HIGHWAY WORK PROPOSAL

Proposal Number: 2 6

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

COUNTY	STATE PROJECT ID	FEDERAL PROJECT ID	PROJECT DESCRIPTION	HIGHWAY
Sheboygan	4630-05-71 and 4630-05-72	WISC 2016 487	Calumet Drive, City of Sheboygan Main Avenue - 26th Street	STH 42
Sheboygan	4630-30-60		Sheboygan - Howard Grove Mueller Rd - IH-43	STH 42

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

Proposal Guaranty Required, $ 75,000.00 Payable to: Wisconsin Department of Transportation	Attach Proposal Guaranty on back of this PAGE.
Bid Submittal 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 Eighty-Five (85) Working Days	
Assigned Disadvantaged Business Enterprise Goal 4%	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 Grading, excavation, base course, concrete pavement, pavement repair, concrete curb and gutter, sidewalk, storm sewer, sanitary sewer, traffic signals, street lighting, marking, and signing.	
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 Project 4630-05-71 and 4630-05-72, Calumet Drive, City of Sheboygan, Main Avenue – 26th Street, and Project 4630-30-60, Sheboygan – Howard Grove, Mueller Rd – IH-43, STH 42, Sheboygan 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 grading, excavation, base course, concrete pavement, concrete curb and gutter, sidewalk, storm sewer, sanitary sewer, traffic signals, street lighting, marking, signing 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 time frame for construction of the project within the 2017 construction season to the engineer in writing within a month after executing the contract but at least 14 calendar days before the preconstruction conference. Assure that the time frame is consistent with the contract completion time. Upon approval, the engineer will issue the notice to proceed within ten calendar days before the beginning of the approved time frame.

To revise the time frame, submit a written request to the engineer at least two weeks before the beginning of the intended time frame. 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.

Interim Liquidated Damages
Complete all work for Project 4630-30-60 within a 25 consecutive working day time frame. If the contractor fails to complete the work within 25 working days, the department will assess the contractor $4,130 in interim liquidated damages for each working day that contract work remains incomplete beyond 25 working days. An entire working day will be

charged for any period of time within a working day that work remains incomplete beyond 12:01 AM.

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

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).

In accordance 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.

Commercial Parking Lot, Parcel 9
A portion of the commercial parking lot, parcel 9, is being reconstructed as part of this project. Complete all work within the parking lot as shown on the plans within 15 consecutive working days. Submit a schedule to the engineer for completing this work prior to the first scheduled coordination meeting with the businesses and property owners.

4. Traffic.

Project 4630-30-60:

STH 42 shall remain open to a minimum of one 12-foot lane in each direction at all times except as follows: STH 42 may be temporarily closed at the intersection of CTH J for the installation of traffic signals for a maximum of 15 minutes for each monotube installation.

Lane closures may cause moderate delay along STH 42 during the peak hours of 4:00 PM - 6:00 PM. The engineer may restrict lane closures to off-peak periods if deemed necessary.

Maintain access to private driveways within the project limits at all times except as follows: if a closure is necessary, notify the property owner 48 hours prior to the anticipated closure. Close the driveway for a maximum of one working day. Construct driveway approaches to commercial businesses in stages or provide temporary access such that access to commercial property is provided at all times during construction. Maintain at least one access to businesses at all times. Paving gaps will be needed at Mueller Rd. and Enterprise Dr.

Project 4630-05-71/72:

General
Construct Calumet Drive in stages in order to maintain traffic. No detour route will be provided. Maintain a minimum of two lanes for bi-directional traffic being maintained at all times on both Calumet Drive and North Avenue. Pedestrian traffic shall be maintained on at least one side of the roadway on existing, new, or temporary sidewalk.

Private Access Maintenance
Maintain local and emergency access to adjacent properties to and from the work zone at all times unless otherwise approved by the engineer. An undistributed amount of base aggregate is provided for maintenance of access within the work areas.

Notify property owners 48 hours in advance of work performed adjacent to their properties that will temporarily restrict access. Examples of these times would be sewer work, curb and gutter installation, concrete paving, driveway and sidewalk installation.

For maintaining access to Wells Fargo Bank, Station 15+00 to Station 21+00 LT, stage reconstruction to maintain the center driveway and at least one other driveway at all times. For all other properties with more than one driveway, stage reconstruction of driveways to maintain at least one entrance at all times. For properties with only one driveway, construct the driveway half at a time. These access requirements may be modified if otherwise agreed to by the engineer and coordinated with the property owner.

Use Portable Changeable Message Signs to announce lane closures seven days prior to starting work and two days prior to changing traffic stages, as noted in the plan and as directed or approved by the engineer.

Portable Changeable Message Signs – Message Prior Approval

After coordinating with the department construction field staff, notify the Northeast Region Traffic Section at (920) 492-7165 (secondary contact number is (920) 492-7719) three business days prior to deploying or changing a message on a PCMS to obtain approval of the proposed message. The Northeast Region Traffic Unit will review the proposed message and either approve the message or make necessary changes.

The mainline paving on STH 42 will be constructed in three primary stages:

STAGE 1: In order to maintain two lanes of traffic during stage 2, temporary widening of the existing pavement is required. In addition, because the existing sidewalk is integral to the existing curb, the sidewalk shall be removed in order to construct the pavement widening. Construct temporary pedestrian surface in order to maintain pedestrian access adjacent to the southbound lanes. Maintain two lanes for northbound traffic and one lane for southbound traffic. Maintain the existing northbound and southbound left turn lanes at the North Avenue intersection during this phase.

Install temporary signals prior to beginning stage 1 widening. Temporary lane closures is required. Maintain a minimum of two lanes for two way traffic on both North Avenue and STH 42 while work is on-going.

Activating temporary signals and de-activating existing signals: Convert the intersection to a 4-way stop between the hours of midnight and 5:00 AM on a Monday, Tuesday, Wednesday, or Thursday, in order to make the signal switch from existing to temporary. Notify the city police department a minimum of 48 hours in advance of when the change will be occurring:

PD Contact:

David E. Anderson
Sergeant of Administration
Sheboygan Police Department
1315 N. 23 Street, Suite 101
Sheboygan, WI 53081
Phone: (920) 459-3352
Fax: (920) 459-0205
David.Anderson@sheboyganwi.gov

STAGE 2: Construct the two northbound lanes while maintaining two lanes for two-way traffic on the existing and widened southbound lanes. This stage includes storm sewer, sanitary sewer, water main, and median construction.

Construct the east approach of the North Avenue intersection in two stages while maintaining cross traffic at STH 42. Construct the westbound lanes first followed by the eastbound lanes (Stage 2A). Modify the temporary signals to accommodate each stage. Adjust the signal heads to align over the traffic lanes. Maintain temporary pedestrian crossings at the Main Avenue, North Avenue and 25th Street intersections.

Left turn movements from North Avenue onto Calumet Drive, and right turns from Calumet Drive onto North Avenue will be prohibited during this phase.

A night time closure of the east approach to the North Avenue intersection will be allowed during this stage to construct storm sewer on Calumet Drive through the North Avenue intersection. This closure will be allowed between 10:00 PM and 5:00 AM, on a Monday,

Tuesday, Wednesday, or Thursday. Utilize message boards a minimum of 72 hours in advance to notify the public of the upcoming closure. Work during this closure to include installation and removal of traffic control, installation of pipe, backfilling, and installation of base course. The temporary pavement over the trench can be paved during normal work hours with flaggers. Provide the city with a work plan and schedule for all operations to be completed during this closure a minimum of seven days prior to the closure; contact Ryan Sazama at (920) 459-3485. Notify the city police department a minimum of 48 hours in advance of when the closure, contact David Anderson at (920) 459-3352.

STAGE 3: Construct the two southbound lanes. Maintain two-way traffic on the northbound lanes which were constructed during Stage 2. Maintain pedestrian access on the new concrete sidewalk constructed in Stage 2. The northbound and southbound left turn lanes on Calumet Drive constructed as part of Stage 2 will be open for left turns as part of this stage.

Construct the west approach of the North Avenue intersection in two stages while maintaining cross traffic at STH 42. Construct the eastbound lanes first followed by the westbound lanes (Stage 3A). Modify the temporary signal head locations to accommodate each stage.

Maintain a temporary pedestrian crossing at the Main Avenue, North Avenue and 25th Street intersections.

Left turn movements from North Avenue onto Calumet Drive, and southbound right turns from Calumet Drive onto North Avenue will be prohibited during this phase.

Activating new signals and de-activating temporary signals: Convert the intersection to a four-way stop between the hours of midnight and 5:00 AM on a Monday, Tuesday, Wednesday, or Thursday, in order to make the signal switch from existing to temporary. Notify the city police department a minimum of 48 hours in advance of when the change will be occurring, contact David Anderson at (920)459-3352.

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. Utilities.

Project: 4630-05-71

This contract does not come under the provisions of Wisconsin Administrative Code Chapter Trans 220.
107-065 (20080501)

There are utility facilities within the construction limits of this project. Additional detailed information regarding the location of discontinued, relocated, and/or removed utility facilities is available in the work plan provided by each utility company. View these documents at the Regional Office during normal working hours.

Alliant Energy (electricity) has aerial facilities along the west side of Calumet Drive and the north side of North Avenue.

Alliant Energy will complete the following work:

Station	Location	Distance from Centerline	Comments
5+89	LT	39	Install pole with anchors 22 and 28 feet southeast of pole (39 feet from centerline).
5+89 - 27+23	LT		Replace overhead electric conductor.
5+91	LT	32	Remove pole & anchors.
7+33	LT	40	Remove pole.
7+34			Discontinue underground electric road crossing.
7+34 - 8+60	RT	varies	Discontinued underground electric.
7+43	LT	48	Install pole.
7+43 - 7+59	LT	48	Install underground electric.
7+59			Install underground electric road crossing.
7+59 - 8+04	RT	varies	Install underground electric.
9+42	LT	49	Install pole.
9+44	LT	43	Remove pole.
10+27			Install overhead electric road crossing.

Station	Location	Distance from Centerline	Comments
10+49			Remove overhead electric road crossing.
11+03	LT	43	Remove pole & anchor; discontinue underground electric going west from pole.
11+55	LT	49	Install pole.
12+54	LT	36	Remove pole; discontinue underground electric going west from pole.
13+46	LT	39	Install pole; install underground electric going west from pole.
14+55	LT	32	Remove pole; discontinue 8 feet of underground electric going west from pole.
14+58	LT	39	Install pole.
14+60			Remove overhead electric road crossing.
14+64			Install overhead electric road crossing.
14+68	RT	34	Remove pole; discontinue 14 feet of underground electric going north from pole; discontinue 26 feet of underground electric going southeast from pole.
14+69	RT	39	Install pole with anchor 6 feet northeast of pole; install underground electric going north from pole & underground electric going southeast from pole.
15+74			Install underground electric road crossing.
15+75	LT	39	Install pole.
15+78			Discontinue underground electric road crossing.
15+79	LT	33	Remove pole.
16+48	RT	39	Install pole with anchor 6 feet northeast of pole.
16+49	RT	37	Remove pole.
16+61			Maintain overhead electric road crossing.
16+71	LT	32	Remove pole; discontinue 8 feet of underground electric going west from pole.
16+75	LT	39	Install pole.
18+64	LT	39	Install pole with anchor 6 feet south of pole.
18+76	RT	40	Electric pole to stay.
18+86			Remove overhead electric road crossing.
18+94	LT	31	Remove pole & anchor.
18+98			Install overhead electric road crossing.
19+27	RT	36	Remove pole & anchor.
19+28	RT	39	Install pole with anchor 6 feet north of pole.
20+96	RT	36	Remove pole.
21+08			Remove overhead electric road crossing.
21+18	LT	32	Remove pole.
21+21	LT	39	Install pole.
23+25	LT	39	Install pole with anchor 10 feet southwest of pole.
23+28	LT	32	Remove pole and push pole.
23+61			Maintain overhead electric road crossing.
23+94	RT	33	Remove pole.
23+99	RT	39	Install pole.
24+89	LT	39	Remove pole.

Station	Location	Distance from Centerline	Comments
25+23	LT	46	Install pole.
27+21	LT	51	Remove pole & anchor.
27+23	LT	51	Install pole with anchor 10 feet southwest of pole.
27+29			Overhead electric road crossing to stay.
27+34	RT	32	Electric pole to stay.
8+33 North Ave	LT	35	Install pole with anchors 32 and 38 feet west of pole (35 feet from centerline).
10+30 North Ave	LT	43	Remove pole; discontinue 8 feet of underground electric going north from pole.
10+50 North Ave	LT	38	Install pole; install 21 feet of underground electric going northwest from pole.

Work will be completed prior to construction.

Contact: Bill Bastian, (920) 322-6716
E-mail: williambastian@alliantenergy.com

AT&T Wisconsin (communication line) has underground conduit running along the east side of Calumet Drive along the entire length of the project.

AT&T Wisconsin will complete the following work:

- Rebuild two existing manholes between Station 4+46 RT and Station 4+68 RT and combine them into one. The combined manhole will be shifted to the west. This work is anticipated to take 10 days to complete and will be completed prior to construction.
- Lower the conduit from Station 5+50 RT to 8+50 RT. This work is anticipated to take 4 days to complete and will be completed prior to construction.
- Assist the contractor in supporting the duct package at Station 9+92 RT. Notify AT&T Wisconsin five days prior to installing storm sewer in this location.
- Lower the conduit from Station 10+50 RT to 14+43 RT. The manhole walls at Station 14+49 RT will be saw cut to accommodate lowering of the duct package. This work is anticipated to take five days to complete and will be completed after the pavement is removed. Notify AT&T Wisconsin five days prior to coordinate this work.
- Lower the conduit from Station 14+56 RT to 23+50 RT. Lower the fiber optic concurrently from Station 22+68 RT to Station 23+50 RT. This work is anticipated to take 10 days to complete and will be completed after pavement is removed. Notify AT&T Wisconsin five days prior to coordinate this work.
- Lower the conduit from Station 25+09 RT to Station 26+31 RT. Shift the lateral at Station 26+31 east to avoid the proposed inlet. This work is anticipated to take five days to complete and will be completed prior to construction.
- Lower the conduit from the manhole at Station 4+46 RT to the utility pole at Station 9+40 RT. This work spans two stages of construction. Notify AT&T Wisconsin five days prior to each stage to coordinate this work.

- Adjust the manhole covers to match finished grades. This work will be done concurrently with construction. This work is anticipated to take four hours per manhole cover. Notify AT&T Wisconsin three working days prior to coordinate this work.

Contact: Chuck Bartelt, (920) 929-1013
E-mail: cb1461@att.com

Charter Communications (communication line) has overhead and underground facilities located within the project limits.

Charter Communications will complete the following work:

- Adjusting their aerial facilities by transferring them onto the new Alliant Energy poles.
- Installing new underground facilities at a depth of 48 inches along the east right-of-way line from Station 23+99 to Station 27+28.
- Install a new underground facilities at a depth of 48 inches beginning on North Avenue at Station 5+05 LT to station 10+55 LT crossing Calumet Drive at Station 11+67. The existing underground lines along North Avenue will be retired in place.

Work will be completed prior to construction.

Contact: Tom Harycki, (262) 416-2437
E-mail: tharcki@chartercom.com

City of Sheboygan (sewer) has underground sewer facilities within the project limits.

Sewer facility improvements will be included as part of this project. Refer to the plan sheets for a summary of the improvements.

Contact: Ryan Sazama, (920) 459-3485
E-mail: ryan.sazama@sheboyganwi.gov

McLeod USA Telcommunication Services Inc (communication line) has overhead and underground facilities within the project limits.

McLeod USA Telcommunication Services Inc will complete the following work:

The line along Calumet Drive will be

- Relocated an underground facility beginning approximately 100 feet east of Calumet Drive on North Avenue. It crosses Calumet drive and then north to Station 14+50. This facility will be approximately 37 feet left of centerline at a depth of 4 feet.
- Adjusting their aerial facilities by transferring them onto the new Alliant Energy poles.

Work will be completed prior to construction.

Contact: Aaron Grodi, (608) 819-5014
Email: aaron.grodi@windstream.com

Sheboygan Water Utility (water) has underground water facilities within the project limits.

Sheboygan Water Utility will complete the following work prior to construction:

- Replace the water main under North Avenue from Calumet Drive to north 25th Street.
- The 6 inch water main along North Avenue east of Calumet Drive to 21st Street will be discontinued in place.
- Lower the existing 16-inch water main at 9+85 RT along North Avenue.
- All hydrants will be relocated.

Sheboygan Water Utility will complete the following work during construction:

- Lower the existing 16-inch water main at 6+40 RT and 21+90 LT. This work is anticipated to take two working days to complete at each location. Notify the Sheboygan Water Utility five working days at each location to coordinate this work.

Contact: Damian Nevers, (920) 459-3806
E-mail: damiannevers@sheboyganwater.org

Wisconsin Public Service Corporation (gas/petroleum) has underground facilities within the project limits.

Wisconsin Public Service Corporation will complete the following work:

- Install new 2-inch plastic gas main from station 5+40 to 8+50 approximately 4 feet deep under the proposed sidewalk on the west side of Calumet Drive. The new facility will cross Main Avenue near the match point and connect to the existing facility on the south side of Main Avenue.
- Install new 8-inch steel main along the south side of North Avenue east of Calumet Drive approximately 4 feet deep beneath the proposed sidewalk. That main will cross North Avenue on the east side of Calumet Drive near station 10+50 (North Avenue) and continue at an approximate depth of 5 feet under the proposed sidewalk on the east side of Calumet Drive. At approximately Station 13+40 the main will cross Calumet Drive at an approximate depth of 7 feet and run north to the project limits at a depth of approximately 5 feet deep under the proposed sidewalk on the west side of Calumet Drive.
- Install a new 8-inch plastic main along the north side of North Avenue under the proposed sidewalk at an approximate depth of 4 feet. This line crosses Calumet Drive at station 10+40 at a depth of approximately 8 feet to avoid proposed storm sewer.

- Install a new 2-inch plastic gas main along the east side of Calumet Drive, under the proposed sidewalk from 25th Street to the north project limits, at an approximate depth of 4 feet. A new 2-inch plastic gas main will also be installed under the existing sidewalk on the north side of 25th Street.

Work will be completed prior to construction.

Contact: Mike Lowther, (920) 451-3743
Email: mllowther@wisconsinpublicservice.com

Project: 4630-05-72

This contract does not come under the provisions of Wisconsin Administrative Code Chapter Trans 220.
107-065 (20080501)

All utilities within the construction limits of Project 4630-05-72 were coordinated under project 4630-05-71. There are no other known utility conflicts within the construction limits.

Additional detailed information regarding the location of vacated, relocated, and/or removed utility facilities is available in the work plan provided by each utility company or on the permits issued to them. View these documents at the region WisDOT office during normal working hours.

Project: 4630-30-60

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

There are utility facilities within the construction limits of this project. Coordinate construction activities with a call to Diggers Hotline or a direct call to the utilities for the underground facilities in the area, as required per statutes. Take all required precautions when working within 18-inches of underground utilities. Use caution to maintain the integrity of underground utilities and maintain OSHA code clearances from overhead facilities at all times.

Additional detailed information regarding the location of utility facilities is available at the region WisDOT office during normal working hours.

AT&T Wisconsin (communication line) – has facilities within the project limits. No conflict are anticipated.

The field contact for this project is Chuck Bartelt, (920) 929-1013, (920) 410-5104 mobile, cb1461@att.com.

ATC Management, Inc. (electricity) – has overhead facilities within the project limits. No conflicts are anticipated.

The field contact for this project is Jerry Rhodes, (920) 338-6523, grhode@atcllc.com.

Alliant Energy (electricity) – has overhead facilities within the project limits. No conflicts are anticipated.

The field contact for this project is Joe Kochan, (920) 459-6331, (920) 948-2052 mobile, joekochan@alliantenergy.com.

Charter Communications (communication line) – has overhead and underground facilities within the project limits. No conflicts are anticipated.

The field contact for this project is Tom Harycki, (920) 429-1235 ext. 20702, (262) 416-2437, tom.haryicki@charter.com.

City of Sheboygan (sewer) – has underground facilities within the project limits. No conflicts are anticipated.

The field contact for this project is Ryan Sazama, (920) 459-3485, ryan.sazama@sheboyganwi.gov.

McLeod USA Telcommunication Services Inc. (communication line) – has overhead and underground facilities within the project limits. No conflicts anticipated.

The field contact for this project is Nathan Becker, (262) 792-7938, Nathan.becker@windstream.com.

Sheboygan County (communication line) – has underground facilities within the project limits. No conflicts anticipated.

The field contact for this project is Christopher Lewinski, (920) 459-0335, chris.lewinski@sheboygancounty.com.

Town of Sheboygan Sanitary District #2 (sewer) – has underground facilities within the project limits. No conflicts anticipated.

The field contact for this project is William Blashka, (920) 451-2320, (920) 946-4939 mobile, williamblashka@townofsheboygan.org.

Town of Sheboygan Sanitary District #3 (water) – has underground facilities with the project limits. No conflicts anticipated.

The field contact for this project is William Blashka, (920) 451-2320, (920) 946-4939 mobile, williamblashka@townofsheboygan.org.

Wisconsin Public Service Corporation (gas/petroleum) – has underground facilities with the project limits. No conflicts anticipated.

The field contact for this project is Kevin Kolb, (920) 451-3733, kckolb@wisconsinpublicservice.com

6. Work By Others.

Project 4630-30-60:

At the intersections of STH 42 and CTH J/40th Street, the Wisconsin Department of Transportation Northeast Region Electrical Unit will perform the following work:

- Furnish monotube poles, arms and steel luminaire arms
- Provide and install the STH 42 EVP detectors
- Provide and install the new traffic signal cabinet
- Terminate all cables and wire in the new traffic signal cabinet
- Salvage existing traffic signal cabinet

Project 4630-05- 71/72:

The City of Sheboygan will be removing all street name signs, and the solar powered electronic speed limits signs, prior to construction. These signs will be reinstalled concurrently with the finishing roadway items under this Contract. Contact Ryan Sazama at (920) 459-3485.

Wells Fargo Bank, Station 15+00 to Station 21+00 LT, is planning to reconstruct their parking lots prior to or concurrently with construction. As part of this work, they will be connecting their private storm sewer line to the 12-inch PVC storm sewer pipes that are being stubbed out of inlet structures 8.2 and 9.2. These parking lots currently drain to the rip rapped outfalls shown on the plans. These outfalls will be removed by the Bank's contractor after the storm sewer connections are completed. Contact Ryan Sazama at (920) 459-3485.

The owners of right-of-way parcels 6, 9, 12 and 16 have signs and light poles, including related underground wiring, and/or sprinkler systems, located within the real estate acquisition limits shown on the plans. The property owners are responsible for removing these items from the construction limits prior to the start of construction operations under this contract. If these items are still present at the start of construction, removal of these items will be by the contractor and will be considered as extra work. These same property owners will also be replacing these items concurrently with construction. For the schedule for removing and replacing signs, light poles, and related underground electrical installations, contact RLO Sign, Inc. at (920) 457-6602. Contact Milwaukee Lawn Sprinkler at (262) 252-3880 for the schedule for removing and reinstalling the sprinkler systems.

7. Environmental Protection Dewatering.

Supplement standard spec 107.18 as follows:

If dewatering is required, treat the water to remove suspended sediments by filtration, settlement or other appropriate best management practice prior to discharge. The means and methods proposed to be used during construction shall be submitted for approval as part of the Erosion Control Implementation Plan for dewatering at each location it is required. The submittal shall also include the details of how the intake will be managed to not cause an increase in the background level turbidity prior to treatment and any additional erosion controls necessary to prevent sediments from reaching the project limits or wetlands and waterways. Guidance on dewatering can be found on the Wisconsin Department of Natural Resources website located in the Storm Water Construction Technical Standards, Dewatering Code #1061, "Dewatering". This document can be found at the WisDNR website:

http://dnr.wi.gov/topic/stormwater/standards/const_standards.html

The cost of all work and materials associated with water treatment and/or dewatering is incidental to the bid items the work is associated.
(NER12-1010)

8. Municipality Acceptance of Sanitary Sewer Construction.

Both the department and City of Sheboygan, or their representative, will inspect construction of sanitary sewer and water main under this contract. However, final acceptance of the sanitary sewer and water main construction will be by the City of Sheboygan. Notify city five working days prior to performing work on sanitary sewer. Contact Ryan Sazama at (920) 459-3485.

