measurement
The department will measure Reheating HMA Pavement Longitudinal Joints by the linear foot, acceptably completed as measured along each joint for each layer of asphalt placed.

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

ITEM NUMBER	DESCRIPTION	UNIT
460.4110.S	Reheating HMA Pavement Longitudinal Joints	LF

Payment is full compensation for furnishing all the work required under this bid item.
460-015 (20140630)

25. QMP HMA Pavement Nuclear Density.

A Description
Replace standard specs 460.3.3.2 (1) and 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 5 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 5 test sites between the QC and QV gauges. Locate an additional 5 test sites if the average difference exceeds 1.0 lb/ft^3. Measure and record the density on the 5 additional test sites for each gauge.

(4) Calculate the average of the difference in density of the 10 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 10 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 5 additional tests at the reference site once the cause of deviation is corrected. Calculate and record the average of the 5 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. 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 manufacturer's 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.

637-SER1 (20120401)

27. Insulation Board Polystyrene 2-Inch, Item 612.0902.S.001.

A Description
This special provision describes furnishing and placing polystyrene insulation board as shown on the plans and as hereinafter provided.

B Materials
Provide polystyrene insulation board that conforms to the requirements for Extruded Insulation Board, AASHTO Designation M230, except as hereinafter revised.

Delete flammability requirement.

B.1 Certification
Before installation, obtain from the manufacturer a certification indicating compliance and furnish it to the engineer.

C (Vacant)

D Measurement
The department will measure Insulation Board Polystyrene (size) by area in square yards of work, completed and accepted.

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

ITEM NUMBER	DESCRIPTION	UNIT
612.0902.S.001	Insulation Board Polystyrene 2-Inch	SY

Payment is full compensation for furnishing all excavation; and for furnishing and placing the insulation board.
612-005 (20030820)

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

A Description

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

B Materials

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

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

C Construction

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

Provide a firm, stable, and slip-resistant surface layer with vertical joints no higher than 1/4 inch and horizontal joints no wider than 1/2 inch. Sheet materials up to 1 inch thick may be lapped if the edge is beveled at 45 degrees or flatter. Asphalt may also be used to ramp up to materials up to 1 inch thick. Construct conforming to the following:

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

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

Maintain the surface with a 4-foot minimum clear width and the specified joint and slope requirements. Repair or reconstruct installations disturbed during construction operations. Remove and dispose of as specified in standard spec 204.3 when no longer required.

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

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

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

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

29. Temporary Curb Ramp, Item 644.1601.S.

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

B Materials
Furnish materials as follows:

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

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

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

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

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

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

ITEM NUMBER	DESCRIPTION	UNIT
644.1601.S	Temporary Curb Ramp	Each

Payment is full compensation for providing, maintaining, and removing temporary curb ramps.
644-020 (20150630)

30. Temporary Pedestrian Safety Fence, Item 644.1616.S.

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

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

Furnish select 2x4 dimensional lumber.

Furnish fence fabric meeting the following requirements.

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

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

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

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

D Measurement
The department will measure Temporary Pedestrian Safety Fence by the linear foot, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
644.1616.S	Temporary Pedestrian Safety Fence	LF

Payment is full compensation for providing, maintaining, and removing the temporary pedestrian safety fence.

644-025 (20150630)

31. Install Conduit Into Existing Item, Item 652.0700.S.

A Description

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

B Materials

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

C Construction

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

D Measurement

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

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
652.0700.S	Install Conduit Into Existing Item	Each

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

652-070 (20100709)

32. Temporary Traffic Signals for Intersections (location).

This work is according to standard spec 661 except as hereinafter modified:

Furnish and install temporary lighting and video detection as shown on the plans and according to standard spec 659.

Relocate existing emergency vehicle preemption detectors from existing signals to temporary signals. Provide and install all emergency vehicle preemption wire to temporary cabinet.

Do not reuse existing traffic signal equipment or traffic signal controller cabinets for temporary traffic signal installation.

Replace standard spec 661.2.1 (1) with the following:

Furnish and install all temporary traffic signal equipment as shown on the plans. The signal controller shall be capable of operating with a non-intrusive vehicle detection system and/or Emergency Vehicle Preemption (EVP) system. All wood poles shall be plumb and level. Provide primary and secondary temporary traffic signal contact names and phone numbers who will be responsible for implementing temporary traffic signal timing changes. The department may request traffic signal timing changes to an approved timing plan during the project. Implement any approved timing plan change within 24 hours upon notification of the change. Record the times of operation of the timing change and provide this information to the department.

Replace standard spec 661.2.1 (3) with the following:

Use existing underground electric service and meter breaker pedestal for the operation of the Temporary Traffic Signal. The contractor will be responsible for arranging any additional service connection to the temporary signal. The department will pay for all energy costs for the operation of the temporary traffic signal.

Furnish and install a generator to operate the temporary traffic signals for the times required to switch the existing permanent traffic signal over to the temporary traffic signal and for the time required to switch the temporary traffic signal back over to the permanent traffic signal.

Contact the local electrical utility at least four days prior to making the switch from the existing permanent traffic signal to the temporary traffic signal. Contact the local electrical utility at least four days prior to making the switch from the temporary traffic signal to the new permanent traffic signal.

Replace standard spec 661.3.1(2) with the following:

Request a signal inspection of the completed temporary traffic signal installation to the engineer at least five working days prior to the time of the requested inspection. Notify the department's Electrical Field Unit at (414) 266-1170 to coordinate the inspection. The department's Region electrical personnel will perform the inspection.

33. Removal and Replacement of Unsuitable Material, Item SPV.0035.200.

A Description

This special provision describes removal and replacement of unsuitable materials found at or below the bottom of water main trenches. Where these specifications do not cover portions of the work to be undertaken, the standard specifications and the Standard Specifications for Sewer and Water Construction in Wisconsin, Sixth Edition 2003, Addendum No. 1, dated December 22, 2004 and Addendum Non. 2, dated April 22, 2008, shall govern the work.

B Materials

Furnish 3-inch dense graded base that is according to the pertinent requirements of standard spec 305.

C Construction

Over-excavate organic, soft, spongy, or otherwise unsuitable materials found at or below the bottom of sanitary sewer and water main trenches as directed by the engineer.

D Measurement

The department will measure Removal and Replacement of Unsuitable Material in place by the cubic yard, acceptably completed, for areas greater than 1 foot below the bottom of the pipe barrel when replacement is approved by the engineer.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0035.200	Removal and Replacement of Unsuitable Material	CY

Payment is full compensation for removal and disposal of unsuitable materials; protection, replacement, or repair of utilities; replacement of suitable materials; and dewatering, including erosion and siltation control methods and devices to provide protection to environment from all pumping operations. Payment will be allowed only for over-excavation, and removal and replacement of unsuitable materials greater than one foot below the bottom of the pipe barrel when replacement is approved by the engineer.

34. Remove Existing Signal Faces, Item SPV.0060.001.

A Description

This work consists of the removing traffic signal faces and pedestrian signal faces according to the plans and as hereinafter provided.

B (Vacant)

C Construction

Perform all work according to standard spec 651 and 658.

Contact Paul Weckel at (262)-728-5585 Ext. 122, at least seven working days prior to the removal of the traffic signal faces.

Perform a field review of existing equipment with Paul Weckel for condition of equipment prior to removal. The city will identify all items to be removed and salvaged or disposed. Coordinate the delivery of any salvaged items with Paul Weckel.

Disconnect the wiring splices in the transformer/pedestal bases, remove traffic signal heads, traffic signal cable, and all hardware. Seal and plug any remaining holes in the poles by an approved method.

Plug any holes that remain once the existing signal face is removed with an approved sealing or closure pinnacle.

After removal of signal equipment, deliver all items deemed salvageable to the city of Delavan municipal garage located at 490 Richmond Rd., Delavan, WI 53115.

D Measurement

The department will measure Remove Existing Signal Faces as each individual pole location, acceptably completed. Up to three signal faces on each pole will be considered a single unit. Signal faces in excess of three will constitute multiple units of payment.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.001	Remove Existing Signal Faces	Each

Payment is full compensation for removing, salvaging, and delivering signal faces; removing wiring and all hardware; for sealing and plugging; for disposal of material; and for corresponding with owner.

35. Relocate Existing Traffic Signal Pole, Item SPV.0060.002.

A Description
This work consists of the removing and reinstalling existing traffic signal poles, pedestal/transformer bases, arms, luminaires, and wiring as shown on the plans and as hereinafter provided.

Furnish, without extra cost to the department, any materials and labor not specifically covered by the plans and standard specifications that may be found necessary to complete the work.

B (Vacant)

C Construction
Perform all work according to standard spec 651 and 658.

De-energize and disconnect the wiring splices in compliance with the National Electric Code (NEC).

Remove existing signal poles, pedestal/transformer bases, wiring and fixtures according to standard spec 204, and as shown on the plans. Disconnect underground conduit system from concrete pole base. Reinstall existing traffic signal poles, pedestal/transformer bases, wiring and fixtures on new concrete base at the location shown in the plan according to standard spec 658.

D Measurement
The department will measure Relocate Existing Traffic Signal Pole as each individual signal pole, acceptably relocated.

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	Relocate Existing Traffic Signal Pole	Each

Payment is according to standard spec 204.5.1 and includes payment for removing and reinstalling the traffic signal pole, arms, faces, luminaires and mounting hardware.

36. Relocate Existing Pedestrian Push Button, Item SPV.0060.003.

A Description
This work consists of the removing and reinstalling existing pedestrian push buttons, as shown on the plans and as hereinafter provided.

Furnish, without extra cost to the department, any materials and labor not specifically covered by the plans and standard specifications that may be found necessary to complete the work.

B (Vacant)

C Construction
Perform all work according to standard spec 651 and 658.

Deennergize and disconnect the wiring splices in compliance with the National Electric Code (NEC).

Remove existing pedestrian push button according to standard spec 204, and as shown on the plans. Rewire and reinstall the existing pedestrian push button at the location shown in the plan according to standard spec 658.

Plug any holes that remain once the existing push button is removed with an approved sealing or closure pinnacle.

D Measurement
The department will measure Relocate Existing Pedestrian Push Button as each individual button, acceptably relocated.

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	Relocate Existing Pedestrian Push Button	Each

Payment is according to standard spec 204.5.1 and includes payment for removing, reinstalling and rewiring the pedestrian push button, for sealing and plugging.

37. Inlet Covers Type DW, Item SPV.0060.004.

A Description
Perform work according to the applicable provisions of standard spec 611 and as detailed in the plans.

B (Vacant)

C (Vacant)

D Measurement
The department will measure Inlet Covers Type DW as each individual inlet cover, acceptably completed.

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.004	Inlet Covers Type DW	Each

Payment is full compensation for providing new covers, including frames, grates or lids, all other required materials, for installing and adjusting each cover, and incidentals necessary to complete the contract work.

38. Traffic Signal Controller, Fully Actuated, 8 Phase, SPV.0060.005.

A Description

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

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

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

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

B Materials

B.1 Controller

The controller shall be a fully traffic actuated, solid state, digital microprocessor based controller, capable of providing the number and sequence of phases, overlaps and any special logic as described herein and shown on the accompanying plan. The controller shall be an Eagle Signal Controls EPAC3108M52. The controller shall be fully programmed and shall be mounted in a control cabinet to operate as a complete and functioning intersection traffic signal control system. The equipment items included shall be, but not necessarily limited to, cabinet, microprocessor based controller, conflict monitor, power distribution panel, interior cabinet wiring and other associated electrical and electronic equipment interior to the control cabinet that is necessary to provide the type of operation described in these specifications.

A four ring, programmable for both single and dual entry concurrent timing, nine phase frame or equivalent shall be provided. Volume density timing shall be provided for eight phases and pedestrian timing shall be provided for all phases. MUTCD flashing capability shall be provided. All controls shall be according to the accompanying plans and with NEMA standards Publication No. TS1-1976 including Revisions No. 1 and No. 2.

The intersection controller unit shall be capable of up to 16 phase operation plus (16) programmable overlaps regardless of whether preemption, coordination or special programming is used. The intersection cabinet shall be wired for a minimum of twelve and include twelve 3 circuit load switches

B.2 Electrical and Operational Aspects

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

2. Timing Features. All controller timing parameters shall be fully programmable from the front panel using keyboard inputs. Memory storage features shall be nonvolatile under power off conditions for at least 30 days. The locking, non- locking detection mode and per phase recall shall also be accessible on the front panel.

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

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

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

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

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

7. Coordination. The controller shall be capable of operation in progressive coordination systems and mutual coordination and shall contain, but not limited to, the following external inputs, with all functions brought out:

- Vehicle/Pedestrian Detectors per phase
- Phase Omit per phase
- Omit Red Clearance per ring
- Maximum II per ring
- Stop Timing per ring
- Select Minimum Recall per controller
- Semi-Mode per controller
- Pedestrian Omit per phase
- Hold per phase
- Internal Max Inhibit per ring
- Red Rest per ring
- Force-Off per ring
- Manual Control per controller
- External Start per controller
- Conflict Monitor Status

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

9. Indicator lights and Switches. A backlit alphanumeric LCD display shall be provided to show the status of each signal phase on. The LCD display shall also be used to show the interval status, phase termination information and the presence of vehicular and pedestrian calls for each phase. The controller shall have fuses for AC power and +24 power.

10. Data Display. The front panel shall contain a display panel consisting of a backlit alphanumeric LCD display. The face of the display shall be scratch, chemical and solvent resistant. The operator shall access the controller through a menu system. By selecting various menu options, real time operational status or stored parameter tables shall be presented to the operator.

11. Diagnostic Program. A diagnostic program shall be prepared by the manufacturer of the controller unit which will demonstrate the proper operation of all inputs, outputs, controls and indicators in the controller, and shall have visual confirmation on the front panel. The diagnostic program shall be resident in the controller. The controller shall continuously run a diagnostic routine in the background to assure unit integrity.

12. Maintenance of Controller. For ease of service, the controller shall be divided into a minimum of the following separate circuit boards:

    a. CPU/Memory/Internal I/O
    b. External Input/Output
    c. Display Subsystem
    d. Power Supply

    Each board must be easily removable without requirements for special tools.

The controller shall provide user programmable, data logging of local events or alarm events including, but not limited to: Conflict Flash, Remote Flash, Local Flash, Controller Voltage Monitor, Detector Failure, On Line and Data Change. The time and date shall be recorded as a part of the message logged. The logging function shall be resident in the controller unit. The logging function shall be viewed from the front panel LCD display. If the logging function cannot be viewed from the front panel LCD display and it has to be performed by supplemental auxiliary equipment, the auxiliary equipment shall be supplied.

13. RS-232 Interface. An RS-232C interface and connector shall be provided for interconnecting to a conflict monitor, printer, another like controller unit, a local personal computer or a remote personal computer through an external modem.

    The controller unit shall be an Eagle Signal Controls EPAC3108M52

14. Controller Functions.

    a. Remote Flash.
    Controller shall have a user front panel programmable "Automatic Night Flash." The flash shall allow the user to program entry and exit phase(s) plus program the output of each load switch for off, flash, or alternate flash. This programming will be independent of start-up flash and or initial phase programming. This allows the operator complete programmability for automatic flash to be different from emergency flash.

    b. Dynamic Maximum
    This allows the user to program values which the controller will activate by user programmed time of day for automatic maximum time adjustments. This automatic controller adjustment will be based on concurrent "Max-Out" or "Gap-Out" terminations of phase green.

    c. Detector Inputs and Logging
    The controller shall have the capability to process 80 separate detector inputs. Each of the 80 inputs can be capable of being user programmable for phase detector inputs, system detector inputs, and/or Queue detector inputs. The controller shall have the capability to count in a report defined by the user up to 24 separate detector inputs. The report will log/record these 24 detector inputs for 72 events. Events start/stop and duration are all individually user programmable. This will allow the user total intersection counting capability without changing any field or cabinet wiring.

    d. Queue Selection
    The controller shall have (2) separate Queue selection routines capable of selecting any/all or partial timing plan operation over riding any existing operation. The queue selection shall be based on computed volume and/or user

selected occupancy routine with processing up to (8) eight detectors in each selection. The user programs thresholds settings to enable/disable queue override.

B.3 Monitoring

A NEMA + monitor with all components and circuitry, independent from the controller and having the capacity to handle a minimum of 12 channels shall be provided. The monitor shall detect conflicting indications, switch failure, controller voltage drops and the absence of reds as follows:

1. Conflicting indications shall cause the monitor to place the intersection in a flashing mode of operation. The monitor shall maintain the flashing mode until manually reset, regardless of 110 VAC power to the conflict monitor.

2. The +24 VDC cabinet power source shall be monitored by the conflict monitor. If that voltage drops to an unsatisfactory level, the monitor shall place the intersection in a flashing mode of operation. Upon resumption of normal voltages, the controller shall resume normal stop and go operation without the necessity of manual resetting.

3. The absence of any required red signal voltage at the field connection terminals in the controller assembly shall cause the monitor to place the intersection in a flashing mode of operation. The monitor shall maintain the flashing mode until manually reset.

4. A load switch that turns on any two (2) indications for the same approach, (such as green and yellow, yellow and red or red and green), shall place the intersection at the flashing mode of operation. The monitor shall maintain the flashing mode until manually reset, regardless of 110 VAC power to the controller.

5. After a power interruption (exceeding 457+25 milliseconds) to the controller assembly, a flashing period (4 to 10 seconds adjustable) shall precede the startup (initialization) sequence. This feature can be resident in either the monitor or the controller.

6. The flash circuit shall be wired in a failsafe manner so that the intersection will revert to and remain in a flashing mode of operation, whenever and for as long as, either the controller unit or the monitor unit is disconnected.

7. Indicator lights shall be provided for:

    a. an indicator for each channel which will latch status of failure,
    b. +24 VDC inputs,
    c. conflict,
    d. power (conflict monitor unit),
    e. power interrupt after failure,

f. red failure,
g. switch.

It will not be acceptable to disable any of the conflict monitor features because of signal sequences containing left or right turns with no red indication. Such sequences will require a loading resistor(s) to be mounted and wired to the unused triac output to simulate field load. The loading resistor shall be 1000 ohm 25 watt resistor meeting MIL-R-370.

B.4 Terminal Facilities

1. Terminal facilities shall consist of all devices external to the controller unit which are necessary to complete the intersection. Terminal facilities supplied shall be protected by dual, common trip, 30 amp circuit breakers. The dual, common trip, 30 amp circuit breakers shall feed an evenly split signal bus through radio interference line filters and bus relays. Bus relays, in all cases, shall be mercury type contractors and shall not be jack mounted. Terminal facilities shall also include applicable load switch panels of sufficient capacity to accommodate 8 vehicle phases and 4 pedestrian phases or 4 overlap phases and shall include a minimum of 12 solid state 3 circuit load switches with visual indicators. Flash transfer relays as required and two double circuit NEMA flashers shall also be provided. The internal wiring of the load switch panels shall be insulated wiring of sufficient size or the individual outputs fused so that the wiring will not be damaged by shorted output light circuits. Printed circuits in the load switch panels will not be acceptable.

2. Terminal strips shall be used to terminate controller cables, signal head cables and vehicle and/or pedestrian detector cables. All controller inputs and outputs shall be terminated on an interface panel. All interface and output terminal connections shall be the screw down type.

3. AC interconnect terminal facilities shall be fused to incoming lines.

4. An Eagle Signal EPAC3108 "D" connector harness and panel shall be provided. The wiring for all alarm log inputs shall be terminated on this panel.

B.5 Cabinet Switches

1. The following switches shall be located inside the cabinet on the maintenance panel:

   a. Controller Power On/Off
   b. Cabinet Light On/Off
   c. Stoptime (3 position)

POSITION	LABEL	FUNCTION
Upper	Stop Time	Place stop time on the controller
Center	Run	Remove stop time input to the controller
Lower	Normal	Connects the monitor to the controller stop time input

Switches shall be provided for all vehicle phases and all even pedestrian phases.

2. The following switches shall be located behind the police door.

   a. Signal/Off
   b. Flash/Normal

   The above switches (a and b) shall function as follows:

	SIGNAL	OFF
FLASH	Signals Flash	Signals Dark
NORMAL	Signals Normal	Signals Dark

3. Manual Detector Operation.

   Three position switches shall be provided external to the controller which will permit manual detector calls and manual detector disconnect for each phase independently. The switches shall be spring loaded and shall rest in the center (non-operative) position. The switches shall be appropriately labeled and shall operate as follows:

Upper Position:	Spring loaded, Disconnect detector
Center Position:	Normal detector operation
Lower Position:	Spring loaded, Test call is placed to the controller

B.6 Cabinet and Cabinet Equipment

1. The controller shall be furnished completely housed in a door-in-door ground mounted (without anchor bolts) metal cabinet of minimum size 44 inches wide, 25 inches deep and 58 inches high.

The cabinet shall be of clean cut design and appearance. The size of the cabinet shall be such as to provide ample space for housing the controller and all of the associated electrical devices which are to be furnished with the controller, together with any other auxiliary devices herein specified.

2. All cabinets shall have the following:

   a. A 15 amp circuit breaker for auxiliary equipment.
   b. A pedestrian push button optoisolator assembly providing four channels of isolation. Relays shall not be acceptable.
   c. A valve type surge protector, as manufactured by Joslyn, catalog NO. L9200-10; General Electric, catalog no 9L15DCB002; or approved equal, shall be mounted internally within the traffic signal cabinet and shall be connected across the line terminals of the circuit breakers. A General Electric varistor, catalog no V150LA20A, shall be installed at the load terminals of each circuit breaker from the hot line to the ground conductor.
   d. Incandescent lamp socket with 100 watt lamp.
   e. Solid state NEMA flasher(s) with visual indicators and completely wired base, rated for at least 10 amps per circuit at 165 degrees F.
   f. Control switches, including controller power switch, stop time switch and cabinet light switch.
   g. All switches specified in sections E and F.
   h. All necessary fuses and circuit breakers.
   i. All wiring harnesses including detector harnesses. Loop detector harness connector shall be MS3106B018-1S, fully wired, terminals I and J shall go to separate isolated terminals. A loop harness shall be provided for each loop as shown on the plans.
   j. Duplex power receptacle. A 120 VAC 20 amp, NEMA 5-20R GFI convenience outlet shall be mounted in each cabinet for energizing equipment or tools. The outlet shall be fuse protected.
   k. Radio interference filter. Each control cabinet shall be equipped with a single radio interference suppressor of sufficient ampere rating to handle the load requirements. The RIS shall be installed at the input power point. It shall minimize interference in both the broadcast and the aircraft frequencies, and shall provide a maximum attenuation of 50DB over a frequency range of from 200KHz to 75MHz, when used in connection with normal installations. The RIS shall be hermetically sealed in a substantial metal case which shall be filled with a suitable insulating compound. The terminals shall be nickel plated brass studs of sufficient external length to provide space to connect two no. 8 AWG wires and shall be so mounted that they cannot be turned in the case. Ungrounded terminals shall be properly insulated from each other, and shall maintain a surface leakage distance of not less than ¼ inch between any exposed current conductor and any other metallic parts. The terminals shall have an insulation factor of 100-200 megohms dependent upon external conditions. The RIS shall not be rated less than 35 amperes. The RIS shall be

designed for operation on 115 VAC±10%, 60Hz, single phase circuits, and shall meet the standards of UL and Radio Manufacturer's Association.

l. Cabinet grounding. In all controller cabinets and auxiliary cabinets, the AC common, the logic ground and the chassis ground shall be isolated from each other the same as detailed by NEMA Standard.

m. Suppressors. Each 120 VAC circuit that services an inductive device, such as a fan motor or a mechanical relay, shall have a suppressor to protect the controller's internal solid state devices from excessive voltage surges. Such suppressors shall be in addition to the surge protector at the input power point.