9. Referenced Construction Specifications.

Sanitary sewer and water main bid items reference the Standard Specifications for Sewer and Water Construction in Wisconsin. 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.

10. Holiday Work Restrictions.

Do not perform work on, nor haul materials of any kind along or across any portion of the highway carrying STH 42 traffic during the following holiday periods:

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

11. Health and Safety Requirements for Workers Remediating Petroleum Contamination.

Add the following to standard spec 107.1(2):

Soil contamination with gasoline, diesel fuel, fuel oil, or other petroleum related products may be encountered during excavation activities. Prepare a site specific Health and Safety Plan complying with the Occupational Safety and Health Administration (OSHA) standard for Hazardous Waste Operation and Emergency Response (HAZWOPER), 29 CFR 1910.120.

All site workers taking part in remediation activities or who will have the reasonable probability of exposure of safety or health hazards associated with the hazardous material shall have completed Health and Safety training that meets OSHA requirements. Prior to the start of remediation work, submit to the engineer a site specific Health and Safety Plan, and written verification that workers will have completed up-to-date OSHA training.

Develop, delineate, and enforce the health and safety exclusions zones for each contaminated site location pursuant to 29 CFR 1910.120.
107-115 (20150630)

12. Notice to Contractor – Historical Resources.

The following historically significant site exists in the project area:

A. Evergreen Park Historic District. Evergreen Park is located on the west side of the project north of 25th Street.

To the extent practical; limit work activities adjacent to this site to the area defined by the slope intercepts.

13. Notice to Contractor – Coordination with Refuse and Recycling.

Refuse and recycling pick-up services will be maintained throughout construction operations under this contract. Contact the City of Sheboygan Sanitation Department two weeks prior to the start of construction operations. Contact: Jason Blasiola at (920) 459-3447 or Dave Graves at (920) 459-3456.

14. Notice to Contractor – Coordination with U.S. Postal Service.

Contact the Sheboygan Post Office two weeks prior to closing sidewalk or road access along any portion of the project.

Contact number for the Sheboygan Post Office is (920) 458-2294.

15. Notice to Contractor – Curb and Gutter Construction.

There may be obstructions including but not limited to, water shut-off valves, light poles, traffic signal poles and utility poles within 3 feet of the back of the proposed integral curb and gutter. No additional payment will be made for interference with slip-form integral curb and gutter.

16. Notice to Contractor – Removing Concrete.

The quantities for removing pavement, removing curb and gutter, and removing sidewalk, as shown on the plans is based on existing conditions prior to the start of work by the utility's. The final quantity for payment will be based on actual measured quantities.

17. Notice to Contractor – Landscaping.

There are various landscaping items such as rip rap, landscaping stone, bark mulch, landscaping stone, underlying fabric, bushes, shrubs, small trees, flowers, and edging located within the real estate acquisition areas. The property owners have been compensated for these items. In addition, if the property wants to salvage these items they must do so prior to construction. Remove any landscaping remaining in place at the start of construction. Removal of these items shall be incidental to excavation items under this contract.

18. Coordination with Businesses, Property Owners, and Department.

The contractor shall arrange and conduct meetings with the engineer, local officials, business people, and property owners affected by the construction project. The first meeting will be held 14 days prior to the start of work under this contract; two meetings per month will be held thereafter. Coordinate with the City of Sheboygan to arrange for a suitable location for the meetings that provides reasonable accommodation for public involvement. At these meetings discuss the projects schedule of operations, current and upcoming construction staging and traffic patterns, progress of the project, access for business and property owners during construction and any problems associated with vehicular and pedestrian access during construction operations. The contractor shall have the approved detailed traffic control plan available for discussion at the initial coordination meeting.

Weekly progress meetings will be held between the contractor and the department according to the department's Timely Decision Making Project Administration Tools, current edition.

19. Traffic Signals and Lighting, General (Project ID: 4630-05-71/72).

Ordering Traffic Signal and Lighting Equipment
Prior to placing any orders for traffic signal or lighting equipment, review the equipment list with the City of Sheboygan. Contact Mike Wilmas at (920) 459-3444.

20. Excavation Common (Project ID: 4630-05-71/72).

Add to standard spec 205.4.1 as follows:

The department will measure Excavation Common based on existing conditions prior to operations under the item Grading and Shaping for Widening Calumet Drive.

Add to standard spec 205.5.2 as follows:

Removal and disposal of materials constructed under the item Grading and Shaping for Widening Calumet Drive that are not incorporated into the final cross section is included in the contract unit price for the Grading and Shaping for Widening Calumet Drive bid item.

21. QMP Base Aggregate.

A Description

A.1 General

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

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

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

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

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

A.2 Contractor Testing for Small Quantities

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

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

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

Plan Quantity	Minimum Required Testing
≤ 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 spec 305 or standard spec 310 for each base aggregate size, source or classification, and type. Set control and warning limits based on the standard specification gradation limits as follows:

1. Control limits are at the upper and lower specification limits.
2. There are no upper warning limits for sieves allowing 100 percent passing and no lower control limits for sieves allowing 0 percent passing.
3. Dense graded warning limits, except for the No. 200 sieve, are 2 percent within the upper and lower control limits. Warning limits for the No. 200 sieve are set 0.5 percent within the upper and lower control limits.
4. Open graded warning limits for the 1-inch, 3/8-inch, and No. 4 sieves are 2 percent within the upper and lower control limits. Upper warning limits for the No. 10, No. 40, and No. 200 sieves are 1 percent inside the upper control limit.

B.6.2 Fracture

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

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

B.6.3 Liquid Limit and Plasticity

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

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

B.7 Corrective Action

B.7.1 General

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

B.7.2 Placement Corrective Action

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

(2) Notify the engineer whenever the running average exceeds a warning limit. When two consecutive running averages exceed a warning limit, the engineer and contractor will discuss appropriate corrective action. Perform the engineer's recommended corrective action and increase the testing frequency as follows:

1. For gradation, increase the QC testing frequency to at least one randomly sampled test per 1000 tons placed.
2. For fracture, increase the QC testing frequency to at least one test per gradation test.

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

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

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

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

B.8 Department Testing

B.8.1 General

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

B.8.2 Verification Testing

B.8.2.1 General

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

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

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

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

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

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

B.8.3 Independent Assurance

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

1. Split sample testing.
2. Proficiency sample testing.
3. Witnessing sampling and testing.

4. Test equipment calibration checks.
5. Reviewing required worksheets and control charts.
6. Requesting that testing personnel perform additional sampling and testing.

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

B.9 Dispute Resolution

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

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

(3) If the project personnel cannot resolve a dispute, and the dispute affects payment or could result in incorporating non-conforming product, the department will use third party testing to resolve the dispute. The department's central office laboratory, or a mutually agreed on independent testing laboratory, will provide this testing. The engineer and contractor will abide by the results of the third party tests. The party in error will pay service charges incurred for testing by an independent laboratory. The department may use third party test results to evaluate the quality of questionable materials and determine the appropriate payment. The department may reject material or otherwise determine the final disposition of nonconforming material as specified in standard spec 106.5.

C (Vacant)

D (Vacant)

E Payment

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

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

Aggregate Fracture Administrative items. The department will determine the quantity of nonconforming material as specified in B.7.2.

301-010 (20151210)

22. Catch Basins and Manholes.

Add to standard spec 611 as follows:

Construct catch basins and manholes using only precast or cast in place concrete masonry options. Do not use the brick masonry or concrete brick or block masonry options.

23. Curb Ramp Detectable Warning Field Natural Patina.

Add to standard spec 602.2 to include the following:

Furnish Neenah Foundry R-4984-24B cast iron detectable plate natural finish.

24. Inlet Covers Type H (Project ID: 4630-05-71/72).

Add to standard spec 611.2 as follows:

Furnish Neenah curb box R-3067-7004 curb box, with lettering "Dump No Waste Drains to Lake", Neenah R-3067 frame and Type L grate.

25. Traffic Control.

Perform this work according to the requirements of standard spec 643, and as shown on the plans or as approved by the engineer, except as hereinafter modified.

Submit to engineer for approval a detailed traffic control plan for maintaining vehicular and pedestrian access according to the requirements of the Traffic special provision. Submit this plan a minimum of ten days prior to the preconstruction conference. This plan shall be approved prior to the initial coordination meeting with businesses and property owners. Clearly identify on the traffic control plan how the pedestrian and vehicular access requirements of the Traffic special provisions will be addressed.

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 above items shall be considered incidental to the item as bid and no additional payment will be made therefore.

Supply the name and telephone number of a local contact person for traffic control repair before starting work.

Have available at all times sufficient experienced personnel to promptly install, remove and reinstall the required traffic control devices to route traffic during the construction operations.

The turning of traffic control devices when not in use to obscure the message will not be allowed under this contract.

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

Cover existing signs which conflict with traffic control as directed by the engineer.

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

a. Do not park or store any vehicle, piece of equipment, or construction materials on the right-of-way without approval of the engineer.

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

c. 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 disturb, remove or obliterate any traffic control signs, advisory signs, shoulder delineators or beam guard 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 expense.

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

26. Construction Staking (Project ID: 4630-05-71/72).

Add to standard spec 650.3.1 as follows:

Stake the proposed locations of traffic signal and street light items 10 days prior to starting work on those items so that the locations of the proposed facilities can be approved by the City of Sheboygan. The city will only approve bases prior to base construction and after utility locates (Diggers Hotline) are marked in the field and clearly visible. Contact Mike Willmas at (920) 459-3444 10 days prior to starting work on those items.

Any field changes regarding the location of the signal poles, pull boxes, etc. as shown on the plans shall be approved by the City of Sheboygan. Signal and lighting items placed at locations not previously approved by the city which need to be relocated will be done so at the contractor's expense.

27. Electrical Conduit (Project ID: 4630-05-71/72).

Add to standard spec 652.2.1 as follows:

Use solvent cemented joints. Solvent cement and primer compound for PVC pipe to meet the requirements of ASTM D-2564.

Add to standard spec 652.3.1 as follows:

Clean and dry the bell and spigot ends of the pipe prior to the application of the solvent cement with a cloth moistened with methyl-ethyl-ketone. Prime all joints using primer compound prior to applying solvent cement. Using a brush, apply the solvent cement liberally to the spigot a distance equal to the joint depth and lightly apply to the inside of the fitting. Immediately thereafter, the joint shall be made by inserting the conduit into the fitting and pushing it home as far as possible. Rotate joint 30° to 90° to distribute the cement.

28. Pull Boxes (Project ID: 4630-05-71/72).

Add to standard spec 653.2 as follows:

The pull box covers shall have the following words stamped on the cover:
Cover for traffic signal pull boxes = TRAFFIC SIGNAL
Cover for street light pull boxes = STREET LIGHTING

29. Concrete Bases (Project ID: 4630-05-71/72).

Add to standard spec 654.2 as follows:

Verify bolt pattern with pole manufacturer prior to installation of bases. Any changes required to match required bolt pattern to be considered incidental.

30. Electric Service Meter Breaker Pedestal (Project ID: 4630-05-71/72).

Add to standard spec 656.3.2 as follows:

The City of Sheboygan will submit the permit application for the electric service to WP&L. The cost of the service installation by WP&L as well as all energy costs shall be paid for by the City of Sheboygan. The contractor shall be responsible for all coordination with WP&L for the timely installation of the service lateral.

31. Traffic Signal Faces, Backplates, LED Modules, Pedestrian Signal Faces, and Pedestrian Push Buttons (Project ID: 4630-05-71/72).

Add to standard spec 658.2.2.1 to include the following:

Furnish Eagle Polycarbonate Vehicle Signal (SA) and Eagle Signal Backplates. The color of the signal body, door, and visor shall be black.

Add to standard spec 658.2.2.3 to include the following:

Furnish Leotek LED traffic signal modules, IL6-P3/P2 series, for both balls and arrows.

Add to standard spec 658.2.3.1 to include the following:

Furnish Eagle Polycarbonate Pedestrian Signals. The color of the signal housing and visor shall be black.

Add to standard spec 658.2.3.3 to include the following:

Furnish Leotek LED modules, CIL Series Countdown Indications.

Add to standard spec 658.2.5 to include the following:

Furnish Polara pushbuttons, BDL3-Bulldog III Series. Pushbutton housing shall be aluminum and color shall be black.

32. Traffic Signal Standards, Pedestal Bases, and Signal Mounting Hardware (Project ID: 4630-05-71/72).

The traffic signal standards and pedestal bases shall be painted black. All painting shall be done by the manufacturer.

The color of the signal mounting hardware shall be black.

33. Lighting Control Cabinet (Project ID: 4630-05-71/72).

Add to standard spec 659.2 to include the following:

The standard detail drawing "Lighting Control Cabinet 120/240 Volt" has been revised to include modifications to the requirements for the main breaker, utility wiring, and the elimination of the GFCI receptacles. Refer to the construction detail drawings for additional information.

The lighting cabinet shall be painted black. All painting to be done by the manufacturer.

34. Insulation Board Polystyrene, 2-Inch, Item 612.0902.S.01 and Insulation Board Polystyrene, 4-Inch, Item 612.0902.S.02.

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.01	Insulation Board Polystyrene 2-Inch	SY
612.0902.S.02	Insulation Board Polystyrene, 4-Inch	SY

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

35. Temporary Pedestrian Surface Asphalt, Item 644.1410.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.

C Construction
Place, compact, and level a dense graded aggregate foundation with a thickness of 4-inches before placing the surface.

Construct asphalt surface a minimum of 2-inches thick compacted with compactors, tampers, or rollers.

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

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

D Measurement
The department will measure Temporary Pedestrian Surface Asphalt 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

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

36. 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)

37. 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)

38. Inlet Covers Temporary, Item SPV.0060.03.

A Description
This special provision describes furnishing, installing and removing a temporary inlet cover at inlets located in the temporary asphalt pavement areas.

B Materials
Furnish inlet covers conforming to standard spec 611.2 and the plan details.

C Construction
Install and removal temporary inlet covers according to standard spec 611.3.

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

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.03	Inlet Covers Temporary	Each

Payment is full compensation for furnishing, installing, maintaining, and removing the temporary inlet covers.

The temporary inlet covers shall become the property of the contractor when no longer needed in the contract work.

39. Storm Sewer Manhole Cover Type J-Modified, Item SPV.0060.04.

A Description
Furnish and install storm sewer manhole covers, including frames and lids according to standard spec 611, as shown on the plans and hereinafter provided.

B Materials
Frame and cover shall be Neenah R-1050 vented lid-machined with eight vent holes and one open pick hole.

Add to standard spec 611.2.1 with the following:

Adjustment rings shall be either concrete with steel reinforcement in conformance with ASTM C-478, or rubber in conformance with ASTM D573-88. Use only single rings for adjustment. The minimum allowable adjustment ring thickness is 4-inches for concrete and 2-inches for rubber.

C Construction
Install storm sewer manhole covers according to standard spec 611. Install rubber adjustment rings according to the manufacturer's recommendations.

D Measurement
The department will measure Storm Sewer Manhole Cover Type J-Modified, as each individual manhole frame and cover, 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.0060.04	Storm Sewer Manhole Cover Type J-Modified	Each

Payment is full compensation for adjustment rings, frame and cover, and other required fittings; for properly installing said frame and cover on each storm sewer manhole including any related cleanup or related work.

40. Traffic Signal Controller and Cabinet, Item SPV.0060.05 (Project ID: 4630-05-71/72).

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

B Materials

B.1 Cabinet

B.1.1 Design

Furnish a door-in-door ground mounted (without anchor bolts) aluminum cabinet of clean-cut design and appearance. Provide a cabinet of minimum size 44 inches wide, minimum 24 inches deep, and minimum 52 inches to maximum 60 inches high. The size of the cabinet shall provide ample space for housing the controller, all of the associated devices which are to be furnished with the controller, all other auxiliary devices herein specified, and all equipment to be furnished as listed in the Description section of this specification.

The cabinet shall comply with the environmental and operating standards outlined in the NEMA TS2 Standard. The cabinet shall provide reasonable vandalism protection. The cabinet shall have a NEMA 3R rating.

Construct the cabinet from type 5052-H32 aluminum with a minimum thickness of 0.125 inches.

Furnish the cabinet with a natural, uncoated, aluminum finish inside. The outside of the cabinet shall be painted black. All painting shall be done by the manufacturer. Continuously weld all seams. The surface shall be smooth, free of marks and scratches. Use stainless steel for all external hardware.

On the top of the cabinet, incorporate a 1-inch slope toward the rear to prevent rain accumulation. Incorporate a rain channel into the design of the main door opening to prevent liquids from entering the enclosure.

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

Equip the lower section of the cabinet door with a louvered air entrance. The air inlet shall be large enough to allow sufficient air flow per the rated fan capacity. Louvers must satisfy the NEMA rod entry test for Type 3R ventilated enclosures. Secure a washable, fiberglass, removable air filter to the air entrance. The filter shall fit snugly against the cabinet door wall.

Attach an aluminum, easily removable, gasketed cover over the air filter and louver.

B.1.2 Doors

The main door and police door-in-door shall each close against a weatherproof and dust-proof, closed-cell neoprene gasket seal. The gasket material for the main door shall be a minimum of 0.188 inches thick by 1.00 inch wide. The gasket material for the police door shall be a minimum of 0.188 inches thick by 0.500 inches wide. Permanently bond the gaskets to the cabinet.

Equip the main door with a three-point latching mechanism. The upper and lower locking points of the latching mechanism shall each have a pair of nylon rollers. The handle on the main door shall utilize a shank of stainless steel 3/4 inches minimum diameter. The handle shall include a hasp for the attachment of an optional padlock. The cabinet door handle may turn either clockwise or counterclockwise to open, and shall not extend outwards past the edge of the door at any time. Position the lock assembly so the key will not cause any interference with the handle, or a person's hand on the handle, when opening the cabinet door.

Include on the main door a solid stainless steel rod stop and catch mechanism capable of rigidly holding the door open at approximately 90, 120, and 180 degrees under windy conditions. The operator must be able to engage and disengage the catch with a shoed or booted foot.

The main door hinge shall be a one-piece, continuous piano hinge with a minimum 0.25 inch stainless steel pin running the entire length of the right side of the door (right-handed). Attach the hinge in such a manner that no rivets or bolts are exposed.

Equip the main door with a brass Corbin tumbler lock No. 2, swing away dust cap, and provide two keys No. 2. Equip the police door-in-door with a standard police lock and provide one key.

Electrically bond the door to the rest of the cabinet with a braided copper grounding conductor.

The length of the grounding conductor shall allow the door to swing fully open, without using the stop bar, without stretching or breaking the grounding conductor. The grounding conductor shall not interfere with normal door operation.

Provide a door switch for the main cabinet door. When the door is opened the switch shall send a signal to the controller sufficient for the controller to log an alarm.

B.1.3 Shelves and Mountings

Mount a minimum of three vertical "C" channels, compatible with Unistrut channel nuts, on each interior side wall of the cabinet for the purpose of mounting the cabinet components. The channels shall accommodate spring mounted nuts or studs. Install three vertical "C" channels or three slotted rails on the interior back wall of the cabinet. All mounting channels and rails shall extend to within 7 inches of the top and bottom of the cabinets and shall be of sufficient strength to rigidly hold specified shelves and equipment.

Provide two full-width, 11-inch deep, fully adjustable, aluminum shelves to support the controller and other equipment. Mount the lower shelf at a height above the bottom of the cabinet such that the shelf and attached drawer does not interfere with the ability to tilt the terminal facility forward on its hinges for maintenance purposes. Mount the top shelf at least 13 inches above the surface of the lower shelf.

Locate the controller and MMU on the top shelf. Locate the loop detector racks and other auxiliary equipment on the lower shelf. The power supply may be mounted on either shelf. Provide an under-shelf drawer under the lower shelf. The drawer shall be approximately 20 inches wide and the full depth of the shelf. The drawer shall operate easily and smoothly, and shall have a stop to prevent inadvertently pulling the drawer out of its support. Design the stop to allow purposeful complete removal of the drawer without the use of tools.

B.1.4 Auxiliary Cabinet Equipment

Ventilate the cabinet by means of a 120 VAC, 60HZ, tube axial compact type fan located in the top of the cabinet plenum. The fan's free delivery airflow shall be equal to or greater than 100 cubic feet per minute. The magnetic field of the fan motor shall not affect the performance of control equipment. The fan bearings shall operate freely. The fan unit shall not crack, creep, warp, or have bearing failure within a seven 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 F. The fan shall run until the cabinet temperature decreases below the turn-on temperature setting by approximately 30 degrees F. The fan shall be fused.

Mount an incandescent lamp and socket in the cabinet to sufficiently illuminate the field terminals. Wire the lamp to a 15-amp ON/OFF toggle switch mounted on the rear cover of the police panel as specified in the Cabinet Switches section of this specification.

Provide a 250 watt element heater. Install the heater on the face of the aluminum, louvered air filter cover such that feed air is supplied through the cover. Provide a protective, ventilated cover over the heater. Provide a cord and twist-off plug to an electrical receptacle on the cabinet door.

Provide a thermostat with an adjustable setting from 0 to 100 degrees F. Install the thermostat on the interior ceiling of the cabinet well away from the cabinet light or any heat source. Provide a thermal limit switch to prevent the heater's protective cover from exceeding 170 degrees F.

B.2 Terminals and Facilities

B.2.1 Terminal Facility

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

Mount the bottom of the terminal facility a minimum of nine inches from the bottom of the cabinet. Hinge the terminal facility at the bottom to allow easy access with simple tools to all wiring on the rear of the panel. It shall not be necessary to remove the lower shelf, the shelf drawer, or any shelf-mounted equipment to hinge down the terminal facility. Provide sufficient slack in the load bay wiring to allow for dropping the load bay.

Fully wire the terminal facility with sixteen load switch sockets: eight phases of vehicular, four phases of pedestrian, and four phases of overlap operation; eight flash transfer relay sockets; one flasher socket; and two terminal facility BIU rack slots. The use of printed circuit boards is not acceptable on the terminal facility, except printed circuit boards are acceptable for the BIU interface with the load bay. Position the 16 load switch sockets in two horizontal rows of eight sockets each. Support the load switches and flasher by a bracket or shelf extending at least three inches from the terminal facility.

Label all terminals, load switches, and flash transfer relay sockets. Label reference designators by silk-screening on the front and rear of the terminal facility to match drawing designations.

Provide rack mounted BIU's. Provide a dual-row, 64-pin female DIN 41612 Type B connector for each BIU rack position. Provide card guides for both edges of the BIU. Terminal and facilities BIU mounting shall be an integral part of the terminal facility.

Provide two each 16-channel, 8-position, TS2 detector racks, each with an integrally mounted BIU mounting. Racks shall be addressable. Power each detector rack by the cabinet power supply. Fasten the loop detector racks towards the left side of the lower shelf.

For BIU rack connectors, provide pre-wired address pins or jumper plugs corresponding to the requirements of the NEMA TS2 Standard. The address pins or jumper plugs shall control the BIU mode of operation. BIUs shall be capable of being interchanged with no additional programming.

For the terminal facility, contain all field wires within one or two rows of horizontally-mounted Marathon heavy duty terminal blocks. Terminate all field output circuits on an unfused terminal block with a minimum rating of 10 amps. Use mechanical connector lugs rated for copper wire.

Angle the lower section of the terminal block out from the back of the cabinet at approximately a 45 degree angle.

Identify all field input/output (I/O) terminals by permanent alphanumeric labels. All labels shall use standard nomenclature per the NEMA TS2 Standard.

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

Wire field terminal blocks to use three positions per vehicle or overlap phase (green, yellow, red).

Wire one RC network in parallel with each flash transfer relay coil.