3. All conductors in the cabinet shall be number 22 AWG or larger, with a minimum of 19 strands and conforming to military specifications, Mil-W-16878D, type B or D vinyl nylon jacket, 600 volt, 105 degree C. All cabinets shall be factory wired.

4. The cabinet shall provide weather protection and forced ventilation, air filters and heaters with adjustable thermostat switches to comply with the environmental and operating standards outlined in NEMA Specification TSI-1-1976. The heater supplied shall have an adjustable thermostat setting which varies from 0 degree to 40 degree. The cabinet shall provide reasonable vandalism protection. Access doors shall be provided with latches and a corbin lock, dust cap and key change LR6380. The small door shall be provided with standard police locks.

5. Forced Ventilation. Controller cabinet containing solid state equipment shall be ventilated by means of 120 VAC, 60 Hz, tube axial compact type fan. The fan' free air delivery flow shall be greater than 100 CFM. The magnetic field of the fan motor shall not affect the performance of the control equipment. The fan bearings shall operate freely. The fan unit shall not crack, creep, warp or have bearing failure within a 7 year duty cycle. The maximum noise level shall be less than 40 decibels. The fan unit shall be corrosion resistant. The thermostat's turn on setting shall be adjustable from 90 to 120 degrees Fahrenheit. The fan shall run until the cabinet's temperature decreases to approximately 30 degrees below the turn on temperature setting. The fan shall be fused.

6. Metal shelves shall be provided to support the controller and external equipment. The controller shall be mounted on the top shelf and not less than 38 inches above the bottom of the cabinet. There shall be a minimum of 10 inch vertical height for detector units.

7. Bus and flash transfer relays, flashers, load switches, circuit breakers and interference filters shall be located on a standard panel consistent with the intersection plan. Design shall facilitate field inspection and maintenance accessibility without excessive disassembly or special tools.

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

9. Any cables, wires or circuits which are not being used shall be neatly folded and shall be capped. These wires shall be neatly tied and stowed away in or on the terminal facilities.

10. Terminal facilities arrangement shall be in a fashion so that trouble shooting of load bay or behind the load bay can be accomplished with simple tools. This means that the load bay will be hinged so that it can be dropped down for ease of maintenance. There will be sufficient slack in the load bay wiring to allow for dropping the load bay.

11. All control cables (i.e. detector harnesses, controller harnesses and harnesses which connect manual/vehicle detector switches) shall be protected by a nylon jacket or equivalent protection to prevent any contact with cabinet metal shelves, doors and any other sharp corners.

12. If any branch circuit wiring or control wiring does not conform to the wire specifications, the supplier will be considered as not meeting the specifications and proper corrective action will be exercised against the supplier.

B.7 Solid State Load Switches

Load switches shall meet the requirements of NEMA-TS1 Part 5 for three circuit load switches.

Each panel of load switches shall be either rack mounted or shall have a switch support bracket extending across the entire length of the switch panel.

The load bay arrangement from left to right shall be as described below:

1. Vehicular phasing shall be grouped first – phase 1 through phase 8, inclusive.
2. Pedestrian phasing shall follow next – phase 2, phase 4, phase 6 and phase 8.

B.8 Equipment List and Drawings

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

B.9 Supplier Warranty

1. Each bidder shall certify that the equipment meets the required specification and shall provide a complete catalog description.

    a. A warranty statement which stipulates that equipment to be supplied shall be warranted for two years from the date of purchase.
    b. Operation manuals.
    c. Maintenance manuals.
    d. Schematic diagrams.
    e. Component and equipment locations within the cabinet.

2. If a malfunction in the controller unit, or its auxiliary equipment occurs during the warranty period, the supplier shall, within 48 hours after notification (excluding Saturday and Sunday), furnish a like controller unit module, or auxiliary equipment, for use while the warranted unit is being repaired. The isolation of any malfunction during the warranty period shall be the responsibility of the supplier. After the supplier has repaired and returned the equipment, the city shall then return the spare component to the supplier.

B.10 Preemption

1. General

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

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

    The preemptor shall be internal to the controller and shall not alter the controller capability or interchangeability under normal operation. The preemptor shall be completely programmable by the user in the field and have six separate sequences with each having high and low priority inputs capable of the following;

2. Preempt Program.

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

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

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

d. Entry Clearance Phase(s) Select. Two sequential phases or phase pairs shall be available to be run as programmable fixed time intervals as an entry sequence. Two entry options shall be available, each programmable. The entry sequence shall be capable of being omitted entirely.

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

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

g. Preempt Sequences. The preemptor shall provide a minimum of six different programmable preemption sequences. These preemption sequences shall be associated with separate preempt call inputs or the sequences may be linked to each other to create more sophisticated sequences.

B.11 Time Base Coordination

These specifications detail a time base coordinator program for use with 2 through 16 phase actuated controller.

The units shall allow traffic control equipment to be coordinated without requiring the use of interconnection cables. The units shall coordinate traffic control equipment based on signals from a precise time base which will allow output control signals to be changed at the proper preprogrammed time to achieve the coordinated operation of an intersection

with other intersections or the desired operation of an isolated intersection. The time base coordinator may also be used as programmer for a master intersection controller which in turn is interconnected with secondary intersection controllers. The units shall also be capable of providing a command for MUTCD flash, and shall allow a full year program to be initiated and carried out without the necessity of field adjustment for anticipated special events, etc.

B.12 Loop Detector Amplifiers

The contractor shall provide the necessary Loop Detector Amplifiers as required on the plans. They shall be Eberle Design Inc. model (LM 302T) two channel loop monitor or approved equal.

Materials and Construction Methods

All loop detector amplifies supplied shall be two- channel, shelf mounted units with digital output timing and sequential scanning. The amplifier shall operate in compliance with all the requirements specified herein when connected to an inductance loop plus lead-in of from 0 to 1000 micro-henries with a loop parameter as low as 5.0 at the amplifiers operating frequency.

Each channel shall be self-tuning and shall be fully operational within one minute after power up. After a power interruption, the channel shall automatically return to normal operation. Two conventional single channel front panel mounted MS3102A 18-1P connectors for each amplifier shall be provided.

Each channel shall have a fail-safe design such that if the loop sensor circuit is broken, the channel shall output a continuous vehicle call.

The loop sensor shall be coupled to the channel input circuitry through isolation transformers. This arrangement shall provide continued operation of the channel even if the loop sensor in the street develops resistive leakage or becomes grounded.

Each amplifier shall have lightning protection as an integral part of its own circuitry. The protection shall enable the detector to withstand the discharge of a 10 microfarad capacitor, charged to + 1000 volts. The discharge shall be applied directly across the detector loop input pins with no loop load present. The protection shall also enable the detector to withstand the discharge from a 10 microfarad capacitor, charged to 1 to 2000 volts. The discharge shall be applied directly across either the detector loop input pins or across either side of the loop input pins to each ground. For this test, the detector chassis shall be grounded and the detector loop input pins shall have a 5.0 ohm dummy resistive load connected across them.

The detector circuits shall be so designed that changes due to environmental drift and applied power shall not cause an actuation. The detectors shall be capable of compensating or tracking for an environmental change of up to, but not exceeding,

1 x 10 minus 3% charge in inductance per second. This requirement must be met within two hours after initial application of operation power.
Each detector channel shall have a minimum of three sensitivity settings and these shall be front panel selectable. The most sensitive setting shall respond to an inductance change of 0.02%. The least sensitive setting may be chosen by the manufacturer such that accurate and repeatable occupancy measurements may be obtained. This setting must cause the detector channel to respond to a 0.14-0.4% charge in inductance.

Each detector channel shall have a front panel mounted indicator to provide a visual indication of each vehicle detection. A detector channel shall not cross talk with any other channel within the same module.

The unit shall operate over input voltage from 95VAC TO 135VAC and shall neither originate nor be sensitive to electrical transients in excess of proposed NEMA standards. Varistors shall be provided between power lines to limit transient voltages.

Extension and delay timing shall be provided for each channel independently as described below.

Delay Timing - Delay detector output for selected interval of 1 to 30 seconds in 1 second increments. Each new detection restarts the delay timer. All channels to be provided.

Extension Timing - Extends vehicle calls up to 7.75 seconds in .050 second increments. All channels to be provided.

Green Gating - Green signals from the controller shall be wired to the detector to modify timing functions. When green is true, delay timing is disabled. When green is false, extension timing is disabled. The green input signals may be DC or direct line voltage AC.

Smart Indicators -Normal indicator operation is provided when neither timer is active. Delay and extensions are distinguished by 4 hertz and 16 hertz flashing, respectively.

B.13 Controller Operation

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

If the contractor is the guarantor, he specifically waives the requirements of Section 289.14(2), Wisconsin Statues, and agrees as a condition of the contract that the owner may maintain an action against him at any time during the warranty period for recovery of damages which the city may have sustained by reason of the failure the contractor to comply with the provisions of the warranty provided to the owner.

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

C Construction

Install equipment as shown on the plans and as specified in this special provision.

D Measurement

The department will measure Traffic Signal Controller, Fully Actuated, 8 Phase as each controller, 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.0060.005	Traffic Signal Controller, Fully Actuated, 8 Phase	Each

Traffic Signal Controller, Fully Actuated, 8 Phase, measured and provided above, will be paid for at the contract unit price each, which price shall be payment in full for furnishing and installing the signal controller and conflict monitor together with cabinet, switches for flashing operation and fittings as are necessary to assure that the controller will perform said functions.

39. Steel Light Pole Assembly-Single Arm, Item SPV.0060.006; Steel Light Pole Assembly-Twin Arm, Item SPV.0060.007.

A Description

This special provision describes providing steel light pole assemblies, each consisting of a transformer base, pole, luminaire arm(s), and festoon outlet, as hereinafter provided and as shown on the plans.

B Materials

Provide carbon steel light pole with 8-sided cross-section and base flange with 11-inch bolt circle diameter and tapered carbon steel luminaire arm(s) (length, quantity, and configuration as shown on the plans). Pole shall be as manufactured by Millerbernd, model SJ1-XXX-A-080-A-300-R-GV, where the luminaire arm length determines the digits XXX, no equal. Provide 17-inch aluminum transformer base as manufactured by Millerbernd, model TB2, no equal.

Provide Steel Light Pole Assembly-Single Arm with one luminaire arm per pole, length and orientation as shown on the plans.

Provide Steel Light Pole Assembly-Twin Arm with two luminaire arms, lengths and orientation as shown on the plans.

Provide 20-amp, 120 VAC duplex receptacle rated for exterior use, including weatherproof in-use cover. Receptacle shall be industrial grade model 5362-A as manufactured by Pass and Seymour, or equivalent model by Leviton or Cooper, or equal. Provide a GFI circuit interrupter model 2085W as manufactured by Pass and Seymour, or equivalent by Leviton or Cooper, or equal. GFI circuit interrupter shall be located in the light pole handhole as shown on the plans.

Provide an appropriately sized hole in the steel light pole for a recessed festoon receptacle. The receptacle shall be located 15 feet above grade on the property side of the pole.

Provide a mounting plate in the inside face of the pole handhole to mount the GFI circuit interrupter. The mounting plate shall be welded to the pole.

Provide all miscellaneous items such as, but not limited to, in-line fuses, stainless steel mounting hardware, wire nuts, splice kits, connectors, tape, insulating varnish, and ground lug fasteners.

C Construction

Install steel light pole assemblies according to applicable provisions of standard spec 657.3.

Install Luminaires LED-City of Delavan on each steel light pole assembly, quantity, and configuration as shown on the plans.

Use a minimum of two stainless steel screws to mount each receptacle and install with the screws through the back of the receptacle, or as recommended by the receptacle manufacturer. Festoon receptacles shall operate on dedicated circuits independent from the lighting as shown on the plans. GFI reset shall be wired in series with the receptacle. Install in-line fuse as shown on the plans. Run wiring inside the pole. Provide strain relief for the wires before entering the receptacle box by using a clamp or other method acceptable to the engineer.

D Measurement

The department will measure Steel Light Pole Assembly-(arm quantity) as each individual light pole acceptably installed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.006	Steel Light Pole Assembly-Single Arm	Each
SPV.0060.007	Steel Light Pole Assembly-Twin Arm	Each

Payment for Steel Light Pole Assembly-(arm quantity) is full compensation for providing all materials including light pole, transformer base, luminaire arm(s), festoon outlet, grounding

lugs and related mounting hardware; for leveling shims; and for furnishing all hardware and fittings necessary for pole installation.

40. Luminaires Utility LED-City of Delavan, Item SPV.0060.008.

A Description
This special provision describes furnishing and installing LED luminaires together with hardware and fittings as shown in the plans.

B Materials
Provide luminaires as manufactured by Cree, model number as listed in the department Electrical Qualified Products List for Luminaires Utility LED-B.

C Construction
Furnish and install Luminaires Utility LED-City of Delavan together with hardware and fittings according to standard spec 659.3.3 and as shown on the plans.

D Measurement
The department will measure Luminaires Utility LED-City of Delavan as each individual luminaire, 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.0060.008	Luminaires Utility LED-City of Delavan	Each

Payment is full compensation for luminaires; for luminaire mounting boxes as required; junction box fusing; for hardware and fittings; and required coordination.

41. Repower Flashing Beacon, Item SPV.0060.009.

A Description
This special provision describes work required to repower an existing flashing beacon located approximately 225 feet west of the intersection of STH 50 and Bauer Parkway as described herein and as shown on the plans.

B (Vacant)

C Construction
Remove existing conductors from flashing beacon back to point of origin.

Flashing beacon shall be powered from a new branch circuit as shown on the plans. Terminate new conductors in existing junction box at the flashing beacon to match the existing configuration. Operation of flashing beacon shall be restored to match its previous operating condition.

D Measurement
The department will measure Repower Flashing Beacon as each individual flashing beacon, acceptably repowered.

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.009	Repower Flashing Beacon	Each

Payment is full compensation for providing all materials including terminations, connectors, fittings, and miscellaneous work required to repower the existing flashing beacon; and for removal of all existing conductors.

42. Remove and Salvage Existing Light Pole, Item SPV.0060.010.

A Description
This special provision describes removing and salvaging or disposing of existing light poles, concrete bases, arms, luminaires, and wiring as shown on the plans and as hereinafter provided.

B (Vacant)

C Construction
Contact Mark Wendorf, city of Delavan Director of Public Works, (262) 728-5585, at least seven days prior to removing any street lights on the city of Delavan lighting systems.

Remove existing light poles, concrete bases, wiring within light poles, wiring between light poles being removed, luminaire arms, and light fixtures according to standard spec 204 and as shown on the plans. Disconnect underground conduit system from light pole base and cap conduit below grade, unless otherwise approved by the engineer or the city. Coordinate equipment to be salvaged with the city. Properly dispose of any equipment that the city chooses not to salvage.

Deliver all salvaged lighting equipment to the city of Delavan maintenance facility, where equipment shall be carefully stockpiled.

490 Richmond Rd.
Delavan, WI 53115

Between removal and delivery to the storage location, all equipment shall be placed on blocks so as not to be in direct contact with the ground. Protect luminaires from moisture. Replace any equipment damaged in the removal process with equipment that is of greater or equal quality than the damaged piece.

D Measurement
The department will measure Remove and Salvage Existing Light Pole as each individual removed existing light pole, acceptably removed and salvaged.

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.010	Remove and Salvage Existing Light Pole	Each

Payment is full compensation for removing light poles, including fixtures, concrete bases, wiring and conduit; for salvaging and disposing of surplus material; for stockpiling salvaged equipment and materials; and for coordinating with the city of Delavan.

43. Construction Staking Curb Ramp Layout, Item SPV.0060.015.

A Description
Perform this work according to the applicable provisions of standard spec 650.

B (Vacant)

C Construction
Set and maintain construction stakes or marks as necessary to achieve the required accuracy and to support the method of operations. Set additional construction stakes as necessary to establish location and grade of the curb ramp including points of change in alignment and grade according to the plans, standard details for curb ramps, and for conformance with the Americans with Disabilities Act (ADA) Accessibility Guidelines (ADAAG). Locate stakes to within 0.02 feet horizontally and establish the grade elevation to within 0.01 feet vertically.

D Measurement
The department will measure Construction Staking Curb Ramp Layout as each individual curb ramp layout, 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.0060.015	Construction Staking Curb Ramp Layout	Each

Payment for Construction Staking Curb Ramp Layout bid item is full compensation for planning and layout of curb ramps including setting lathe, stakes, pins, string line or other materials used to establish the horizontal and vertical position of the curb ramp; and for resetting damaged or missing construction staking materials.

44. Salvage and Reinstall Existing Light Pole, Item SPV.0060.016.

A Description

This special provision describes salvaging and replacing existing light poles, arms, conduit, luminaires, and components as shown on the plans and as hereinafter provided.

B (Vacant)

C Construction

Contact Mark Wendorf, City of Delavan Director of Public Works, (262) 728-5585, at least seven days prior to removing any street lights on the city of Delavan lighting systems. Perform a field review of existing street lights with city staff for condition of equipment prior to removal. Notify the city of Delavan of any damaged or non-operating equipment. Carefully document existing wiring configuration before modifying any wiring.

Remove existing light poles, wiring between light poles being removed, luminaire arms, and light fixtures according to standard spec 204 and as shown on the plans. Existing wiring inside the pole from the transformer base to the luminaire shall remain. Disconnect underground conduit system from light pole base and cap conduit below grade, unless otherwise approved by the engineer or the city.

Removal of the pull boxes and concrete bases will be paid for separately.

Deliver all salvaged lighting equipment to the city maintenance facility, where equipment shall be carefully stored.

490 Richmond Rd.
Delavan, WI 53115

Between removal and delivery to the storage location, all equipment shall be placed on blocks so as not to be in direct contact with the ground. Protect luminaires from moisture. Replace any equipment damaged in the removal process with equipment that is of greater or equal quality than the damaged piece.

Contact Mark Wendorf, City of Delavan Director of Public Works, (262) 728-5585, at least seven days prior to reinstalling the street light to coordinate a pick up time at the city maintenance facility.

Reinstall light pole on new concrete base (paid for separately) to match the documented condition before removal. Reconnect the wire splices in the transformer bases to the new circuit conductors as shown on the plans.

D Measurement

The department will measure Salvage and Reinstall Existing Light Pole as each individual existing light pole, acceptably salvaged and reinstalled.

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.016	Salvage and Reinstall Existing Light Pole	Each

Payment is full compensation for removing light poles, including fixtures, wiring and conduit; for salvaging, handling, transporting, and reinstalling light poles and fixtures; for furnishing and installing materials including hardware and connectors; for performing all mounting, leveling; for storing salvaged equipment and materials; and for coordinating with the city of Delavan.

45. Storm Sewer Tap, Item SPV.0060.017.

A Description
This special provision describes tapping various sized storm sewer pipes into existing structures, including manholes or inlets, or other pipes at locations shown on the plans.

Perform the work according to the applicable provisions of standard spec 608 and 611, and as hereinafter provided.

B (Vacant)

C Construction
Tap into the existing structure to allow the pipe to be flush with the interior wall of the existing pipe or structure.

All necessary temporary shoring needed for construction of this item will not be paid for separately but will be included in this item of work.

D Measurement
The department will measure Storm Sewer Tap as each individual storm sewer tap, 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.0060.017	Storm Sewer Tap	Each

Payment is full compensation for providing all materials, including saw cuts, for excavating; for removing concrete; for providing and removing sheeting and shoring, making connections to new or existing facilities, and for cleaning out.

46. Remove Existing Valve Box, Item SPV.0060.200.

A Description

This special provision describes removing water valve boxes at locations shown on the plans or as directed by the engineer, and as hereinafter provided. Where these specifications do not cover portions of the work to be undertaken, the standard specifications and the Standard Specifications for Sewer and Water Construction in Wisconsin, Sixth Edition 2003, Addendum No. 1, dated December 22, 2004 and Addendum Non. 2, dated April 22, 2008, shall govern the work.

B Materials

Furnish granular backfill that is according to the pertinent requirements of standard spec 209.

C Construction

Remove and salvage water valve box in its entirety from top of box to top of water valve. After removing the valve boxes, backfill the remaining void space with compacted granular backfill to grade. Each layer of backfill to be placed in the void shall not exceed 12 inches in thickness and shall be thoroughly compacted by means of approved tampers, rollers or vibrators.

Salvage and stockpile valve boxes on site for removal by the city.

D Measurement

The department will measure Remove Existing Valve Box as each existing water valve box, acceptably removed. Hydrant auxiliary valve box removal is included in Remove Existing Fire Hydrant.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.200	Remove Existing Valve Box	EACH

Payment is full compensation for excavating; properly salvaging surplus material from the excavation; backfilling and compacting the backfill material; and restoring the site; but not including removing fire hydrant auxiliary valve boxes. The department will measure and pay for Backfill Granular separately.

47. Abandon Existing Hydrant, Item SPV.0060.201.

A Description

This special provision describes removing existing fire hydrants as shown on the plans or as directed by the engineer, and as hereinafter provided. Where these specifications do not cover portions of the work to be undertaken, the standard specifications and the Standard Specifications for Sewer and Water Construction in Wisconsin, Sixth Edition 2003,

Addendum No. 1, dated December 22, 2004 and Addendum Non. 2, dated April 22, 2008, shall govern the work.

B Materials
Furnish granular backfill that is according to the pertinent requirements of standard spec 209.

C Construction
Remove and dispose of the existing hydrants and valve boxes. After removing the hydrants, auxiliary valve and valve boxes, and plugging the end of the water main, backfill the remaining void space with compacted granular backfill to grade. Each layer of backfill to be placed in the void shall not exceed 12 inches in thickness and shall be thoroughly compacted by means of approved tampers, rollers or vibrators.

Salvage and stockpile hydrants on site for removal by the city.

D Measurement
The department will measure Remove Existing Fire Hydrant as each individual removed hydrant 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	Abandon Existing Hydrant	Each

Payment is full compensation for excavating; removal of existing fire hydrant, auxiliary valve and valve box; plugging existing water main; properly disposing of surplus material from the excavation; backfilling and compacting the backfill material; restoring the site. The department will measure and pay for Backfill Granular separately.

48. Water Main Fitting 12-Inch Cap, Item SPV.0060.202; Water Main Fitting 12-Inch Sleeve, Item SPV.0060.203; Water Main Fitting 12-Inch X 45 Degree Bend, Item SPV.0060.204; Water Main Fitting 12-Inch X 22.5 Degree Bend, Item SPV.0060.205; Water Main Fitting 12-Inch Tee, Item SPV.0060.206; Water Main Fitting 12-Inch X 8-Inch Tee, Item SPV.0060.207; Water Main Fitting 12-Inch X 6-Inch Tee, Item SPV.0060.208; Water Main Fitting 12-Inch X 8-Inch Cross, Item SPV.0060.209; Water Main Fitting 12-Inch X 8-Inch Reducer, Item SPV.0060.210; Water Main Fitting 8-Inch Sleeve, Item SPV.0060.211; Water Main Fitting 8-Inch X 45 Degree Bend, Item SPV.0060.212; Water Main Fitting 8-Inch Tee, Item SPV.0060.213; Water Main Fitting 8-Inch X 6-Inch Tee, Item SPV.0060.214; Water Main Fitting 8-Inch X 6-Inch Reducer, Item SPV.0060.215; Water Main Fitting 6-Inch Sleeve, Item

SPV.0060.216; Water Main Fitting 6-Inch X 90 Degree Bend, Item SPV.0060.217; Water Main Fitting 6-Inch X 45 Degree Bend, Item SPV.0060.218.

A Description

This special provision describes furnishing and installing water main fittings as shown on the plans, as specified herein, and needed for a complete and proper installation. Comply with manufacturers' recommendations on product handling, storage, and protection. Where these specifications do not cover portions of the work to be undertaken, the standard specifications and the Standard Specifications for Sewer and Water Construction in Wisconsin, Sixth Edition 2003, Addendum No. 1, dated December 22, 2004 and Addendum Non. 2, dated April 22, 2008, shall govern the work.

B Materials

Provide American-made ductile iron fittings with mechanical joint complying with ANSI A21.10 or A21.53. Use cement lining complying with ANSI A-21.4, standard thickness. Provide solid sleeves where required.

Bolts and nuts: Use Corten bolts and nuts, or; Use A-304 stainless steel bolts with nuts and washers of series 300 stainless steel per ASTM A194.

Provide restrained joint type fittings compatible with pipe system utilized, as specified by the pipe manufacturer. Provide restrained type joints for all fittings. Acceptable manufacturers: EBAA Iron, Meg-A-Lug System or approved equal.

Provide polyethylene sheet complying with ANSI/AWWA C105/A21.5-99. The minimum thickness of the sheet for linear low-density polyethylene film is 8 mils and for high-density cross laminated polyethylene film is 4 mils. The sheet will have the following markings at minimum 2 feet increments along its length: Manufacturer’s name or trademark, year of manufacture, minimum film thickness and material type (LLDPE or HDCLPE), applicable range of nominal pipe diameter size(s), and Warning – Corrosion Protection – Repair Any Damage.

C Construction

Comply with AWWA C600. Protect fittings by loose wrapping or tubing with polyethylene sheet. Place polyethylene sheet or tube around the entire circumference of the fitting, tie or tape sheet securely to prevent displacement during backfilling. Comply with ANSI/AWWA A21.5-93/C105 regarding installation of polyethylene protection.

D Measurement

The department will measure Water Main Fittings as each individual fitting, 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.0060.202	Water Main Fitting, 12-Inch Cap	Each
SPV.0060.203	Water Main Fitting, 12-Inch Sleeve	Each
SPV.0060.204	Water Main Fitting, 12-Inch X 45 Degree Bend	Each
SPV.0060.205	Water Main Fitting, 12-Inch X 22.5 Degree Bend	Each
SPV.0060.206	Water Main Fitting, 12-Inch Tee	Each
SPV.0060.207	Water Main Fitting, 12-Inch X 8-Inch Tee	Each
SPV.0060.208	Water Main Fitting, 12-Inch X 6-Inch Tee	Each
SPV.0060.209	Water Main Fitting, 12-Inch X 8-Inch Cross	Each
SPV.0060.210	Water Main Fitting, 12-Inch X 8-Inch Reducer	Each
SPV.0060.211	Water Main Fitting, 8-Inch Sleeve	Each
SPV.0060.212	Water Main Fitting, 8-Inch X 45 Degree Bend	Each
SPV.0060.213	Water Main Fitting, 8-Inch Tee	Each
SPV.0060.214	Water Main Fitting, 8-Inch X 6-Inch Tee	Each
SPV.0060.215	Water Main Fitting, 8-Inch X 6-Inch Reducer	Each
SPV.0060.216	Water Main Fitting, 6-Inch Sleeve	Each
SPV.0060.217	Water Main Fitting, 6-Inch X 90 Degree Bend	Each
SPV.0060.218	Water Main Fitting, 6-Inch X 45 Degree Bend	Each

Payment is full compensation for furnishing and installing water main fittings complete in place, including pipe connections, restrained joints, and polyethylene wrapping.

49. Water Valves, 12-Inch, Item SPV.0060.219; Water Valves, 8-Inch, Item SPV.0060.220; Water Valves, 6-Inch, Item SPV.0060.221.

A Description

This special provision describes furnishing and installing water valves as shown on the plans, as specified herein, and needed for a complete and proper installation. Comply with manufacturers' recommendations on product handling, storage, and protection. Where these specifications do not cover portions of the work to be undertaken, the standard specifications and the Standard Specifications for Sewer and Water Construction in Wisconsin, Sixth Edition 2003, Addendum No. 1, dated December 22, 2004 and Addendum No. 2, dated April 22, 2008, shall govern the work.

B Materials

Provide gate valves 4-inch to 10-inch with clockwise closing direction, designed according to AWWA C509 (cast iron body) or AWWA C515 (ductile iron body), bronze fitted, resilient wedge and seat type with non-rising stem and O-ring packing. Provide mechanical joint ends for buried valves. Provide restrained type joints for all mechanical joint end valves.

Acceptable valve manufacturer 4-inch to 10-inch Gate Valves: Mueller A-2360 or Clow 2639.

Acceptable valve manufacturer 12-inch and larger Butterfly Valves: Mueller B-3211, no substitutions.

Provide American-made adjustable valve boxes on buried valves, compatible with size and type of valve protected. Mark valve box cover "WATER" for potable water piping valves. Provide bituminous coated carbon steel valve extension stems and 2-inch square operating nuts 2 inches below the cover. Provide a centering ring at the top of the extension. Provide valve box stabilizer for all valve boxes. Acceptable valve box stabilizer manufacturers: Adaptor, Inc. or equal.

C Construction
Install according to manufacturers recommended installation procedures. Extend and adjust box to finished grade.

D Measurement
The department will measure Water Valves (size) as each individual valve, 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.0060.219	Water Valves, 12-Inch	Each
SPV.0060.220	Water Valves, 8-Inch	Each
SPV.0060.221	Water Valves, 6-Inch	Each

Payment is full compensation for furnishing and installing water valves and boxes complete in place, including polyethylene wrapping of valves and valve box; valve box stabilizer; but not including fire hydrant auxiliary valves.

50. Water Main Connection 12-Inch Non-Pressure, Item SPV.0060.222; Water Main Connection 8-Inch Non-Pressure, Item SPV.0060.223; Water Main Connection 6-Inch Non-Pressure, Item SPV.0060.224.

A Description
This special provision describes making non-pressure connections to existing water mains as shown on the plans, as specified herein, and needed for a complete and proper installation. Where these specifications do not cover portions of the work to be undertaken, the standard specifications and the Standard Specifications for Sewer and Water Construction in Wisconsin, Sixth Edition 2003, Addendum No. 1, dated December 22, 2004 and Addendum Non. 2, dated April 22, 2008, shall govern the work.

B Materials and Construction
Make connections to existing water mains as required for a complete and proper installation. Use solid sleeves where required. Use restrained type joints for all fittings. Provide polyethylene protection of all fittings. Coordinate the shutdown of water mains with municipality.

C (Vacant)

D Measurement
The department will measure Water Main Connection as each individual connection, 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.0060.222	Water Main Connection, 12-Inch	Each
SPV.0060.223	Water Main Connection, 8-Inch	Each
SPV.0060.224	Water Main Connection, 6-Inch	Each

Payment is full compensation for making connections to existing water mains complete in place, including removal of existing plugs; cutting and removing existing mains; thrust blocking; excavation; bracing; bedding and covering of pipe; trench dewatering; trench backfilling; testing; disinfection; finish grading; removal and disposal of waste excavated materials; protection, replacement, or repair of utilities; installation and removal of temporary thrust blocking and temporary plugs; but not including pipe fittings which will be paid for under the Pay Item "Water Main Fittings" or backfilling with granular trench backfill materials.

51. Fire Hydrants, Item SPV.0060.225.

A Description
This special provision describes furnishing and installing fire hydrants as shown on the plans, as specified herein, and needed for a complete and proper installation. Comply with manufacturers' recommendations on product handling, storage, and protection. Where these specifications do not cover portions of the work to be undertaken, the standard specifications and the Standard Specifications for Sewer and Water Construction in Wisconsin, Sixth Edition 2003, Addendum No. 1, dated December 22, 2004 and Addendum Non. 2, dated April 22, 2008, shall govern the work.

B Materials
Provide standard bury fire hydrants of 6-1/2 feet with original yellow enamel coating. Comply with AWWA C502. Acceptable manufacturers: Clow Medallion – Double Steamer, no substitutions.

Provide compression type with a 5-1/4 inch minimum size main valve assembly, O-ring seals, two 4-1/2 inch pumper nozzles with 5-inch Storz connectors, a vandal-resistant National Standard operating nut, and an above ground break flange.

Provide a 6-inch auxiliary resilient seat type gate valve and restrained type jointing between the valves and the tee fittings. Acceptable manufacturers: Mueller A-2360 or Clow 2639.

Provide valve boxes with covers marked with the word "WATER". Provide valve box stabilizers on all hydrant auxiliary valves, acceptable manufacturer Adaptor, Inc.

Provide locator wire terminal box with each hydrant. The box will be 2½-inch diameter by 18-inch shaft length, ABS plastic with cast iron lid, polyester laminate fiberglass reinforced 2-point terminal blocks. Acceptable manufacturers: C.P. Test Services – VALVCO.

C Construction

Install hydrants plumb with the lowest hose connection at least 18 inches but not more than 23 inches above the finished grade ground level. Install hydrants without the use of hydrant extensions. Utilize fittings on connecting pipe if extension to the proper finished grade is required. Hydrant extensions will not be allowed. Verify that oil reservoir is full. Re-coat hydrant with manufacturer provided enamel paint if damaged during installation. Cover new hydrant with black plastic bag until new system is in service.

Set hydrant bases and auxiliary valve on a precast concrete block to provide firm support for the base. Brace the bases with solid concrete blocking between the base and undisturbed trench wall to counteract the reaction thrust of water pressure at the base. Brace the hydrant barrels during backfilling. Do not block the drain hole in hydrant. Place a minimum of ½ cubic yards of washed coarse stone at and around the base for proper drainage. Cover stone with geotextile fabric before backfilling. Place and compact backfill materials in 6-inch layers around the hydrant and auxiliary gate valve. Extend and adjust auxiliary box to finished grade.

Install locator wire terminal box behind hydrants and set the top of the box flush with the finished grade. Install locator wire on top of the hydrant connecting pipe. Extend the locator wire up the back of the hydrant to the terminal box leaving 12-inches of slack.

Repair existing pipe underdrain according to standard spec 612.

D Measurement

The department will measure Fire Hydrants as each individual hydrant, 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.0060.225	Fire Hydrants	Each

Payment is full compensation for furnishing and installing fire hydrants and appurtenances complete in place, including excavation; removal and disposal of unsuitable excavated material; bracing; bedding and covering of pipe; 5 linear feet of 6-inch connecting pipe; auxiliary gate valve, box and valve box adaptor; thrust blocking; hydrant barrel drain washed stone pocket; locator wire and terminal box; support; trenching dewatering; backfilling and compacting; testing; disinfection; finish grading; removal and disposal of waste excavated

materials; and protection, replacement, or repair of utilities and repair of pipe underdrains. Hydrant leads in excess of 5-feet will be paid for as Water Main (Open Cut), 6-Inch RJT, SPV.0090.204. The department will measure and pay for Backfill Granular separately.

52. Water Service Pipe Connections, 1-Inch, Item SPV.0060.226.

A Description

This special provision describes furnishing and installing water service pipe connections as shown on the plans, as specified herein, and needed for a complete and proper installation. Comply with manufacturers' recommendations on product handling, storage, and protection. Where these specifications do not cover portions of the work to be undertaken, the standard specifications and the Standard Specifications for Sewer and Water Construction in Wisconsin, Sixth Edition 2003, Addendum No. 1, dated December 22, 2004 and Addendum Non. 2, dated April 22, 2008, shall govern the work.

B Materials

Provide service saddles, corporation stops, curb stops, and service boxes. Provide for electrical conductivity on all water service pipe and fittings by use of a solid 10 AWG locator wire as shown on the detail drawings.

Provide double strap stainless steel service saddles with nylon coated epoxy coated clamps and stainless steel stiffeners.

Provide American made corporation stops of Mueller No. H15008, no substitutions.

Provide American made curb stops of Mueller No. H15209, no substitutions.

Provide American made services boxes with extension type and stationary rods, Tyler H100F. Size 100G, no substitutions.

Provide 5-foot extension rods with stationary ring. Shorter rods may be used where the depth of the existing service will not allow for a 5-foot extension rod. Terminate extension rods within one foot of ground surface.

C Construction

Install service connections at locations shown on the plans or determined by the engineer at the time of construction. Install corporation stop and curb stop as shown on the standard water service installation detail. Set curb stop on a precast concrete block. Do not splice the water service pipe. Install service boxes over the curb stop in a truly vertical position. Set and adjust the top of the service box top flush with the finished grade ground level. Extend locator wire up the outside of water service boxes and into top of box by drilling a hole through the box as shown in the detail drawings.

Repair existing pipe underdrain according to standard spec 612.

D Measurement
The department will measure Water Service Pipe Connections, 1-inch as each individual connection, 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.0060.226	Water Service Pipe Connections, 1-inch	Each

Payment is full compensation for furnishing and installing water service pipe fittings and connections, connecting to existing water service lines, and connecting water service lines to the water mains complete in place, including furnishing corporation stops, curb stops, service boxes, and all required fittings; locator wire; removal of existing service boxes; plugging and abandoning existing water service lines and repair of pipe under drains below curb and gutter.

53. Adjust Water Valve Box, Item SPV.0060.227.

A Description
This special provision describes locating, exposing, and protecting existing water valve boxes after the pavement is removed, furnishing and installing water valve box extensions if necessary; and adjusting the water valve boxes to the finished elevation required. Comply with manufacturers' recommendations on product handling, storage, and protection. Where these specifications do not cover portions of the work to be undertaken, the standard specifications and the Standard Specifications for Sewer and Water Construction in Wisconsin, Sixth Edition 2003, Addendum No. 1, dated December 22, 2004 and Addendum Non. 2, dated April 22, 2008, shall govern the work.

B (Vacant)

C Construction
Furnish and install water valve box extensions to the existing water valve boxes if necessary. Protect the water valve boxes during construction. Clean out the water valve boxes as necessary to assure the valve wrench will fit completely over the valve operating nut. Adjust the valve boxes to the required finished elevation.

D Measurement
The department will measure Adjust Water Valve Box 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.0060.227	Adjust Water Valve Box	EACH

Payment is full compensation for locating, exposing, and protecting water valve boxes; furnishing and installing water valve box extensions if necessary; exclusive of water valve boxes; cleaning out the water valve boxes; and adjusting water valve boxes to the finished elevation. The contractor shall replace water valve boxes, which are damaged by the contractor's operations, in kind, at the contractor's expense.

54. Replace Water Valve Box, Item SPV.0060.228.

A Description

This special provision describes replacing broken water valve boxes. Comply with manufacturers' recommendations on product handling, storage, and protection. Where these specifications do not cover portions of the work to be undertaken, the standard specifications and the Standard Specifications for Sewer and Water Construction in Wisconsin, Sixth Edition 2003, Addendum No. 1, dated December 22, 2004 and Addendum Non. 2, dated April 22, 2008, shall govern the work.

B Materials

Provide American-made adjustable valve boxes on buried valves, compatible with size and type of valve protected. Mark valve box cover "WATER" for potable water piping valves. Provide bituminous coated carbon steel valve extension stems and 2-inch square operating nuts 2 inches below the cover. Provide a centering ring at the top of the extension. Provide valve box stabilizer for all valve boxes. Acceptable valve box stabilizer manufacturers: Adaptor, Inc. or equal. Acceptable valve box Tyler 6860 series or East Jordan 8560 series with No.6 base or approved equal.

C Construction

Remove all broken components of the existing valve box and replace as required.

D Measurement

The department will measure Replace Water Valve Box by each unit, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.228	Replace Water Valve Box	EACH

Payment is full compensation for exposing, and protecting water valve boxes; furnishing and installing water valve box components as necessary; exclusive of water valves; cleaning out the water valve boxes; and adjusting water valve boxes to the finished elevation. The contractor shall replace water valve boxes, which are damaged by the contractor's operations, in kind, at the contractor's expense.

55. Adjust Curb Box, Item SPV.0060.229.

A Description

This special provision describes locating, exposing, and protecting existing water service curb boxes after the pavement is removed, furnishing and installing curb box extensions if necessary; and adjusting the curb boxes to the finished elevation required. Comply with manufacturers' recommendations on product handling, storage, and protection. Where these specifications do not cover portions of the work to be undertaken, the standard specifications and the Standard Specifications for Sewer and Water Construction in Wisconsin, Sixth Edition 2003, Addendum No. 1, dated December 22, 2004 and Addendum Non. 2, dated April 22, 2008, shall govern the work.

B (Vacant)

C Construction

Furnish and install curb box extensions to the existing curb boxes if necessary. Protect the curb boxes during construction. Clean out the curb boxes as necessary to assure the valve wrench will fit completely over the valve bolt. Adjust the curb boxes to the required finished elevation.

D Measurement

The department will measure Adjust Curb Box 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.0060.229	Adjust Curb Box	EACH

Payment is full compensation for locating, exposing, and protecting curb boxes; furnishing and installing curb box extensions if necessary; exclusive of curb boxes; cleaning out the curb boxes; and adjusting curb boxes to the finished elevation. The contractor shall replace curb boxes, which are damaged by the contractor’s operations, in kind, at the contractor's expense.

56. Sanitary Manhole Installation, Item SPV.0060.230.

A Description

This special provision describes the installation of a sanitary manhole at an existing pipe bend, as specified herein, and needed for a complete and proper installation. The Municipality will supply the pre-cast concrete manhole bottom, barrel, and cone sections. Where these specifications do not cover portions of the work to be undertaken, the standard specifications and the Standard Specifications for Sewer and Water Construction in Wisconsin, Sixth Edition 2003, Addendum No. 1, dated December 22, 2004 and Addendum Non. 2, dated April 22, 2008, shall govern the work.

B Materials
For sanitary manhole frames use concrete adjusting rings for grade adjustment Use flexible watertight rubber gaskets or preformed bituminous plastic gaskets consisting of a homogeneous blend of refined hydrocarbon resins and plasticizing compound reinforced with mineral filler for each joint, including grade ring joints. Acceptable manufacturers: K.T. Snyder Co. RAM-NEK, Concrete Sealants Type CS-102, or approved equal.

C Construction
Perform excavations to locate the existing pipe bend and install new manhole at locations shown on the plans and as specified herein. The location shown on the plans is approximate. Field verify for suitable dimensions and layout before installation. Install flexible watertight gaskets and grade rings not to exceed 8 inches. Trim and smooth surplus gaskets.

D Measurement
The department will measure Sanitary Manhole Installation as each individual structure, acceptably installed.

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.230	Sanitary Manhole Installation	Each

Payment is full compensation for providing labor, materials, and equipment required to excavate and locate the existing pipe bend, and install sanitary manholes supplied by the municipality; pickup and delivery of pre-cast concrete manhole sections to job site; removal and disposal of existing pavements; excavation; removal and disposal of existing structure or pipe; removal and disposal of unsuitable excavated materials; bracing, sheeting, and shoring; protection, replacement, or repair of utilities; dewatering, including erosion and sedimentation control methods and devices to provide protection to the environment from all pumping operations; temporary pumping of sewage around work area if necessary to complete work; manhole bedding; manhole joint seals; connections to existing pipes; concrete adjusting rings; poured benches and inverts as required; frame and cover adjustment to final grade; and cleanup. The department will measure and pay for Sanitary Manhole Frame and Grate, Special; Sanitary Chimney Seals; Sanitary Manhole Exterior Joint Protection and Backfill Granular separately.

57. Sanitary Manhole Exterior Joint Protection, Item SPV.0060.231.

A Description
This special provision describes the installation of sanitary manhole exterior joint protection, as specified herein, and needed for a complete and proper installation. Comply with manufacturers' recommendations on product handling, storage, and protection. Where these specifications do not cover portions of the work to be undertaken, the standard specifications and the Standard Specifications for Sewer and Water Construction in Wisconsin, Sixth Edition 2003, Addendum No. 1, dated December 22, 2004 and Addendum Non. 2, dated April 22, 2008, shall govern the work.

B Materials
Furnish manhole exterior joint protection and exterior frame to cone protection consisting of woven polypropylene fabric with rubberized mastic coating and strapping, with a minimum width of 9-inches. Acceptable manufacturers: MacWrap by MarMac Construction Products, or Cretex Wrap by Cretex Specialty Products or approved equal.

C Construction
Install external joint protection in the presence of the engineer. Field verify for suitable dimensions and layout before installation. Comply with manufacturer's recommendations regarding installation and protection of sleeves during backfilling.

D Measurement
The department will measure Sanitary Manhole Exterior Joint Protection for each manhole, acceptably completed, regardless of the number of seals required.

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.231	Sanitary Manhole Exterior Joint Protection	Each

Payment is full compensation for providing labor, materials, and equipment required to install all sanitary manhole exterior joint protection; and cleanup.

58. Sanitary Manhole Cone Replacement, Item SPV.0060.232.

A Description
This special provision describes the replacement of sanitary manhole cones at existing sanitary sewer manholes, as specified herein, and needed for a complete and proper installation. Where these specifications do not cover portions of the work to be undertaken, the standard specifications and the Standard Specifications for Sewer and Water Construction in Wisconsin, Sixth Edition 2003, Addendum No. 1, dated December 22, 2004 and Addendum Non. 2, dated April 22, 2008, shall govern the work.

B Materials
Provide eccentric cone section complying with ASTM C478. Use 4000 psi concrete using Type 1 Portland Cement complying with ASTM C150. Use flexible watertight rubber gaskets or preformed bituminous plastic gaskets consisting of a homogeneous blend of refined hydrocarbon resins and plasticizing compound reinforced with mineral filler for each joint, including grade ring joints. Acceptable manufacturers: K.T. Snyder Co. RAM-NEK, Concrete Sealants Type CS-102, or approved equal. Use concrete adjusting rings and mortar for grade adjustment. Provide steps with a minimum width of 12 inches and a minimum projection of 5 inches. Use steps consisting of copolymer polypropylene plastic with continuous ½-inch steel reinforcement.