Permanently label all logic-level, NEMA-controller and MMU input and output terminations on the terminal facility. Identity the function of each terminal position on the cabinet drawings.

Terminal blocks for DC signal interfacing shall have a number 6-32 x 7/32 inch screw as minimum. Functions to be terminated shall be as specified in the listing of Input/ Output Terminals in Section 5 of the NEMA TS2 Standard.

Conform all terminal facility and cabinet wiring to the WSEC. The green/ walk, yellow, and red/ don't walk load switch outputs shall be minimum 16 gauge wire. The MMU (other than AC power), controller I/O, and logic ground shall be minimum 22 gauge wire. All wire colors shall be consistent.

B.3 Auxiliary Panels

B.3.1 Vehicle Detection Interface Panel

Provide a 32-position interface panel or two 16-position panels. Each interface panel shall allow for the connection of 32 or 16 independent field loops, respectively. The panels shall have barrier strip type terminals using 8-32 screws and be rated for 20 inch pounds of torque.

Provide a ground bus terminal between each loop pair terminal to provide a termination for the loop lead-in cable ground wire. Secure the interface panels to a mounting plate attached to the left interior side wall of the cabinet.

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

Provide a cable of sufficient length to allow the detector rack to be placed on either shelf. Identify all termination points by a unique number silk screened on the panel.

B.3.2 Intersection Lighting

Provide an intersection lighting control panel as described. The intersection lighting control panel shall consist of an aluminum panel 0.125 inches thick and approximately 5 inches by 10 inches. Determine the actual panel size by the cabinet’s mounting rail placement. Attach to the panel a 2 pole-30 amp contactor-120vac coil (Square D #8910DPA32V02 or equal), and a heavy duty six position terminal block (Marathon DJ1606 or equal). Use wire sizes 10AWG for power and load wiring, and 16AWG for control wires. Wire the terminal strip as follows:

a. Control coil
b. L1 in
c. L2 in
d. Neutral in and control coil
e. L1 out
f. L2 out

Protect each output by a MOV (V150LA20A) wired between the output and neutral. Include a photo control (Intermatic #K4021C or equal). Mount the photo control just above the cabinet Page 6 of 18 April 14, 2011 door and approximately 12 inches from the right side of the cabinet. Wire the photo control to a 3 position terminal strip using 16AWG wire color coded to match the photo control wiring connected to the intersection lighting control panel.

B.4 Conductors and Cabling

All conductors in the cabinet shall be copper 22 AWG or larger. All 14 AWG and smaller wire shall conform to MIL-W-16878/1, Type B, 600V, 19-strand tinned copper. The wire shall have a minimum of 0.010 inches thick PVC insulation without clear nylon jacket and rated to 105 degrees Celsius. All 12 AWG and larger wire shall be UL or NRTL listed THHN/THWN 90 degrees Celsius, 600V, 0.020 inches thick PVC insulation, and clear nylon jacketed.

Provide controller and MMU cables of sufficient length to allow the units to be placed on either cabinet shelf in the operating mode. Connecting cables shall be sleeved in a braided nylon mesh. Exposed tie-wraps and interwoven cables are unacceptable.

Provide the cabinet configuration with enough SDLC RS-485 Port 1 communication cables to allow full capabilities of that cabinet. Each communication cable connector shall be a 15-pin metal shell D subminiature type. The cable shall be a shielded cable suitable for RS-485 communications. Secure all connecting cables and wire runs by mechanical clamps. Stick-on type clamps are not acceptable.

Pre-wire the terminal facility for a Type 16 MMU.

All wiring shall be neat in appearance. Stow excess cable behind the terminal facility or below the shelves in order to allow easy access to the terminal facility and cabinet components. All cabinet wiring shall be continuous from its point of origin to its termination point. Butt type connections/splices are not acceptable.

Wire the grounding system in the cabinet into three separate circuits: AC Neutral, Earth Ground, and Logic Ground.

Optoisolate all pedestrian pushbutton inputs from the field to the controller through the BIU and operate at 12 VAC.

Hook or loop all wire, size 16 AWG or smaller, at solder joints around the eyelet or terminal block post prior to soldering to ensure circuit integrity. Lap joint soldering is not acceptable.

B.5 Cabinet Switches
Locate the following switches on a maintenance panel on the inside of the cabinet door:

a. Controller On/Off
b. Cabinet Light
c. Stop Time (Three Position)
d. Manual Detector Switches (Three Position)

Position Switch Label Function

Upper Stop Time Place stop time on the controller

Center Run Remove the stop time input to the controller

Lower Normal Connects the MMU to the controller stop time input

Locate the following switches behind the police access door:

a. Signal/Off
b. Flash/Normal
c. Hand/ auto
d. Coiled hand control and cable

The above switches shall function as follows:

- Off: Signals Dark

- Signal: Signals On and operating as follows:

- Auto Hand

- Flash: Signals Flash Signals Flash

- Normal: Signals Normal Signals Advance by use of hand control

Provide manual detector switches. Provide four pedestrian detector switches. The switches shall be spring loaded and automatically return to the center position. Wire the pedestrian switches to the T&F BIU slot 1. The switches shall operate as follows:

- Position Function

- Up Detector Disabled

- Center Detector Enabled

- Down Detector Called

B.6 Power Panel
B.6.1 Design
The power panel shall consist of a separate module, securely fastened to the interior right side wall of the cabinet. Wire the power panel to provide the necessary power to the cabinet, controller, MMU, cabinet power supply, and all auxiliary equipment. Manufacture the power panel from 0.090-inch, 5052-H32 aluminum. Panel layout shall facilitate field inspection and maintenance accessibility without excessive disassembly or special tools.

Provide a light, tough, transparent, weather-resistant, non-yellowing, thermoplastic cover, rigidly mounted over the full power panel, with access holes for circuit breakers and other equipment, and open on the sides for ventilation.

B.6.2 Bus Bar
Provide a minimum 20-position neutral bus bar capable of connecting three #12 AWG wires per position.

B.7 Circuit Breakers
House in the power panel the following vertically mounted, single pole, 120 volts AC, 60 Hertz, circuit breakers, with the ON position being up:

One 30-amp signal breaker. This breaker shall supply power for all cabinet functions not powered through one of the other breakers or fuses listed below. Streetlights will be powered from outside the cabinet in the meter breaker pedestal. This breaker shall feed a signal bus supplied through a solid state bus relay and a radio interference line filter. The bus relay, in all cases, shall be a solid state contactor and shall not be jack mounted.

Breakers shall be thermal magnetic type, UL or NRTL listed, with a minimum of 22,000 amp interrupting capacity.

One 15-amp auxiliary breaker. This breaker shall supply power to the fan and heater.

One 10-amp breaker. This breaker shall supply power for control equipment: controller, MMU, and cabinet power supply.

One 20-amp circuit breaker for future use.

Power the cabinet light through the GFI fuse, not a circuit breaker.

B.8 Radio Interference Suppressor
Equip each control cabinet with a single radio interference suppressor (RIS) of sufficient ampere rating to handle the load requirements. Install the RIS at the input power point. The

RIS shall minimize interference in both the broadcast and the aircraft frequencies, and shall provide a maximum attenuation of 50 DB over a frequency range from 200 KHZ to 75 MHZ, when used in connection with normal installations. The RIS shall be hermetically sealed in a substantial metal case filled with a suitable insulating compound. The terminals shall be nickel-plated brass studs of sufficient external length to provide space to connect two #8 AWG wires and shall be so mounted that they cannot be turned in the case. Ungrounded terminals shall be properly insulated from each other, and shall maintain a surface leakage distance of not less than 6.35 mm between any exposed current conductor and any other metallic parts. The terminals shall have an insulation factor of 100-200 megohms dependent upon external conditions. The RIS shall be rated at minimum 50 amperes. Design the RIS for operation on 115 VAC +/- 10%, 60HZ, singlephase circuits, and to meet the standards of UL or a NRTL and Radio Manufacturer's Association.

B.9 Bus Relay
Provide a normally-open, 60 amp, solid state relay.

B.10 Surge Protector
Install a plug-in type EDCO SHA-1250, Atlantic/Pacific, or approved equal, surge protector across the load terminal of the 10-amp circuit breaker. Install a varistor at the load terminals of the circuit breaker from the hot line to the grounded current carrying neutral conductor; varistor to meet controller manufacturer’s specifications.

B.11 Power Receptacles
Mount a 120 VAC 20 amp, NEMA 5-20R GFCl convenience outlet at each of these two locations:

a. On the interior right side wall above the power panel. The outlet shall be fully operational and fuse protected.

b. Near the power panel where it will not interfere with power panel maintenance. This outlet is to be wired by field installation personnel.

B.12 Suppressors and RC Network
Provide a suppressor for each 120 VAC circuit that serves an inductive device, such as a fan motor or a mechanical relay, to protect the controller's solid state devices from excessive voltage surges. Such suppressors shall be in addition to the surge protector at the input power point.

Wire one RC network in parallel with each inductive device.

B.13 Auxiliary Devices
B.13.1 Load Switches
Provide solid state load switches conforming to the requirements of section 6.2 of the NEMA TS2 Standard.

B.13.2 Flashers
Provide one solid state flasher conforming to the requirements of section 6.3 of the NEMA TS2 Standard.

B.13.3 Flash Transfer Relays
Provide flash transfer relays conforming to the requirements of section 6.4 of the NEMA TS2 Standard.

B.13.4 Inductive Loop Detector Units
Provide inductive loop detector units conforming to the requirements of section 6.5 of the NEMA TS2 Standard for 2-channel, rack mount detector units, type C.

B.13.5 Cabinet Power Supply
Provide one cabinet power supply with each cabinet conforming to the requirements of section 5.3.5 of the NEMA TS2 Standard. Provide LED indicators for the 12 VDC, 12 VAC, and 24 VDC outputs. Provide jack plugs on the front panel for access to the +24 VDC for test purposes.

B.14 Bus Interface Units (BIU)
Provide three BIUs conforming to the requirements of section 8 of the NEMA TS2 Standard.

Provide two BIUs with the main panel and one BIU with one of the detector racks.

B.15 Malfunction Management Unit (MMU)
Provide one shelf-mountable, 16 channel, solid-state MMU with Ethernet capability. The MMU shall meet the requirements of Section 4 of the NEMA TS2 Standard. The MMU shall be an Eberle Design Inc. Model MMU2-16LE.

The MMU shall be capable of the following:

- Detecting simultaneously active inputs of Green (Walk), Yellow, or Red (Don't Walk) on the same channel.

- Determining if the field signal input states detected as active or inactive by the MMU correspond with the data provided by the Controller Unit.

- Monitoring an optional external watchdog output from a Controller Unit or other external cabinet device.

- Monitoring an intersection with up to four approaches using the Flashing Yellow Arrow (for protected/permissive left and right turn movements).

- Event logging for the following; AC Line log, Prior/Previous Faults log, and Monitor Reset Log. All log entries shall include a date and time stamp.

- All monitor functions shall be capable of being programmed through the front panel, without the need for computers or special programs cards.

- A built-in Diagnostic Wizard shall be provided that displays detailed diagnostic information regarding the fault being analyzed. This mode shall provide a concise view of the signal states involved in the fault, pinpoint faulty signal inputs, and provide guidance on how the technician should isolate the cause of the malfunction.

The MMU shall have an LCD display that allows for viewing of log files and field indications, as well as the viewing and setting of date and time and configuration parameters.

B.16 Traffic Signal Controller
Provide a fully actuated, solid state, digital microprocessor based EPAC 3608M62 controller capable of providing the number and sequence of phases, overlaps, and any special logic as described herein. The controller unit shall meet and be operational for, the NEMA TS2 Standard, Section 3, specifications for the Type 2 Actuated (A1) configuration. The controller unit shall be capable of being upgraded by only a firmware/ software installation to meet and be operational for the NEMA TS2 Standard, Section 3, specifications for the Type 2 Actuated/ NTCIP (A1N, Level 2) configuration.

B.17 TACTICS 3.1 (or greater)
Provide current version of Siemens controller remote Closed Loop system software capable of communicating with all of city's current controllers on their closed loop systems. This software shall include updates for up to one year upon installation. Price shall also include installation and setup on city's existing computers.

C Construction
Construct in general conformance with the relevant provisions of standard spec 675 and the manufacturer's recommendations.

D Measurement
The department will measure Traffic Signal Controller and Cabinet as each individual assembly, acceptably completed.

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.05	Traffic Signal Controller and Cabinet	Each

Payment is full compensation for furnishing and installing the Traffic Signal Controller and Cabinet, for making all connections, and furnishing all required testing.

41. Poles Type 13, Item SPV.0060.06 (Project ID: 4630-05-71/72).

A Description

Work under this item consists of furnishing and installing monotube poles.

B Materials

Furnish Valmont Poles meeting the following requirements:

Design support structures conforming to the minimum wall thickness the plan details show and to AASHTO design and fabrication standards for structural supports for highway signs, luminaires, and traffic signals. Use a design life of 50 years. Design to withstand a 3 second gust wind speed of 90 mph (145 km/h). Do not use the methods of Appendix C of those AASHTO standards.

Use Category III criteria for Type 9 and Type 10 Poles. Use Category II criteria for Type 13 Poles.

For structures requiring a fatigue analysis, use 45 mph (72 km/h) for truck-induced gusts.

After welding and before zinc coating, clean the exterior surface of each steel pole free of all loose rust and mill scale, dirt, oil or grease, and other foreign substances.

Apply a zinc coating conforming to the process specified for steel sign bridges in standard spec 641.2.8. Ensure that the zinc coating is tight, free from rough areas or slag, and presents a uniform appearance.

After completing manufacturing, clean the exterior surfaces of each pole free of all loose scale, dirt, oil or grease, and other foreign substances.

Provide a reinforced hand hole measuring 4-inches by 6-inches (100 mm by 150 mm) as the plans show. Locate the hand hole 18-inches (450 mm) from the bottom of the pole base to the center of the door.

For the hand hole, include an access cover mounted to the pole by two ¼" - 20 x ¾" (m6 x 1.00 x 19 mm) hex-head stainless steel bolts.

Provide a grounding lug complete with mounting hardware, as required, inside the pole as the plans show.

Provide access to the grounding lug from the hand hole. Weld the ground lug directly opposite the hand hole on the inside wall of the pole.

Equip the top of the shaft with a removable, ventilated cap held securely in place by at least 3¼" – 20 x ¾" (m6 x 1.00 x 19 mm) hex-head stainless steel set screws.

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

Attached base plates firmly to the pole shaft by welding or other approved method.

Include anchor bolts meeting AASHTO standards applicable to the pole type and loading. Provide a mounting template that ensures correct installation of anchor bolts in foundation.

Paint poles black using a powder coat over the galvanizing. Painting to be done by the manufacturer.

C Construction
Install poles as specified in the plan details and using appropriate contractor-furnished anchor bolts and hardware. Use the appropriate anchor bolt template to ensure correct installation. Secure pole to anchor assembly and document tensioning procedures conforming to standard spec 641.3.1.2.

After completing erection using normal pole shaft raking techniques, ensure the centerline of the shaft appears vertical.

D Measurement
The department will measure Poles Type 13 as each individual pole, acceptably completed.

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.06	Poles Type 13	Each

Payment is full compensation for providing and installing poles including all hardware and fittings necessary to install the poles, and for installing identification plaques.

42. Monotube Arms 35-Ft, Item SPV.0060.10; Monotube Arm 50-Ft, Item SPV.0060.12 (Project ID: 4630-05-71/72).

A Description
Work under this item consists of furnishing and installing monotube arms.

B Materials
Furnish Valmont Monotube Arms meeting the following requirements:

Design support structures conforming to the minimum wall thickness of the plan details show and to AASHTO design and fabrication standards for structural supports for highway signs, luminaires, and traffic signals. Use a design life of 50 years. Design to withstand a 3 second gust wind speed of 90 mph (145 km/h). Do not use the methods of Appendix C of those AASHTO standards.

Use Category III criteria for 15 to 30 foot arms. Use Category II criteria for 35 to 55 foot arms.

For structures requiring a fatigue analysis, use 45 mph (72 km/h) for truck-induced gusts.

Base the designs on the completed maximum loading configuration the standard detail drawing shows. Along with the materials list, submit a certificate of compliance certifying that the arms as furnished, conform to the above structural performance requirements. Ensure that the certificate of compliance is on the manufacturer's letterhead, signed by an authorized company officer, and notarized. Send a copy of the certificate and a copy of the monotube arm shop drawings to the department electrical engineer.

Furnish monotube arms conforming to the following:

1. Consist of zinc coated steel round or oval members.

2. Have a mounting device welded to the pole end of the monotube arm that allows the attachment of the arm to a pole as the plans show.

3. Have stiffeners or gussets if required between the arm tube and the arm mounting device to provide adequate strength to resist side loads.

4. Monotube arms to be painted black using a powder coat over the galvanizing.

After welding and before zinc coating, clean exterior surfaces of each arm free of all loose rust and mill scale, dirt, oil or grease, and other foreign substances.

Apply zinc coating as specified for sign bridge components in standard spec 641.2.8. Ensure that the zinc coating is tight, free from rough areas or slag, and presents a uniform appearance.

After manufacturing is complete, clean the exterior surfaces of each pole free of all loose scale, dirt, oil, or grease, and other foreign substances.

Paint arms black using a powder coat over the galvanizing. Painting to be done by the manufacturer.

C Construction
Conform to standard spec 657.3.

D Measurement
The department will measure Monotube Arms (length) as each individual arm, 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.0060.10	Monotube Arms 35-FT	Each
SPV.0060.12	Monotube Arms 50-FT	Each

Payment is full compensation for providing and installing all materials, including all hardware, fittings, mounting devices, shims, and attachments necessary to completely install the arms.

43. Concrete Bases Type 13 Contractor Supplied Anchor Bolts and Rods, Item SPV.0060.15 (Project ID: 4630-05-71/72).

A Description

This special provision describes constructing concrete bases, including the use of contractor supplied anchor bolts and anchor rod templates.

B Materials

B.1. Concrete Bases

Furnish grade A, A-FA, A-S, A-T, A-IS, or A-IP concrete conforming to standard spec 501.2 as modified in standard spec 716. Provide QMP for Class III ancillary concrete as specified in standard spec 716.

Furnish bar steel reinforcement conforming to standard spec 505.2.

Use Schedule 40 PVC electrical conduit conforming to the electrical conduit specified in standard spec 652.

B.2. Anchor Bolts

Provide anchor bolts conforming to AASHTO M314, Grade 55 and Supplementary Specification S1, or ASTM F1554 Grade 55. Threads on bolts shall be formed by rolling.

Hot-dip galvanize the entire length of the anchor rods according to AASHTO M111. Hot-dip the nuts and washers according to AASHTO M232. use zinc coated nuts manufactured with sufficient allowance to allow nuts to run freely on the threads.

B.3. Anchor Rod Template

Furnish a steel top and bottom template conforming to ASTM A709, Grade 36 as part of each anchor assembly. Provide a top template of sufficient gauge to hold the anchor rods securely in position at the top, and resist racking or twisting during the pour. Use a ½-inch thick bottom anchor plate-template and secure it to each anchor rod. Templates shall not be welded to the anchor rods.

C Construction

C.1. Concrete Bases

Construct concrete bases, including necessary hardware, as specified in standard spec 501 and plan details, and provide the surface finish specified in standard spec 502.3.7.2. Inspect the forming and applicable reinforcement for concrete bases before pouring the concrete. Cure exposed portions of concrete bases as specified for concrete pavement in standard spec 415.3.12 except the contractor may use curing compound conforming to standard spec 501.2.9. Wait at least seven days before installing poles.

C.2. Anchor Bolts

Lubricate anchor bolt threads and nuts with bees wax or other high-wax lubricant. Set leveling nuts to the required elevation before installing the structure. Adjust top nuts and leveling nuts to align and plumb the structure. Ensure that all nuts are snug-tight with no gaps. Tighten each top nut 1/3 turn past snug for bolts 1½-inch or smaller in diameter and 1/5 turn for larger diameter bolts conforming to the tightening sequence specified on department form DT 2321. If required, install jamb nuts wrench tight.

Complete department form DT 2321 for each structure. Indicate the parties responsible for the installation and submit the form to the engineer for inclusion in the permanent project record.

C.3. Anchor Rod Templates

Secure the anchor rod template to all anchor rods at one time in its correct position as the plan details show. Ensure relative movement and misalignment does not occur. If any twisting, racking, or other movement of the anchor rods out of plumb, projection, or pattern, or any damage to the threads exists the engineer will reject the entire base.

Maintain the clear distance between the soil and the reinforcing steel cage using the means the plan detail shows. Do not weld the anchor rods to each other, the reinforcing steel cage, and the templates or to any other component of the foundation.

If any anchor rod template is located above the concrete surface, it may be removed 24 hours after placing the concrete.

D Measurement

The department will measure Concrete Bases Type 13, Contractor Supplied Anchor Bolts and Rods 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.0060.15	Concrete Bases Type 13 Contractor Supplied Anchor Bolts and Rods	Each

Payment for the Concrete Bases Type 13, Contractor Supplied Anchor Bolts and Anchor Rod Template is full compensation for providing concrete, reinforcing steel, and electrical conduit; for providing anchor rods, templates, nuts, and washers; for excavating; for driving steel piling if required; for installing electrical conduit, electrical ground, templates; for placing and curing concrete; for backfilling; and for disposing of surplus material and restoring the site.

44. Lighting Assembly, Item SPV.0060.20.

A Description

Furnish and install poles and luminaires, install pole wiring and appurtenances for lighting at the locations as shown on the plans, according to the requirements of the plans, the standard specifications, and as hereinafter provided.

B Materials

(1) Furnish LED street light fixture, Philips Gardco Model CA22L-1-3-110LA-NW-UNIV-BRA. This item includes the mounting arm.

(2) Furnish street light pole, Valmont Model R-290845806T4-D1-313-VIBDPNR.

(3) Furnish and install the pole wiring, fusing, connections, and circuit tags according to the standard detail drawing Non-Freeway Lighting Unit Pole Wiring.

C Construction

Assemble and install the lighting unit according to the manufacturer's installation instructions. Install the lighting assembly on a concrete base and provide pole wiring and all necessary miscellaneous materials required for a complete operating lighting unit.

D Measurement

The department will measure Lighting Assembly, by the unit, in place, connected for service, and accepted.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.20	Lighting Assembly	Each

Payment is full compensation for furnishing and installing all materials to complete the installation of the lighting assembly. Pole wiring from the fixture to the handhole will be measured and paid for separately.

45. Sanitary Manhole Cover Type J-Special, Item SPV.0060.26.

A Description

Furnish and install sanitary manhole covers, including frames and sealed lids according to standard spec 611, as shown on the plans and hereinafter provided.

B Materials

B.1 Shop Drawings

Prior to incorporating any materials or products into the work, submit to the engineer product literature and catalog cuts of the materials to be supplied. Submit information in sufficient detail to readily determine if these materials are in conformance with the specifications.

B.2 Frame and Cover

The frame and cover shall be Neenah R-1550; with Type "B" solid lid with self-sealing gasket and concealed pick holes. Lid Part Number is 1050-5200.

C Construction

Conform to standard spec 611.3.3.

D Measurement

The department will measure Sanitary Manhole Cover Type J-Special as each individual manhole frame and cover, 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.0060.26	Sanitary Manhole Cover Type-J Special	Each

Payment is full compensation for providing all labor and materials, including adjustment rings, frame and cover, and other required fittings; for properly installing said frame and cover on each sanitary manhole including any related cleanup or related work.

46. Internal Chimney Seal, Item SPV.0060.27.

A Description

This special provision includes the materials and procedures required for the internal sealing of the entire chimney area of all new sanitary manholes, reconstructed manholes and rehabilitated manholes as shown on the plans and hereinafter provided.

B Materials

B.1 Frame Seal

Frame seals shall consist of a flexible external rubber sleeve and extension and stainless steel compression bands, all conforming to the following requirements:

(1) Rubber Sleeve and Extension – The flexible rubber sleeve and extension shall be extruded or molded from a high grade rubber compound conforming to the applicable material requirements of ASTM C-923, with a minimum 1500 psi tensile strength, maximum 18% compression set and a hardness (durometer) of 48±5.

The rubber sleeve shall be double, triple or quadruple pleated with a minimum unexpanded vertical height of 8-inches, 10-inches or 13-inches respectively and a minimum thickness of 3/16-inches. The top and bottom section of the sleeve that compresses against the manhole frame casting and the chimney/cone shall have an integrally formed expansion band recess and a series of sealing fins to facilitate a watertight seal.

The top section of the extension shall have a minimum thickness of 3/32-inches and shall be shaped to fit into the bottom band recess of the sleeve under the bottom chimney seal band and the remainder of the extension shall have a minimum thickness of 3/16-inches. The bottom section of the extension shall contain an integrally formed expansion band recess and multiple sealing fins matching that of the rubber sleeve.

Any splice used to fabricate the sleeve and extension shall be hot vulcanized and have a strength such that the sleeve shall withstand a 180 degree bend with no visible separation.

(2) Expansion Bands – The expansion bands used to compress the sleeve against the manhole shall be integrally formed from 16 gauge stainless steel conforming to the applicable material requirements of ASTM C-923, Type 304, with no welded attachments and shall have a minimum width of 1¾-inches.

The bands shall have a minimum adjustment range of 2½ diameter inches and the mechanism used to expand the band shall have the capacity to develop the pressures necessary to make a watertight seal. The band shall be permanently held in place with a positive locking mechanism which secures the band in its expanded position after tightening.

(3) Acceptable Manufacturers:

- Cretex Specialty Products

B.2 Equipment

The contractor shall have a manufacturer's recommended expansion tool and all other equipment/tools necessary to prepare the surfaces of the manhole and install the frame seals.

B.3 Cementitious Grout

Cementitious grout shall be premixed, non-metallic, high strength, non-shrink grout which meets the requirements of ASTM C-191 and C-827 as well as CRD-C-588 and C-621. when mixed to a mortar or "plastic" consistency, it shall have a minimum 1 day and 28 day compressive strength of 6,000 and 9,000 psi, respectively.

C Construction

C.1 Field Measurements

The contractor shall measure the manhole to determine the information required on the manufacturer's "Sizing and Ordering" procedure. This information is needed to obtain the proper size of any extensions.

C.2 Surface Preparation

All sealing surfaces shall be reasonably smooth, clean and free of any form offsets or excessive honeycomb. The top internal portion of the manhole cone shall have a minimum 3-inch high vertical surface. The preparation of this vertical surface when none exists shall be according to the frame seal manufacturer's instructions.

C.3 Installation of Frame Seal

The internal frame seals and extensions shall be installed according to the manufacturer's instructions.

D Measurement

The department will measure Internal Chimney Seal, as each individual chimney seal, 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.0060.27	Internal Chimney Seal	Each

All costs for furnishing and installing an internal frame seal and where necessary, an extension(s) shall be included in the unit price bid for sanitary manhole.

47. Lateral Connection Sealing, Item SPV.0060.28.

A Description

This special provision includes the materials and procedures for sealing and testing lateral connections using a specialized chemical grout packer.

B Materials

B.1 Chemical Sealing Materials

The chemical grout shall be of a type which has a documented record of satisfactory performance in sewer usage. All grouting materials shall be delivered to the job site in the original, labeled, and unopened containers. Contractor shall submit with his bid, the brand name manufacturer of the chemical grout(s) they intend to use. The chemical grout(s) selected by the contractor is subject to approval of the engineer. Grouts shall be Acrylic base gel chemical sealing material - Avanti AV-100 or equal.

B.2 Equipment

The basic equipment shall consist of a closed circuit television system, necessary chemical sealant containers, pumps, regulators, valves, hoses, etc., and lateral connection sealing packers for the various sizes of sewer pipes. The packer shall be cylindrical and have a diameter less than the pipe size and have cables attached at each end to pull it through the line. The same equipment shall be used for both testing and sealing sewer lateral connections. The packer shall contain a lateral sealing inversion tube. This tube should be designed to accommodate two sizes of laterals, 4-inch and 6-inch diameters. The inversion tubes are one length to facilitate sealing of approximately two feet of the lateral.

C Construction

C.1 Cleaning

Light cleaning (one pass) with a jet truck will be completed prior to setup of the lateral packer. If light cleaning is not sufficient for seating a lateral packer and/or accessing lateral connections, the contractor will move to a different line section. Heavy cleaning, root cutting, deposit reaming, etc. will be considered beyond the scope of this project. This type of work will be negotiated separately.

C.2 Televising

Television inspection is limited to a "Quick Pull". During this inspection the operator notes obstructions, offset joints, debris, the location of lateral connections, and the general condition of each lateral. The "Quick Pull" inspection is videotaped, and only data relating to the lateral sealing report is logged. Also during this inspection, the contractor determines which laterals can be accessed, and if there is enough clearance for the lateral sealing packer. The contractor makes the final determination on lateral sealing packer clearance.

C.3 Lateral Connection Testing and Sealing Procedures

Laterals are air tested by isolating the area to be tested with the packer and applying positive pressure into the isolated "void" area. A sensing unit is used for continuous monitoring of the "void" pressure. This sensing unit is located within the "void" area and accurately transmits pressure readout to the control panel. The test procedure consists of applying air pressure into each isolated VOID area. To isolate a VOID, the lateral sealing packer is positioned straddling the lateral. The operator inflates the packer ends to isolate the lateral and inserts an inflatable inversion tube. The lateral shall be tested with a gauge pressure of one-half (1/2) p.s.i. per foot of depth of sewer or a minimum of four (4) p.s.i., whichever is larger. The VOID pressure is observed during this test for a minimum of 10 seconds. If the VOID pressure drop is greater than 1 psi in 10 seconds, the lateral is considered to have failed the air test. If no pressure can be built up, the connection will also have failed the test. Any connection failing the test shall be sealed and retested utilizing the same method and procedures until it does pass the test. The cost of retesting lateral connections shall be considered incidental and included in the cost of sealing sanitary sewer lateral connection.

D Measurement

The department will measure Lateral Connection Sealing, as each individual lateral, 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.0060.28	Lateral Connection Sealing	Each

Payment is full compensation for furnishing all materials, labor, and equipment to complete all work as specified.

48. Adjusting Water Valve Boxes, Item SPV.0060.30.

A Description
Adjust water valve boxes to final pavement elevations, as shown in the plans and as hereinafter provided.

B Materials
Utilize existing valve boxes where the required extent of adjustment allows. If additional sections are necessary, coordinate with the Sheboygan Water Utility and contact Damien Nevers at (920) 459-3806 to obtain required materials.

C Construction
Prior to completion of paving operations, adjust the water valve boxes to match the final proposed grade. Excavate and expose the existing water main valve box to the depth needed to adjust the valve box to grade, add or remove extension(s) as needed, and backfill with base aggregate material according to the requirements for the adjacent roadway base course construction.

Complete adjustments in such a manner to avoid any damage to the water valve boxes. Provide the Sheboygan Water Utility two working days advance notice prior to adjusting the valve boxes to finished grade.

D Measurement
The department will measure Adjusting Water Valve Boxes as a unit of work for each valve box, acceptably adjusted according to the contract.

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.30	Adjusting Water Valve Boxes	Each

Payment is full compensation for adjusting each valve box; excavating as necessary to access the valve box; backfilling; repairing any damage done to the valve box during adjustment; and for adding new sections if necessary.
(NER12-0206)

49. Street Sweeping, Item SPV.0075.01.

A Description
Remove small dirt and dust particles from the roadway using a street sweeper periodically during the project as directed by the engineer.

B (Vacant)

C Construction
Provide a self-contained mechanical or air conveyance street sweeper and dispose of the material collected.

D Measurement
The department will measure Street Sweeping by the hour that the street sweeper is on the project picking up and removing debris from the roadway.

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0075.01 (NER11-0602)	Street Sweeping	HRS

Payment is full compensation for providing street sweeping and for disposing of material collected.

50. Storm Sewer Pipe PVC 8-Inch, Item SPV.0090.03; 12-Inch, Item SPV.0090.04.

A Description
This special provision describes furnishing and installing storm sewer according to standard spec 608, as shown on the plans and as follows.

B Materials
Supplement standard spec 608.2 as follows:

B.1 Polyvinyl Chloride (PVC) Pipe SDR 35 and Fittings
Polyvinyl Chloride (PVC) Pipe SDR 35 and Fittings:

(1) Pipe and fittings furnished shall meet the requirements for Type PSM Polyvinyl Chloride (PVC) Sewer Pipe and Fittings, as set forth in ASTM Designation D-3034 and subsequent revisions thereof.

(2) The dimensions of the pipe shall be according to ASTM D-3034 (SDR rating 35). The wall thickness shall not be less than that specified except that isolated arcs spanning no more than 15 degrees of the perimeter shall be not less than 95% of the specified minimum.

(3) Each length of pipe and each fitting shall be marked as follows:

a. Manufacturer's name or trademark.
b. Nominal pipe size.
c. The PVC cell classification, e.g., 12454-B.
d. The legend Type PSM PVC Sewer Pipe.
e. ASTM Designation D-3034.

(4) Pipe fittings shall be according to all manufacturer's recommendations.

(5) All pipe and fittings shall be by one (1) manufacturer, and shall have elastomeric joints conforming to the requirements of ASTM F-477 and D-3212.

(6) Flexible couplings shall be manufactured from flexible polyvinyl chloride (PVC) intended for water-tight joints and shall be 3/8 inch thick with multiple sealing ribs. Each coupling shall consist of 2-Series 300 (18-8) all stainless steel, extra strength (0.040 thick) T-bolt clamps with multiple take up points. The flexible coupling shall conform to the applicable parts of ASTM C443, C425, C564, D1869, and C1173. The flexible couplings shall be manufactured to connect the PVC replacement pipe with pipes of different materials.

C Construction
Conform to standard spec 608.3.

D Measurement
The department will measure Storm Sewer Pipe PVC (size) by the linear foot according to standard spec 608.4.

E Payment
Supplement standard spec 608.5 to include the following:

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.03	Storm Sewer Pipe PVC 8-Inch	L.F.
SPV.0090.04	Storm Sewer Pipe PVC 12-Inch	L.F.

51. Televising Storm Sewer, Item SPV.0090.05.

A Description
Inspect and document all storm sewer trunk-lines, inlet leads, and manholes installed under this contract with closed circuit television as shown on the plans and hereinafter provided.

B Materials

B.1 Video Recording

The entire inspection must be recorded on a DVD, capable of being viewed on a DVD player or WindowsÒ media player.

B.2 Closed Circuit Television Camera

Television equipment shall include television camera, television monitor, cables, power source, lights and other equipment. The television camera shall be specifically designed and constructed for operation in connection with sewer inspection and include the following features:

a. Pan and Tilt Radial View Color Sewer TV Camera.
b. 360 Degree Radial x 300 Degree Pan and Tilt Viewing Field.
c. Multi-Conductor.
d. Remote Adjustable Optical Focus, Remote Light Compensating Iris.
e. Automatic White Balance Circuitry, NTSC Color.
f. Low Light, 3 Lux Camera.

The pan and tilt view camera to be specifically designed to provide a close-up view of sewer pipe walls and lateral entrances through the use of a low light sensitive camera, movable camera head and directional lighting. Unit to be color, and designed for operation through up to 2,000-feet of multi-conductor cable in sanitary and storm sewers. Chassis construction to be 100% solid state circuitry designed to withstand shocks and vibration normally sustained while being pulled through a pipe. The image pick-up device to be low light sensitive, 3 Lux, solid-state camera incorporating the latest high resolution closed circuit television technology. Operating climatic ranges of the camera is to be -10ºC to +30ºC, and up to 100% relative humidity.

The remote reading footage counter is to be accurate to 1% over the length of the particular section being inspected and mounted over the television monitor.

B.3 Sewer Cleaning Equipment

Sewer cleaning equipment shall consist of a jet cleaner with a vacuum/air transport debris removal system.

The water pump system on the cleaning vehicle must have the ability to pump between 50 to 65-gallons per minute at a pressure of 1,200 to 1,500 pounds per square inch. Units with pumps smaller than this will not be acceptable.

C Construction

C.1 Sewer Flow Control

When sewer depth of flow at the upstream manhole of the manhole section being worked is above the maximum allowable for television inspection, joint testing and/or sealing; reduce flow to the level shown below by operation of pump stations, plugging or blocking of the flow, or by pumping and bypassing of the flow, as specified.

Depth of flow shall not exceed that shown below for the respective pipe sizes, as measured in the manhole when performing television inspection.

(1) Maximum Depth of Flow	Television Inspection
(2) 6 to 10-inch Pipe	20% Of Pipe Diameter
(3) 12 to 24-inch Pipe	25% Of Pipe Diameter
(4) 27-inch and Larger Pipe	30% Of Pipe Diameter

Plugging or Blocking: Insert a sewer line plug into the line upstream of the section being worked. The plug is to be designed so that all or any portion of the sewage can be released. During television inspection, testing and sealing operations, reduce flow to be within the limits specified above. After the work has been completed, restore flow to normal.

Pumping and Bypassing: When pumping and bypassing is required, supply the pumps, conduits and other equipment to divert the flow of sewage around the manhole section in which work is to be performed. The bypass system is to be of sufficient capacity to handle existing flow, plus additional flow that may occur during a rainstorm. Furnish the necessary labor and supervision to set up and operate the pumping and bypassing system. If pumping is required on a 24-hour basis, equip engines in a manner to keep noise to a minimum.

Flow Control Precautions: When flow in a sewer line is plugged, blocked or bypassed, take sufficient precautions to protect the sewer lines from damage that might result from sewer surcharging. Precautions must be taken to ensure that sewer flow control operations do not cause flooding or damage to public or private property being serviced by the sewers involved.

C.2 Preparation/Coordination

Dispose of any and all debris removed from the sewers during the cleaning process in compliance with all federal, state and local requirements. Pay any and all fees associated with the proper disposal of these materials. The City of Sheboygan will not have a disposal site available.

C.3 Television Inspection

Move camera through the line in either direction at a uniform rate, but no greater than 30-feet per minute, stopping when necessary to ensure proper documentation of the sewer's condition. Use manual winches, power winches, TV cable and powered rewinds, or other devices that do not obstruct the camera view or interfere with proper documentation of the sewer conditions, when moving the camera through the sewer line. If, during the inspection operation, the television camera will not pass through the entire manhole section, reset the equipment in a manner so the inspection can be performed from the opposite manhole.

In the event the section being televised has substantial flow entering the sewer between manholes, such that inspection of the sewer is impaired, coordinate with the owner of source of flow to have such flow temporarily stopped and/or reschedule television inspection of the particular section to a time when such flow is reduced to permit proceeding with the television inspection.

When sewer line depth of flow at the upstream manhole of the section being televised is above the maximum allowable for television inspection, reduce the flow to permit proceeding with the television inspection.

Whenever non-remote powered and controlled winches are used to pull the television camera through the line, telephones, use radios or other suitable means of communication set up between the two manholes of the section being inspected to ensure that adequate communications exist between members of the crews.

Check accuracy of the measurement meters daily by use of a walking meter, roll-a-tape or other suitable device. Begin footage measurements at the sewer line point of penetration of the upstream manhole, unless specific permission is given to do otherwise. Show footage on the video data view at all times.

C.4 Documentation of Television Results

Document television inspections through the use of an in-vehicle computer system; system to be IBM compatible on a CD or DVD. All defects and general information on the pipe being viewed along with an index for retrieving the information must be supplied to the City of Sheboygan as part of the report.

Television inspection logs to be typed or computer printed, and be acceptable to the engineer. Printed location reports shall clearly show the location, in relation to adjacent manholes, of each source of infiltration discovered. In addition, record other data of significance, including the location of buildings and house service connections, joints, unusual conditions, roots, storm sewer connections, collapsed sections, presence of scale and corrosion, and other discernible features. Include a voice recording on the DVD that makes brief and informative comments on the sewer conditions.

The measurement of distance to defects is critical in confirming the location of areas to be excavated.

Make color DVD recordings of the data on the television monitor. Provide two copies of each DVD; one for the City of Sheboygan, and one for the engineer.

Speed of recording playback to be the same speed that it was recorded. Establish tabs for the start of each sewer segment. Title to the DVD will remain with the City of Sheboygan. All DVD's and necessary playback equipment to be readily accessible for review by the engineer during the televising process.

Include the following information on the DVD's and computer logs:

A. DVD Data View:

(1) Report number.

(2) Date of television inspection.

(3) Upstream and downstream manhole numbers.

(4) Current distance along reach.

(5) Printed labels on the container and DVD, with location information, date, format information and other descriptive information.

B. DVD Audio:

(1) Date and time of television inspection, operator name and name of adjacent street.

(2) Verbal confirmation of upstream and downstream manhole numbers and TV direction in relation to direction of flow.

(3) Verbal description of pipe size, type and pipe joint length.

(4) Verbal description and location of each service connection and pipe defect.

(5) Type of weather during inspection.

C. Computerized logs:

(1) Location of each point of leakage.

(2) Location of each service connection.

(3) Location of any damaged sections, nature of damage and location with respect to pipe axis.

(4) Deflection in alignment or grade of pipe.

(5) Record of repairs and quantity of sealing material used (if applicable).

(6) Date, time, municipality, street, basin, manhole section, reference manhole number, name of operator, inspector and weather conditions.

(7) Pipe diameter, pipe material, section length and corresponding DVD identification.

C.5 Cleaning Requirements
Remove all debris and sediment to assure that the storm sewer can perform as designed.

C.6 Manhole Inspection Reports
Provide digital photographs of each manhole including:

(1) Casting / frame at ground surface.

(2) Bench.

(3) General inside.

(4) Observed leaks or structural failures.

(5) Provide copies of digital photos printed out with all photographs of each structure on one (1) each 8½" x 11" sheet.

(6) Provide a computer CD with all pictures indexed by a structure identification number, which is the same as the structure identification number included in the televising reports.

D Measurement
The department will measure Storm Sewer Televising by the linear foot, acceptably completed. Measure along the centerline of the pipe, from the pipe end at a free outlet to the center of the end catch basin, inlet, manhole, junction or other drainage structure; or from center to center of end catch basins, manholes, inlets, other drainage structures or junctions. The department will not make deductions from these measured lengths for intermediate catch basins, manholes, inlets, or other drainage structures, junctions or fittings.

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.05	Televising Storm Sewer	LF

Payment is full compensation for providing all labor and materials necessary to properly perform the work described under this section for the storm sewer pipes installed under this project.

52. Abandoning Sanitary Sewer 10-Inch, Item SPV.0090.10.

A Description
This special provision describes filling the sanitary sewer that will be abandoned, with cellular concrete (slurry), size and location as shown on plans, according to the applicable standard spec 204, 501 and 519, and as hereinafter provided.

B Materials
Provide cellular concrete (slurry) comprised of 1 part cement, 1 part fly ash, 8 parts sand and an approved equal, and water. All components shall conform to the applicable requirements of standard spec 501.2.

Provide mortar and brick according to standard spec 519.

C Construction
The sanitary pipe to be abandoned shall be filled with slurry from one end and a vent pipe must be placed on the other end. The slurry may have to be mechanically pumped into the old pipe to be sure the entire pipe is completely filled. The ends of the pipes shall be sealed with mortar and bricks.

D Measurement
The department will measure the Abandoning Sanitary Sewer (size) per linear foot of pipe filled, and 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.0090.10	Abandoning Sanitary Sewer 10-Inch	LF

Payment is full compensation for furnishing all materials; excavation and backfilling where necessary.

53. Remove Sanitary Sewer, Item SPV.0090.11.

A Description
Completely remove all existing sanitary sewer facilities as shown on the plan and those that are in conflict with the new facilities and / or are located within the trench and excavation limits of the new facilities.

B (Vacant)

C Construction
Conform to standard spec 204.3. Remove existing sanitary and backfill all resulting trenches with granular backfill conforming to standard spec 209.

D Measurement
The department will measure Remove Sanitary Sewer by the linear foot acceptably completed, measured along the center of the pipe.

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.11	Remove Sanitary Sewer	LF

Payment is full compensation for providing all equipment, labor, tools, materials and incidentals required to remove the sanitary sewer including all attached parts and connections; for furnishing all excavation except for rock excavation; for sheeting, shoring and dewatering; for furnishing, placing and compacting backfill material; for removing sheeting and shoring; for proper disposal of excess and waste material and for restoring the site of the work.

54. Sanitary Sewer Cured-In-Place Liner, Item SPV.0090.12.

A Description

This special provision describes the installation of a cured-in-place pipe liner as part of the rehabilitation of the existing sanitary sewer as shown on the plans and as hereinafter provided.

B Materials

B.1 Cured-In-Place Liner

B.1.1 Resin

(1) Polyester resin for general chemical applications:

a. Up to 5% by mass thixotropic agent which will not interfere with visual inspection may be added for viscosity control.

b. Resins may contain pigments, dyes or colorants which will not interfere with visual inspection of cured liner.

B.1.2 Reinforcing Material

(1) Non-Woven, needle interlocked polyester felt formed into sheets of required thickness.

a. Felt tubes may be made of single or multiple layer construction, with any layer not less than 1.5 mm thick.

b. Mechanical strengthener membrane or strips may be sandwiched in between layers where required to control longitudinal stretching.

c. Liners shall have a bonded internal polyurethane membrane, which must be left on the internal surface of liner after curing.

d. Minimum thickness of bonded polyurethane membrane and inner liner, if used shall be 0.3 mm, +5%, and shall not affect structural dimension requirements of cured liner.

B.1.3 Felt Content

(1) Content shall ensure cured thickness of liner as specified.

(2) Thickness of cured liner to be as specified (+ 10%-4%) and shall not include thickness of polyurethane inner liner.

B.1.4 Resin Content

(1) 10 to 15% by volume greater than volume of felt in liner bag.

B.1.5 Cured liner shall conform to minimal structure standards listed:

	Standard	Value
Tensile Strength	ASTM D638	3,000 psi
Flexural Modulus of Elasticity	ASTM D790	250,000 psi
Flexural Strength	ASTM D790	4,500 psi

B.1.6 Liner Pipe Thickness Design Criteria

(1) Minimum depth of cover over sewer will be 10.0 feet.

(2) Ground water height will be one-half of soil cover.

(3) Ovality will be 2.0%.

(4) Partially deteriorated pipe.

(5) Unit weight of soil is 120 pcf

(6) Safety factor of 2.

(7) All liners must meet a minimum thickness of 6 mm.

(8) Contractor must submit design data and cured-in-place pipe liner thickness for each run of pipe from manhole to manhole to the engineer. This information shall be submitted with the bid so it can be reviewed all at once by the engineer before the contract will be awarded.

B.1.7 Fabricate liner to size that when installed will fit internal circumference of pipe. Allowance shall be made for circumferential stretching during insertion.

B.1.8 Meet requirements of ASTM F-1216.

B.2 Submittals

B.2.1 Product Data

(1) Manufacturer's product literature, application and installation requirements for materials used in liner.

(2) Manufacturer's product certification for materials used in liner.

B.2.2 Contractor

(1) List completed projects, including location and contact (minimum 100,000 linear feet).

(2) Proposed plan for bypassing sewage during liner installation.

B2.3 Post Lining Submittals

(1) Testing results per section C.5.4.

(2) CCTV tapes and reports (pre and post lining) per section C.5.5.

B.3 Quality Assurance

B.3.1 Corrosion

(1) Fabricate finished liner from materials which, when cured, will be chemically resistant to withstand internal exposure to domestic sewage.

B.3.2 Manhole Connections

(1) All manhole connections shall be water tight.

B.3.3 Testing

(1) Test finished pipe liner according to section 3.05.D.

C Construction

C.1 Examination

(1) Examine tapes of condition of pipe interior before starting work.

C.2 Preparation

(1) Prior to liner installations sufficiently remove protruding taps, mineral deposits, roots and other debris from sewer line to the industry standard of 95% of the pipe diameter.