C Construction

Remove and reinstall the existing frame and cover or new frame and cover as directed by the engineer. Masonry adjusting rings and mortar shall be added or removed as needed. Install seals according to the manufacturer's recommended installation procedures. Remove concrete barrel sections or blocks to an elevation sufficient to install new cone and set frames and covers in paved areas so that the top of the cover will be flush with the finished pavement. Apply and evenly coat sealing material between adjusting rings and frame. Apply and evenly coat the chimney exterior from the top of the manhole cone or lid to the manhole frame with a ¼-inch thick layer of bituminous material.

D Measurement

The department will measure Sanitary Manhole Cone Replacement as each individual cone, acceptably replaced.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.232	Sanitary Manhole Cone Replacement	EACH

Payment is full compensation for providing labor, materials, and equipment required to excavate, remove and replace sanitary sewer manhole cones; removal and disposal of existing pavements; excavation; removal and disposal of existing structure to an elevation required to install a new manhole cone to meet the proposed grade; removal and disposal of unsuitable excavated materials; bracing, sheeting, and shoring; protection, replacement, or repair of utilities; dewatering, including erosion and sedimentation control methods and devices to provide protection to the environment from all pumping operations; temporary pumping of sewage around work area if necessary to complete work; manhole joint seals; concrete adjusting rings; frame and cover adjustment to final grade; and cleanup. The department will measure and pay for Sanitary Manhole Frame and Grate, Special; Sanitary Chimney Seals; Sanitary Manhole Exterior Joint Protection and Backfill Granular separately.

59. Sanitary Manhole Frame and Grate, Special, Item SPV.0060.233.

A Description

This special provision describes the installation of frames and grates on sanitary manholes, as specified herein, and needed for a complete and proper installation. Comply with manufacturers' recommendations on product handling, storage, and protection. Where these specifications do not cover portions of the work to be undertaken, the standard specifications and the Standard Specifications for Sewer and Water Construction in Wisconsin, Sixth Edition 2003, Addendum No. 1, dated December 22, 2004 and Addendum Non. 2, dated April 22, 2008, shall govern the work.

B Materials
Provide cast iron frames and covers with heavy duty, indented top with round, solid self-sealing lids and machined bearing surfaces, concealed pick holes, stamped with the word "SANITARY". Acceptable products: Neenah R-1580 round, East Jordan 1020, or approved equal. Use concrete adjusting rings and mortar for grade adjustment.

C Construction
Unless otherwise shown on the drawings or as directed by the engineer, set frames and covers in paved areas so that the top of the cover will be flush with the finished pavement. Apply and evenly coat sealing material between adjusting rings and frame. Apply and evenly coat the chimney exterior from the top of the manhole cone or lid to the manhole frame with a ¼-inch thick layer of bituminous material.

D Measurement
The department will measure Sanitary Manhole Frame and Grate, Special as each individual frame and grate, 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.0060.233	Sanitary Manhole Frame and Grate, Special	Each

Payment is full compensation for providing labor, materials, and equipment required to install sanitary manhole frames and grates; and cleanup.

60. Sanitary Manhole Chimney Seals, Item SPV.0060.234.

A Description
This special provision describes the installation of sanitary manhole chimney seals, as specified herein, and needed for a complete and proper installation. Comply with manufacturers' recommendations on product handling, storage, and protection. Where these specifications do not cover portions of the work to be undertaken, the standard specifications and the Standard Specifications for Sewer and Water Construction in Wisconsin, Sixth Edition 2003, Addendum No. 1, dated December 22, 2004 and Addendum Non. 2, dated April 22, 2008, shall govern the work.

B Materials
Furnish internal/external frame seals consisting of flexible synthetic rubber sleeve and stainless steel expansion bands. Sleeve material conforming to ASTM D412 and ASTM D2240. Comply with a minimum 20 psi adhesion tensile strength, 1000% minimum webbing @ 77 degrees F, 500% minimum elongation @ 32 degrees F, and maximum 75 psi compressibility @ 77 degrees F. Provide sleeve with a minimum thickness of 0.062” and unexpanded external vertical heights of 10 to 12 inches. Expansion bands to compress sleeve in place: 16 gauge minimum thickness, Type 304, ASTM A2740 stainless steel construction. Minimum band width: ½-inch. All screw and bolt fasteners: Type 304, ASTM A276, stainless steel. Make a watertight seal having a minimum adjustment of 2 inches.

Provide accessories when required by each application. Tapered sleeve for sloped sealing surfaces. Wedge inserts of same construction as sleeve. Acceptable manufacturers: Adaptor, Inc. Internal/External Adaptor Seal.

C Construction
Install internal/external seal according to the manufacturer's recommendations. Install internal rubber gasket on the manhole chimney. Provide watertight gasket to eliminate leakage between the frame and each adjusting ring down to and including cone section. Field verify for suitable dimensions and layout before installation.

D Measurement
The department will measure Sanitary Manhole Chimney Seals of the height installed as each individual seal, 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.0060.234	Sanitary Manhole Chimney Seals	Each

Payment is full compensation for providing labor, materials, and equipment required to install sanitary chimney seals and extensions; and cleanup.

61. Sanitary Manhole Frame Adjustment, Item SPV.0060.235.

A Description
This special provision describes the adjustment of frames and grates on sanitary manholes, as specified herein, and needed for a complete and proper installation. Comply with manufacturers' recommendations on product handling, storage, and protection. Where these specifications do not cover portions of the work to be undertaken, the standard specifications and the Standard Specifications for Sewer and Water Construction in Wisconsin, Sixth Edition 2003, Addendum No. 1, dated December 22, 2004 and Addendum Non. 2, dated April 22, 2008, shall govern the work.

B Materials
Use concrete adjusting rings and mortar for grade adjustment.

C Construction
Unless otherwise shown on the Drawings or as directed by the engineer, set frames and covers in paved areas so that the top of the cover will be flush with the finished pavement. Apply and evenly coat sealing material between adjusting rings and frame. Apply and evenly coat the chimney exterior from the top of the manhole cone or lid to the manhole frame with a ¼-inch thick layer of bituminous material.

D Measurement
The department will measure Sanitary Manhole Frames Adjustment as each individual frame and grate, 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.0060.235	Sanitary Manhole Frame Adjustment	Each

Payment is full compensation for providing labor, materials, and equipment required to install sanitary manhole frames and grates; and cleanup.

62. Pavement Cleanup Project ID 3170-08-70, Item SPV.0075.001.

A Description
This special provision describes cleanup of dust and debris from pavements within and adjacent to the job site. Pavement Cleanup includes surveillance and reporting of all active haul routes.

B Materials
B.1 Pavement Cleanup
Furnish a vacuum-type street sweeper equipped with a power broom, water spray system, and a vacuum collection system.

Utilize vacuum equipment with a self-contained particulate collector capable of preventing discharge from the collection bin into the atmosphere.

Use a vacuum-type sweeper as the primary sweeper, except as specified in this special provision or approved by the engineer.

C Construction
C.1 Surveillance
Provide daily surveillance of active haul routes to identify if material is being tracked from the jobsite. Document the condition of the roads and all sweeping recommendations in a daily report. Submit reports to the engineer daily, including hourly metered tickets for that day’s sweeping activities.

C.2 Pavement Cleanup
Keep all pavements, sidewalks, driveways, curb lanes and gutters within the project boundaries, free of dust and debris generated from all activity under the contract. Keep all pavements, sidewalks, driveways, curb lanes, and gutters adjacent to the project free of dust and debris that are caused by land disturbing, dust generating activities, as defined in the contractor's Dust Control Implementation Plan (DCIP). Provide routine sweeping of all pavements, sidewalks, driveways, curb lanes and gutters on local-street active haul routes as defined in the DCIP or as directed by the engineer. Include the following roadways for routine sweeping:

- STH 50 / E. Geneva Street
- Borg Road / S. Wright Street
- And any other roadways approved by the department

In addition to routine sweeping, conduct sweepings as the engineer directs or approves, to eliminate dust problems that might arise during off-work hours or emergencies. Provide the engineer with a contact person available at all times to respond to requests for emergency sweeping. Coordinate with engineer to determine essential deadlines for responding to emergency sweeping requests and cleaning up spillage and material tracked to/from the project.

Skid steers with mechanical power brooms may only be utilized on sidewalks and driveways whose pavements will not support the weight of a street sweeper, unless otherwise approved by the engineer.

D Measurement

The department will measure Pavement Cleanup (Project ID 3170-08-70) by the hour, acceptably completed.

Tickets shall include:

- Date
- Company
- Operator name
- Equipment make/model
- Routes swept
- Total hours.

Total hours shall be to the nearest 0.25 hour that work under this item was performed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV. 0075.001	Pavement Cleanup Project ID 3170-08-70	HR

Payment is full compensation for daily surveillance; preparing and submitting the daily surveillance report with hourly metered tickets; mobilization; sweeping; and disposing of materials.

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63. Water Main Exploratory Excavation, Item SPV.0075.200.

A Description

This special provision describes excavating areas indicated on the drawings or as directed by the engineer to determine location and depth of existing water mains and sanitary sewer mains and determine if existing location conflicts with proposed construction. Comply with

manufacturers' recommendations on product handling, storage, and protection. Where these specifications do not cover portions of the work to be undertaken, the standard specifications and the Standard Specifications for Sewer and Water Construction in Wisconsin, Sixth Edition 2003, Addendum No. 1, dated December 22, 2004 and Addendum Non. 2, dated April 22, 2008, shall govern the work.

B (Vacant)

C Construction
Perform excavation as required and as directed by the engineer to determine if conflicts between existing or proposed utilities exist.

D Measurement
The department will measure Water Main Exploratory Excavation by hours for each excavation, 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.0075.200	Water Main Exploratory Excavation	HRS

Payment is full compensation for additional mobilizations; removal and disposal of existing pavements; excavation; removal and disposal of surplus and unsuitable excavated materials; protection, replacement, or repair of utilities; trench dewatering, including erosion and siltation control methods and devices to provide protection to environment from all pumping operations; bracing; trench backfilling with and compaction of excavated materials; traffic control; but not including backfilling with granular trench backfill materials. The department will measure and pay for Backfill Granular separately.

64. Concrete Curb & Gutter 24-Inch Type D Special, Item SPV.0090.001; Concrete Curb & Gutter 24-Inch Type A Special, Item SPV.0090.002; Concrete Curb 24-Inch Type D, Item SPV.0090.003; Concrete Curb & Gutter 24-Inch Type D, Item SPV.0090.004.

A Description
Perform work according to the applicable provisions of standard spec 601 and as detailed in the plans.

B (Vacant)

C (Vacant)

D Measurement
The department will measure Concrete Curb & Gutter 24-Inch Type D Special, Concrete Curb & Gutter 24-Inch Type A Special, Concrete Curb 24-Inch Type D, and Concrete Curb & Gutter 24-Inch Type D in length by the linear foot, acceptably completed.

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.001	Concrete Curb & Gutter 24-Inch Type D Special	LF
SPV.0090.002	Concrete Curb & Gutter 24-Inch Type A Special	LF
SPV.0090.003	Concrete Curb 24-Inch Type D	LF
SPV.0090.004	Concrete Curb & Gutter 24-Inch Type D	LF

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, and reinforcement tie bars unless specified otherwise; 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.

65. Concrete Curb & Gutter HES 30-Inch Type A, Item SPV.0090.005; Concrete Curb & Gutter HES 30-Inch Type D, Item SPV.0090.006.

A Description
Perform work according to the applicable provisions of standard spec 601 and as detailed in the plans.

B Materials
Furnish air-entrained concrete conforming to standard spec 501. Use high early strength concrete.

C (Vacant)

D Measurement
The department will measure Concrete Curb & Gutter HES 30-inch Type A and Concrete Curb & Gutter HES 30-inch Type D 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.0090.005	Concrete Curb & Gutter HES 30-Inch Type A	LF
SPV.0090.006	Concrete Curb & Gutter HES 30-Inch Type D	LF

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, and reinforcement tie bars unless specified otherwise; 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.

66. Sawing Curb Head, Item SPV.0090.007.

A Description

This special provision describes sawing curb heads according to the applicable provisions of standard spec 204 and as detailed in the plans.

B (Vacant)

C Construction

Sawcut and remove the curb head from existing asphaltic and concrete curb and gutter. Capture and dispose of the slurry residue created by the sawing.

D Measurement

The department will measure Sawing Curb Head in length by the linear foot, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.007	Sawing Curb Head	LF

Payment is full compensation for sawing curb head; for hauling and disposing of surplus materials; for capturing and disposing of any saw slurry; and for restoring the work site.

67. Water Main (Open Cut), 12-Inch RJT, Item SPV.0090.200; Water Main (Open Cut), 12-Inch, Item SPV.0090.201; Water Main (Open Cut), 8-Inch RJT, Item SPV.0090.202; Water Main (Open Cut), 8-Inch, Item SPV.0090.203; Water Main (Open Cut), 6-Inch RJT, Item SPV.0090.204.

A Description

A.1 General

This special provision describes furnishing and installing water main pipe as shown on the plans, as specified herein, and needed for a complete and proper installation. Provide labor, materials, tools, chemicals and equipment necessary to perform the pressure and leakage tests and disinfection. Comply with manufacturers' recommendations on product handling, storage, and protection.

A.2 References
Where these specifications do not cover portions of the work to be undertaken, the standard specifications, the Standard Specifications for Sewer and Water Construction in Wisconsin, Sixth Edition 2003, Addendum No. 1, dated December 22, 2004 and Addendum Non. 2, dated April 22, 2008, and the requirement of the Wisconsin Administrative Code – Section NR shall govern the work.

A.3 Submittals
Furnish two (2) copies of bacteriological test reports.

B Materials
B.1 General
Provide PVC plastic pipe materials in sizes 3-inch through 24-inch, unless otherwise indicated on the plans.

B.2 PVC Plastic Pipe
Provide Class 12454A or B polyvinyl chloride complying with ASTM D1784. Comply with AWWA C-900 for Class 150 pressure pipe with a standard dimension ratio of 18 for pipe 12-inch and smaller. Use push-on bell and spigot type joints with elastomeric ring conforming to ASTM F-477.

B.3 Restrained Joints
Provide restrained joint pipe system, where indicated on the plans, that utilizes mechanical joint retainer gland systems that provide locking segments shaped to pipe barrel that do not create stress points on pipe barrel. Do not use setpoint type retainer glands. Acceptable manufacturers: EBAA Iron, Meg-A-Lug System.

B.4 Polyethylene Sheet
Provide polyethylene sheet complying with ANSI/AWWA C105/A21.5-99. The minimum thickness of the sheet for linear low-density polyethylene film is 8 mils and for high-density cross laminated polyethylene film is 4 mils. The sheet will have the following markings at minimum 2 feet increments along its length: Manufacturer’s name or trademark, year of manufacture, minimum film thickness and material type (LLDPE or HDCLPE), applicable range of nominal pipe diameter size(s), and Warning – Corrosion Protection – Repair Any Damage.

B.5 Granular Pipe Bedding and Cover Materials
Provide well graded, washed, mixture of 100 percent crushed gravel or crushed stone aggregate free of clay, loam, dirt, calcareous or other foreign matter conforming to the "Standard Specifications for Sewer and Water Construction in Wisconsin."

Provide material of crushed stone chips with the following gradation:

SIEVE SIZE	PERCENT PASSING BY WEIGHT
1/2-inch	100%
3/8-inch	90-100%
No. 8	0-15%
No. 30	0-3%

For flexible thermoplastic pipes: Comply with ASTM D2321, Class I or II as modified below:

1) Exclude sharp angular granular materials.
2) Limit maximum particle size to ½ inch.

Do not use Class II materials in wet conditions.

B.6 Granular Trench Backfill

Provide either granular material or excavated granular materials. Remove unsuitable materials at the direction of the engineer.

Granular material: Use granular materials consisting of durable particles ranging in size from fine to coarse in a substantially uniform combination complying with standard spec 209.

Excavated granular materials: A mixture of sand and gravel, free from organic matter, clay, loam, dirt, and other foreign material, passing the 1-1/2-inch sieve, with not more than 15 percent passing the No. 200 sieve.

C Construction

C.1 General

Install according to pipe manufacturer's recommendations. For ductile iron water mains and appurtenances comply with AWWA C600. Lay water mains and water service lines with a minimum depth of cover of six feet below finished grade ground level unless otherwise indicated on the plans. Where new mains cross existing mains, install new main below existing main unless otherwise indicated on the plans. Do not advance trench excavation more than 50 feet ahead of completed pipe installation except as approved by the engineer.

Provide and maintain sheeting, shoring, and bracing necessary for protection of the Work, adjacent property, and for the safety of personnel. Remove temporary sheeting and bracing after backfilling to an elevation which will prohibit caving of exposed side banks. Fill voids left by the withdrawal of sheeting with compacted sand. The engineer may direct that supports in trenches be cut off at any specific elevation to protect adjacent facilities or property. Compensation for support left in place will be negotiated. No extra payment will be made for the supports left in place without the direction of the engineer. Do not leave supports within 4 feet of the ground or pavement surface in place without the permission of the engineer. Develop a suitable procedure to prevent already jointed pipe from pulling apart

and the displacement of pipe bedding and cover around the pipe wall when a portable trench box or sliding trench shield is used.

Plug existing water mains to be abandoned with concrete or fittings.

Provide pumping, bailing, wellpointing, and construct ditches and dikes required to dewater and drain ground water, sewage, or storm water to keep the excavation and site dry for the completion of the Work.

Excavate by open cut unless otherwise indicated on the plans. Over excavate organic, soft, spongy, or otherwise unsuitable soils found at or below the bottom of the trench to meet firm subsoil or as directed by the engineer.

Comply with the following maximum trench widths at the top of pipelines:

NOMINAL PIPE SIZES (INCHES)	TRENCH WIDTHS (INCHES)
12 or smaller	30
14-18	36
20-24	42
27-30	48
33 and larger	1-1/3 times pipe O.D.

Where the trench width exceeds the maximum limitations, provide higher strength pipe, or embed or cradle the pipe in concrete to achieve the necessary load factor as determined by the engineer at no additional cost to the Municipality.

Wherever the trench is over excavated, refill the trench bottom to the required pipeline grade with 3-inch dense graded base conforming to the standard specifications as directed by the engineer. Removal and replacement of material, or unsuitable material, to a depth of one foot below pipe barrel outside diameter is considered incidental to installation of the pipe. Wherever the trench is over excavated to remove unsuitable material, install geotechnical fabric between native soil and granular material. Install fabric to cover bottom and sides of trench to envelope entire bedding and covering material and overlap 1 foot at the top.

C.2 Pipe Bedding and Covering

Install compacted granular pipe bedding and covering material with a minimum thickness of 4 inches under pipe barrels and 2 inches under bells. Wherever two or more pipes or conduits are placed in the same trench or excavated area, backfill the trench with granular pipe bedding and covering material to support the uppermost pipe or conduit. Provide sand bedding with a minimum thickness of 3 inches under electrical and wiring conduits and cables.

Following placement of pipe and inspection of joints, install compacted granular pipe bedding and covering material for the full width of the trench to 12 inches above the top of the pipe, unless otherwise shown on the plans.

Install granular pipe bedding and covering material in uniform loose layers not exceeding 8 inches thick. Compact each layer firmly by ramming or tamping with tools approved by the engineer in such a manner as not to disturb or injure the pipe to yield a minimum density of 95 percent of maximum dry density as determined according to ASTM D1557 or AASHTO-T180. Where trench is widened by installation of structure or jacking pits, extend bedding and covering materials to total width of excavation.

C.3 Backfill

Backfill trench from the top of pipe cover to topsoil, paving subgrade, or foundation level. If trenches settle during the period of construction and within the guarantee period of the work, fill trench back to the surrounding grade, and restore the surfaces.

For trench in streets, parking areas, driveways, sidewalks, curb and gutter, or within 2 feet of any proposed curb and gutter, sidewalk, and other paved areas backfill with granular trench backfill materials. Place in uniform loose layer not exceeding 12 inches thick and compact with vibrating roller or equivalent. Fill the top 18 inches of trenches with Base Aggregate Dense 1 ¼-Inch complying with standard spec 305.

Compact each layer of trench backfill materials to yield a minimum density of 95 percent of maximum dry density as determined according to ASTM D1557 or AASHTO T-180. The density of compacted backfill will be determined at intervals of not more than 500 feet at locations selected by the engineer. The Municipality may provide the services of an independent testing laboratory for the density tests. Maintain temporary pavement level with adjoining pavement surfaces until the permanent pavement is placed.

Finish grade and fill to achieve the lines and grades required. Slope grades to drain away from structures. Except where mounding over trenches is specified, grade smooth areas of the Work including previously grassed areas that have been disturbed, and adjacent transition areas. Fill and compact depressions from settlement and round tops of embankments and breaks in grade. Protect newly graded areas from traffic and erosion. Repair settlement or washing away that may occur prior to surface restoration and re-establish grades to the required elevations at no additional cost to the Municipality.

Remove unsuitable and surplus excavated materials not used for backfilling from the project site. Do not deposit on public or private property without written permission from property owner or authorized representative of appropriate public agency.

C.4 Polyethylene Protection

Protect ductile iron pipe and fittings by loose wrapping or tubing with polyethylene sheet. Place polyethylene sheet or tube around the entire circumference of the pipe, tie or tape sheet securely to prevent displacement during backfilling. Comply with ANSI/AWWA A21.5-93/C105 regarding installation of polyethylene protection.

C.6 Pipe Restraining Systems
Protect from movement water main piping, plugs, caps, tees, valves, hydrants, and bends of 11-1/4 degrees or greater utilizing restrained type pipe and fittings. Provide restraining system as outlined above or utilize metal tie rods, clamps, and lugs to prevent pipe and appurtenances from movement. Protect tie rods and clamps with epoxy or bituminous paint. Where utilizing restrained joint pipe system to immobilize joints or fittings, provide restrained joint pipe to distance indicated on the plans, or not less than a minimum of two pipe lengths on each side of the bend or fitting to be restrained. Utilization of concrete thrust blocking with the engineers approval is done at the contractor's expense and at no additional cost to the Municipality. Restraining systems utilized on straight runs of push pipe are not considered as fittings, and are paid for as part of the pay item for restrained joint type pipe.

Concrete thrust blocks: Provide precast or cast-in-place concrete thrust blocking with a compressive strength of 3000 psi in 28 days. Locate thrust blocking between solid ground and the fitting to be anchored. Unless otherwise shown or directed by the engineer, place the base and thrust bearing sides of thrust blocking directly against undisturbed earth. Sides of thrust blocking not subject to thrust may be placed against forms. Place thrust blocking so the fitting joints will be accessible for repair.

C.7 Sewer Crossing
Separate water mains from sanitary sewer, storm sewers, combined sewers, house sewer service connections, and drains according to provisions of NR 811.67 and Comm. 382.40(8) of the Wisconsin Administrative Code. Wherever water mains cross over storm sewers, sanitary sewers, or sewer service connections lay the water mains so that its invert is at least 6 inches above the top of the sewer. Maintain this vertical separation for that portion of the water main located within 8 feet horizontally of any sewer or drain crossed. Center a length of water main pipe over the sewer to be crossed with joints equidistant from the sewer or drain. Comply with the requirements of Comm. 382.40(8) of the State of Wisconsin Administration Code for water service lines. Do not install water line through sewer manhole.

Repair and reconnect drain tiles crossing utility trenches with same size and material drain tile, or PVC SDR 26 pipe and water tight couplings.