(2) If offset joints or collapsed pipe sections are present that will prevent insertion of the liner -Notify the engineer immediately. Repairs for these conditions are not part of the scope of this project and will be completed only after the engineer issues written authorization.

(3) Sewage Bypassing

a. Provide for flow of sewage around sections of pipe to be lined.
    1) Pump or bypass lines shall be of adequate size and capacity to handle flow.
    2) Coordinate bypassing operations with owner.

C.3 Installation

C3.1 Preparation of Liner

(1) Resin Impregnation

a. Designate location where uncured resin in original containers and unimpregnated liner will be vacuum impregnated prior to installation. Installer shall allow engineer to inspect materials and "wet out" procedure.

b. Resin and catalyst system compatible with requirements of this method shall be used. Quantities of liquid thermosetting materials shall be to manufacturer's standards to provide lining thickness required.

c. Transport resin impregnated liner to site immediately prior to inversion in suitable light-proof container with temperature maintained below 40 degrees Fahrenheit

(2) Insertion of Liner

a. Insert liner through an existing manhole by means of an inversion process. Lubricant may be used.

(3) Curing Liner

a. After inversion is complete, apply heat source and recirculation equipment. Equipment shall be capable of uniformly raising the temperature of the liner above the temperature required to effect cure of resin.

b. Provide suitable monitors to gauge temperature of incoming and outgoing heating source. Place second gauge between impregnated liner and pipe invert at remote manhole to determine temperatures during cure. Temperature in line during cure period shall be as recommended by resin manufacturer.

c. Initial cure shall be complete when inspection of exposed portions of liner to be hard and sound and remote temperature sensor indicates that temperature is of magnitude to realize an exotherm.

d. Cool hardened liner to temperature below 100 degrees F before relieving pressure in the liner.

C.4 Connections

C.4.1 Service Connections

(1) Locations

a. Determine service connection locations from television inspection video tapes.

(2) Reinstatements

a. Reinstate and reconnect service connections unless service connection is deemed to be inactive.

b. Reconnect services without excavation by television camera and cutting device that re-establishes services for minimum of95% of the flow capacity.

c. Sanitary services shall not be out of service for more than 24 hours during lining process.

C.4.2 Manholes Connections

(1) Reconstruct benches and channels in manholes with grout to match new invert elevations.

(2) At the connection to the manhole, provide a watertight seal between the host pipe and liner pipe

C.5 Field Quality Control

C.5.1 Finished Liner

(1) Liner shall be continuous over entire length of insertion run and be as free as commercially practicable from visual defects such as foreign inclusions, dry spots, pinholes and delaminations.

(2) During curing process, gauge water tightness under positive head.

(3) Liner shall conform to shape of pipe existing before installation and not be out of round by more than 15%.

C.5.2 Liner Thickness

(1) Cured liner shall be accurately measured and shall not be more than 5% less than thickness specified.

C.5.3 Felt and Resin Content of Liner

(1) Visually inspect liner to ensure number of layers of felt conforms to specified number of layers and thickness.

(2) Calculate resin to felt ratio by weight.

(3) Ratio shall fall in range 1.0:1 to 1.15:1.

C.5.4 Testing

(1) Flexural Strength and Modulus of Elasticity:

a. Testing shall be completed by a 3rd party according to ASTM D790.

b. Specimens tested shall be actual thickness of fabricated liner.

c. Do not machine specimen on surface.

d. Make test with smooth (inner) face in compression using 5 specimens.

C5.5 CCTV Examination

(1) Televise interior of pipe after completion of Work and provide tape to OWNER.

(2) Use pan and tilt color 3 lux camera to view the sewer service lateral connections.

C.6 Cleaning and Restoration

C.6.1 At completion of work, remove rubbish, debris, dirt, equipment and excess material from site. Clean and restore adjacent surfaces soiled by and during course of work.

D Measurement

The department will measure Sanitary Sewer Cured-In-Place Liner by the linear foot, acceptably completed. Measurements will be taken along the centerline of the pipe. The distance through the sanitary manholes will be excluded from the measurement.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.12	Sanitary Sewer Cured-In-Place Liner	LF

Payment is full compensation for site preparation, cleaning of existing sanitary sewers to condition necessary for proper installation of product, pre-installation televising, determining if existing service connections are active or inactive, placement of lining material within sanitary sewer, flow control, including bypass pumping, if required, reinstatement and reconnection of active service connections, sewer testing and internal inspections of installation, cleanup, and other appurtenant and incidental work. The televising of the sanitary sewer to determine installed conditions will be measured and paid for separately.

55. Sanitary Sewer 8 Inch, Item SPV.0090.14; Sanitary Sewer Laterals 6 Inch, Item SPV.0090.16.

A Description

Furnish and install sanitary sewer main and laterals according to the requirements of the Standard Specifications for Sewer & Water Construction in Wisconsin (latest edition), as shown on the plans, and hereinafter provided.

B Materials

B1.1 General

Sanitary sewers shall be polyvinyl chloride pipe conforming to the requirements of ASTM D3034, SDR-35 with elastomeric gasket type joints.

Wyes for laterals shall be in-line wyes. Saddles or similar will be not allowed.

Pipe bedding material shall consist of ¾-inch crushed stone chips conforming to Section 8.43.2(a)2 of "Standard Specifications for Sewer and Water". Backfill material shall conform to Section 209 standard specifications.

B.2 Shop Drawings

Prior to incorporating any materials or products into the work, submit to the engineer and City of Sheboygan product literature and catalog cuts of the materials being supplied.

Submit sufficient detail to readily determine if these materials are in conformance with the required specifications.

C Construction

C.1 Applicable Specifications

Perform all sanitary sewer system construction in conformance to the Standard Specifications for Sewer & Water Testing in the State of Wisconsin (latest edition).

C.2 Sanitary Sewer Mainline Testing

The unit price for sanitary sewer pipe shall also include alignment, grade, deflection, and deformation testing; water filtration and water exfiltration testing, low pressure air tests and mandrel tests. Closed circuit television testing is also required and will be measured and paid for separately.

C.3 Maintenance Sanitary Sewer Service

Provide adequate equipment and facilities to provide bypass pumping for all elements of work requiring interruption to flow in the sanitary sewer. The contractor is responsible for damages to private or public property due to sewer backup while controlling sewage flow.

C.4 Determination of Active Sanitary Laterals

Dye test and / or provide the necessary inspections to determine which laterals are active and to be reconnected and relayed. City staff will be available to assist the contractor in making this determination. Existing connections as shown on the plan are indicated from a previous television report and could possibly be either active or inactive.

C.5 Depth of New Sanitary Laterals

The contractor shall make every effort to install the new sanitary lateral at a depth greater than 8-feet below the sidewalk elevation. Connections to the existing lateral are to be made using 45-degree bends. Install the laterals deep enough to avoid conflicts with other utilities and pipes. This can be accomplished by having a riser located at the main connection and another riser located near the connection to the existing lateral near the right-of-way or as directed by the engineer or City of Sheboygan.

C.5 Cleaning

The contractor is responsible to see that sanitary sewer lines are free at all times of dirt, gravel, and debris resulting from construction operations. The City of Sheboygan will notify the contractor of any debris identified, and if the contractor fails to properly clean out the debris, the city will charge the contractor for cleaning any of the manholes and sewer lines on this project during construction and until final acceptance of the improvements. Upon completion of the work, ensure that any debris in the manholes or pipe deposited as a result of this project has been removed prior to leaving the construction site.

D Measurement

The department will measure Sanitary Sewer Pipe (Size) and Sanitary Lateral (size) by the linear foot approved by the City of Sheboygan, and 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.0090.14	Sanitary Sewer 8 Inch	LF
SPV.0090.16	Sanitary Lateral 6 Inch	LF

Payment is full compensation for couplings, vertical risers, vertical and horizontal bends, and other required fittings to properly connect the new lateral to the existing lateral according to the specifications; for furnishing all dye testing or inspection required to identify active laterals; for furnishing all excavation, except for rock excavation; for forming foundation; for replacing unstable foundation materials; for sheeting, shoring and dewatering; for laying pipe; for making connections to new or existing pipe or fixtures; for backfilling and compacting; for providing and compacting stone bedding material and granular backfill; for providing flow control and temporary pumping; for testing; for cleaning out pipes and manholes and for restoring the site of the work.

56. Televising Sanitary Sewer, Item SPV.0090.17.

A Description

Inspect and document all sanitary sewer pipes with closed circuit television in accordance as shown on the plans and hereinafter provided.

B Materials

The camera, television monitor, and other components of the video system shall be capable of producing a quality color picture. The television camera used for the inspection shall be one specifically designed and constructed for such inspection and shall be capable of radial view for inspection of the entire pipe, including lateral connections. The camera shall be mounted on adjustable skids, or self-propelled, and positioned in the center of the pipe. Lighting of the camera shall be supplied by a lamp on the camera and shall be capable of lighting the entire periphery of the pipe. The camera shall be operative in 100 percent humidity conditions and shall have a minimum of 650 lines of resolution. The view seen on by the televising camera shall be transmitted to a monitor of not less than 17 inches.

C Construction

C.1 Procedures

The intent of closed circuit televising inspection (CCTI) is to observe and record the conditions of the sewer sections being inspected. The location of the laterals will also be documented on the report.

A minimum of one pass with a jet shall be made prior to televising.

The television camera shall be moved through a sewer at a uniform rate, stopping when necessary to ensure properly documentation of the sewer. The television camera shall not be pulled at a speed greater than 30 feet per minute.

During the inspection operation, if the television camera will not pass through the entire sewer section, reset equipment in a manner so that the inspection can be performed from the opposite manhole. If, again, the camera fails to pass through the entire section, excavate and repair or replace the defective section. All costs for the reset and repair due to an obstruction will be incidental to the linear foot price for sanitary sewer.

If the camera becomes submerged due to a sag in the pipe, a high velocity jet will be utilized to pull water away from the camera lens. If the engineer deems that the sag is not acceptable, excavate and repair or replace the defective section of pipe. All costs for the reset and repair due to an obstruction will be incidental to the linear foot price for sanitary sewer.

If the camera becomes trapped within the sewer, it is the responsibility of the contractor to remove the camera. All costs for removal, including possible excavation and restoration are the responsibility of the contractor.

C.2 Inspection Logs

The logs shall be computer printed. One copy in a PDF format shall be supplied to the city. Television inspection logs must include the following:

A. Date, time, city, street, basin, sewer section, reference manhole number, name of operator, inspector, and weather conditions.

B. Pipe diameter, pipe material, section length, depth of pipe, length between joints, and corresponding video recording identification.

C. Location of each point of leakage and estimate of flow.

D. Location of each service connection.

E. Location of any damaged sections, nature of damage, and location with respect to pipe axis (such as mineral deposits, cracked pipe, sags, etc.)

C.3. Recordings

The purpose of video recording is to supply a visual record and audio record of the condition of sewers. Recording playback shall be done at the same speed that it was recorded. Upon final payment of the work, all video recording shall become the property of the City of Sheboygan, and shall be in a digital format. A complete video and audio recording shall be made of each line televised. Recordings and packages shall labeled with location information and inspection date. Television inspection reports shall include the following:

(1) Visual (On screen in corner):

a. Report number.
b. Date of television inspection.
c. Sewer section and number.
d. Current distance along reach (Tape counter footage).

(2) Audio:

a. Date and time of television inspection, operator name, name of overlaying or adjacent street, and manhole numbers.
b. Verbal confirmation of sewer section and televising direction in relation to the direction of flow.
c. Verbal description of pipe size, type, and pipe joint length.
d. Verbal description and location of each service connection and pipe defect.
e. Type of weather during inspection.

D Measurement

The department will measure Televising Sanitary Sewer by the linear foot that is acceptably completed. The measurement equals the distance along the centerline of the pipe, from sanitary manhole to manhole or to the end of the existing sanitary sewer pipe. No deductions from those measured lengths will be made for intermediate fittings. No deductions will be made for sanitary manholes.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.17	Televising Sanitary Sewer	LF

Payment is full compensation for providing all labor and materials necessary to properly perform the work described under this section for the sanitary sewer pipes installed under this project.

57. Railing Steel Pedestrian, Type C3 Special, Item SPV.0090.20.

A Description

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

B Materials

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

B.1 Coating System

B.1.1 Galvanizing

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

B.1.2 Two Coat System

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

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

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

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

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

Manufacturer	Coat	Products	Dry Film Minimum Thickness (mils)	Min. Time[1] Between Coats (hours)
Sherwin Williams 1051 Perimeter Drive Suite 710 Schaumburg, IL 60173 (847) 330-1562	Tie	Recoatable Epoxy Primer B67-5 Series / B67V5	2.0 to 4.0	6
	Top	Acrolon 218 HS Polyurethane, B65-650	2.0 to 4.0	NA
Carboline 350 Hanley Industrial St. Louis, MO 63144 (314) 644-1000	Tie	Rustbond Penetrating Sealer FC	1	36
	Tie	Carboguard 60	4.0 to 6.0	10
	Tie	Carboguard 635	4.0 to 6.0	1
	Top	Carbothane 133 LH(satin)	4	NA
Wasser Corporation 4118 B Place NW Suite B Auburn, WA 98001 (253) 850-2967	Tie	MC-Ferrox B 100	3.0 to 5.0	8
	Top	MC-Luster 100	2.0 to 4.0	NA
PPG Protective and Marine Coatings P.O. Box 192610 Little Rock, AR 72219-2610 (414) 339-5084	Tie	Amercoat 399	3.0 to 5.0	3
	Top	Amercoat 450H	2.0 to 4.0	NA

[1] Time is dependent on temperature and humidity. Contact manufacturer for more specific information.

B.2 Shop Drawings

Submit shop drawings showing the details of railing construction. Show the railing height post spacing, rail location, weld sizes and locations and all dimensions necessary for the construction of the railing. Show location of shop rail splices, field erection joints and expansion joints. State the name of the coating manufacturer and the product name of the tie

coat and top coat used along with the color. State the size and material type used for all components. Also show the size and location of any vent or drainage holes provided.

C Construction

C.1 Delivery, Storage and Handling

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

C.2 Touch-up and Repair

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

D Measurement

The department will measure Railing Steel Pedestrian by the linear foot that is acceptably completed. The measurement equals the distance along the centerline of the top rail, from end post to end post, where railing is satisfactorily furnished and 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.0090.20	Railing Steel Pedestrian, Type C3 Special	LF

Payment is full compensation for fabricating, galvanizing, painting, shop drawings, delivery, storage and handling, and installing the railing, including any touch up or repairs.

58. Grading and Shaping For Widening Calumet Drive, Item SPV.0105.03.

A Description

This special provision describes excavating, filling, grading, shaping, compacting, and removals, as necessary to construct the widening on Calumet Drive as part of Stage 1 as shown on the plans, according to the standard specifications, and as hereinafter provided.

B (Vacant)

C Construction

Dispose of all surplus and unsuitable material according to standard spec 205.3.12.

D Measurement
The department will measure Grading and Shaping For Widening Calumet Drive as a single complete lump sum unit of work, acceptably completed.

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.03	Grading and Shaping For Widening Calumet Drive	LS

Payment is full compensation for furnishing all excavating, grading, shaping, and compacting; for providing and placing fill; and for the removal and disposal of any materials not incorporated into the final cross section.

The base course, surfacing and finishing items will be measured and paid for under the pertinent items provided in the contract.

59. Concrete Pavement Joint Layout, Item SPV.0105.01.

A Description
This special provision describes providing a concrete pavement 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 pavement to prevent uncontrolled cracking. Submit a joint layout design to the engineer one week before paving each intersection. Mark the location of all concrete pavement joints in the field. Follow the plan details for joints in concrete pavements making adjustments as required to fit field conditions and as permitted by the engineer.

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 under the contract.

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.01	Concrete Pavement Joint Layout	LS

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

60. Construction Staking Sanitary Sewer, Item SPV.0105.05.

A Description

Perform construction staking as required for the installation of the sanitary sewer items including sanitary sewer main, laterals, and manholes.

B (Vacant)

C Construction

Perform the work according to standard spec 650, and as specified below.

Set and maintain construction stakes or marks as necessary to achieve the required accuracy and to support the method of operations for the construction sanitary sewer, sanitary laterals, and sanitary manholes. Locate stakes to within 0.02 feet horizontally and establish the elevations to within 0.02 feet vertically. Determine that the proposed elevations shown on the plan at match points to existing city utilities match field conditions and provide this information to the engineer a minimum of three working days prior to ordering manholes.

D Measurement

The department will measure Construction Staking Sanitary Sewer as a single lump sum unit of work, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.05	Construction Staking Sanitary Sewer	LS

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

Payment for Construction Staking Sanitary Sewer is full compensation for locating and setting all construction stakes; for relocating and resetting damaged or missing construction stakes.

Payment for Construction Staking Sanitary Sewer also includes setting construction stakes as necessary for storm sewer pipe associated with each manhole staked.

61. Remove and Salvage Traffic Signals (STH 42 and North Avenue), Item SPV.0105.06.

A Description

This special provision describes removing and salvaging traffic signals according to the pertinent provisions of standard spec 204 and as hereinafter provided.

B (Vacant)

C Construction

Inventory the quantity and condition of the control cabinet, controller, traffic signals, push button signs, lighting equipment, and pull box frames and covers prior to removal. Provide the engineer and the City of Sheboygan Public Works Department with a copy of the inventory three working days prior to removal. Contact Mike Wilmas, (920) 459-3444.

Notify the City's Public Works Department at least three working days prior to the desired starting date for the removal of the traffic signals. The city's electrical unit will arrange for de-energizing the signals with the local electrical utility. The city's electrical unit will verify that the traffic signals have been de-energized and will then notify the engineer. Contact Mike Wilmas, (920) 459-3444.

Remove and salvage the control cabinet, controller, traffic signals, push button signs, and pull box frames and covers, following notification by the engineer to do so, in such a manner that they are not damaged.

The contractor will be responsible for all work to remove the traffic signal cabinet and its internal modules.

Remove the traffic signal standards and poles from their concrete bases. Remove the attached transformer bases, trombone arms, and luminaire arms from the standards or poles. Access hand hole doors, push button signs, and hardware shall remain intact. Remove the pull box frames and covers from the corrugated pipe.

Notify the city's electrical department at least three working days prior to removing, to make arrangements for the city to pick up the salvaged traffic signals. Store and protect the salvaged signal materials in the project right-of-way until the city can pick up the materials. Contact Mike Wilmas, (920) 459-3444.

The underground cable, wires, and conduits shall become the property of the contractor to be disposed of properly.

D Measurement
The department will measure Remove and Salvage Traffic Signals (Location), as a single lump sum unit of work, acceptably completed.

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.06	Remove and Salvage Traffic Signals (STH 42 and North Avenue)	LS

Payment is full compensation for inventorying; disconnecting the wiring of the traffic signals; removing and disassembling the traffic signals; removing the pull box frames and covers; and for storing and protecting the salvaged traffic signal materials on the construction site.

The removal of concrete bases will be paid for separately under the pertinent items provided in the contract.

62. Vehicular Video Detection System 4-Camera (Calumet Drive and North Avenue), Item SPV.0105.10.

A Description
This special provision describes furnishing and installing a vehicular video detection system (VDS) as shown on the plans, and as directed by the engineer in the field. The VDS shall be a four-camera system.

B Materials
Furnish Iteris video detection camera system and interface devices. This item includes three Iteris RZ-4 Advanced WDR (RZ-4 A WDR) video detection cameras and one Iteris Vantage Vector hybrid detection sensor (video detection camera and radar unit).

B.1 System Hardware
(1) The video detection system (VDS) shall consist of up to four video cameras, a video detection processor (VDP) capable of processing from one to four video sources, output extension modules, video surge suppressors and a pointing device.

B.2 Available System Configurations
(1) The proposed VDS shall be available in various configurations to allow maximum deployment flexibility. The proposed VDS shall have multiple configurations available for deployment as described in Table 1.

Table 1. VDS Configuration

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

B.3 System Software

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

B.4 VDP Hardware

(1) The VDS shall conform to Caltrans TEES, NEMA TS-1, and NEMA TS-2 electrical, mechanical, and environmental requirements.

B.5 VDP System Interfaces

(1`) Video Input - Each video input shall accept RS170 (NTSC) or CCIR (PAL) signals from an external video source (camera sensor, DVD or video tape player).

(2) Video Output - One video output shall be provided. The video output shall be RS170 or CCIR compliant and shall pass through the input video signal. For multi-channel video input configurations, a momentary push-button shall be provided on the front panel to cycle through each input video channel. The real time video output shall have the capability to show text and graphical overlays to aid in system setup. The overlays shall display real-time actuation of detection zones upon vehicle detection or presence.

(3) Serial Communications - A serial communications port shall be provided on the front panel. The serial port shall compliant with EIA232 electrical interfaces and shall use a DB9 type connector mounted on the front panel of the VDP.

(4) Contact Closure Output - Open collector (contact closure) outputs shall be provided. Four (4) open collector outputs shall be provided for the single, dual or quad channel rack-mount configuration. Additionally, the VDP shall allow the use of extension modules to provide up to 24 open collector contact closures per camera input.

(5) Logic Inputs - Logic inputs such as delay/extend or delay inhibit shall be supported through the appropriate detector rack connector pin or front panel connector in the case of the I/O module.

(6) LED Indicators - Detection and status LEDs shall be provided on the front panel.

(7) Test Switches - The front panel of the VDP shall have detector test switches to allow the user to manually place calls on each VDP output channel. The test switch shall be able to place either a constant call or a momentary call depending on the position of the switch.

(8) Mouse Port - A USB mouse port shall be provided on the front panel of the video processing unit.

(9) Extension Module Port - Extension modules shall be connected to the VDP by an 8-wire twisted-pair cable with modular RJ45 connectors.

B.6 Extension Modules

(1) Extension modules (EM) shall be available to eliminate the need of rewiring the detector rack, by enabling the user to plug an extension module into the appropriate slot in the detector rack to provide additional open collector outputs. The extension module shall be available in both 2 and 4 channel configurations. A separate I/O module with 32 outputs through a 37-pin "D" connector on the front panel and 8 inputs through a 15-pin "D" connector using an external wire harness for expanded flexibility shall also be available.

(2) The VDP and EM shall be specifically designed to mount in a standard detector rack, using the edge connector to obtain power, provide contact closure outputs and accept logic inputs (e.g. delay/extend). No adapters shall be required to mount the VDP or EM in a standard detector rack.

(3) Firmware Upgrade - The VDP shall enable the loading of modified or enhanced software through the EIA232 or USB port (using a USB thumb drive).

B.7 VDP Software

B.7.1 General System Functions

(1) Detection zones shall be programmed via an on board menu displayed on a video monitor and a pointing device connected to the VDP. The menu shall facilitate placement of detection zones and setting of zone parameters or to view system parameters.

(2) The VDP shall store up to three different detection zone patterns in non-volatile memory.

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

(4) The VDP shall accept new detection patterns from an external computer through the EIA232 port when the external computer uses the correct communications protocol for downloading detection patterns.

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

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

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

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

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

(10) The VDP shall employ color overlays on the video output.

(11) The VDP shall have the ability to show phase status (green, yellow, or red) for up to 8 phases. These indications shall also be color coded.

(12) The VDP shall have the capability to change the characteristics of a detection zone based on external inputs such as signal phase.

(13) For alpha numeric user inputs, the VDP shall utilize a virtual QWERTY keyboard on the video overlay system to ease user input.

(14) The VDP shall aid the user in drawing additional detection zones by automatically drawing and placing zones at appropriate locations with only a single click of the mouse. The additional zone shall utilize geometric extrapolation of the parent zone when creating the child zone. The process shall also automatically accommodate lane marking angles and zone overlaps.

B.8 VDS Camera Sensor

(1) To accommodate deployment flexibility, the VDS camera sensor shall be compatible will all VDP platforms identified in Table 1. The VDS camera sensor shall be supplied by the VDS manufacturer.

(2) The advanced camera enclosure shall utilize Indium Tin Oxide (ITO) technology for the heating element of the front glass. The transparent coating shall not impact the visual acuity and shall be optically clear.