C.8 PVC Water Main and HDPE Tubing Locator
Place a single strand, single conductor, blue insulated No. 10 AWG, copper locator wire on top of the PVC plastic water mains, HDPE Tubing, and all fittings, and secure with tape every 5 feet. Extend locator wire to top of terminal boxes leaving 12 inches of slack for future connection. Terminate locator wire for HDPE water services just below the top of the water service boxes as shown in the detail drawings. The contractor shall test all locator wire for electrical continuity prior to the acceptance of the main.

C.9 Testing and Inspecting
Conduct pressure and leakage test according to the latest edition of AWWA standard C600 as modified herein.

Sequence of installation: Install new water main but do not install corporation stops, service lines, curb stops, or service boxes; conduct pressure test, leakage test; and disinfection of new water main; flush main; after acceptance for use put main into service (while existing main continues to function): Install corporation stops, curb stops, and new service boxes; and connect new service box to existing service lines.

Hydrostatic tests: Where any section of a water line is provided with concrete thrust blocking for fittings, do not make hydrostatic tests until at least 5 days after installation of the concrete thrust blocking, unless otherwise directed by the engineer. Devise a method for disposal of wastewater from hydrostatic tests, and for disinfection, as approved in advance by the engineer.

Pressure tests: Subject the new water mains, including valves and hydrants, to a hydrostatic pressure of 150 psi by means of a pump connected to the pipe. Hold the test pressure for a duration of one hour without pressure loss or further pressure application. Carefully examine exposed pipe, joints, fittings, and valves. Replace or remake joints showing visible leakage. Remove cracked pipe, defective pipe, and cracked or defective joints, fittings, and valves. Replace with sound material and repeat the test until results are satisfactory. Make repair and replacement without additional cost to the Municipality. If it is found unnecessary to add water during the duration of the pressure test, a combination pressure and leakage test may be performed.

Leakage test: Conduct a leakage test after the pressure test has been satisfactorily completed. Subject the new water mains and service lines, including valves and hydrants, to a hydrostatic pressure of approximately 1.5 times the normal working pressure at the point of lowest elevation of the test section by means of a pump connected to the pipe. Duration of each leakage test: At least 2 hours. Maximum allowable leakage: Not to exceed the number of gallons per hour (gph) as determined by the following formula:

$$gph = \frac{LD(P^{1/2})}{133{,}200}$$ in which

L = length of pipe tested, in feet
D = diameter of main, in inches
P = average pressure, in pounds per square inch (gage)

Should any test of pipe disclose leakage greater than the maximum allowable amount, locate and repair the defective joint or joints and then repeat the leakage test until the leakage is within the specified allowance, and at no additional cost to the Municipality.

Combination Pressure and Leakage Test: Subject the new water mains and appurtenances to a hydrostatic pressure of 150 psi and hold the test pressure for a duration of at least 2-hours. Should any test of pipe disclose leakage greater than the maximum allowable amount, locate and repair the defective joint or joints and then perform a leakage test until the leakage is within the specified allowance, and at no additional cost to the Municipality.

Time for making test: Except for joint material setting, or where concrete reaction backing necessitates a 5 day delay, pipelines jointed with rubber gaskets, mechanical, or push-on joints, or couplings may be subjected to hydrostatic pressure, inspected, and tested for leakage at any time after partial completion of backfill. Perform the pressure and leakage tests satisfactorily prior to requesting the engineer to witness the official tests. Notify the engineer at least 48 hours prior to the time of the requested official tests. Depending on traffic conditions, public hazard, or other reasons, the engineer may direct when to conduct the tests, and may order the tests to be made in relatively short sections of water mains.

C.10 Disinfection

Preliminary Flushing: Prior to disinfection, flush main as thoroughly as possible. Where no fire hydrants exist provide and install temporary 2 1/2-inch service line and fittings for flushing of new water main and provide means necessary to attain a flushing velocity of 2.5 fps. Flush main until water runs clear. Coordinate time of flushing with Municipality and engineer, at least 72 hours in advance of flushing. Do not initiate flushing without Municipality's permission. Provide residual chlorine testing as required.

After the water main work has been satisfactorily completed and tested, disinfect the work according to AWWA C651, and NR 811.06 of the State of Wisconsin Administrative Code.

Forms of applied chlorine: Apply chlorine by dry gas feeder unless solution feed chlorinator, solution of chlorine-bearing compounds, or tablet method is approved by the Municipality. Provide effective diffusion of the gas into the water and regulate the rate of gas flow. Provide means for preventing the backflow of water into the feeder.

Chlorine-bearing compounds in water: Apply solution of calcium hypochlorite granular or sodium hypochlorite into one end of the section of main to be disinfected while filling the main with water.

Tablet method: Apply tablet of calcium hypochlorite to short extensions up to 2,500 feet and water mains diameter up to 12-inch only. Utilize only when scrupulous cleanliness has been used in construction. Do not use if trench water or foreign material has entered the main or if the water is below 41 degrees F. Place tablets at the top of the main and attach by an adhesive, such as Permatex No. 1. Place crushed tablets inside the annular space of the pipe joints.

Requirement of chlorine: Apply disinfecting solutions having at least 50 mg/l but not more than 100 mg/l of available chlorine. Retain the disinfecting solutions in the work for at least 24 hours. Chlorine residual after the retention period: At least 25 mg/l.

C.11 Flushing and Testing

Following chlorination, flush treated water thoroughly from the water mains work until the chlorine concentration in the water flowing from the main is no higher than generally prevailing in the Municipality's system, or less than 1 mg/l. Hold and infiltrate the initial discharge of highly chlorinated flush water such that the chlorine concentration of water discharged from the site is less than 0.5 mg/l. Provide residual chlorine testing as required.

After flushing, collect water samples on two successive days in sterile bottles treated with sodium thiosulfate. Notify the engineer and the Municipality to witness sample collection. The contractor will deliver samples to a State approved laboratory for bacteriological analysis. Should the initial disinfection result in an unsatisfactory bacterial test, repeat the chlorination procedure until satisfactory results are obtained.

Swabbing: Flush and swab the piping, valves, and fittings that must be placed in service immediately and cannot be disinfected by the above specified methods, with 5% solution of calcium hypochlorite prior to assembly. Secure the engineer's approval before applying this method of disinfection.

C.12 Insulation

If minimum cover cannot be maintained over water main, insulate the water main with polystyrene insulation board according to the Standard Specifications for Sewer and Water Construction in Wisconsin, Sixth Edition, 2003, Detail File No. 48.

D Measurement

The department will measure Water Main (Open Cut), (size) by the linear foot along the centerline of the pipe acceptably completed in place. The measurement will go through fittings and valves.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.200	Water Main (Open Cut), 12-Inch RJT	LF
SPV.0090.201	Water Main (Open Cut), 12-Inch	LF
SPV.0090.202	Water Main (Open Cut), 8-Inch RJT	LF
SPV.0090.203	Water Main (Open Cut), 8-Inch	LF
SPV.0090.204	Water Main (Open Cut), 6-Inch RJT	LF

Payment is full compensation for furnishing and installing water main pipe complete in place, removal and disposal of existing pavements; excavation; removal and disposal of surplus and unsuitable excavated materials; removal of existing water main pipe; protection, replacement, or repair of utilities; trench dewatering, including erosion and siltation control methods and devices to provide protection to environment from all pumping operations; over-excavation, and removal and replacement of unsuitable materials up to one foot below the bottom of the pipe barrel when replacement is approved by the engineer; installation of pipe; special gaskets as required; pipe fittings; restrained joint type pipe; bracing; furnishing and installing locator wire and terminal boxes at hydrants; bedding and covering of pipe; plugging and abandoning of existing water mains where directed by the engineer; trench backfilling with and compaction of excavated materials; flushing; temporary fittings; flushing hydrants; testing; disinfection; and finish grading subgrade and base material for asphalt pavement patch; but not including backfilling with granular trench backfill materials. The department will measure and pay for Backfill Granular separately.

Installing new mains in excess of 6 feet of cover in order to cross existing mains, provide for future improvements or cross below sewer lines is considered incidental to the installation of the water main, and no addition to the contract will be allowed.

68. Water Service Pipe, 1-Inch C.T.S. HDPE, Item SPV.0090.205.

A Description

This special provision describes furnishing and installing water service pipe as shown on the plans, as specified herein, and needed for a complete and proper installation. Comply with manufacturers' recommendations on product handling, storage, and protection. Where these specifications do not cover portions of the work to be undertaken, the standard specifications and the Standard Specifications for Sewer and Water Construction in Wisconsin, Sixth Edition 2003, Addendum No. 1, dated December 22, 2004 and Addendum Non. 2, dated April 22, 2008, shall govern the work.

B.1 Materials

Provide HDPE 200 psi tubing 1-inch O.D. CTS SDR 9 complying with ASTM D2737.

B.2 Granular Pipe Bedding and Cover Materials

Provide clean sand free of lumps, rocks and debris for pipe bedding and cover materials.

B.3 Granular Trench Backfill

Provide either granular material or excavated granular materials. Remove unsuitable materials at the direction of the engineer.

Granular material: Use granular materials consisting of durable particles ranging in size from fine to coarse in a substantially uniform combination complying with standard spec 209.

Excavated granular materials: A mixture of sand and gravel, free from organic matter, clay, loam, dirt, and other foreign material, passing the 1-1/2-inch sieve, with not more than 15 percent passing the No. 200 sieve.

C.1 Construction

Install according to manufacturers recommended installation procedures. Make service connections at locations shown on the plans or determined by the engineer at the time of construction. Install water service pipe as shown on the detail drawings. Do not splice the water service pipe. Support or repair existing curb underdrains as incidental to this bid item. Provide for electrical conductivity on all water service pipe and fittings by use of a solid 10 AWG locator wire as shown on the detail drawings.

C.2 Pipe Bedding and Covering

Install compacted granular pipe bedding and covering material with a minimum thickness of 4 inches under pipe. Wherever two or more pipes or conduits are placed in the same trench or excavated area, backfill the trench with granular pipe bedding and covering material to support the uppermost pipe or conduit. Provide sand bedding with a minimum thickness of 3 inches under electrical and wiring conduits and cables.

Following placement of pipe and inspection of joints, install compacted granular pipe bedding and covering material for the full width of the trench to 12 inches above the top of the pipe, unless otherwise shown on the plans.

Install granular pipe bedding and covering material in uniform loose layers not exceeding 8 inches thick. Compact each layer firmly by ramming or tamping with tools approved by the engineer in such a manner as not to disturb or injure the pipe to yield a minimum density of 95 percent of maximum dry density as determined according to ASTM D1557 or AASHTO-T180. Where trench is widened by installation of structure or jacking pits, extend bedding and covering materials to total width of excavation.

C.3 Backfill

Backfill trench from the top of pipe cover to topsoil, paving subgrade, or foundation level. If trenches settle during the period of construction and within the guarantee period of the work, fill trench back to the surrounding grade, and restore the surfaces.

For trench in streets, parking areas, driveways, sidewalks, curb and gutter, or within 2 feet of any proposed curb and gutter, sidewalk, and other paved areas backfill with granular trench backfill materials. Place in uniform loose layer not exceeding 12 inches thick and compact with vibrating roller or equivalent. Fill the top 18 inches of trenches with Base Aggregate Dense 1 ¼-Inch complying with standard spec 305.

Compact each layer of trench backfill materials to yield a minimum density of 95 percent of maximum dry density as determined according to ASTM D1557 or AASHTO T-180. The density of compacted backfill will be determined at intervals of not more than 500 feet at locations selected by the engineer. The Municipality may provide the services of an independent testing laboratory for the density tests. Maintain temporary pavement level with adjoining pavement surfaces until the permanent pavement is placed.

Finish grade and fill to achieve the lines and grades required. Slope grades to drain away from structures. Except where mounding over trenches is specified, grade smooth areas of the Work including previously grassed areas that have been disturbed, and adjacent transition areas. Fill and compact depressions from settlement and round tops of embankments and breaks in grade. Protect newly graded areas from traffic and erosion. Repair settlement or washing away that may occur prior to surface restoration and re-establish grades to the required elevations at no additional cost to the Municipality.

Remove unsuitable and surplus excavated materials not used for backfilling from the project site. Do not deposit on public or private property without written permission from property owner or authorized representative of appropriate public agency.

D Measurement

The department will measure Water Service Pipe, 1-Inch C.T.S. HDPE by the linear foot along the centerline of the pipe, acceptably completed in place.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.205	Water Service Pipe, 1-inch C.T.S. HDPE	LF

Payment is full compensation for furnishing and installing water service pipe complete in place, including removal and disposal of existing pavements; excavation; removal and disposal of surplus and unsuitable excavated materials; protection, replacement, or repair of utilities bracing; bedding and covering of pipe; locator wire; trench dewatering; testing; disinfection; backfilling and compacting granular trench backfill materials; finish grading; protection, and replacement or repair of utilities.

Installing new services in excess of 6 feet of cover in order to cross existing mains, provide for future improvements, or cross below sewer lines is considered incidental to the installation of the service, and no addition to the contract will be allowed. The department will measure and pay for Backfill Granular separately.

69. Steel Casing Pipe, 36-Inch, Item SPV.0090.206.

A Description

This special provision describes furnishing and installing steel casing pipe as shown on the plans and details and as hereinafter provided. Where these specifications do not cover portions of the work to be undertaken, the standard specifications, the Standard Specifications for Sewer and Water Construction in Wisconsin, Sixth Edition 2003, Addendum No. 1, dated December 22, 2004 and Addendum Non. 2, dated April 22, 2008, NUCA Trenchless Excavation Construction Equipment & Methods Manual, NUCA Pipe Jacking & Microtunneling Design Guide, and AREMA - American Railway Engineering and Maintenance-of-Way Association Manual for Railway Engineering shall govern the work.

B Materials

Casing pipe shall be steel, round, plain end, have a minimum yield point strength of 35,000 psi and conform to ASTM A 252 Grade 2 or ASTM A139 Grade B without hydrostatic tests. Casing pipe shall have a minimum wall thickness of 0.5625 inches. Ends shall be prepared for butt welding and beveled to facilitate proper welding of transverse joints.

Casing pipe must be new pipe that has smooth surfaces that are uniform and free of bulges, dents or warping throughout entire length. The exterior of the casing pipe shall be coated with coal tar epoxy or bituminous asphalt at a rate to obtain a dry film thickness of 16 mils. All joints between lengths shall be continuous field-welded butt joints according to AWWA C206, with a smooth non-obstructing joint inside. The casing pipe shall be installed without bends.

C Construction

C.1 General

Perform work according to the standard specifications, the Standard Specifications for Sewer and Water Construction in Wisconsin, Sixth Edition, 2003, NUCA Trenchless Excavation Construction Equipment & Methods Manual, NUCA Pipe Jacking & Microtunneling Design Guide, and AREMA - American Railway Engineering and Maintenance-of-Way Association Manual for Railway Engineering.

Prior to installation of the steel casing pipe provide a boring and jacking plan to the engineer for review and approval. Failure to provide the specified boring and jacking plan may result in shut down of the work until which time the required plan is developed and submitted.

Jack the steel casing pipe into place beneath the railroad tracks at the location, elevation, and grade shown on the plans. Jack the pipe into place without disturbing the railroad above the pipe and do not carry the excavation ahead of the pipe far enough to cause caving. Two rails or sills shall be set or secured on a rigid base on the bottom of the jack pit to keep the pipe at the established grade. Design bracing, backstops, and use jacks of sufficient rating for continuous jacking without stoppage, except for adding pipe sections and as conditions permit, to minimize tendency of ground material to "freeze" around casing pipe. The joints between sections of steel casing pipe to be installed shall be welded with a continuous circumferential weld. The borehole diameter shall be essentially the same as the outside diameter of the casing. The auger shall be kept inside the casing at all times. If the auger is pushed ahead of the casing, the annular space around the casing shall be pressure grouted. Provide a steerable front section of casing to allow vertical grade adjustments. Seal the ends of the casing pipe between the casing and carrier pipe with concrete brick and mortar, concrete, or rubber end seals specifically made for this purpose. Provide a minimum of two magnesium anode bags connected at each end of the casing with a copper connector cable welded to the steel casing.

C.2 Carrier Pipe

Carrier pipe shall be 12-inch diameter, as specified under Water Main (Open Cut), 12-Inch RJT in these Special Provisions. Restrain all joints within casing. The carrier pipe shall be installed on line and grade through the casing pipe. Casing spacers/insulators, large enough so as not to interfere with carrier pipe restrained joints, shall be used to prevent damage to pipe. Carrier pipe support shall be hardwood skids and blocking consisting of oak, pressure treated lumber, or redwood with hot dipped galvanized or stainless steel strapping. Stainless steel casing spacers consisting of 14 gauge type 304 stainless steel shells, PVC liner, high molecular weight polymer runners, and stainless steel bolts and lock nuts are also acceptable. Fill the annular space between the casing and carrier pipe with specified sand or pea gravel.

C.3 Railroad Coordination

A minimum of two weeks prior to boring and jacking operations the contractor shall contact the railroad company to coordinate the operations around railroad traffic. This coordination is in addition to any other railroad coordination requirements as described in these special provisions and the standard specifications.

C.4 Jacking Pits
Jacking pits or shafts shall be excavated and maintained to the minimum dimensions necessary to perform the operation. Excavations shall be adequately barricaded, tight sheeted, braced and dewatered, as required, according to OSHA requirements and to protect all existing utilities. Boring and jacking pits shall be located as shown on plans unless the permitting agency requires additional setback distance.

D Measurement
The department will measure Steel Casing Pipe, 36-inch by the linear foot, acceptably completed.

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.206	Steel Casing Pipe, 36-Inch	LF

Payment is full compensation for furnishing and installing steel casing pipe complete in place including, removal and disposal of existing pavements: excavation and backfilling of the jacking and receiving pits; removal and disposal of waste excavated materials; protection, replacement, or repair of utilities; dewatering, including erosion and siltation control methods and devices to provide protection to environment from all pumping operations; excavation support including bracing, tight sheeting, shoring, and any other support necessary to complete the work and protect existing utilities; installation of casing pipe, corrosion protection, and end seals; properly disposing of surplus material from the excavation; backfilling and compacting the backfill material; and for restoring the site. The department will measure and pay for Backfill Granular and Water Main (Open Cut), 12-Inch RJT separately.

70. Removing Overhead Sign Support Station 141+75, Item SPV.0105.001; Removing Overhead Sign Support Station 102+40, Item SPV.0105.002.

A Description
Work under this item shall consist of removing the overhead sign structure and footing. Removal of the sign on the structure is paid for separately. See signing plans for location.

B (Vacant)

C Construction
Remove overhead sign supports and concrete footings, backfill the resulting holes, and dispose of all materials outside of the right-of-way according to standard spec 204.3 and 638.3. Concrete footing shall be removed to 2 feet below the existing ground. The reinforcement shall be cut off flush with the top of the concrete. The footing shall be then covered with topsoil and seeded. This is all incidental to Removing Overhead Sign Support (location).

D Measurement
The department will measure Removing Overhead Sign Support (location) as a single lump sum unit of work for each support, 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
SPV.0105.001	Removing Overhead Sign Support Station 141+75	LS
SPV.0105.002	Removing Overhead Sign Support Station 102+40	LS

Payment in full compensation for disassembling, removing, including concrete footings, backfilling, and disposal of all materials.
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71. Remove and Transport Traffic Signals, STH 50 (E. Geneva Street) & Borg Road/Wright Street, Item SPV.0105.003.

A Description
This special provision describes removing and transporting existing traffic signals at the intersection of STH 50 & Borg/Wright Street. Specific removal items are noted in the plans.

B (Vacant)

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

Notify Paul Weckel at (262)-728-5585 Ext. 122 at least five working days prior to the removal of the traffic signals. Complete the removal work immediately following shut down of this equipment.

Perform a field review of existing equipment with Paul Weckel for condition of equipment prior to removal. The department will identify all items to be removed and salvaged or disposed.

Remove all standards and poles per plan from their concrete footings and disassemble. Remove the transformer bases from each pole. Remove the signal heads, mast arms, luminaires, wiring/cabling and traffic signal mounting devices from each signal standard, arm or pole. Ensure that access handhole doors and hardware remain intact. Remove traffic signal cabinet from its concrete footing. Dispose of the underground signal cable, internal wires and street lighting cable.

After removal of signal equipment, deliver all remaining materials, except wire and cable to the city of Delavan municipal garage located at 490 Richmond Rd., Delavan, WI 53115.

D Measurement
The department will measure Remove and Transport Traffic Signals (Location), completed according to the contract and accepted, as a single complete lump sum unit of work.

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.003	Remove and Transport Traffic Signals, STH 50 (E. Geneva Street) & Borg Road/Wright Street	LS

Payment is full compensation for removing, disassembling traffic signals, and delivering the requested materials to the department; properly disposing of scrap material; and for any necessary interim stockpiling of requested materials on site.

72. Concrete Pavement Joint Layout, Item SPV.0105.004.

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

B (Vacant)

C Construction
Plan and locate all points necessary to establish the horizontal position of the transverse and longitudinal joints in the concrete to prevent uncontrolled cracking. Submit a joint layout design to the engineer before paving each intersection. Mark the location of all concrete joints in the field. Follow the plan details for joints in concrete making adjustments as required to fit field conditions.

D Measurement
The department will measure Concrete Pavement Joint Layout as a single lump sum unit of work for all joint layout designs and marking, acceptably completed.

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.004	Concrete Pavement Joint Layout	LS

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

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

73. EVP Detector STH 50 (E Geneva St) and Borg Road/Wright Street, Item SPV.0105.005.

A Description

This special provision describes furnishing and installing an Optical Emergency Vehicle Preemption (EVP) System at the location shown on the plans and as hereinafter provided.

B Materials

Provide the following materials:

- Four channel discriminator
- Four optical detectors
- Four confirmation lights
- Card rack
- Detector cable as necessary
- Cables and auxiliary equipment as necessary for installation

Provide equipment from the same manufacturer and fully compatible. Provide a discriminator that can detect and prioritize Tomar and 3M brand emitters and that is capable of locking out non-coded emitters.

C Construction

Mount detectors on the top horizontal member of monotube arms, between the first and second traffic signal head, and as otherwise shown. Install per the manufacturer's instructions.

Aim detectors at approaching traffic. Install detector cable from the detector to the control cabinet, using the shortest path.

Replace any materials deemed unacceptable or not in working order by the city of Delavan at no cost to the department.

D Measurement

The department will measure EVP Detector (Location) as a single lump sum unit of work for each detector, 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.0105.005	EVP Detector STH 50 (E Geneva St) and Borg Road/Wright Street	LS

Payment is full compensation furnishing and installing detectors, confirmation lights and cable; for furnishing and installing discriminators, card racks, cables and miscellaneous materials; and for any replacement material.

74. Water Main Spot Relocation 12-Inch RJT, Item SPV.0105.200; Water Main Spot Relocation 8-Inch RJT, Item SPV.0105.201; Water Main Spot Relocation 6-Inch RJT, Item SPV.0105.202.