(3) Cable terminations at the camera for video and power shall not require crimping or special tools. The video termination shall only require a coax stripper and a screw driver. No connectors (e.g. BNC) shall be required. The power termination shall only require a standard wire stripper and screw driver.

(4) The camera sensor shall allow the user to set the focus and field of view either at the camera sensor or from the controller cabinet.

(5) The camera shall produce a useable video image of the bodies of vehicles under all roadway lighting conditions, regardless of time of day. The minimum range of scene luminance over which the camera shall produce a useable video image shall be the minimum range from nighttime to daytime, but not less than the range 0.003 lux to 10,000 lux.

(6) The imager shall employ three dimensional dynamic noise reduction (3D-DNR) to remove unwanted image noise.

(7) The camera imager shall employ wide dynamic range (WDR) technology to compensate for wide dynamic outdoor lighting conditions. The dynamic range shall be greater than 100 dB.

(8) The camera shall be digital signal processor (DSP) based and shall use a CCD sensing element and shall output color video with resolution of not less than 540 TV lines. The color CCD imager shall have a minimum effective area of 811(h) x 508(v) pixels.

(9) The horizontal field of view shall be adjustable from 2.4 to 58 degrees. This camera configuration may be used for the majority of detection approaches in order to minimize the setup time and spares required by the user. The lens shall be a 27x zoom lens with a focal length of 3.25mm to 88.0mm.

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

(11) The camera shall be housed in a weather-tight sealed enclosure made of 6061 anodized aluminum.

(12) When mounted outdoors in the enclosure, the camera shall operate satisfactorily in a temperature range from -34 °C to +74 °C and a humidity range from 0% RH to 100% RH.

(13) The camera shall be powered by 120-240 VAC 50/60 Hz. Power consumption shall be 5 watts typical and 25 watts or less under worst conditions.

B.9 Installation

(1) The coaxial cable to be used between the camera and the VDP in the traffic cabinet shall be Belden 8281.

(2) The power cabling shall be 16 AWG three-conductor cable with a minimum outside diameter of 0.325 inch and a maximum diameter of 0.490 inch. The cabling shall comply with the National Electric Code, as well as local electrical codes.

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

B.10 Warranty

(1) The supplier shall provide a limited three-year warranty on the video detection system.

(2) During the warranty period, technical support shall be available from the supplier via telephone within 4 hours of the time a call is made by a user, and this support shall be available from factory-certified personnel or factory-certified installers.

(3) During the warranty period, updates to VDP software shall be available from the supplier without charge.

B.11 Maintenance and Support

(1) The supplier shall maintain an adequate inventory of parts to support maintenance and repair of the video detection system.

(2) The supplier shall maintain an ongoing program of technical support for the video detection system.

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

(4) All product documentation shall be written in the English language.

C Construction

Install the video detection system at the location shown on the plans according to the manufacturer's installation guidelines.

D Measurement

The department will measure Vehicular Video Detection System 4-Camera (Calumet Drive and North Avenue), completed according to the contract and accepted, as a single 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.0105.10	Vehicular Video Detection System 4-Camera (Calumet Drive and North Avenue)	LS

Payment is full compensation for furnishing and installing the materials.

63. Traffic Signal Preemption and Priority Control System, Item SPV.0105.12, (Intersection of Calumet Drive and North Avenue).

A Description

This special provision describes furnishing and installing an Infrared Activated, Data Encoded, Traffic Signal Preemption and priority control system including infrared detectors, detector cable, phase selector, and card rack.

B Materials

B.1 Infrared Detector. The detector will change the infrared signal to an electrical signal. It will be located at or near the intersection. It will send the electrical signal, via the detector cable, to the phase selector. Shall be an Opticom 711.

(1) The required detector will be a lightweight, weatherproof device capable of sensing and transforming pulsed infrared energy into electrical signals for use by the phase selection equipment.

(2) The infrared detector will be designed for mounting at or near an intersection on mast arms, pedestals, pipes or span wires.

(3) Each infrared detector will be supplied with mounting hardware to accommodate installation on mast arms. Additional hardware will be available for span wire installations. Additional hardware may be needed.

(4) The infrared detector design will include adjustable tubes that lock into position, to enable their reorientation for span wire mounting without disassembly of the unit.

(5) The detector will accept infrared signals from one or two directions and will provide single or dual electrical output signal(s).

(6) The infrared detector will be available in three configurations:

a. Uni-directional with one output channel.

b. Bi-directional with one output channel.

c. Bi-directional with two output channels.

(7) The detector will allow aiming of the two infrared sensing inputs for skewed approaches, wide roads or slight curves.

(8) The infrared detector will have a built-in, labeled terminal block to simplify wiring connections.

(9) The infrared detector will receive power from the phase selector and will have internal voltage regulation to operate at 24 volts DC.

(10) The infrared detector will respond to a clear lens data-encoded emitter with 0.84 (±10%) Joules of energy output per flash at a distance of 2,500 feet (762m) under clear atmospheric conditions. If the emitter is configured with a visible light filter, the detector will respond at a distance of 1800 feet (549m) under clear atmospheric conditions. The noted distances will be comparable day and night.

(11) The infrared detector will deliver the necessary electrical signal to the phase selector via a detector cable up to 1,000 feet (305m) in length.

B.2 Detector Cable. The detector cable will carry the electrical signal from the detector to the phase selector.

(1) The detector cable will deliver sufficient power from the phase selector to the infrared detector and will deliver the necessary quality signal from the detector to the phase selector over a non-spliced distance of 1,000 feet (305m).

(2) The cable will be of durable construction to satisfy the following installation methods:

a. Direct burial.

b. Conduit and mast arm pull.

c. Exposed overhead (supported by messenger wire).

(3) The outside diameter of the detector cable will not exceed 0.3 inches (7.62mm).

(4) The insulation rating of the detector cable will be 600 volts minimum.

(5) The temperature rating of the detector cable will be +158°F (+70°C) minimum.

(6) The conductors will be shielded with aluminized polyester and have an AWG #20 (7 x 28) stranded and individually tinned drain wire to provide signal integrity and transient protection.

(7) The shield wrapping will have a 20% overlap to ensure shield integrity following conduit and mast arm pulls.

(8) The detector cable will be comprised of three signal wires and a drain wire. Each wire will be 20 AWG (7 x 28). The capacitance will not exceed 48 pF per foot a 1 Khz. The detector cable wires will be stranded, individually tinned copper, color-coded insulation as follows:

a. Orange for delivery of detector power (+).

b. Drain wire for detector power return (-).

c. Yellow for detector signal #1.

d. Blue for detector signal #2 or ground, depending on model of detector being used.

B.3 Phase Selector. The phase selector will accommodate data-encoded communication and will validate, identify, classify and record the signal from the detector. It will be located within the controller cabinet at the intersection. It will request the controller to provide priority to the requesting vehicle and/or record presence of a probe vehicle. Shall be an Opticom 764.

(1) The phase selector, designed to be installed in the traffic controller cabinet, will accommodate data-encoded signals and is intended for use directly with numerous controllers. These include California/New York Type 170 controllers with compatible software, NEMA controllers, or other controllers along with the system card rack and suitable system interface equipment and controller software.

(2) The phase selector will be a plug-in, two or four channel, multiple-priority device intended to be installed directly into a card rack located within the controller cabinet.

(3) The phase selector will be powered from 115 volt (95 volts AC to 135 volts AC), 60Hz mains and will contain an internal, regulated power supply that supports up to twelve infrared detectors.

(4) Programming the phase selector and retrieving the data stored in it will be accomplished using a Windows™ computer and the system interface software. The connection can be made either directly, via the computer's communication (COM) port, or remotely via a modem. The communication port on the phase selector will be an RS232 interface located on the front and back of the unit. The communication protocol will be made available upon request for creating software to implement other communication applications.

(5) The phase selector will include the ability to directly sense the green traffic controller signal indications through the use of dedicated sensing circuits and wires connected directly the field wire termination points in the traffic controller cabinet.

(6) The phase selector will have the capability of storing up to 1000 of the most recent priority control calls, probe frequency passages, or unauthorized vehicle occurrences. When the log is full, the phase selector will drop the oldest entry to accommodate the new entry. The phase selector will store the record in non-volatile memory and will retain the record if power terminates. Each record entry will include ten points of information about the priority call, as follows:

a. Classification: Indicates the type of vehicle.

b. Identification number: Indicates the unique ID number of the vehicle.

c. Priority level: Indicates whether High or Low priority or Probe frequency is requested by the vehicle.

d. Direction: Channel A, B, C, or D; indicates the vehicle's direction of travel.

e. Call duration: Indicates the total time in seconds the priority status is active.

f. Final greens at end of call: Indicates which phases are green at the end of the call.

g. Duration of the final greens: Indicates the total time final greens were active at the end of call.

h. Time and date call started and ended: Indicates the time a priority call started and ended; provided in seconds, minutes, hours, day, month, year.

i. Maximum signal intensity: Indicates the strongest signal intensity measured by the phase selector during call.

j. Priority output active: Indicates if the phase selector requested priority from the controller for the call.

(7) The phase selector will include several control timers that will limit or modify the duration of a priority control condition, by channel, and can be programmed from a Windows™ computer. The control timers will be as follows:

a. MAX CALL TIME: Will set the maximum time a channel is allowed to be active. It will be settable from 60 to 65,535 seconds in one-second increments.

b. CALL HOLD TIME: Will set the time a call is held on a channel after the priority signal is no longer being received. It will be settable from one to 255 seconds in one-second increments. Its factory default must be six seconds.

c. CALL DELAY TIME: Will set the time a call must be recognized before the phase selector activates the corresponding output. It will be settable from zero to 255 seconds in one-second increments. Its factory default must be zero seconds.

(8) The phase selector's default values will be re-settable by the operator using an IBM PC-compatible computer, or manually using switches located on its front.

(9) The phase selector will be capable of three levels of discrimination of data-encoded infrared signals, as follows:

a. Verification of the presence of the base infrared signal of either High priority, Low priority or Probe frequency.

b. Validation of the infrared signal data-encoded pulses.

c. Determination of when the vehicle is within the prescribed range.

(10) The phase selector's card edge connector will include primary infrared detector inputs and power outputs. Two additional detector inputs per channel will be provided on a front panel connector.

(11) The phase selector will include one opto-isolated NPN output per channel that provides the following electrical signal to the appropriate pin on the card edge connector:

a. 6.25Hz ± 0.1Hz 50% on/duty square wave in response to a Low priority call.

b. A steady ON in response to a High priority call.

(12) The phase selector will accommodate three methods for setting intensity thresholds (emitter range) for high and low priority signals:

a. Using a data-encoded emitter with range-setting capability.

b. Using any encoded emitter by manipulating the front panel switches.

c. Inputting the range requirements via the communication port.

(13) The intensity threshold will have 1200 set points. There will be separate intensity thresholds for the primary detector and the auxiliary detectors.

(14) The phase selector will have a POWER ON LED indicator that flashes to indicate unit diagnostic mode and illuminates steadily to indicate proper operation.

(15) The phase selector will have internal diagnostics to test for proper operation. If a fault is detected, the phase selector will use the front panel LED indicators to display fault information.

(16) The phase selector will have a High (High) and Low (Low) solid state LED indicator for each channel to display active calls.

(17) The phase selector will have a test switch for each channel to test proper operation of High or Low priority.

(18) The phase selector will properly identify a High priority call with the presence of 10 other Low priority data-encoded emitter signals being received simultaneously on the same channel.

(19) The phase selector will have write-on pads to allow identification of the phase and channel.

(20) The phase selector will have the capability to enter unique names for each channel via the interface software.

(21) The phase selector will provide one isolated confirmation light control output per channel. These outputs are user configurable through software for a variety of confirmation light sequences.

(22) The NEMA model of the phase selector will have outputs for the control of NEMA controllers that lack internal preemption capability. This function will be accomplished through the use of Manual Control Enable, Interval Advance, and Phase Omit options.

(23) The NEMA model will also have the option of providing separate outputs for High and Low priority calls for controllers that do not recognize a 6.25 Hz pulsed Low priority request.

(24) The NEMA model of the phase selector shall have the capability to set Interval Advance rates as low as once every 200 mSec for Low priority calls. It shall also be able to operate in the Manual Control Enable Mode for Low Priority calls and activate a standard preemption output for high priority calls.

(25) The phase selector will have the capability of recording the presence of a vehicle transmitting at the specified Probe frequency. The phase selector will at no time attempt to modify the intersection operation in response to the Probe frequency.

(26) The phase selector will have the capability of providing Low priority in a mode where the output to the controller is gated or controlled by timing relationships within the controller cycle.

(27) The phase selector will have the capability to assign a relative priority to a call request within High or Low priority. This assignment will be based on the received vehicle class.

(28) The phase selector will have the capability to discriminate between individual ID codes, and allow or deny a call output to the controller based on this information.

(29) The phase selector will have the capability to log call requests by unauthorized vehicles.

(30) The phase selector will have the ability to command an emitter to relay a received code to the next intersection.

(31) The phase selector will have the capability of functionally testing connected detector circuits and indicating via front panel LEDs non-functional detector circuits.

(32) The phase selector will incorporate a precision real time clock synchronized AC power line frequency.

(33) The clock will have the capability to automatically adjust itself for changes in daylight saving time. Interface software will be used to set the clock and to input the appropriate dates and times for daylight saving changes.

(34) The phase selector shall have the capability to set the minimum time between Low priority calls.

(35) An auxiliary interface panel will be available to facilitate interconnections between the phase selector and traffic cabinet wiring.

B.4 Card Rack. The card rack will provide simplified installation of a phase selector into controller cabinets that do not already have a suitable card rack. Shall be an Opticom 760.

(1) The required card rack will provide simplified installation of a phase selector into controller cabinets that do not already have a suitable card rack.

(2) The card rack will be factory wired to one connector, located behind the card slot, and a terminal block, located next to the phase selector slot, on the front of the card rack.

(3) The card rack connector on the front will provide for all connections to the traffic controller.

(4) The card rack will provide labeled terminal blocks for connecting the primary infrared detectors to a phase selector.

C Construction

Install the card rack and phase selector inside the cabinet according to the manufacturer's installation requirements.

Install detectors on monotube arms as shown on the plans. Set initial aim according to manufacturer's installation requirements. Final adjustment shall be as directed by the City of Sheboygan. Contact Mike Wilmas at (920) 459-3444 to schedule the final adjustment. Install detector cable according to manufacturer's installation requirements.

D Measurement

The department will measure Traffic Signal Preemption and Priority Control System as a lump sum unit of work, complete and accepted 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.0105.12	Traffic Signal Preemption and Priority Control System	LS

Payment is full compensation for furnishing and installing traffic signal preemption and priority control system.

64. Remove Traffic Signal (STH 42 & CTH J/DL), Item SPV.0105.13.

A Description
This work shall consist of removing some of the existing traffic signal equipment from the intersections of STH 42 & CTH J/40th St as shown in the plans and according to the requirements of standard spec 657 and standard spec 658 , standard detail drawings, and as hereinafter provided.

B (Vacant)

C Construction
After coordination with the NE Region Electrical Unit, the existing traffic signal equipment shall be disconnected from the concrete bases and transported off site to the electrical subcontractor facilities and/or to a recycling/garbage facility.

D Measurement
The department will measure Remove Traffic Signal (Location) as a single lump sum unit of work, acceptably completed.

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.13	Remove Traffic Signal (STH 42 & CTH J/DL)	LS

Payment for Remove Traffic Signal is full compensation for removal and transporting to the appropriate facility.

65. Water for Seeded Areas, Item SPV.0120.01.

A Description
This special provision describes furnishing, hauling and applying water to seeded area 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. The topsoil shall not be left 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 shall be considered the minimum. The department will not charge contract time during the watering period unless it is the only remaining item of work left in the contract.

D Measurement
The department will measure Water for Seeded Areas by volume by the 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.0120.01	Water for Seeded Areas	MGAL

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

66. Thickened Edge Concrete Sidewalk, Item SPV.0165.01.

A Description
This special provision describes constructing Thickened Edge Concrete Sidewalk according to plan details, standard spec 602, and as hereinafter provided.

B Materials
Modify standard spec 602.2 to include coated high strength bar steel reinforcement according to standard spec 505.2.4.

C Construction
Conform to standard spec 602.3.

D Measurement
The department will measure Thickened Edge Concrete Sidewalk by the square foot, acceptably completed for the full width of the sidewalk as shown on the plan details.

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0165.01	Thickened Edge Concrete Sidewalk	SF

Add to standard spec 602.5.2 to include the following:

Payment includes furnishing and installing coated high strength bar steel reinforcement.

67. Concrete Retaining Curb, Item SPV.0165.02.

A Description
This special provision describes constructing Concrete Retaining Curb according to plan details, standard spec 601, and as hereinafter provided.

B Materials
Add to standard spec 601.2 to include coated high strength bar steel reinforcement according to standard spec 505.2.4.

C Construction
Conform to standard spec 601.3. Staking/layout of the concrete retaining curb to be concurrent with staking adjacent 18-inch Type D curb.

D Measurement
The department will measure Concrete Retaining Curb by the square foot, acceptably completed, measured along the front face of the retaining curb.

E Payment
Supplement standard spec 601.5 to include the following:

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0165.02	Concrete Retaining Curb	LF

Modify standard spec 601.5 to include the following:

Payment includes furnishing and installing coated high strength bar steel reinforcement.

68. Sealing Concrete Pavement Joints, Item SPV.0180.01.

A Description
This special provision describes furnishing and installing joint sealer for concrete pavement as shown on the plans, and as hereinafter provided.

B Materials
Use a sealant material meeting the requirements of ASTM D6690 Type II: Joint and Crack Sealants, Hot Applied, for Asphalt and Concrete Pavements. Deliver the sealant in the manufacturer's original sealed container legibly marked with the following information:

- Manufacturer's name
- Trade name of sealant
- Manufacturer's batch or lot number
- ASTM D6690, Type II
- Minimum application temperature
- Maximum (or safe) heating temperature

Prior to commencing work, provide the engineer with a certificate of compliance along with a copy of the manufacturer's recommendations pertaining to heating and application of the sealant.

C Construction
Supplement standard spec 415.3 as follows:

Place joint sealer as shown on the plans and according to the manufacturer's instructions. All longitudinal, transverse, and construction joints shall be sealed prior to allowing any traffic on the pavement.

Joints shall not be sealed until they have been inspected and approved by the engineer.

Should any spalling of the sawed edges occur that would in the judgment of the engineer detrimentally affect the joint-sealing ability, such spalled areas shall be patched with an approved epoxy which shall be allowed to harden prior to installation of the joint seal. Each patch shall be true to the intended neat lines of the finished cut joint.

Application of the joint sealer shall be made when the joint surfaces are clean and dry.

Joints shall be cleaned and dried to accept the sealing material according to the manufacturer's recommendations.

All longitudinal and transverse concrete pavement joints, including the joint between the pavement and the curb and gutter and any joints in the curb and gutter shall be sealed. The sealant shall be tooled flush with or recessed up to a maximum of 1/16" ± 1/64" below the concrete surface. Overbonding will not be allowed. Material remaining on the surface of the pavement shall be removed without damaging the sealant in the joint.

D Measurement
The department will measure Sealing Concrete Pavement Joints by the square yard of pavement sealed and acceptably completed.

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0180.01	Sealing Concrete Pavement Joints	SY

Payment is full compensation for furnishing all materials, sawing joints, sealing all joints within concrete pavement and curb and gutter.
(NER14-1126)

69. Excavation, Hauling and Disposal of Petroleum-Contaminated Soil and Management of Petroleum-Contaminated Groundwater, Item SPV.0195.01.

A Description

A.1 General

This special provision describes excavating, segregating, loading, hauling, treatment, and disposing of petroleum-contaminated soil at a DNR approved bioremediation and disposal facility. The closest DNR approved disposal facility is:

Advanced Disposal Services Hickory Meadows Landfill
W3105 Schneider Road
Hilbert, Wisconsin 54129

Waste Management Solutions Ridgeview Landfill
6207 Hempton Lake Road
Whitelaw, Wisconsin 54247

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

This special provision also describes pumping, hauling and disposing of petroleum-contaminated groundwater (if dewatering is necessary) to the Sheboygan Regional Wastewater Treatment Facility.

Perform this work according to standard spec 205 and with pertinent parts of Chapters NR 100-299 of the Wisconsin Administrative Code, as supplemented herein. Perform all work necessary to control, handle, and dispose of groundwater and surface water, and all other water that may be encountered within contaminated areas, as required for performance of the work.

A.2 Notice to the Contractor – Contaminated Soil and Groundwater Locations

The department completed testing for soil and groundwater contamination for locations within this project where excavation is required.

Petroleum-contaminated soil and groundwater (if dewatering is necessary) is potentially present at the following location:

1. Site 3 - Walgreens – Station 10+00 to Station 12+50, LT of reference line on STH 42, and Station 7+75 to Station 10+00, LT of reference line on North Ave.

2. Site 4 – Q-Mart – Station 8+60 to Station 9+40, RT of reference line on North Avenue, and Station 8+75 to Station 9+60, 20 feet LT of reference line to project limits on LT on STH 42.

Contaminated soils and/or groundwater and/or underground storage tanks (USTs) may be encountered at other locations within the construction limits. If contaminated soils and/or groundwater and/or USTs are encountered elsewhere on the project, terminate excavation activities in the area and notify the engineer and the environmental consultant. Contaminated soil at other locations shall be managed by the contractor under this contract. USTs will be removed by others.

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

Name:	Daniel Haak
Address:	TRC Environmental Corporation
	708 Heartland Trail, Suite 3000, Madison, WI 53717
Phone:	(608) 826-3628
Fax:	(608) 826-3941
e-mail:	dhaak@trcsolutions.com

A.3 Coordination

Coordinate work under this Contract with the environmental consultant retained by the department:

Consultant:	TRC Environmental Corporation
Contact:	Mr. Dan Haak
Address:	708 Heartland Trail, Suite 3000, Madison, WI 53717
Phone:	(608) 826-3628
Fax:	(608) 826-3941
e-mail:	dhaak@trcsolutions.com

The role of the environmental consultant will be limited to:

1. Determining the location and limits of contaminated soil to be excavated based on soil analytical results from previous investigations, visual observations, and field screening of soil that is excavated;

2. Identifying contaminated soils to be hauled to the disposal facility;

3. Documenting that activities associated with management of contaminated soil and groundwater are in conformance with the contaminated material management methods for this project as specified herein; and

4. Obtaining the necessary approvals for disposal of contaminated soil from the disposal facility.

5. Identifying contaminated groundwater to be pumped and hauled for treatment and disposal (if dewatering is necessary).

6. Assisting the contractor with laboratory analytical results from previous investigations as necessary for disposal of contaminated water with the Sheboygan Regional Wastewater Treatment Facility. Contractor shall be responsible for coordinating disposal with the Sheboygan Regional Wastewater Treatment Facility, including but not limited to completion of a waste application and any required additional testing.

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

Identify the DNR approved disposal facility that will be used for disposal of contaminated soils, and provide this information to the environmental consultant no later than 30 calendar days prior to commencement of excavation activities in the contaminated areas or at the preconstruction conference, whichever comes first. The environmental consultant will be responsible for obtaining the necessary approvals for disposal of contaminated soils from the disposal facility.

Coordinate with the environmental consultant to ensure that the environmental consultant is present during excavation activities in the contaminated areas. Perform excavation work in each of the contaminated areas on a continuous basis until excavation work is completed. Do not transport contaminated soil or pump contaminated groundwater offsite without prior approval from the environmental consultant.

A.4 Protection of Groundwater Monitoring Wells

Groundwater monitoring wells, including lost or improperly abandoned wells, may be present within the construction limits. Notify the environmental consultant when groundwater monitoring wells are encountered. Protect all groundwater monitoring wells to maintain their integrity. If required by the environmental consultant, adjust wells that do not conflict with utilities, structures, curb and gutter, etc. to be flush with the final grade. For wells that conflict with the previously mentioned items, notify the environmental consultant, and coordinate with the environmental consultant, or for wells that require abandonment, the abandonment or adjustment of the wells by others. The environmental consultant will provide maps indicating the locations of all known monitoring wells, if requested by the contractor.