A Description

This special provision describes furnishing and installing water main and fittings to relocate water main in areas with other utility conflicts or as directed by the engineer. Comply with manufacturers' recommendations on product handling, storage, and protection. Where these specifications do not cover portions of the work to be undertaken, the standard specifications and the Standard Specifications for Sewer and Water Construction in Wisconsin, Sixth Edition 2003, Addendum No. 1, dated December 22, 2004 and Addendum Non. 2, dated April 22, 2008, shall govern the work.

B Materials

Furnish water main and fittings that is according to the pertinent sections of these special provisions.

C Construction

Install water main and fittings in compliance with the pertinent sections of these special provisions.

D Measurement

The department will measure Water Main Spot Relocation (size) by the lump sum unit of work for each relocation acceptably completed. If the total length of pipe required for the relocation is greater than 30 linear feet, or the total number of fittings required for the relocation is more than five, the additional pipe and fittings will be paid for according to pertinent sections of these special provisions.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.200	Water Main Spot Relocation 12-Inch RJT	LS
SPV.0105.201	Water Main Spot Relocation 8-Inch RJT	LS
SPV.0105.202	Water Main Spot Relocation 6-Inch RJT	LS

Payment is full compensation for additional mobilizations, furnishing and installing up to 30 linear feet of water main pipe and up to five fittings complete in place, removal and disposal of existing pavements; excavation; removal and disposal of surplus and unsuitable excavated materials; removal of existing water main pipe; protection, replacement, or repair of utilities; trench dewatering, including erosion and siltation control methods and devices to provide protection to environment from all pumping operations; installation of pipe; special gaskets as required; pipe fittings; restrained joint type pipe; bracing; installation of locator wire; bedding and covering of pipe; plugging and abandoning of existing water mains; trench backfilling with and compaction of excavated materials; flushing; temporary fittings; testing; disinfection; and finish grading; but not including backfilling with granular

trench backfill materials. The department will measure and pay for Backfill Granular separately.

75. Water for Seeded Areas, Item SPV.0120.001.

A Description

This special provision describes furnishing, hauling and applying water to seeded areas as directed by the engineer, and as hereinafter provided.

B Materials

When watering seeded areas, use clean water, free of impurities or substances that might injure the seed.

C Construction

If rainfall is not sufficient, keep all seeded areas thoroughly moist by watering or sprinkling. Water for 30 days after seed placement or as the engineer directs. Apply water in a manner to preclude washing or erosion. Do not leave the topsoil un-watered for more than 3 days during this 30-day period unless the engineer determines that it is excessively wet and does not require watering. The equivalent of 1-inch of rainfall per week is considered the minimum.

D Measurement

Water for Seeded Areas will be measured by volume in thousand gallon units (MGAL), acceptably completed. The department will determine volume by engineer-approved meters or from tanks of known capacity.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0120.001	Water for Seeded Areas	MGAL

Payment is full compensation for furnishing, hauling, and applying the water.

76. Wall Modular Block Gravity LRFD, R-64-20, Item SPV.0165.001.

A Description

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

B Materials

B.1 Proprietary Wall Systems

The supplied wall system must be from the department's approved list of Modular Block Gravity Wall systems (Modular Block Gravity Walls). Proprietary wall systems must conform to the requirements of this specification and be pre-approved for use by the

department's Bureau of Structures. The name of the pre-approved proprietary wall system selected shall be furnished to the engineer within 25 days after the award of contract. The location of the plant manufacturing the facing units shall be furnished to the engineer at least 14 days prior to the project delivery.

The department maintains a list of pre-approved Modular Block Gravity Wall systems. To be eligible for use on this project, a system must have been pre-approved by the Bureau of Structures and added to that list prior to the bid opening date. To receive pre-approval, the retaining wall system must comply with all pertinent requirements of this provision and be prepared according to the requirements of Chapter 14 of the department's LRFD Bridge Manual. Information and assistance with the pre-approval process can be obtained by contacting the Bureau of Structures, Structures Maintenance Section in Room 601 of the Hill Farms State Transportation Building in Madison or by calling (608) 266-8494.

B.2 Design Requirements

It is the responsibility of the contractor to submit a design and supporting documentation as required by this special provision, for review and acceptance by the department, to show the proposed wall design is in compliance with the design specifications. The submittal shall include the following items for review: detailed plans and shop drawings, complete design calculations, explanatory notes, supporting materials, and specifications. The detailed plans and shop drawings shall include all details, dimensions, quantities and cross-sections necessary to construct the walls. Submit electronically to the engineer and Bureau of Structures for review and acceptance. Submit no later than 60 days from the date of notification to proceed with the project and a minimum of 30 days prior to the date proposed to begin wall construction.

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

The design of the Modular Block Gravity Wall shall be in compliance with the *AASHTO LRFD Bridge Design Specifications 6th Edition 2012*, (AASHTO LRFD) with latest interim specifications for Mechanically Stabilized Earth Walls, WisDOT's current *Standard Specifications for Highway and Structure Construction* (standard spec), Chapter 14 of the WisDOT LRFD Bridge Manual and standard engineering design procedures as determined by the department. Loads, load combinations, load and resistance factors shall be as specified in AASHTO LRFD Section 11. The associated resistance factors shall be defined according to Table 11.5.7-1 LRFD.

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

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

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

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

The design of the Modular Block Gravity Wall by the contractor shall consider the internal and compound stability of the wall mass according to AASHTO LRFD 11.10.6. Internal stability shall also be considered at each block level. Calculations for factored stresses and resistances shall be based upon assumed conditions at the end of the design life. The width of the modular block from front face to back face of the wall shall be included in the design computations and shown on the wall shop drawings. Compound stability shall be computed for the applicable strength limits. Sample analyses and hand calculations shall be submitted to verify the output of any software program used. The design calculations and notes shall clearly indicate the Capacity to Demand Ratios (CDR) for all internal and external stabilities as defined in AASHTO LRFD.

Facing units shall be designed according to AASHTO LRFD 11.10.2.3.

The minimum embedment of the wall shall be 1 foot 6 inches, or as given on the contract plan. Step the leveling pad to follow the general slope of the ground line. Frost depth shall not be considered in designing the wall for depth of leveling pad. Additional embedment may be detailed by the contractor, but will not be measured for payment.

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

Wall facing units shall be installed on concrete leveling pads. The bottom row of blocks shall be horizontal and 100 percent of the block surface shall bear on the leveling pad.

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

B.3 Wall System Components

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

B.3.1 Wall Facing

Wall facing units shall consist of precast modular concrete blocks. All units shall incorporate a mechanism or devices that develop a mechanical connection between vertical block layers. Units that are cracked, chipped or have other imperfections, or have excessive efflorescence shall not be used within the wall. A single block type and style shall be used throughout each wall. The color and surface texture of the block shall be as given on the plan or chosen by the engineer.

Provide a cast-in-place concrete cap as shown on the plans.

Block dimensions may vary no more than the following tolerances from the standard values published by the manufacturer:

Height: ±3/16 inch
Width: ±1/2 inch
Depth: No less than the unit design depth.

Wall facing units shall consist of precast modular concrete blocks produced by a wet cast process. The concrete blocks shall have a minimum strength of 4,000 psi at 28 days. The concrete for the blocks shall be air entrained, with an air content of 6 percent +/- 1.5 percent. All materials for the concrete mixture for the blocks shall meet the requirements of section 501 of the standard specification. Wall facing units produced by a wet cast process need not be certified as to absorption and freeze-thaw requirements.

B.3.2 Backfill

Furnish and place backfill for Modular Block Gravity Walls as shown on the plans and as hereinafter provided.

Wall Backfill, Type A, shall comply with the requirements for Coarse Aggregate No. 1 as given in standard spec 501.2.5.4.5 of the standard specification. All backfill placed within a zone from the top of the leveling pad to the top of the final layer of wall facing units and within 1 foot behind the back face of the wall shall be Wall Backfill, Type A. This includes all material used to fill openings in the wall facing units.

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

Backfill placed between retained soil and Type A backfill shall comply with the requirements for Grade 1 Granular Backfill as contained in standard spec 209.2.2. Wall Backfill, Type A, may be used as retained backfill.

B.3.3 Miscellaneous

Provide a cast in place concrete cap or coping consisting of Grade A, A-FA, A-S, A-T, A-IS, A-IP or A-IT concrete conforming to standard spec 501 as modified in standard spec 716.

Provide QMP for cast in place cap and coping concrete as specified in standard spec 716, Class II Concrete.

Use a wall leveling pad that consists of poured concrete, Grade A, A-FA, A-S, A-T, A-IS, A-IP, or A-IT concrete conforming to standard spec 501 as modified in standard spec 716. Provide QMP for leveling pad concrete as specified in standard spec 716, Class III Concrete.

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

C Construction

C.1 Excavation and Backfill

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

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

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

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

C.2 Compaction

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

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

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

C.3 Wall Components
Erect wall facing units and other associated elements according to the wall manufacturer's construction guide and to the lines, elevations, batter, and tolerances as shown on the plans. Center the initial layer of facing units on the leveling pad; then level them and properly align them. Fill formed voids or openings in the facing units with wall backfill, Type A. Remove all debris on the top of each layer of facing units, before placing the next layer of facing units.

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

C.4 Geotechnical Information
Geotechnical data to be used in the design of the wall is given on the wall plan. After completing wall excavation, notify the department and allow the Regional Soils Engineer two working days to review the foundation.

D Measurement
The department will measure Wall Modular Block Gravity LRFD by the square foot, acceptably completed, measured as the vertical area within the pay limits the contract plans show. No other measurement of quantities shall be made in the field. Unless the engineer directs in writing, a change to the limits indicated on the contract plan, wall area constructed above or below these limits will not be measured for payment.

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0165.001	Wall Modular Block Gravity LRFD, R-64-20	SF

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

Railings and other items above the wall cap or coping will be paid for separately.

Any required topsoil, fertilizer, seeding or sodding and mulch will be paid for at the contract unit price of topsoil, fertilizer, seeding or sodding and mulch, respectively.

77. Anti-Graffiti Coating, Item SPV.0165.002.

A Description

This special provision describes furnishing and applying a permanent liquid Anti-Graffiti Coating to the exposed surfaces for the purpose of preventing absorption of paint components into the concrete surfaces.

B Materials

The Anti-Graffiti Coating must be compatible for use on unpainted, stained or painted concrete surfaces. The following products or equal may be used as an Anti-Graffiti Coating:

a. Anti-Graffiti Coating by Sherwin Williams.
b. Permaclean 1496 Matte Finish by TK Products.
c. Duraguard 310 CRU by Chem Masters.

C Construction

C.1 Preparation of Concrete Surfaces

Clean all concrete surfaces that are to be coated to ensure that the surface is free of all laitance, dirt, dust, grease, efflorescence, graffiti, and any foreign material in order to accept the coating material according to product requirements. Correct, at contractor expense, any surface problems resulting from the surface preparation methods used.

C.2 Application

Apply anti-graffiti coating to concrete and modular block surfaces as shown or noted on the plans.

C.3 Test Areas

Prior to applying anti-graffiti coating to the structure, apply the anti-graffiti coating to a sample panel measuring a minimum of 48 inches by 48 inches and “tag” the panel with spray paint. Demonstrate that graffiti can be removed on the sample panel. Do not apply anti-graffiti coating to any structure until the department approves the test panels.

D Measurement

The department will measure Anti-Graffiti Coating 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.0165.002	Anti-Graffiti Coating	SF

Payment is full compensation for furnishing and applying the coating, for concrete surface preparation, and test panels.

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:

440.3.5.2 Corrective Actions for Localized Roughness

Replace paragraph two with the following effective with the September 2016 letting:

(2) The engineer will not direct corrective action or assess a pay reduction for an area of localized roughness without physically riding that work. The engineer will not direct corrective action on bridges without authorization from the department's bureau of structures.

450.3.1.1.4 Recording Truck Loads

Replace the entire text with the following effective with the December 2016 letting:

(1) If not using automatic batch recording, install a digital recorder as part of the platform truck or storage silo scales. Ensure that the recorder can produce a printed digital record of at least the gross or net weights of delivery trucks. Provide gross, tare, net weights, load count, and the cumulative tonnage; the date, time, ticket number, WisDOT project ID, and mix 250 number; and the mix type including the traffic, binder, and mix designation codes specified in 460.3.1. Ensure that scales cannot be manually manipulated during the printing process. Provide an interlock to prevent printing until the scales come to rest. Size the scales and recorder to accurately weigh the heaviest loaded trucks or tractor-trailers hauling asphaltic mixture. Ensure that recorded weights are accurate to within 0.1 percent of the nominal capacity of the scale.

(2) Ensure that tickets identify additives not included in the mix design submittal. Indicate on the ticket if the mixture will be placed under a cold weather paving plan and identify the warm mix additive and dosage rate required under 450.3.2.1.2.2.

455.3.2.1 General

Replace paragraph one with the following effective with the December 2016 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 and reasonably free of loose dirt, dust, or other foreign matter. Do not apply to surfaces with standing water. Do not apply if weather or surface conditions are unfavorable or before impending rains.

460.2.1 General

Replace the entire text with the following effective with the December 2016 letting:

(1) Furnish a homogeneous mixture of coarse aggregate, fine aggregate, mineral filler if required, SMA stabilizer if required, recycled material if used, warm mix asphalt additive or process if used, and asphaltic material. Design mixtures conforming to table 460-1 and table 460-2 to 4.0% air voids to establish the aggregate structure.

(2) Determine the target JMF asphalt binder content for production from the mix design data corresponding to 3.0% air voids (97% Gmm) target at the design the number of gyrations (Ndes). Add liquid asphalt to achieve the required air voids at Ndes.

(3) For SMA, determine the target JMF asphalt binder content for production from the mix design data corresponding to 4.0% air voids (96% Gmm) target at Ndes.

460.2.8.2.1.5 Control Limits

Replace paragraph one with the following effective with the December 2016 letting:

(1) Conform to the following control limits for the JMF and warning limits based on a running average of the last 4 data points:

ITEM	JMF LIMITS	WARNING LIMITS
Percent passing given sieve:		
37.5-mm	+/- 6.0	+/- 4.5
25.0-mm	+/- 6.0	+/- 4.5
19.0-mm	+/- 5.5	+/- 4.0
12.5-mm	+/- 5.5	+/- 4.0
9.5-mm	+/- 5.5	+/- 4.0
2.36-mm	+/- 5.0	+/- 4.0
75-µm	+/- 2.0	+/- 1.5
Asphaltic content in percent	- 0.3	- 0.2
Air voids in percent[1]	+1.3/-1.0	+1.0/-0.7
VMA in percent[2]	- 0.5	- 0.2

[1] For SMA, JMF limits are +/-1.3 and warning limits are +/-1.0.

[2] VMA limits based on minimum requirement for mix design nominal maximum aggregate size in table 460-1.

460.2.8.2.1.6 Job Mix Formula Adjustment

Replace paragraph one with the following effective with the December 2016 letting:

(1) The contractor may request adjustment of the JMF according to CMM 8-36.6.13.1. Have an HMA technician certified at a level appropriate for process control and troubleshooting or mix design submit a written JMF adjustment request. Ensure that the resulting JMF is within specified master gradation bands. The department will have a certified Hot Mix Asphalt, Mix Design, Report Submittals technician review the proposed adjustment and, if acceptable, issue a revised JMF.

460.2.8.3.1.6 Acceptable Verification Parameters

Replace paragraph one with the following effective with the December 2016 letting:

(1) The engineer will provide test results to the contractor within 2 mixture-production days after obtaining the sample. The quality of the product is acceptably verified if it meets the following limits:

- Va is within a range of 2.0 to 4.3 percent. For SMA, Va is within a range of 2.7 to 5.3 percent.
- VMA is within minus 0.5 of the minimum requirement for the mix design nominal maximum aggregate size.

460.3.3.1 Minimum Required Density

Replace paragraph one with the following effective with the December 2016 letting:

(1) Compact all layers of HMA mixture to the density table 460-3 shows for the applicable mixture, location, and layer.

TABLE 460-3 MINIMUM REQUIRED DENSITY[1]

LOCATION	LAYER	PERCENT OF TARGET MAXIMUM DENSITY		
		MIXTURE TYPE		
		LT and MT	HT	SMA[5]
TRAFFIC LANES[2]	LOWER	93.0[3]	93.0[4]	___
	UPPER	93.0	93.0	___
SIDE ROADS, CROSSOVERS, TURN LANES, & RAMPS	LOWER	93.0[3]	93.0[4]	___
	UPPER	93.0	93.0	___
SHOULDERS & APPURTENANCES	LOWER	91.0	91.0	___
	UPPER	92.0	92.0	___

[1] The table values are for average lot density. If any individual density test result falls more than 3.0 percent below the minimum required target maximum density, the engineer may investigate the acceptability of that material.

[2] Includes parking lanes as determined by the engineer.

[3] Minimum reduced by 2.0 percent for a lower layer constructed directly on crushed aggregate or recycled base courses.

[4] Minimum reduced by 1.0 percent for a lower layer constructed directly on crushed aggregate or recycled base courses.

[5] The minimum required densities for SMA mixtures are determined according to CMM 8-15.

460.5.2.1 General

Replace paragraph six with the following effective with the December 2016 letting:

(6) If during a QV dispute resolution investigation the department discovers mixture with 1.5 > Va > 5.0 or VMA more than 1.0 below the minimum allowed in table 460-1, and the engineer allows that mixture to remain in place, the department will pay for the quantity of affected material at 50 percent of the contract price.

460.5.2.3 Incentive for HMA Pavement Density

Replace paragraph one with the following effective with the December 2016 letting:

(1) If the lot density is greater than the minimum specified in table 460-3 and all individual air voids test results for that mixture placed during the same day are within 2.5 - 4.0 percent, the department will adjust pay for that lot as follows:

INCENTIVE PAY ADJUSTMENT FOR HMA PAVEMENT DENSITY[1]

PERCENT LOT DENSITY ABOVE SPECIFIED MINIMUM	PAY ADJUSTMENT PER TON[2]
From -0.4 to 1.0 inclusive	$0
From 1.1 to 1.8 inclusive	$0.40
More than 1.8	$0.80

[1] SMA pavements are not eligible for density incentive.

[2] The department will prorate the pay adjustment for a partial lot.

501.2.6 Fly Ash

Replace the entire subsection with the following effective with the December 2016 letting:

501.2.6.1 General

(1) Fly ash is defined as a finely divided residue resulting from the combustion of coal in a base loaded electric generating plant, transported from the boiler by flue gases, and later collected, generally by precipitators. Use fly ash in concrete manufactured by facilities and processes known to provide satisfactory material.

(2) Test fly ash using a recognized laboratory, as defined in 501.2.2(1), starting at least 30 days before its proposed use, and continuing at ASTM-required frequencies as the work progresses. The manufacturer shall test the chemical and physical properties listed in tables 1 and 2 of ASTM C618 at the frequencies and by the test methods prescribed in ASTM C311.

(3) Use only one source of fly ash for a bid item of work under the contract, unless the engineer directs or allows otherwise in writing.

(4) Prequalify any proposed fly ash source as follows: The contractor shall obtain a copy of the certified report of tests or analysis made by a qualified independent laboratory, recognized by the department under 501.2.2, showing full and complete compliance with the above specification from the fly ash manufacturer and furnish it to the engineer. Provide this report to the engineer at least 14 calendar days before using the fly ash.

(5) The manufacturer shall retain test records for at least 5 years after completing the work, and provide these records upon request.

501.2.6.2 Class C Ash

(1) Conform to ASTM C618 class C except limit the loss on ignition to a maximum of 2 percent.

501.2.6.3 Class F Ash

(2) Furnish a class F fly ash from a source listed on the department's approved product list, and conform to ASTM C618 class F except limit the loss on ignition to a maximum of 2 percent.

502.3.7.8 Floors

Replace paragraph sixteen with the following effective with the September 2016 letting:

(16) The finished bridge floor shall conform to the surface test specified in 415.3.10. The engineer will not direct corrective grinding without authorization from the department’s bureau of structures.

503.3.2.1.1 Tolerances

Increase the "length of beam" max tolerance for prestressed concrete I-type girders from 3/4" to 1 1/2" effective with the December 2016 letting:

PRESTRESSED CONCRETE I-TYPE GIRDERS

Length of beam..... +/- 1/8" per 10', up to a max of +/- 1 1/2"

Errata

Make the following corrections to the standard specifications:

Throughout the contract:
Update all references to the construction rental rate "Blue Book" to reference "EquipmentWatch" rates.

105.13.4 Content of Claim

(1) Include the following 5 items in the claim.

1. A concise description of the claim.
2. A clear contractual basis for the claim. This should include reference to 104.2 on revisions to the contract and as appropriate, specific reference to contract language regarding the bid items in question.
3. Other facts the contractor relies on to support the claim.
4. A concise statement of the circumstances surrounding the claim and reasons why the department should pay the claim. Explain how the claimed work is a change to the contract work.
5. A complete breakdown of the costs used to compile the claim. Include copies of all EquipmentWatch equipment rental rate sheets used, with the applicable number highlighted.

109.4.5.5.1 General

(2) The department will pay for use of contractor-owned equipment the engineer approves for force account work at published rates. The department will pay the contractor expense rates, as modified in 109.4.5.5, given in EquipmentWatch Cost Recovery (formerly Rental Rate Blue Book) . Base all rates on revisions effective on January 1 for all equipment used in that calendar year.

http://equipmentwatch.com/estimator/

109.4.5.5.2 Hourly Equipment Expense Rates (Without Operators)

(1) The contractor shall determine, and the department will confirm, hourly equipment expense rates as follows:

HEER = [RAF x ARA x (R/176)] + HOC

Where:

HEER = Hourly equipment expense rate.
RAF = EquipmentWatch regional adjustment factor.
ARA = EquipmentWatch age rate adjustment factor.
R = Current EquipmentWatch monthly rate.
HOC = EquipmentWatch estimated hourly operating cost.

(2) The EquipmentWatch hourly operating cost represents all costs of equipment operation, including fuel and oil, lubrication, field repairs, tires, expendable parts, and supplies.

109.4.5.5.3 Hourly Equipment Stand-By Rate

(1) For equipment that is in operational condition and is standing-by with the engineer's approval, the contractor shall determine, and the department will confirm, the hourly stand-by rate as follows:

HSBR = RAF x ARA x (R/176) x (1/2)

Where:

HSBR = Hourly stand-by rate.
RAF = EquipmentWatch regional adjustment factor.
ARA = EquipmentWatch age rate adjustment factor.
R = Current EquipmentWatch monthly rate.

(2) The department will limit payment for stand-by to 10 hours or less per day up to 40 hours per week. The department will not pay the contractor for equipment that is inoperable due to breakdown. The department will not pay for idle equipment if the contractor suspends work or if the contractor is maintaining or repairing the equipment.

109.4.5.5.4 Hourly Outside-Rented Equipment Rate

(1) If the contractor rents or leases equipment from a third party for force account work, the contractor shall determine, and the department will confirm, the hourly outside-rented equipment rate as follows:

HORER = HRI + HOC

Where:

HORER = Hourly outside-rented equipment rate

HRI = Hourly rental invoice costs prorated for the actual number of hours that rented equipment is operated solely on force account work

HOC = EquipmentWatch hourly operating cost.