Coordinate with the environmental consultant to ensure that the environmental consultant is present to abandon and/or document the location of the groundwater monitoring wells during excavation activities.

A.5 Excavation Management Plan Approval

The excavation management plan for this project has been designed to minimize the off-site disposal of contaminated material. The excavation management plan, including these special provisions, has been developed in cooperation with the WDNR. The WDNR's concurrence letter is on file at the Wisconsin Department of Transportation. For further information regarding the investigations, including waste characterization within the project limits, contact Kathie Van Price with the department, at (920) 492-7175.

A.6 Health and Safety Requirements

Supplement standard spec 107.1 with the following:

During excavation activities, expect to encounter soil and/or groundwater contaminated with PVOCs. Site workers taking part in activities that will result in the reasonable probability of exposure to safety and health hazards associated with hazardous materials shall have completed health and safety training that meets the Occupational Safety and Health Administration (OSHA) requirements for Hazardous Waste Operations and Emergency Response (HAZWOPER), as provided in 29 CFR 1910.120.

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

Disposal of contaminated soil at the disposal facility is subject to the facility's safety policies, which include as a minimum:

1. No smoking is allowed on-site.

2. Maximum speed limit of 15 mph on access roads and 5 mph while in active area.

3. All persons entering the active area must wear the following personal protective equipment: hard hats, high visibility clothing, steel toed work boots, safety glasses, and seat belts.

4. Minimum requirement for spacing is as follows:

    a. A minimum 15 foot Safety Zone is required between landfill equipment and all personnel at all times.

    b. Do not back up directly behind the compactor or dozer.

c. Trucks must yield the right-of-way to landfill equipment.

d. 15 feet required between trucks.

5. Only the driver can exit the truck and must stay within 4 feet of the truck. Use of Spotter is prohibited. Helper (if any), must remain in vehicle while unloading.

6. Tailgates of all vehicles may only be opened while in the active area and must be closed prior to exiting the active area.

7. Cleaning out vehicles must be done in designated area, not in the active area. Vehicles must be properly locked out / tagged out according to OSHA during the clean out process.

8. No scavenging is allowed.

9. Horseplay is prohibited.

Violation of the landfill's safety policy will result a verbal or written warning explaining this policy and may result in the loss of dumping privileges.

Immediately report all accidents and injuries at the disposal facility to landfill management.

B (Vacant)

C Construction
Supplement standard spec 205.3 with the following:

The environmental consultant will periodically examine excavated soil during excavations in the areas of known soil contamination within the construction limits.

Control operations in the contaminated areas to minimize the quantity of contaminated soil excavated and to ensure that excavations do not extend beyond the minimum required to construct utilities and highway improvements unless expressly directed to do so by the engineer.

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

On the basis of the results of such field-screening, the material will be designated for disposal as follows:

a. Excavation Common consisting of clean soil and/or clean construction and demolition fill (such as clean soil, boulders, concrete, reinforced concrete, bituminous pavement, bricks, building stone, and unpainted or untreated wood), which under NR 500.08 are exempt materials, or

b. Low-level contaminated material for reuse as fill within the construction limits, or

c. Contaminated soil for off-site treatment and disposal at the WDNR-licensed disposal facility, or

d. Potentially contaminated for temporary stockpiling and additional characterization prior to disposal.

Some material may require additional characterization prior to disposal. Provide for the temporary stockpiling of up to 100 cubic yards of contaminated soil on-site that require additional characterization. Construct and maintain a temporary stockpile of the material according to NR 718.05(3), including, but not limited to, placement of the contaminated soil/fill material on an impervious surface and covering the stockpile with impervious material to prevent infiltration of precipitation. The department's environmental consultant will collect representative samples of the stockpiled material, laboratory-analyze the samples, and advise the contractor, within 10 business days of the construction of the stockpile, of disposal requirements. The stockpiled material shall be disposed either at the WDNR-licensed disposal facility by the contractor or, if characterized as hazardous waste, by the department. As an alternative to temporarily stockpiling contaminated soil/fill material that requires additional characterization, the contractor has the option of suspending excavation in those areas where such soil is encountered until such time as characterization is completed.

Directly load and haul soils designated by the environmental consultant for off-site disposal to the DNR approved disposal facility. Use loading and hauling practices that are appropriate to prevent any spills or releases of contaminated soils or residues. Prior to transport, sufficiently dewater soils designated for off-site disposal so as not to contain free liquids. Verify that the vehicles used to transport contaminated material are licensed for such activity according to applicable state and federal regulations.

When material is encountered outside the above-identified limits of known contamination that appears to have been impacted with petroleum products, or when other obvious potentially contaminated materials are encountered or material exhibits characteristics of industrial-type wastes, such as fly ash, foundry sand, and cinders, or when underground storage tanks are encountered, suspend excavation in that area and notify the engineer and the environmental consultant.

Groundwater may be present within the construction limits. Water generated during dewatering operations (if necessary) is expected to be permitted to discharge to the surface except in the contaminated areas.

Contaminated groundwater generated from dewatering activities within the contaminated areas may exceed the surface water discharge limits for PVOCs specified in the DNR's "General Permit to Discharge under the Wisconsin Pollutant Discharge Elimination System" for "Contaminated Groundwater from Remedial Action Operations" (WPDES Permit No. WI-0046566-5), Table 3.1.

The Sheboygan Regional Wastewater Treatment Facility has granted permission to dispose contaminated water generated during dewatering at the Sheboygan Regional Wastewater Treatment Facility (Facility) provided the following conditions are met:

a. Notify Sharon Thieszen, City of Sheboygan Regional Wastewater Treatment Superintendent at (920)459-3464 prior to transporting contaminated water to the plant. All potentially contaminated groundwater generated during dewatering activities shall be containerized and not discharged to sanitary or storm sewers. Any discharge shall meet all conditions of the most current Sheboygan Regional Wastewater Treatment Facility Sewer Use Ordinance.

b. Do not dispose grit (such as sand, sediment, detritus, etc.) at the Facility.

c. Furnish, install, and maintain a sediment control device (e.g. box, bag) for use prior to disposal of water at the facility.

d. Do not dispose any petroleum free product at the Facility.

e. The discharge concentrations shall meet the Sheboygan Regional Wastewater Treatment Facility requirements, and shall be at a minimum, at the point of discharge:

    - Total petroleum volatile organic compounds (PVOCs) <100 µg/L and the limit for benzene is <0.5 µg/L.

    - PVOC compounds include benzene, ethylbenzene, methyl tert butyl ether, toluene, xylenes, and trimethylbenzenes.

f. Document compliance with the Sheboygan Regional Wastewater Treatment Facility discharge requirements and with the Special Provisions, including water quality sampling and analysis. Contractor shall test water generated during dewatering, and store and analyze samples, and provide copies of such documentation to the engineer.

The Sheboygan Regional Wastewater Treatment Facility may impose a sanitary sewer use fee and flow restrictions. The cost will be based on the amount of BOD (Biochemical Oxygen Demand), TSS (total suspended solids), and TP (Total Phosphorous).

Notify the environmental consultant prior to pumping contaminated groundwater.

Discharging contaminated groundwater to any location other than that approved and provided by the environmental consultant, is at the contractor's cost. If the contractor chooses alternate discharge, at the contractor's cost, obtain DNR concurrence on any dewatering plans, and provide and operate any and all treatment and discharge equipment required.

Employ construction methods and techniques in a manner that will minimize the need for dewatering, and if dewatering is required, minimize the volume of water generated. Take measures to limit groundwater, surface water, and precipitation from entering and exiting excavations in the areas of contamination. Such measures, which may include berming, ditching, or other means, shall be maintained until construction of utilities in the areas of contamination are complete.

Ensure continuous dewatering and excavation safety at all times. Provide, operate, and maintain adequate pumping equipment and drainage and disposal facilities. Notify the engineer of any dewatering activities, and obtain any permits necessary to discharge water. Provide copies of such permits to the engineer. Meet any requirements and pay any costs for obtaining and complying with such permit use. Follow all applicable legislative statues, judiciary decisions, and regulations of the State of Wisconsin.

D Measurement

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

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0195.01	Excavation, Hauling, and Disposal of Petroleum-Contaminated Soil and Management of Petroleum-Contaminated Groundwater	Ton

Payment is full compensation for excavating, segregating, loading, hauling, treatment, and disposal of contaminated soil; tipping fees including applicable taxes and surcharges; obtaining solid waste collection and transportation service operating licenses; assisting in the collection soil samples for field evaluation; and for dewatering of soils prior to transport and disposal of contaminated groundwater, if necessary.

70. Sanitary Manholes 48-Inch Diameter Item SPV.0200.01.

A Description
This work shall consist of furnishing and installing sanitary sewer manholes to the requirements of the plans and the Standard Specifications for Sewer and Water Construction in Wisconsin and as hereinafter provided.

B Materials
Manholes shall be pre-cast concrete. Sanitary manholes shall be provided with cast-in boots or seals meeting the physical requirements of ASTM C443 and the performance requirements of both ASTM C425 and ASTM C443. Sanitary manhole benches shall extend to the crown of the outgoing pipe. Eccentric manhole cones shall be used.

Sanitary manholes of 48-inch diameter shall have joints sealed and anchored in the full inside depth of the bell riser and cone section or approved equal; and they shall be installed using Key-Lock Lift Inserts, manufactured by A-Lok or approved equal in lieu of lift holes.

C Construction
Sanitary sewer manholes shall be constructed according to the plan details and the Standard Specifications for Sewer and Water Construction in Wisconsin.

The manhole castings shall be sealed to the adjusting rings with bituminous sealing material.

D Measurement
The department will measure Sanitary Manholes 48-Inch Diameter by the vertical foot in place, acceptably completed and approved by the City of Sheboygan.

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0200.01	Sanitary Manholes 48-InchDiameter	VF

Payment is full compensation for furnishing all materials including all masonry, outside drop construction, sewer construction, boots, backplastering, waterproofing, steps, and other fittings; for furnishing all excavations, for furnishing all bypassing and monitoring, for sheeting and shoring, forming foundations, and making connections to all new or existing facilities; for removal of existing manholes, for furnishing all bedding material; for backfilling and compaction, testing of backfill compaction, removing sheeting and shoring, cleanup, and restoring the site of the work.

71. Sanitary Sewer Manhole Liner, Item SPV.0200.02.

A Description
This special provision describes all work, materials, and equipment required for substrate rehabilitation of sanitary sewer manhole structures for the purpose of eliminating infiltration, repair of voids, and restoration of the structural integrity of the substrate as a

result of applying a monolithic fiber-reinforced structural cementitious liner to the wall and bench surfaces of brick, concrete, or any other masonry construction material. In addition, this special provision describes the procedures for cleaning, preparation, application and testing. The applicator, approved and trained by the manufacturer, shall furnish all labor, equipment and materials for applying a cementitious mix to form a structural monolithic liner of a minimum 1/2 inch thickness, with machinery specially designed for the application. All aspects of the installations shall be according to the manufacturer's recommendation and per the following specifications which includes:

a. The removal of any loose and unsound material.
b. Cleaning of the area to be sprayed.
c. The elimination of active infiltration prior to liner application.
d. The repair and filling of voids.
e. The repair and sealing of the invert and benches.
f. The spray application of a cementitious mix to form a structural monolithic liner.

B Materials

B.1 Patching Material (Strong-Seal® QSR)

Strong-Seal® QSR, a quick setting fiber reinforced calcium aluminate corrosion resistant cementitious material, shall be used as a patching material and is to be mixed and applied according to manufacturer's recommendations and shall have the following minimum requirements:

Strong-Seal® QSR Minimum Requirements		
Compressive Strength	ASTM C109	>1800 psi, 1 hr. >2600 psi, 24 hrs. >3000 psi, 28 days
Bond	ASTM C882	>1600 psi, 28 days
Calcium Aluminate Cement		Sulfate resistant
Applied Density		105 pcf ± 5 lbs.
Shrinkage	ASTM C596	0% at 90% R.H.
Placement Time		5 to 10 minutes
Set Time		15 to 30 minutes

B.2 Infiltration Control Material (Strong-Seal® Strong-Plug®)

Strong-Plug®, a rapid setting cementitious product specifically formulated for leak control, shall be used to stop minor water infiltration and shall be mixed and applied according to manufacturer's recommendations and shall have the following minimum requirements:

Strong-Seal® Strong-Plug® Minimum Requirements		
Compressive Strength	ASTM C109	>1000 psi, 1hr. >2500 psi, 24 hrs.
Sulfate Resistance	ASTM C267	No weight loss after 15 cycles @ 2000 ppm
Freeze/Thaw	ASTM C666 "Method A"	100 cycles
Pull Out Strength	ASTM C234	14,000 lbs.
Set Time		<1.0 minute

B.3 Grouting Material

(1) Strong-Seal® Grout 250, a cementitious grout, shall be used for stopping very active infiltration and filling voids and shall be mixed and applied according to manufacturer's recommendations. The cementitious grout shall be volume stable, and have a minimum 28 day compressive strength of 250 psi.

(2) Strong-Seal® Grout 1000, a cementitious grout, shall be used for the same application as Grout 250, but is designed for special soil conditions, and shall be used per manufacturer's recommendations. The cementitious grout shall be volume stable and have a minimum 28 day compressive strength of 1000 psi.

(3) Chemical grouts may be used for stopping very active infiltration and shall be mixed and applied per manufacturer's recommendation.

B.4 Strong-Seal® Ms-2a® Liner Material

Strong-Seal® MS-2A® cementitious liner product shall be used to form a structural monolithic liner covering all interior substrate surfaces and shall have the following minimum requirements:

MS-2A®			
Compressive Strength	ASTM C109	28 days	>9000 psi
Tensile Strength	ASTM C496	28 days	>800 psi
Flexural Strength	ASTM C293	28 days	>1200 psi
Shrinkage @90% R.H.	ASTM C596	28 days	0%
Bond	ASTM C882	28 days	Substrate failure
Density, When Applied			134 ± 5lbs/ft3
Freeze/Thaw	ASTM C666	N/A	300 cycles no visible damage

(1) Strong-Seal® MS-2A® shall be made with Type I Portland Cement and shall be used according to manufacturer's recommendations in applications where there is no evidence of sulfide conditions (substrate surface of pH 3.0 or higher). Strong-Seal® MS-2A® product or approved equal shall be factory blended requiring only the addition of water at the jobsite. The bag weight shall be 63-67 pounds. The contents shall have a dry bulk density of 82-¬85 pounds per cubic foot. When mixed with manufactures' recommended amount of water it shall have a wet nozzle density in the range of 129-139 pounds per cubic foot and shall have a typical yield of .57 cubic feet per bag.

(2) Strong-Seal® MS-2A® products shall be reinforced with alkaline resistant fiberglass rods not less than 1/2 inch in length.

(3) The material should meet or exceed industry standards and shall not have any basic ingredient that exceeds EPA maximum allowable limits for any heavy metals.

B.5 Water

Water used to mix product shall be clean and free from contaminants. Questionable water shall be tested by a laboratory per ASTM C-94 procedure. Potable water need not be tested.

B.6 Other Materials

No other material shall be used with the mix described in 2.4.1 without prior approval or recommendation from Strong-Seal® Systems.

B.7 Equipment

(1) Applicator must use approved equipment designed and manufactured by the material supplier specifically for the application of cementitious liners in sanitary systems.

(2) Specially designed machines consisting of a progressive cavity pump and an air system for low velocity spray application of product, shall be used for applying Strong-Seal® Systems products. Equipment is complete with water storage and metering system. SprayMate® models 35C, 35D and Minimate II are approved machines for applying Strong-Seal® Systems products. Other models may be approved after review by Strong-Seal® personnel.

C Construction

C.1 Preparation

(1) Place covers over invert to prevent extraneous material from enter-ing the sewer lines before cleaning.

(2) All foreign material shall be removed from the manhole wall and bench using a high pressure water spray (minimum 3000 psi). If grease, chemicals, previous coatings or other surface contaminants are present, the surface will be cleaned with steam, chemical cleaning compounds or surface abrading as necessary to provide a clean substrate. Loose and protruding brick, mortar, and concrete shall be removed using a mason's hammer and chisel and/or scraper. Fill any large voids with quick setting patching mix Strong-Seal® QSR (2.1).

(3) Active leaks shall be stopped using quick setting, specially formulated mixes, such as Strong-Plug® (2.2) according to manufacturer's recommendations. Some leaks may require weep holes to localize the infiltration during the application. After application the weep holes shall be plugged with the quick setting material Strong-Seal® Strong Plug® (2.2) prior to final coat. When severe infiltration exists, drilling may be required in order to pressure grout using a cementitious grout, Strong-Seal® Grout 250, Strong-Seal® Grout 1000 or chemical grouts (2.3). Manufacturer's recommendations shall be followed when pressure grouting is required.

C.2 Invert Repair

(1) After all preparations have been completed, remove all loose material and wash wall again.

(2) Any bench, invert, or service line repairs shall be made at this time using the quick setting patching mix, Strong-Seal® QSR (2.1) and shall be used per manufacturer's recommendations.

(3) Invert repair shall be performed on all inverts with visible damage or where infiltration is present or when vacuum testing is specified. After blocking flow through the manhole and thoroughly cleaning invert, the quick setting patch material, Strong-Seal® QSR (2.1) shall be applied to the invert in an expeditious manner. The material shall be troweled uniformly onto the damaged invert at a minimum thickness of 1/2 inch at the invert extending out onto the bench of the manhole sufficiently to tie into the structural monolithic liner to be spray applied. The finished invert surfaces shall be smooth and free of ridges. The flow may be re-established in the manhole within 30 minutes after placement of the material.

C.3 Mixing of Liner Materials

(1) For each bag of product, use the amount of water required per manufacturer's recommendations following mixing procedures noted on product bag. Only enough water will be used to produce a mix consistency to allow application of liner material up to one inch thick in a single application without material "sagging" on vertical surface and using the approved equipment for mixing and application.

(2) Prepared mix shall be discharged into a hopper and another batch prepared to occur in such a manner as to allow spraying continuously without interruption until each application is complete.

C.4 Spraying

(1) The surface shall be clean and free of all foreign material and shall be damp without noticeable free water droplets or running water, but totally saturated just prior to the application of material. Materials shall be applied up to 1 inch thick in one or more passes from the bottom of the frame; however, minimum total thickness shall not be less than ½ inch. The surface is then troweled to a relatively smooth finish being careful not to over trowel.

(2) A brush finish shall be applied to the trowel-finished surface. Manufacturer's recommendations shall be followed whenever more than 24 hours have elapsed between applications.

C.5 Bench Application

(1) The wooden covers shall be removed at this time and the bench sprayed with materials mixed per specifications as per 4.3 and spray applied in such a manner that a gradual slope is produced from the walls to the invert with the thickness at the invert to be no less than ½ inch. The wall/bench intersection shall be rounded to a uniform radius the full circumference of the intersection.

C.6 Curing

(1) Caution will be taken to minimize exposure of applied product to quick surface drying and air movement. If time between application of additional coats is to be longer than 15 minutes, place cover over manhole. In extremely hot and arid climates, manhole should be shaded while reconstruction is in progress and a concrete curing agent should be used. Contact manufacturer for curing compound recommendations.

(2) Strong-Seal® MS-2A® liner product shall have the following minimum cure times before being subjected to flow:

Hold Times Before Releasing Flow	
Storm Run-off and Surcharge	8 hrs.
Force Main Impact	12 hrs.

Hold Times Before Allowing Traffic	
After final application of the Strong-Seal® liner product, street traffic shall be held	12 hrs.

C.7 Weather Restrictions

(1) No application shall be made if ambient temperature is below 40 degrees Fahrenheit. No application shall be made to frozen surfaces or if freezing is expected to occur within the substrate within 24 hours after application.

(2) Precautions shall be taken to keep the mix temperatures at time of application below 90 degrees Fahrenheit. Water temperature shall not exceed 80 degrees Fahrenheit. Chill with ice if necessary.

C.8 Product Testing

(1) Four 2-inch cubes shall be cast each day or from every pallet of product used, and shall be properly packaged, labeled and returned to manufacturer for testing according to the owner's or manufacturer's directions for compression strength per ASTM C109 procedure.

C.9 Final Acceptance Testing

(1) At the direction of the City of Sheboygan, the reconstructed structure shall be tested by any one of the following methods:

a. Visually verify the absence of leaks. and perform an exfiltration test.

b. Perform an exfiltration test.

1) For manholes 0 to 6 foot deep, if water loss is 1 inch or less in 5 minutes, manhole reconstruction is acceptable.

2) C9.1.2.2 For manholes over 6 feet deep, if water loss is 1 inch plus 1/8 inch for each additional foot of depth or less in 5 minutes, manhole is acceptable.

c. Vacuum testing per ASTM C1244-93 procedure. Vacuum testing shall not be conducted earlier than 7 days after application.

D Measurement

The department will measure Sanitary Sewer Manhole Liner by the vertical foot, acceptably completed. Measurements will be from the flow line of the lowest pipe to the top of the manhole cover. No deduction will be made for the heights of the casting.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0200.02	Sanitary Sewer Manhole Liner	VF

Payment is full compensation for preparation and repair of the manhole for proper installation of the liner, placement of liner system, testing; and for furnishing all materials.

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 __4__ *(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 __2__ *(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
SHEBOYGAN 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	34.13	20.79	54.92
Cement Finisher	33.95	19.88	53.83
Future Increase(s): Add $1.75 on 6/1/16. Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add $1.40/hr when the Wisconsin Department of Transportation or responsible governing agency requires that work be performed at night under artificial illumination with traffic control and the work is completed after sunset and before sunrise.			
Electrician	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)	40.81	18.33	59.14
Painter	29.87	18.79	48.66
Pavement Marking Operator	30.27	18.93	49.20
Piledriver	30.11	21.09	51.20
Roofer or Waterproofer	30.40	2.23	32.63
Teledata Technician or Installer	25.40	8.07	33.47
Tuckpointer, Caulker or Cleaner	31.55	18.26	49.81
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	15.78	48.43
Heavy Truck Driver - ELECTRICAL LINE CONSTRUCTION ONLY	28.57	13.71	42.28

TRADE OR OCCUPATION	HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
	$	$	$
Light Truck Driver - ELECTRICAL LINE CONSTRUCTION ONLY	26.53	13.09	39.62
Groundman - ELECTRICAL LINE CONSTRUCTION ONLY	22.45	11.84	34.29
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	20.00	1.24	21.24
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)	19.29	0.00	19.29
Railroad Track Laborer	17.00	7.58	24.58

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.	21.00	0.00	21.00
Work Performed on the Great Lakes Including Diver; Wet Tender or Hydraulic Dredge Engineer.	41.65	21.71	63.36
Work Performed on the Great Lakes Including 70 Ton & Over Tug Operator; Assistant Hydraulic Dredge Engineer; Crane or Backhoe Operator; Hydraulic Dredge Leverman or Diver's Tender; Mechanic or Welder.	41.65	21.71	63.36
Work Performed on the Great Lakes Including Deck Equipment Operator or Machineryman (Maintains Cranes Over 50 Tons or Backhoes 115,000 Lbs. or More); Tug, Launch or Loader, Dozer or Like Equipment When Operated on a Barge, Breakwater Wall, Slip, Dock or Scow, Deck Machinery.	36.72	21.15	57.87
Work Performed on the Great Lakes Including Deck Equipment Operator, Machineryman or Fireman (Operates 4 Units or More or Maintains Cranes 50 Tons or Under or Backhoes 115,000 Lbs. or Under); Deck Hand, Deck Engineer or Assistant Tug Operator; Off Road Trucks-Great Lakes ONLY.	36.72	21.15	57.87

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	31.59	16.39
Carpenter	30.48	15.80
Millwright	32.11	15.80
Piledriverman	30.98	15.80
Ironworker	30.86	25.42
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
Painters	24.39	11.72
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.