109.2 Scope of Payment

Correct errata to clarify that work under the contract is included in payment unless specifically excluded.

(2) The department will pay for the quantity of work acceptably completed and measured for payment as the measurement subsection for each bid item specifies. Within the contract provide means to furnish and install the work complete and in-place. Payment is full compensation for everything required to perform the work under the contract including, but not limited to, the work elements listed in the payment subsection. Payment also includes all of the following not specifically excluded in that payment subsection:

1. Furnishing and installing all materials as well as furnishing the labor, tools, supplies, equipment, and incidentals necessary to perform the work.
2. All losses or damages, except as specified in 107.14, arising from one or more of the following:
   - The nature of the work.
   - The action of the elements.
   - Unforeseen difficulties encountered during prosecution of the work.
3. All insurance costs, expenses, and risks connected with the prosecution of the work.
4. All expenses incurred because of an engineer-ordered suspension, except as specified in 104.2.2.3.
5. All infringements of patents, trademarks, or copyrights.
6. All other expenses incurred to complete and protect the work under the contract.

204.3.2.2.1 General

Correct errata by removing the reference to 490 which was deleted effective with the 2017 spec.

(1) Under the Removing Pavement bid item, remove concrete pavements, concrete alleys, concrete driveways, or rigid base including all surfaces or other pavements superimposed on them.

657.2.2.1.1 General

Correct errata by eliminating the reference to department provided arms in the last sentence.

(1) Furnish shop drawings as specified in 506.3.2, except submit 5 copies with the materials list. Ensure the drawings contain sufficient detail to allow satisfactory review and show the outside diameters of the pole at the butt, top, and splice locations the plans show. Show the width, depth, length, and thickness of all material, and list pertinent ASTM specification designations and metal alloy designations together with the tensile strength of metallic members. Provide tightening procedures for arm-to-pole connections on the shop drawings.

657.2.2.1.4 Poles Designed Under Legacy Standards

Correct errata by deleting the entire subsection to eliminate redundant language.

657.2.2.2 Trombone Arms

Correct errata by changing the reference from 657.2.2.1.3 to 657.2.2.1.2.

(1) Design aluminum trombone arms as specified in 657.2.2.1.2 based on the completed maximum loading configuration the plans show. Furnish shop drawings conforming to 657.2.2.1.1 that show the width, depth, length, and thickness of all members. Also list the ASTM alloy designation and strength of each aluminum member on the shop drawings.

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

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.

Non-discrimination Provisions

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

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

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

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

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

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

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

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

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

Pertinent Non-Discrimination Authorities:

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

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

SEPTEMBER 2002

NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY (EXECUTIVE ORDER 11246)

1. The Offeror's or Bidder's attention is called to the "Employment Practices" and "Equal Opportunity Clause" set forth in the Required Contract Provisions, FHWA 1273.

2. The goals and timetables for minority and female participation expressed in percentage terms for the contractor's aggregate work force in each trade, on all construction work in the covered area, are as follows:

Goals for Minority Participation for Each Trade:

County	%	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/hcciDocs/contracting-info/ws4567.doc

Effective February 2016 letting

Cargo Preference Act Requirement

All Federal-aid projects shall comply with 46 CFR 381.7 (a) – (b) as follows:

(a) *Agreement Clauses.* "Use of United States-flag vessels:"

(1) Pursuant to Pub. L. 664 (43 U.S.C. 1241(b)) at least 50 percent of any equipment, materials or commodities procured, contracted for or otherwise obtained with funds granted, guaranteed, loaned, or advanced by the U.S. Government under this agreement, and which may be transported by ocean vessel, shall be transported on privately owned United States-flag commercial vessels, if available.

(2) Within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, 'on-board' commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph (a)(1) of this section shall be furnished to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590."

(b) *Contractor and Subcontractor Clauses.* "Use of United States-flag vessels: The contractor agrees—"

(1) To utilize privately owned United States-flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to this contract, to the extent such vessels are available at fair and reasonable rates for United States-flag commercial vessels.

(2) To furnish within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, 'on-board' commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph (b) (1) of this section to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590.

(3) To insert the substance of the provisions of this clause in all subcontracts issued pursuant to this contract.

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

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
WALWORTH COUNTY

Compiled by the State of Wisconsin - Department of Workforce Development
for the Department of Transportation
Pursuant to s. 103.50, Stats.
Issued on May 1, 2016

CLASSIFICATION: Contractors are required to call the Department of Workforce Development if there are any questions 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	31.55	18.52	50.07
Carpenter	33.02	17.12	50.14
Future Increase(s): Add $1.42/hr on 6/1/2016. Premium Pay: DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day.			
Cement Finisher	33.46	18.50	51.96
Electrician	35.13	23.19	58.32
Future Increase(s): Add $1.60 on 6/1/16; Add $1.70 on 6/1/17 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	35.62	0.00	35.62
Ironworker	30.77	23.72	54.49
Line Constructor (Electrical)	45.36	17.92	63.28
Painter	29.87	18.79	48.66
Pavement Marking Operator	31.24	17.04	48.28
Piledriver	30.11	21.09	51.20
Roofer or Waterproofer	30.40	2.23	32.63
Teledata Technician or Installer	25.63	17.25	42.88
Tuckpointer, Caulker or Cleaner	34.28	18.60	52.88
Underwater Diver (Except on Great Lakes)	36.74	16.00	52.74
Heavy Equipment Operator - ELECTRICAL LINE CONSTRUCTION ONLY	36.73	15.92	52.65
Light Equipment Operator -ELECTRICAL LINE CONSTRUCTION ONLY	32.65	17.28	49.93
Heavy Truck Driver - ELECTRICAL LINE CONSTRUCTION ONLY	28.57	14.44	43.01
Light Truck Driver - ELECTRICAL LINE CONSTRUCTION ONLY	26.53	13.09	39.62

TRADE OR OCCUPATION	HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
	$	$	$
Groundman - ELECTRICAL LINE CONSTRUCTION ONLY	21.75	12.97	34.72
TRUCK DRIVERS			
Single Axle or Two Axle	36.72	21.15	57.87
Three or More Axle	25.78	18.96	44.74
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.			
Articulated, Euclid, Dumptor, Off Road Material Hauler	30.82	21.85	52.67
Future Increase(s): Add $1.30/hr on 6/1/2016; Add $1.25/hr on 6/1/2017. Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add $1.50/hr night work premium. See DOT'S website for details about the applicability of this night work premium at: http://wisconsindot.gov/Pages/doing- bus/civil- rights/labornwage/prevailing- wage- compliance. aspx.			
Pavement Marking Vehicle	23.82	17.72	41.54
Shadow or Pilot Vehicle	25.28	18.31	43.59
Truck Mechanic	25.28	18.31	43.59
LABORERS			
General Laborer	30.67	15.65	46.32
Future Increase(s): Add $1.00/hr eff. 06/01/2016; Add $1.00/hr eff. 06/01/2017 Premium Pay: Add $.10/hr for topman, air tool operator, vibrator or tamper operator (mechanical hand operated), chain saw operator and demolition burning torch laborer; Add $.15/hr for bituminous worker (raker and luteman), formsetter (curb, sidewalk and pavement) and strike off man; Add $.20/hr for blaster and powderman; Add $.25/hr for bottomman; Add $.35/hr for line and grade specialist; Add $.45/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	19.00	0.00	19.00
Landscaper	30.67	15.65	46.32
Future Increase(s): 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	27.30	15.65	42.95
Future Increase(s): 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 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.			
Fiber Optic Laborer (Outside, Other Than Concrete Encased)	16.00	0.74	16.74
Railroad Track Laborer	18.00	4.43	22.43

TRADE OR OCCUPATION	HOURLY BASIC RATE OF PAY $	HOURLY FRINGE BENEFITS $	TOTAL $
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 $1.30/hr on 6/1/2016; Add $1.25/hr on 6/1/2017. Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add $1.50/hr night work premium. See DOT'S website for details about the applicability of this night work premium at: http://wisconsindot.gov/Pages/doing- bus/civil- rights/labornwage/prevailing- wage- compliance. aspx.	38.27	21.85	60.12
Backhoe (Track Type) Having a Mfgr.'s Rated Capacity of 130,000 Lbs. or Over; Caisson Rig; Crane, Tower Crane, Portable Tower, Pedestal Tower or Derrick, With Boom, Leads &/or Jib Lengths Measuring 175 Ft or Under; Crane, Tower Crane, Portable Tower, Pedestal Tower or Derrick, With or Without Attachments, With a Lifting Capacity of 100 Tons or Under, Self-Erecting Tower Crane With A Lifting Capacity Of 4,000 Lbs., & Under; Dredge (NOT Performing Work on the Great Lakes); Licensed Boat Pilot (NOT Performing Work on the Great Lakes); Pile Driver. Future Increase(s): Add $1.30/hr on 6/1/2016; Add $1.25/hr on 6/1/2017. Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add $1.50/hr night work premium. See DOT'S website for details about the applicability of this night work premium at: http://wisconsindot.gov/Pages/doing- bus/civil- rights/labornwage/prevailing- wage- compliance. aspx.	37.77	21.85	59.62
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); Tube Finisher; Tugger (NOT Performing Work on the Great Lakes); Winches & A- Frames. Future Increase(s): Add $1.30/hr on 6/1/2016; Add $1.25/hr on 6/1/2017.	37.27	21.85	59.12

TRADE OR OCCUPATION	HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
	$	$	$
Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add $1.50/hr night work premium. See DOT'S website for details about the applicability of this night work premium at: http://wisconsindot.gov/Pages/doing- bus/civil- rights/labornwage/prevailing- wage- compliance. aspx.			
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.	37.01	21.85	58.86
Future Increase(s): Add $1.30/hr on 6/1/2016; Add $1.25/hr on 6/1/2017.			
Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add $1.50/hr night work premium. See DOT'S website for details about the applicability of this night work premium at: http://wisconsindot.gov/Pages/doing- bus/civil- rights/labornwage/prevailing- wage- compliance. aspx.			
Air 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.	36.72	21.85	58.57
Future Increase(s): Add $1.30/hr on 6/1/2016; Add $1.25/hr on 6/1/2017.			
Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add $1.50/hr night work premium. See DOT'S website for details about the applicability of this night work premium at: http://wisconsindot.gov/Pages/doing- bus/civil- rights/labornwage/prevailing- wage- compliance. aspx. .			
Fiber Optic Cable Equipment.	26.00	3.86	29.86

SUPERSEDES DECISION WI20120010
U. S. DEPARTMENT OF LABOR
(DAVIS-BACON ACT, MINIMUM WAGE RATES)

STATE: Wisconsin
GENERAL DECISION NUMBER: WI160010
DATE: October 7, 2016
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	$30.67	16.55
Group 2: Air Tool Operator; Joint Sawer and Filler (Pavement); Vibrator or Tamper Operator (Mechanical Hand Operated);	30.77	16.55
Group 3: Bituminous Worker (Raker and Luteman); Formsetter (Curb, Sidewalk, and Pavement); Strike Off man	30.82	16.55
Group 4: Line and Grade Specialist	31.02	16.55
Group 5: Blaster and Powderman	30.87	16.55
Group 6: Flagperson; Traffic Control	27.30	16.55

CLASSES OF LABORER AND MECHANICS

Bricklayer	35.10	18.58
Carpenter	30.48	15.80
Millwright	32.11	15.80
Piledriverman	30.98	15.80
Ironworker (North East Two Thirds)	33.15	25.42
Ironworker (South West One Third)	34.34	25.72
Cement Mason/Concrete Finisher	35.07	19.75
Electrician		See Page 3
Line Construction		
Lineman	42.14	32% + 5.00
Heavy Equipment Operator	40.03	32% + 5.00
Equipment Operator	33.71	32% + 5.00
Heavy Groundman Driver	26.78	14.11
Light Groundman Driver	24.86	13.45
Groundsman	23.18	32% + 5.00
Millwrights	27.71	12.76
Painter, Brush	32.74	18.70
Painter, Structural Steel	32.89	18.70
Painter, Spray	33.74	18.70
Well Drilling:		
Well Driller	16.52	3.70

Truck Drivers:	Basic Hourly Rates	Fringe Benefits
1 & 2 Axles	26.63	19.85
Three or More Axles; Euclids, Dumptor & Articulated, Truck Mechanic	26.78	19.85

Notes: Welders receive rate prescribed for craft performing operation to which welding is incidental. Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29 CFR, 5.5(a)(1)(ii)). Includes Modification #0 dated January 8, 2016; Modification #1 dated January 29, 2016; Modification #2 dated February 26, 2016; Modification #3 dated March 11, 2016; Modification #4 dated April 8, 2016; Modification #5 dated June 17, 2016; Modification #6 dated July 1, 2016; Modification #7 dated July 22, 2016; Modification #8 dated July 29, 2016; Modification #9 dated August 19, 2016; Modification #10 dated August 26, 2016; Modification #11 dated September 2, 2016; Modification #12 dated September 30, 2016; Modification #13 dated October 7, 2016.

SUPERSEDES DECISION WI20120010
U. S. DEPARTMENT OF LABOR
(DAVIS-BACON ACT, MINIMUM WAGE RATES)

STATE: Wisconsin
GENERAL DECISION NUMBER: WI160010
DATE: October 7, 2016
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	$39.27	$21.80
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.	$38.77	$21.80
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 (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.	$38.27	$21.80
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.	$38.01	$21.80
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.	$37.72	$21.80
Group 6: Off – road material hauler with or without ejector	$31.82	$21.80

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: WI160010
DATE: October 7, 2016
DESCRIPTION OF WORK: Highways and Airport Runway and Taxiway Construction

LABORERS CLASSIFICATION:	Rates	Benefits
Electricians		
Area 1	$30.68	17.28
Area 2:		
Electricians	32.00	19.28
Area 3:		
Electrical contracts under $130,000	28.96	18.26
Electrical contracts over $130,000	31.16	18.34
Area 4:	30.50	29.50% + 9.57
Area 5	28.96	24.85% + 9.70
Area 6	37.02	29%+9.77
Area 8		
Electricians	32.45	26.10% + 10.56
Area 9:		
Electricians	36.50	20.39
Area 10	29.64	20.54
Area 11	34.92	25.05
Area 12	34.98	19.89
Area 13	36.01	24.00
Teledata System Installer		
Area 14		
Installer/Technician	24.35	13.15
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.

SCHEDULE OF ITEMS REVISED:

CONTRACT:	PROJECT(S):	FEDERAL ID(S):
20161213014	3170-08-70	WISC 2016474
	3170-08-71	N/A

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
	SECTION 0001 Roadway Items					
0010	201.0120 Clearing	270.000 ID		.		.
0020	201.0220 Grubbing	270.000 ID		.		.
0030	204.0100 Removing Pavement	5,681.000 SY		.		.
0040	204.0110 Removing Asphaltic Surface	240.000 SY		.		.
0050	204.0115 Removing Asphaltic Surface Butt Joints	221.000 SY		.		.
0060	204.0120 Removing Asphaltic Surface Milling	22,095.000 SY		.		.
0070	204.0130 Removing Curb	563.000 LF		.		.
0080	204.0150 Removing Curb & Gutter	8,079.000 LF		.		.
0090	204.0155 Removing Concrete Sidewalk	3,231.000 SY		.		.
0100	204.0175 Removing Concrete Slope Paving	517.000 SY		.		.

SCHEDULE OF ITEMS REVISED:

CONTRACT:	PROJECT(S):	FEDERAL ID(S):
20161213014	3170-08-70	WISC 2016474
	3170-08-71	N/A

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
0110	204.0180 Removing Delineators and Markers	24.000 EACH		.		.
0120	204.0195 Removing Concrete Bases	15.000 EACH		.		.
0130	204.0210 Removing Manholes	2.000 EACH		.		.
0140	204.0220 Removing Inlets	13.000 EACH		.		.
0150	204.0245 Removing Storm Sewer (size) 001. 12-Inch	352.000 LF		.		.
0160	204.0245 Removing Storm Sewer (size) 002. 21-Inch	190.000 LF		.		.
0170	204.0291.S Abandoning Sewer	13.000 CY		.		.
0180	204.9060.S Removing (item description) 001. Inlet Covers	7.000 EACH		.		.
0190	204.9060.S Removing (item description) 002. Commercial Sign	3.000 EACH		.		.
0200	204.9060.S Removing (item description) 003. Light Pole	4.000 EACH		.		.

CONTRACT: 20161213014
PROJECT(S): 3170-08-70, 3170-08-71
FEDERAL ID(S): WISC 2016474, N/A

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
0210	204.9090.S Removing (item description) 001. Block Retaining Wall	262.000 LF		.		.
0220	205.0100 Excavation Common	26,533.000 CY		.		.
0230	209.2100 Backfill Granular Grade 2	6,700.000 CY		.		.
0240	211.0100 Prepare Foundation for Asphaltic Paving (project) 001. 3170-08-70	LUMP	LUMP			.
0250	213.0100 Finishing Roadway (project) 001. 3170-08-70	1.000 EACH		.		.
0260	305.0120 Base Aggregate Dense 1 1/4-Inch	22,960.000 TON		.		.
0270	310.0115 Base Aggregate Open-Graded	5.000 CY		.		.
0280	311.0110 Breaker Run	16,725.000 TON		.		.
0290	405.0100 Coloring Concrete WisDOT Red	83.000 CY		.		.
0300	415.0085 Concrete Pavement 8 1/2-Inch	7,923.000 SY		.		.

CONTRACT: 20161213014
PROJECT(S): 3170-08-70, 3170-08-71
FEDERAL ID(S): WISC 2016474, N/A

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
0310	415.1085 Concrete Pavement HES 8 1/2-Inch	1,881.000 SY		.		.
0320	416.0170 Concrete Driveway 7-Inch	1,045.000 SY		.		.
0330	416.0270 Concrete Driveway HES 7-Inch	116.000 SY		.		.
0340	416.0610 Drilled Tie Bars	589.000 EACH		.		.
0350	416.0620 Drilled Dowel Bars	43.000 EACH		.		.
0360	440.4410 Incentive IRI Ride	6,329.000 DOL	1.00000		6329.00	
0370	450.4000 HMA Cold Weather Paving	1,285.000 TON		.		.
0380	455.0605 Tack Coat	3,034.000 GAL		.		.
0390	460.2000 Incentive Density HMA Pavement	6,480.000 DOL	1.00000		6480.00	
0400	460.4110.S Reheating HMA Pavement Longitudinal Joints	31,755.000 LF		.		.
0410	460.6223 HMA Pavement 3 MT 58-28 S	8,649.000 TON		.		.

CONTRACT: 20161213014
PROJECT(S): 3170-08-70, 3170-08-71
FEDERAL ID(S): WISC 2016474, N/A

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
0420	460.6224 HMA Pavement 4 MT 58-28 S	3,390.000 TON		.		.
0430	465.0120 Asphaltic Surface Driveways and Field Entrances	254.000 TON		.		.
0440	465.0125 Asphaltic Surface Temporary	1,698.000 TON		.		.
0450	465.0310 Asphaltic Curb	18.000 LF		.		.
0460	511.1200 Temporary Shoring (structure) 001. R-64-20	480.000 SF		.		.
0470	513.2001 Railing Pipe (structure) 001. R-64-20	333.000 LF		.		.
0480	520.8000 Concrete Collars for Pipe	15.000 EACH		.		.
0490	522.1024 Apron Endwalls for Culvert Pipe Reinforced Concrete 24-Inch	1.000 EACH		.		.
0500	524.0624 Apron Endwalls for Culvert Pipe Salvaged 24-Inch	2.000 EACH		.		.
0510	601.0105 Concrete Curb Type A	335.000 LF		.		.

CONTRACT: 20161213014
PROJECT(S): 3170-08-70, 3170-08-71
FEDERAL ID(S): WISC 2016474, N/A

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
0520	601.0110 Concrete Curb Type D	122.000 LF		.		.
0530	601.0407 Concrete Curb & Gutter 18-Inch Type D	256.000 LF		.		.
0540	601.0409 Concrete Curb & Gutter 30-Inch Type A	3,597.000 LF		.		.
0550	601.0411 Concrete Curb & Gutter 30-Inch Type D	4,263.000 LF		.		.
0560	601.0600 Concrete Curb Pedestrian	875.000 LF		.		.
0570	602.0405 Concrete Sidewalk 4-Inch	13,290.000 SF		.		.
0580	602.0410 Concrete Sidewalk 5-Inch	54,110.000 SF		.		.
0590	602.0420 Concrete Sidewalk 7-Inch	115.000 SF		.		.
0600	602.0505 Curb Ramp Detectable Warning Field Yellow	1,020.000 SF		.		.
0610	604.0400 Slope Paving Concrete	360.000 SY		.		.
0620	606.0200 Riprap Medium	4.000 CY		.		.

CONTRACT: 20161213014
PROJECT(S): 3170-08-70, 3170-08-71
FEDERAL ID(S): WISC 2016474, N/A

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
0630	608.0312 Storm Sewer Pipe Reinforced Concrete Class III 12-Inch	1,111.000 LF		.		.
0640	608.0318 Storm Sewer Pipe Reinforced Concrete Class III 18-Inch	16.000 LF		.		.
0650	608.0324 Storm Sewer Pipe Reinforced Concrete Class III 24-Inch	806.000 LF		.		.
0660	608.0336 Storm Sewer Pipe Reinforced Concrete Class III 36-Inch	192.000 LF		.		.
0670	608.0412 Storm Sewer Pipe Reinforced Concrete Class IV 12-Inch	135.000 LF		.		.
0680	611.0530 Manhole Covers Type J	3.000 EACH		.		.
0690	611.0535 Manhole Covers Type J-Special	5.000 EACH		.		.
0700	611.0624 Inlet Covers Type H	27.000 EACH		.		.
0710	611.0639 Inlet Covers Type H-S	4.000 EACH		.		.
0720	611.0666 Inlet Covers Type Z	2.000 EACH		.		.
0730	611.1003 Catch Basins 3-FT Diameter	2.000 EACH		.		.

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CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
0740	611.1230 Catch Basins 2x3-FT	25.000 EACH		.		.
0750	611.2004 Manholes 4-FT Diameter	11.000 EACH		.		.
0760	611.2005 Manholes 5-FT Diameter	2.000 EACH		.		.
0770	611.2008 Manholes 8-FT Diameter	2.000 EACH		.		.
0780	611.8110 Adjusting Manhole Covers	3.000 EACH		.		.
0790	611.8115 Adjusting Inlet Covers	7.000 EACH		.		.
0800	611.9710 Salvaged Inlet Covers	5.000 EACH		.		.
0810	612.0406 Pipe Underdrain Wrapped 6-Inch	1,075.000 LF		.		.
0820	612.0902.S Insulation Board Polystyrene (inch) 001. 2-Inch	60.000 SY		.		.
0830	619.1000 Mobilization	1.000 EACH		.		.
0840	620.0300 Concrete Median Sloped Nose	849.000 SF		.		.

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FEDERAL ID(S): WISC 2016474, N/A

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
0850	624.0100 Water	304.000 MGAL		.		.
0860	625.0100 Topsoil	17,830.000 SY		.		.
0870	627.0200 Mulching	10,180.000 SY		.		.
0880	628.1504 Silt Fence	3,025.000 LF		.		.
0890	628.1520 Silt Fence Maintenance	6,650.000 LF		.		.
0900	628.1905 Mobilizations Erosion Control	16.000 EACH		.		.
0910	628.1910 Mobilizations Emergency Erosion Control	8.000 EACH		.		.
0920	628.2006 Erosion Mat Urban Class I Type A	17,600.000 SY		.		.
0930	628.7005 Inlet Protection Type A	44.000 EACH		.		.
0940	628.7010 Inlet Protection Type B	2.000 EACH		.		.
0950	628.7015 Inlet Protection Type C	69.000 EACH		.		.

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CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
0960	628.7020 Inlet Protection Type D	14.000 EACH		.		.
0970	629.0210 Fertilizer Type B	11.100 CWT		.		.
0980	630.0120 Seeding Mixture No. 20	6.000 LB		.		.
0990	630.0130 Seeding Mixture No. 30	311.000 LB		.		.
1000	630.0200 Seeding Temporary	265.000 LB		.		.
1010	634.0618 Posts Wood 4x6-Inch X 18-FT	31.000 EACH		.		.
1020	634.0816 Posts Tubular Steel 2x2-Inch X 16-FT	87.000 EACH		.		.
1030	637.2210 Signs Type II Reflective H	918.970 SF		.		.
1040	637.2215 Signs Type II Reflective H Folding	119.360 SF		.		.
1050	637.2230 Signs Type II Reflective F	207.640 SF		.		.
1060	638.2602 Removing Signs Type II	119.000 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
1070	638.3000 Removing Small Sign Supports	71.000 EACH		.		.
1080	641.8100 Overhead Sign Support (structure) 001. S-64-604	LUMP	LUMP			.
1090	641.8100 Overhead Sign Support (structure) 002. S-64-603	LUMP	LUMP			.
1100	642.5401 Field Office Type D	1.000 EACH		.		.
1110	643.0100 Traffic Control (project) 001. 3170-08-70	1.000 EACH		.		.
1120	643.0300 Traffic Control Drums	85,552.000 DAY		.		.
1130	643.0410 Traffic Control Barricades Type II	2,166.000 DAY		.		.
1140	643.0420 Traffic Control Barricades Type III	10,256.000 DAY		.		.
1150	643.0500 Traffic Control Flexible Tubular Marker Posts	729.000 EACH		.		.
1160	643.0600 Traffic Control Flexible Tubular Marker Bases	729.000 EACH		.		.
1170	643.0705 Traffic Control Warning Lights Type A	7,794.000 DAY		.		.

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
1180	643.0715 Traffic Control Warning Lights Type C	9,970.000 DAY		.		.
1190	643.0800 Traffic Control Arrow Boards	294.000 DAY		.		.
1200	643.0900 Traffic Control Signs	16,387.000 DAY		.		.
1210	643.0920 Traffic Control Covering Signs Type II	10.000 EACH		.		.
1220	643.1000 Traffic Control Signs Fixed Message	1.000 SF		.		.
1230	643.1050 Traffic Control Signs PCMS	111.000 DAY		.		.
1240	643.2000 Traffic Control Detour (project) 001. 3170-08-70	1.000 EACH		.		.
1250	643.3000 Traffic Control Detour Signs	13,770.000 DAY		.		.
1260	644.1410.S Temporary Pedestrian Surface Asphalt	5,600.000 SF		.		.
1270	644.1420.S Temporary Pedestrian Surface Plywood	525.000 SF		.		.
1280	644.1430.S Temporary Pedestrian Surface Plate	525.000 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
1290	644.1601.S Temporary Curb Ramp	10.000 EACH		.		.
1300	644.1616.S Temporary Pedestrian Safety Fence	1,900.000 LF		.		.
1310	645.0120 Geotextile Type HR	72.000 SY		.		.
1320	645.0220 Geogrid Type SR	24,000.000 SY		.		.
1330	646.0106 Pavement Marking Epoxy 4-Inch	15,268.000 LF		.		.
1340	646.0126 Pavement Marking Epoxy 8-Inch	2,971.000 LF		.		.
1350	646.0600 Removing Pavement Markings	11,366.000 LF		.		.
1360	647.0110 Pavement Marking Railroad Crossings Epoxy	4.000 EACH		.		.
1370	647.0156 Pavement Marking Arrows Epoxy Type 1	4.000 EACH		.		.
1380	647.0166 Pavement Marking Arrows Epoxy Type 2	34.000 EACH		.		.
1390	647.0176 Pavement Marking Arrows Epoxy Type 3	6.000 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
1400	647.0186 Pavement Marking Arrows Epoxy Type 4	2.000 EACH		.		.
1410	647.0356 Pavement Marking Words Epoxy	12.000 EACH		.		.
1420	647.0456 Pavement Marking Curb Epoxy	140.000 LF		.		.
1430	647.0526 Pavement Marking Yield Line Symbols Epoxy 18-Inch	9.000 EACH		.		.
1440	647.0566 Pavement Marking Stop Line Epoxy 18-Inch	521.000 LF		.		.
1450	647.0606 Pavement Marking Island Nose Epoxy	14.000 EACH		.		.
1460	647.0656 Pavement Marking Parking Stall Epoxy	235.000 LF		.		.
1470	647.0726 Pavement Marking Diagonal Epoxy 12-Inch	211.000 LF		.		.
1480	647.0766 Pavement Marking Crosswalk Epoxy 6-Inch	3,785.000 LF		.		.
1490	647.0955 Removing Pavement Markings Arrows	11.000 EACH		.		.
1500	647.0965 Removing Pavement Markings Words	6.000 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
1510	649.0400 Temporary Pavement Marking Removable Tape 4-Inch	22,703.000 LF		.		.
1520	649.0402 Temporary Pavement Marking Paint 4-Inch	24,837.000 LF		.		.
1530	649.0801 Temporary Pavement Marking Removable Tape 8-Inch	731.000 LF		.		.
1540	649.0802 Temporary Pavement Marking Paint 8-Inch	601.000 LF		.		.
1550	649.1100 Temporary Pavement Marking Stop Line 18-Inch	102.000 LF		.		.
1560	649.1200 Temporary Pavement Marking Stop Line Removable Tape 18-Inch	242.000 LF		.		.
1570	649.1800 Temporary Pavement Marking Arrows Removable Tape	15.000 EACH		.		.
1580	649.1802 Temporary Pavement Marking Arrows Paint	12.000 EACH		.		.
1590	650.4000 Construction Staking Storm Sewer	42.000 EACH		.		.
1600	650.4500 Construction Staking Subgrade	5,030.000 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
1610	650.5000 Construction Staking Base	3,810.000 LF		.		.
1620	650.5500 Construction Staking Curb Gutter and Curb & Gutter	9,267.000 LF		.		.
1630	650.6500 Construction Staking Structure Layout (structure) 001. R-64-20	LUMP	LUMP			.
1640	650.7000 Construction Staking Concrete Pavement	1,220.000 LF		.		.
1650	650.8500 Construction Staking Electrical Installations (project) 001. 3170-08-70	LUMP	LUMP			.
1660	650.9910 Construction Staking Supplemental Control (project) 001. 3170-08-70	LUMP	LUMP			.
1670	650.9920 Construction Staking Slope Stakes	5,030.000 LF		.		.
1680	652.0225 Conduit Rigid Nonmetallic Schedule 40 2-Inch	2,661.000 LF		.		.
1690	652.0235 Conduit Rigid Nonmetallic Schedule 40 3-Inch	3,922.000 LF		.		.
1700	652.0700.S Install Conduit into Existing Item	10.000 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
1710	652.0800 Conduit Loop Detector	1,571.000 LF		.		.
1720	653.0135 Pull Boxes Steel 24x36-Inch	11.000 EACH		.		.
1730	653.0140 Pull Boxes Steel 24x42-Inch	38.000 EACH		.		.
1740	653.0900 Adjusting Pull Boxes	2.000 EACH		.		.
1750	653.0905 Removing Pull Boxes	21.000 EACH		.		.
1760	654.0101 Concrete Bases Type 1	12.000 EACH		.		.
1770	654.0102 Concrete Bases Type 2	4.000 EACH		.		.
1780	654.0105 Concrete Bases Type 5	16.000 EACH		.		.
1790	654.0110 Concrete Bases Type 10	1.000 EACH		.		.
1800	654.0113 Concrete Bases Type 13	3.000 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
1810	654.0217 Concrete Control Cabinet Bases Type 9 Special	1.000 EACH		.		.
1820	654.0230 Concrete Control Cabinet Bases Type L30	1.000 EACH		.		.
1830	655.0230 Cable Traffic Signal 5-14 AWG	1,792.000 LF		.		.
1840	655.0240 Cable Traffic Signal 7-14 AWG	1,946.000 LF		.		.
1850	655.0250 Cable Traffic Signal 9-14 AWG	126.000 LF		.		.
1860	655.0260 Cable Traffic Signal 12-14 AWG	1,000.000 LF		.		.
1870	655.0280 Cable Traffic Signal 19-14 AWG	175.000 LF		.		.
1880	655.0320 Cable Type UF 2-10 AWG Grounded	705.000 LF		.		.
1890	655.0515 Electrical Wire Traffic Signals 10 AWG	3,643.000 LF		.		.
1900	655.0610 Electrical Wire Lighting 12 AWG	4,788.000 LF		.		.
1910	655.0615 Electrical Wire Lighting 10 AWG	303.000 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
1920	655.0620 Electrical Wire Lighting 8 AWG	9,728.000 LF		.		.
1930	655.0625 Electrical Wire Lighting 6 AWG	10,716.000 LF		.		.
1940	655.0630 Electrical Wire Lighting 4 AWG	13,022.000 LF		.		.
1950	655.0635 Electrical Wire Lighting 2 AWG	10,270.000 LF		.		.
1960	655.0700 Loop Detector Lead In Cable	5,564.000 LF		.		.
1970	655.0800 Loop Detector Wire	4,945.000 LF		.		.
1980	656.0200 Electrical Service Meter Breaker Pedestal (location) 001. STH 50 (E. Geneva Street) & Borg Road/Wright Street	LUMP	LUMP			.
1990	656.0200 Electrical Service Meter Breaker Pedestal (location) 002. STH 50 (E. Geneva Street) & Borg Road/Wright Street	LUMP	LUMP			.
2000	657.0100 Pedestal Bases	11.000 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
2010	657.0255 Transformer Bases Breakaway 11 1/2-Inch Bolt Circle	4.000 EACH		.		.
2020	657.0315 Poles Type 4	4.000 EACH		.		.
2030	657.0405 Traffic Signal Standards Aluminum 3.5-FT	4.000 EACH		.		.
2040	657.0410 Traffic Signal Standards Aluminum 9-FT	1.000 EACH		.		.
2050	657.0420 Traffic Signal Standards Aluminum 13-FT	5.000 EACH		.		.
2060	657.0425 Traffic Signal Standards Aluminum 15-FT	1.000 EACH		.		.
2070	657.0709 Luminaire Arms Truss Type 4-Inch Clamp 12-FT	8.000 EACH		.		.
2080	657.1345 Install Poles Type 9	1.000 EACH		.		.
2090	657.1355 Install Poles Type 12	3.000 EACH		.		.
2100	657.1530 Install Monotube Arms 30-FT	1.000 EACH		.		.
2110	657.1535 Install Monotube Arms 35-FT	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
2120	657.1540 Install Monotube Arms 40-FT	1.000 EACH		.		.
2130	657.1555 Install Monotube Arms 55-FT	1.000 EACH		.		.
2140	658.0110 Traffic Signal Face 3-12 Inch Vertical	20.000 EACH		.		.
2150	658.0115 Traffic Signal Face 4-12 Inch Vertical	6.000 EACH		.		.
2160	658.0120 Traffic Signal Face 5-12 Inch Vertical	2.000 EACH		.		.
2170	658.0215 Backplates Signal Face 3 Section 12-Inch	20.000 EACH		.		.
2180	658.0220 Backplates Signal Face 4 Section 12-Inch	6.000 EACH		.		.
2190	658.0225 Backplates Signal Face 5 Section 12-Inch	2.000 EACH		.		.
2200	658.0416 Pedestrian Signal Face 16-Inch	30.000 EACH		.		.
2210	658.0500 Pedestrian Push Buttons	13.000 EACH		.		.
2220	658.0600 Led Modules 12-Inch Red Ball	15.000 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
2230	658.0605 Led Modules 12-Inch Yellow Ball	15.000 EACH		.		.
2240	658.0610 Led Modules 12-Inch Green Ball	15.000 EACH		.		.
2250	658.0615 Led Modules 12-Inch Red Arrow	14.000 EACH		.		.
2260	658.0620 Led Modules 12-Inch Yellow Arrow	20.000 EACH		.		.
2270	658.0625 Led Modules 12-Inch Green Arrow	12.000 EACH		.		.
2280	658.0635 Led Modules Pedestrian Countdown Timer 16-Inch	30.000 EACH		.		.
2290	658.5069 Signal Mounting Hardware (location) 001. STH 50 (E. Geneva Street) & Borg Road/Wright Street	LUMP	LUMP			.
2300	659.1125 Luminaires Utility LED C	8.000 EACH		.		.
2310	659.2130 Lighting Control Cabinets 120/240 30-Inch	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
2320	661.0200 Temporary Traffic Signals for Intersections (location) 001. STH 50 (E. Geneva Street) & Borg Road/Wright Street	LUMP	LUMP			.
2330	690.0150 Sawing Asphalt	15,670.000 LF	.			.
2340	690.0250 Sawing Concrete	3,237.000 LF	.			.
2350	715.0415 Incentive Strength Concrete Pavement	3,042.000 DOL	1.00000		3042.00	
2360	ASP.1T0A On-the-Job Training Apprentice at $5.00/HR	1,800.000 HRS	5.00000		9000.00	
2370	ASP.1T0G On-the-Job Training Graduate at $5.00/HR	3,000.000 HRS	5.00000		15000.00	
2380	SPV.0035 Special 200. Removal and Replacement of Unsuitable Material	100.000 CY	.			.
2390	SPV.0060 Special 001. Remove Existing Signal Faces	14.000 EACH	.			.
2400	SPV.0060 Special 002. Relocate Existing Traffic Signal Pole	1.000 EACH	.			.
2410	SPV.0060 Special 003. Relocate Existing Pedestrian Push Button	5.000 EACH	.			.

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2420	SPV.0060 Special 004. Inlet Covers Type DW	8.000 EACH		.		.
2430	SPV.0060 Special 005. Traffic Signal Controller, Fully Actuated, 8 Phase	1.000 EACH		.		.
2440	SPV.0060 Special 006. Steel Light Pole Assembly- Single Arm	4.000 EACH		.		.
2450	SPV.0060 Special 007. Steel Light Pole Assembly-Twin Arm	10.000 EACH		.		.
2460	SPV.0060 Special 008. Luminaires Utility LED- City of Delavan	24.000 EACH		.		.
2470	SPV.0060 Special 009. Repower Flashing Beacon	1.000 EACH		.		.
2480	SPV.0060 Special 010. Remove and Salvage Existing Light Pole	9.000 EACH		.		.
2490	SPV.0060 Special 015. Construction Staking Curb Ramp Layout	79.000 EACH		.		.
2500	SPV.0060 Special 016. Salvage and Reinstall Existing Light Pole	2.000 EACH		.		.
2510	SPV.0060 Special 017. Storm Sewer Tap	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
2520	SPV.0060 Special 200. Remove Existing Valve Box	21.000 EACH		.		.
2530	SPV.0060 Special 201. Abandon Existing Hydrant	7.000 EACH		.		.
2540	SPV.0060 Special 202. Water Main Fitting 12-Inch Cap	1.000 EACH		.		.
2550	SPV.0060 Special 203. Water Main Fitting 12-Inch Sleeve	6.000 EACH		.		.
2560	SPV.0060 Special 204. Water Main Fitting 12-Inch X 45 Degree Bend	2.000 EACH		.		.
2570	SPV.0060 Special 205. Water Main Fitting 12-Inch X 22.5 Degree Bend	1.000 EACH		.		.
2580	SPV.0060 Special 206. Water Main Fitting 12-Inch Tee	1.000 EACH		.		.
2590	SPV.0060 Special 207. Water Main Fitting 12-Inch X 8-Inch Tee	5.000 EACH		.		.
2600	SPV.0060 Special 208. Water Main Fitting 12-Inch X 6-Inch Tee	4.000 EACH		.		.
2610	SPV.0060 Special 209. Water Main Fitting 12-Inch X 8-Inch Cross	1.000 EACH		.		.

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	SPV.0060 Special 210.					
2620	Water Main Fitting	1.000				
	12-Inch X 8-Inch Reducer	EACH		.		.
	SPV.0060 Special 211.					
2630	Water Main Fitting	6.000				
	8-Inch Sleeve	EACH		.		.
	SPV.0060 Special 212.					
2640	Water Main Fitting	7.000				
	8-Inch X 45 Degree Bend	EACH		.		.
	SPV.0060 Special 213.					
2650	Water Main Fitting	2.000				
	8-Inch Tee	EACH		.		.
	SPV.0060 Special 214.					
2660	Water Main Fitting	5.000				
	8-Inch X 6-Inch Tee	EACH		.		.
	SPV.0060 Special 215.					
2670	Water Main Fitting	4.000				
	8-Inch X 6-Inch Reducer	EACH		.		.
	SPV.0060 Special 216.					
2680	Water Main Fitting	6.000				
	6-Inch Sleeve	EACH		.		.
	SPV.0060 Special 217.					
2690	Water Main Fitting	1.000				
	6-Inch X 90 Degree Bend	EACH		.		.
	SPV.0060 Special 218.					
2700	Water Main Fitting	6.000				
	6-Inch X 45 Degree Bend	EACH		.		.
	SPV.0060 Special 219.					
2710	Water Valves, 12-Inch	10.000				
		EACH		.		.
	SPV.0060 Special 220.					
2720	Water Valves, 8-Inch	7.000				
		EACH		.		.

CONTRACT: 20161213014
PROJECT(S): 3170-08-70, 3170-08-71
FEDERAL ID(S): WISC 2016474, N/A

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
	SPV.0060 Special 221.					
2730	Water Valves, 6-Inch	1.000 EACH		.		.
	SPV.0060 Special 222.					
2740	Water Main Connection 12-Inch Non-Pressure	7.000 EACH		.		.
	SPV.0060 Special 223.					
2750	Water Main Connection 8-Inch Non-Pressure	6.000 EACH		.		.
	SPV.0060 Special 224.					
2760	Water Main Connection 6-Inch Non-Pressure	7.000 EACH		.		.
	SPV.0060 Special 225.					
2770	Fire Hydrants	6.000 EACH		.		.
	SPV.0060 Special 226.					
2780	Water Service Pipe Connections, 1-Inch	17.000 EACH		.		.
	SPV.0060 Special 227.					
2790	Adjust Water Valve Box	11.000 EACH		.		.
	SPV.0060 Special 228.					
2800	Replace Water Valve Box	6.000 EACH		.		.
	SPV.0060 Special 229.					
2810	Adjust Curb Box	3.000 EACH		.		.
	SPV.0060 Special 230.					
2820	Sanitary Manhole Installation	1.000 EACH		.		.

CONTRACT: 20161213014
PROJECT(S): 3170-08-70, 3170-08-71
FEDERAL ID(S): WISC 2016474, N/A

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
2830	SPV.0060 Special 231. Sanitary Manhole Exterior Joint Protection	1.000 EACH		.		.
2840	SPV.0060 Special 232. Sanitary Manhole Cone Replacement	3.000 EACH		.		.
2850	SPV.0060 Special 233. Sanitary Manhole Frame and Grate, Special	7.000 EACH		.		.
2860	SPV.0060 Special 234. Sanitary Manhole Chimney Seals	10.000 EACH		.		.
2870	SPV.0060 Special 235. Sanitary Manhole Frame Adjustment	18.000 EACH		.		.
2880	SPV.0075 Special 001. Pavement Cleanup Project ID 3170-08-70	165.000 HRS		.		.
2890	SPV.0075 Special 200. Water Main Exploratory Excavation	12.000 HRS		.		.
2900	SPV.0090 Special 001. Concrete Curb & Gutter 24-Inch Type D Special	2,144.000 LF		.		.
2910	SPV.0090 Special 002. Concrete Curb & Gutter 24-Inch Type A Special	1,084.000 LF		.		.
2920	SPV.0090 Special 003. Concrete Curb 24-Inch Type D	40.000 LF		.		.

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CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
2930	SPV.0090 Special 004. Concrete Curb & Gutter 24-Inch Type D	345.000 LF		.		.
2940	SPV.0090 Special 005. Concrete Curb & Gutter HES 30-Inch Type A	400.000 LF		.		.
2950	SPV.0090 Special 006. Concrete Curb & Gutter HES 30-Inch Type D	447.000 LF		.		.
2960	SPV.0090 Special 007. Sawing Curb Head	9.000 LF		.		.
2970	SPV.0090 Special 200. Water Main (Open Cut), 12-Inch RJT	225.000 LF		.		.
2980	SPV.0090 Special 201. Water Main (Open Cut), 12-Inch	2,460.000 LF		.		.
2990	SPV.0090 Special 202. Water Main (Open Cut), 8-Inch RJT	200.000 LF		.		.
3000	SPV.0090 Special 203. Water Main (Open Cut), 8-Inch	620.000 LF		.		.
3010	SPV.0090 Special 204. Water Main (Open Cut), 6-Inch RJT	170.000 LF		.		.
3020	SPV.0090 Special 205. Water Service Pipe, 1-Inch C.T.S. HDPE	605.000 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
3030	SPV.0090 Special 206. Steel Casing Pipe, 36-Inch	66.000 LF		.		.
3040	SPV.0105 Special 001. Removing Overhead Sign Support Station 141+75	LUMP	LUMP			.
3050	SPV.0105 Special 002. Removing Overhead Sign Support Station 102+40	LUMP	LUMP			.
3060	SPV.0105 Special 003. Rmv and Trnsprt Traffic Signals, STH50 (E. Geneva St) & Borg Rd/Wright St	LUMP	LUMP			.
3070	SPV.0105 Special 004. Concrete Pavement Joint Layout	LUMP	LUMP			.
3080	SPV.0105 Special 005. EVP Detector STH50 (E. Geneva St) & Borg Road / Wright Street	LUMP	LUMP			.
3090	SPV.0105 Special 200. Water Main Spot Relocation 12-Inch RJT	LUMP	LUMP			.
3100	SPV.0105 Special 201. Water Main Spot Relocation 8-Inch RJT	LUMP	LUMP			.
3110	SPV.0105 Special 202. Water Main Spot Relocation 6-Inch RJT	LUMP	LUMP			.
3120	SPV.0120 Special 001. Water for Seeded Areas	621.000 MGAL		.		.

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
3130	SPV.0165 Special 001. Wall Modular Block Gravity LRFD, R-64-20 **P**	1,940.000 SF		.		.
3140	SPV.0165 Special 002. Anti-Graffiti Coating	1,770.000 SF		.		.
	SECTION 0001 TOTAL					.
	TOTAL BID					.

PLEASE ATTACH SCHEDULE OF ITEMS HERE