Proposal ID: 20161213026 Project(s): 4630-05-71, 4630-05-72, 4630-30-60

SECTION: 0001 Roadway Items

Alt Set ID: Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0010	201.0105 Clearing	4.000 STA	_____.____	_____.____
0020	201.0120 Clearing	42.000 ID	_____.____	_____.____
0030	201.0205 Grubbing	4.000 STA	_____.____	_____.____
0040	201.0220 Grubbing	42.000 ID	_____.____	_____.____
0050	204.0100 Removing Pavement	19,389.000 SY	_____.____	_____.____
0060	204.0110 Removing Asphaltic Surface	53.000 SY	_____.____	_____.____
0070	204.0150 Removing Curb & Gutter	5,347.000 LF	_____.____	_____.____
0080	204.0155 Removing Concrete Sidewalk	3,074.000 SY	_____.____	_____.____
0090	204.0195 Removing Concrete Bases	11.000 EACH	_____.____	_____.____
0100	204.0210 Removing Manholes	13.000 EACH	_____.____	_____.____
0110	204.0220 Removing Inlets	17.000 EACH	_____.____	_____.____
0120	204.0245 Removing Storm Sewer (size) 01. 12-Inch or Less	2,451.000 LF	_____.____	_____.____
0130	205.0100 Excavation Common	22,403.000 CY	_____.____	_____.____
0140	213.0100 Finishing Roadway (project) 01. 4630-05-71	1.000 EACH	_____.____	_____.____
0150	213.0100 Finishing Roadway (project) 03. 4630-30-60	1.000 EACH	_____.____	_____.____
0160	305.0110 Base Aggregate Dense 3/4-Inch	449.000 TON	_____.____	_____.____

Proposal ID: 20161213026 Project(s): 4630-05-71, 4630-05-72, 4630-30-60

SECTION: 0001 Roadway Items

Alt Set ID: Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0170	305.0120 Base Aggregate Dense 1 1/4-Inch	9,644.000 TON	_____.____	_____.____
0180	311.0110 Breaker Run	21,014.000 TON	_____.____	_____.____
0190	405.0100 Coloring Concrete WisDOT Red	86.000 CY	_____.____	_____.____
0200	415.0080 Concrete Pavement 8-Inch	115.000 SY	_____.____	_____.____
0210	415.0090 Concrete Pavement 9-Inch	18,913.000 SY	_____.____	_____.____
0220	415.0100 Concrete Pavement 10-Inch	190.000 SY	_____.____	_____.____
0230	415.0210 Concrete Pavement Gaps	11.000 EACH	_____.____	_____.____
0240	416.0160 Concrete Driveway 6-Inch	135.000 SY	_____.____	_____.____
0250	416.0170 Concrete Driveway 7-Inch	1,041.000 SY	_____.____	_____.____
0260	416.0610 Drilled Tie Bars	848.000 EACH	_____.____	_____.____
0270	416.0620 Drilled Dowel Bars	3,954.000 EACH	_____.____	_____.____
0280	416.1710 Concrete Pavement Repair	2,226.000 SY	_____.____	_____.____
0290	416.1720 Concrete Pavement Replacement	748.000 SY	_____.____	_____.____
0300	440.4410 Incentive IRI Ride	3,474.000 DOL	1.00000	3,474.00
0310	455.0605 Tack Coat	165.000 GAL	_____.____	_____.____
0320	465.0105 Asphaltic Surface	6.000 TON	_____.____	_____.____

Proposal ID: 20161213026 Project(s): 4630-05-71, 4630-05-72, 4630-30-60

SECTION: 0001 Roadway Items

Alt Set ID: Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0330	465.0120 Asphaltic Surface Driveways and Field Entrances	174.000 TON	_____.____	_____.____
0340	465.0125 Asphaltic Surface Temporary	378.000 TON	_____.____	_____.____
0350	520.8000 Concrete Collars for Pipe	8.000 EACH	_____.____	_____.____
0360	601.0342 Concrete Curb & Gutter Integral 18-Inch	6,223.000 LF	_____.____	_____.____
0370	601.0405 Concrete Curb & Gutter 18-Inch Type A	430.000 LF	_____.____	_____.____
0380	601.0407 Concrete Curb & Gutter 18-Inch Type D	2,480.000 LF	_____.____	_____.____
0390	601.0409 Concrete Curb & Gutter 30-Inch Type A	30.000 LF	_____.____	_____.____
0400	601.0600 Concrete Curb Pedestrian	329.000 LF	_____.____	_____.____
0410	602.0405 Concrete Sidewalk 4-Inch	22,461.000 SF	_____.____	_____.____
0420	602.0515 Curb Ramp Detectable Warning Field Natural Patina	363.000 SF	_____.____	_____.____
0430	608.0312 Storm Sewer Pipe Reinforced Concrete Class III 12-Inch	1,268.000 LF	_____.____	_____.____
0440	608.0315 Storm Sewer Pipe Reinforced Concrete Class III 15-Inch	134.000 LF	_____.____	_____.____
0450	608.0318 Storm Sewer Pipe Reinforced Concrete Class III 18-Inch	86.000 LF	_____.____	_____.____
0460	608.0324 Storm Sewer Pipe Reinforced Concrete Class III 24-Inch	1,742.000 LF	_____.____	_____.____
0470	608.0330 Storm Sewer Pipe Reinforced Concrete Class III 30-Inch	134.000 LF	_____.____	_____.____

Proposal ID: 20161213026 Project(s): 4630-05-71, 4630-05-72, 4630-30-60

SECTION: 0001 Roadway Items

Alt Set ID: Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0480	608.0412 Storm Sewer Pipe Reinforced Concrete Class IV 12-Inch	54.000 LF	_____.____	_____.____
0490	611.0420 Reconstructing Manholes	10.000 EACH	_____.____	_____.____
0500	611.0430 Reconstructing Inlets	39.000 EACH	_____.____	_____.____
0510	611.0530 Manhole Covers Type J	1.000 EACH	_____.____	_____.____
0520	611.0624 Inlet Covers Type H	28.000 EACH	_____.____	_____.____
0530	611.0639 Inlet Covers Type H-S	1.000 EACH	_____.____	_____.____
0540	611.1230 Catch Basins 2x3-FT	26.000 EACH	_____.____	_____.____
0550	611.2004 Manholes 4-FT Diameter	14.000 EACH	_____.____	_____.____
0560	611.2005 Manholes 5-FT Diameter	2.000 EACH	_____.____	_____.____
0570	611.2006 Manholes 6-FT Diameter	4.000 EACH	_____.____	_____.____
0580	611.3004 Inlets 4-FT Diameter	2.000 EACH	_____.____	_____.____
0590	611.3230 Inlets 2x3-FT	1.000 EACH	_____.____	_____.____
0600	611.8110 Adjusting Manhole Covers	3.000 EACH	_____.____	_____.____
0610	612.0208 Pipe Underdrain Unperforated 8-Inch	720.000 LF	_____.____	_____.____
0620	612.0902.S Insulation Board Polystyrene (inch) 01. 2-INCH	692.000 SY	_____.____	_____.____
0630	612.0902.S Insulation Board Polystyrene (inch) 02. 4-INCH	398.000 SY	_____.____	_____.____

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SECTION: 0001 Roadway Items

Alt Set ID: Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0640	619.1000 Mobilization	1.000 EACH	_____.____	_____.____
0650	620.0300 Concrete Median Sloped Nose	69.000 SF	_____.____	_____.____
0660	624.0100 Water	80.000 MGAL	_____.____	_____.____
0670	625.0100 Topsoil	5,594.000 SY	_____.____	_____.____
0680	627.0200 Mulching	500.000 SY	_____.____	_____.____
0690	628.1504 Silt Fence	625.000 LF	_____.____	_____.____
0700	628.1520 Silt Fence Maintenance	625.000 LF	_____.____	_____.____
0710	628.2008 Erosion Mat Urban Class I Type B	5,094.000 SY	_____.____	_____.____
0720	628.7005 Inlet Protection Type A	26.000 EACH	_____.____	_____.____
0730	628.7010 Inlet Protection Type B	14.000 EACH	_____.____	_____.____
0740	628.7015 Inlet Protection Type C	82.000 EACH	_____.____	_____.____
0750	628.7020 Inlet Protection Type D	6.000 EACH	_____.____	_____.____
0760	628.7560 Tracking Pads	4.000 EACH	_____.____	_____.____
0770	628.7570 Rock Bags	12.000 EACH	_____.____	_____.____
0780	629.0210 Fertilizer Type B	3.870 CWT	_____.____	_____.____
0790	630.0140 Seeding Mixture No. 40	101.000 LB	_____.____	_____.____
0800	630.0200 Seeding Temporary	148.000 LB	_____.____	_____.____

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SECTION: 0001 Roadway Items

Alt Set ID: Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0810	634.0614 Posts Wood 4x6-Inch X 14-FT	5.000 EACH	_____.____	_____.____
0820	634.0616 Posts Wood 4x6-Inch X 16-FT	36.000 EACH	_____.____	_____.____
0830	634.0812 Posts Tubular Steel 2x2-Inch X 12-FT	2.000 EACH	_____.____	_____.____
0840	634.0814 Posts Tubular Steel 2x2-Inch X 14-FT	27.000 EACH	_____.____	_____.____
0850	634.0816 Posts Tubular Steel 2x2-Inch X 16-FT	18.000 EACH	_____.____	_____.____
0860	637.2210 Signs Type II Reflective H	581.380 SF	_____.____	_____.____
0870	637.2215 Signs Type II Reflective H Folding	44.760 SF	_____.____	_____.____
0880	637.2230 Signs Type II Reflective F	63.750 SF	_____.____	_____.____
0890	638.2102 Moving Signs Type II	13.000 EACH	_____.____	_____.____
0900	638.2602 Removing Signs Type II	98.000 EACH	_____.____	_____.____
0910	638.3000 Removing Small Sign Supports	78.000 EACH	_____.____	_____.____
0920	642.5201 Field Office Type C	1.000 EACH	_____.____	_____.____
0930	643.0100 Traffic Control (project) 01. 4630-05-71	1.000 EACH	_____.____	_____.____
0940	643.0100 Traffic Control (project) 03. 4630-30-60	1.000 EACH	_____.____	_____.____
0950	643.0300 Traffic Control Drums	37,470.000 DAY	_____.____	_____.____
0960	643.0410 Traffic Control Barricades Type II	2,142.000 DAY	_____.____	_____.____
0970	643.0420 Traffic Control Barricades Type III	8,694.000 DAY	_____.____	_____.____

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SECTION: 0001 Roadway Items

Alt Set ID: Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0980	643.0705 Traffic Control Warning Lights Type A	14,975.000 DAY	_____.____	_____.____
0990	643.0715 Traffic Control Warning Lights Type C	7,438.000 DAY	_____.____	_____.____
1000	643.0800 Traffic Control Arrow Boards	649.000 DAY	_____.____	_____.____
1010	643.0900 Traffic Control Signs	10,903.000 DAY	_____.____	_____.____
1020	643.1050 Traffic Control Signs PCMS	126.000 DAY	_____.____	_____.____
1030	644.1410.S Temporary Pedestrian Surface Asphalt	9,250.000 SF	_____.____	_____.____
1040	644.1601.S Temporary Curb Ramp	14.000 EACH	_____.____	_____.____
1050	644.1616.S Temporary Pedestrian Safety Fence	500.000 LF	_____.____	_____.____
1060	646.0103 Pavement Marking Paint 4-Inch	330.000 LF	_____.____	_____.____
1070	646.0106 Pavement Marking Epoxy 4-Inch	24,003.000 LF	_____.____	_____.____
1080	646.0126 Pavement Marking Epoxy 8-Inch	1,277.000 LF	_____.____	_____.____
1090	646.0600 Removing Pavement Markings	4,645.000 LF	_____.____	_____.____
1100	647.0153 Pavement Marking Arrows Paint Type 1	3.000 EACH	_____.____	_____.____
1110	647.0163 Pavement Marking Arrows Paint Type 2	2.000 EACH	_____.____	_____.____
1120	647.0166 Pavement Marking Arrows Epoxy Type 2	44.000 EACH	_____.____	_____.____
1130	647.0176 Pavement Marking Arrows Epoxy Type 3	2.000 EACH	_____.____	_____.____

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SECTION: 0001 Roadway Items

Alt Set ID: Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
1140	647.0206 Pavement Marking Arrows Bike Lane Epoxy	8.000 EACH	_____.____	_____.____
1150	647.0306 Pavement Marking Symbols Bike Lane Epoxy	8.000 EACH	_____.____	_____.____
1160	647.0356 Pavement Marking Words Epoxy	8.000 EACH	_____.____	_____.____
1170	647.0406 Pavement Marking Words Bike Lane Epoxy	6.000 EACH	_____.____	_____.____
1180	647.0556 Pavement Marking Stop Line Epoxy 12-Inch	210.000 LF	_____.____	_____.____
1190	647.0606 Pavement Marking Island Nose Epoxy	1.000 EACH	_____.____	_____.____
1200	647.0716 Pavement Marking Diagonal Epoxy 8-Inch	164.000 LF	_____.____	_____.____
1210	647.0726 Pavement Marking Diagonal Epoxy 12-Inch	350.000 LF	_____.____	_____.____
1220	647.0766 Pavement Marking Crosswalk Epoxy 6-Inch	1,869.000 LF	_____.____	_____.____
1230	647.0955 Removing Pavement Markings Arrows	14.000 EACH	_____.____	_____.____
1240	647.0965 Removing Pavement Markings Words	5.000 EACH	_____.____	_____.____
1250	649.0400 Temporary Pavement Marking Removable Tape 4-Inch	17,595.000 LF	_____.____	_____.____
1260	649.0402 Temporary Pavement Marking Paint 4-Inch	6,400.000 LF	_____.____	_____.____
1270	649.0801 Temporary Pavement Marking Removable Tape 8-Inch	270.000 LF	_____.____	_____.____

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SECTION: 0001 Roadway Items

Alt Set ID: Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
1280	649.1000 Temporary Pavement Marking Stop Line Removable Tape 12-Inch	165.000 LF	_____.____	_____.____
1290	650.4000 Construction Staking Storm Sewer	49.000 EACH	_____.____	_____.____
1300	650.4500 Construction Staking Subgrade	3,191.000 LF	_____.____	_____.____
1310	650.5500 Construction Staking Curb Gutter and Curb & Gutter	2,480.000 LF	_____.____	_____.____
1320	650.7000 Construction Staking Concrete Pavement	3,191.000 LF	_____.____	_____.____
1330	650.8500 Construction Staking Electrical Installations (project) 01. 4630-05-71	LS	LUMP SUM	_____.____
1340	650.8500 Construction Staking Electrical Installations (project) 03. 4630-30-60	LS	LUMP SUM	_____.____
1350	650.9910 Construction Staking Supplemental Control (project) 01. 4630-05-71	LS	LUMP SUM	_____.____
1360	650.9910 Construction Staking Supplemental Control (project) 03. 4630-30-60	LS	LUMP SUM	_____.____
1370	650.9920 Construction Staking Slope Stakes	3,191.000 LF	_____.____	_____.____
1380	652.0225 Conduit Rigid Nonmetallic Schedule 40 2-Inch	4,551.000 LF	_____.____	_____.____
1390	652.0235 Conduit Rigid Nonmetallic Schedule 40 3-Inch	1,520.000 LF	_____.____	_____.____
1400	652.0800 Conduit Loop Detector	300.000 LF	_____.____	_____.____
1410	653.0105 Pull Boxes Steel 12x24-Inch	4.000 EACH	_____.____	_____.____

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SECTION: 0001 Roadway Items

Alt Set ID: Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
1420	653.0115 Pull Boxes Steel 12x36-Inch	12.000 EACH	_____.____	_____.____
1430	653.0140 Pull Boxes Steel 24x42-Inch	7.000 EACH	_____.____	_____.____
1440	653.0905 Removing Pull Boxes	33.000 EACH	_____.____	_____.____
1450	654.0101 Concrete Bases Type 1	8.000 EACH	_____.____	_____.____
1460	654.0105 Concrete Bases Type 5	31.000 EACH	_____.____	_____.____
1470	654.0113 Concrete Bases Type 13	2.000 EACH	_____.____	_____.____
1480	654.0217 Concrete Control Cabinet Bases Type 9 Special	1.000 EACH	_____.____	_____.____
1490	654.0230 Concrete Control Cabinet Bases Type L30	2.000 EACH	_____.____	_____.____
1500	655.0230 Cable Traffic Signal 5-14 AWG	1,212.000 LF	_____.____	_____.____
1510	655.0240 Cable Traffic Signal 7-14 AWG	1,589.000 LF	_____.____	_____.____
1520	655.0260 Cable Traffic Signal 12-14 AWG	1,250.000 LF	_____.____	_____.____
1530	655.0270 Cable Traffic Signal 15-14 AWG	1,429.000 LF	_____.____	_____.____
1540	655.0290 Cable Traffic Signal 21-14 AWG	669.000 LF	_____.____	_____.____
1550	655.0305 Cable Type UF 2-12 AWG Grounded	880.000 LF	_____.____	_____.____
1560	655.0515 Electrical Wire Traffic Signals 10 AWG	3,260.000 LF	_____.____	_____.____
1570	655.0610 Electrical Wire Lighting 12 AWG	2,160.000 LF	_____.____	_____.____

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SECTION: 0001 Roadway Items

Alt Set ID: Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
1580	655.0620 Electrical Wire Lighting 8 AWG	3,628.000 LF	_____.____	_____.____
1590	655.0625 Electrical Wire Lighting 6 AWG	8,906.000 LF	_____.____	_____.____
1600	655.0630 Electrical Wire Lighting 4 AWG	2,252.000 LF	_____.____	_____.____
1610	655.0700 Loop Detector Lead In Cable	1,918.000 LF	_____.____	_____.____
1620	655.0800 Loop Detector Wire	910.000 LF	_____.____	_____.____
1630	655.0900 Traffic Signal EVP Detector Cable	890.000 LF	_____.____	_____.____
1640	656.0200 Electrical Service Meter Breaker Pedestal (location) 01. STH 42 & North Ave Signals	LS	LUMP SUM	_____.____
1650	656.0200 Electrical Service Meter Breaker Pedestal (location) 02. STH 42 and North Ave Lighting	LS	LUMP SUM	_____.____
1660	656.0200 Electrical Service Meter Breaker Pedestal (location) 03. STH 42 and 26th St Lighting	LS	LUMP SUM	_____.____
1670	657.0100 Pedestal Bases	10.000 EACH	_____.____	_____.____
1680	657.0425 Traffic Signal Standards Aluminum 15-FT	6.000 EACH	_____.____	_____.____
1690	657.0430 Traffic Signal Standards Aluminum 10-FT	4.000 EACH	_____.____	_____.____
1700	657.1360 Install Poles Type 13	2.000 EACH	_____.____	_____.____
1710	657.1550 Install Monotube Arms 50-FT	2.000 EACH	_____.____	_____.____

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SECTION: 0001 Roadway Items

Alt Set ID: Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
1720	657.1812 Install Luminaire Arms Steel 12-FT	2.000 EACH	_____.____	_____.____
1730	658.0110 Traffic Signal Face 3-12 Inch Vertical	16.000 EACH	_____.____	_____.____
1740	658.0115 Traffic Signal Face 4-12 Inch Vertical	10.000 EACH	_____.____	_____.____
1750	658.0120 Traffic Signal Face 5-12 Inch Vertical	4.000 EACH	_____.____	_____.____
1760	658.0215 Backplates Signal Face 3 Section 12-Inch	16.000 EACH	_____.____	_____.____
1770	658.0220 Backplates Signal Face 4 Section 12-Inch	10.000 EACH	_____.____	_____.____
1780	658.0225 Backplates Signal Face 5 Section 12-Inch	4.000 EACH	_____.____	_____.____
1790	658.0416 Pedestrian Signal Face 16-Inch	8.000 EACH	_____.____	_____.____
1800	658.0500 Pedestrian Push Buttons	8.000 EACH	_____.____	_____.____
1810	658.0600 Led Modules 12-Inch Red Ball	20.000 EACH	_____.____	_____.____
1820	658.0605 Led Modules 12-Inch Yellow Ball	20.000 EACH	_____.____	_____.____
1830	658.0610 Led Modules 12-Inch Green Ball	20.000 EACH	_____.____	_____.____
1840	658.0615 Led Modules 12-Inch Red Arrow	10.000 EACH	_____.____	_____.____
1850	658.0620 Led Modules 12-Inch Yellow Arrow	24.000 EACH	_____.____	_____.____
1860	658.0625 Led Modules 12-Inch Green Arrow	14.000 EACH	_____.____	_____.____
1870	658.0635 Led Modules Pedestrian Countdown Timer 16-Inch	8.000 EACH	_____.____	_____.____

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Alt Set ID: Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
1880	658.5069 Signal Mounting Hardware (location) 01. STH 42 & North Ave	LS	LUMP SUM	_____.____
1890	658.5069 Signal Mounting Hardware (location) 03. STH 42 & CTH J/CTH DL	LS	LUMP SUM	_____.____
1900	659.1120 Luminaires Utility LED B	4.000 EACH	_____.____	_____.____
1910	659.2130 Lighting Control Cabinets 120/240 30-Inch	2.000 EACH	_____.____	_____.____
1920	661.0200 Temporary Traffic Signals for Intersections (location) 01. STH 42 & North Ave	LS	LUMP SUM	_____.____
1930	690.0150 Sawing Asphalt	1,351.000 LF	_____.____	_____.____
1940	690.0250 Sawing Concrete	17,768.000 LF	_____.____	_____.____
1950	715.0415 Incentive Strength Concrete Pavement	5,672.700 DOL	1.00000	5,672.70
1960	ASP.1T0A On-the-Job Training Apprentice at $5.00/HR	2,000.000 HRS	5.00000	10,000.00
1970	ASP.1T0G On-the-Job Training Graduate at $5.00/HR	1,320.000 HRS	5.00000	6,600.00
1980	SPV.0060 Special 03. Inlet Covers Temporary	5.000 EACH	_____.____	_____.____
1990	SPV.0060 Special 04. Storm Sewer Manhole Covers Type J-Modified	19.000 EACH	_____.____	_____.____
2000	SPV.0060 Special 05. Traffic Signal Controller and Cabinet	1.000 EACH	_____.____	_____.____
2010	SPV.0060 Special 06. Poles Type 13	4.000 EACH	_____.____	_____.____

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Alt Set ID: Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
2020	SPV.0060 Special 10. Monotube Arms 35-Ft	2.000 EACH	_____.____	_____.____
2030	SPV.0060 Special 12. Monotube Arms 50-Ft	2.000 EACH	_____.____	_____.____
2040	SPV.0060 Special 15. Concrete Bases Type 13 Contractor Supplied Anchor Bolts and Rods	4.000 EACH	_____.____	_____.____
2050	SPV.0060 Special 20. Lighting Assembly	31.000 EACH	_____.____	_____.____
2060	SPV.0060 Special 26. Sanitary Manhole Cover Type J-Specia	6.000 EACH	_____.____	_____.____
2070	SPV.0060 Special 27. Internal Chimney Seal	19.000 EACH	_____.____	_____.____
2080	SPV.0060 Special 28. Lateral Connection Sealing	3.000 EACH	_____.____	_____.____
2090	SPV.0060 Special 30. Adjusting Water Valve Boxes	16.000 EACH	_____.____	_____.____
2100	SPV.0075 Special 01. Street Sweeping	100.000 HRS	_____.____	_____.____
2110	SPV.0090 Special 03. Storm Sewer Pipe PVC 8-Inch	12.000 LF	_____.____	_____.____
2120	SPV.0090 Special 04. Storm Sewer Pipe PVC 12-Inch	24.000 LF	_____.____	_____.____
2130	SPV.0090 Special 05. Televising Storm Sewer	3,400.000 LF	_____.____	_____.____
2140	SPV.0090 Special 10. Abandoning Sanitary Sewer 10-Inch	110.000 LF	_____.____	_____.____
2150	SPV.0090 Special 11. Remove Sanitary Sewer	1,001.000 LF	_____.____	_____.____
2160	SPV.0090 Special 12. Sanitary Sewer Cured-In-Place Liner	1,104.000 LF	_____.____	_____.____

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Alt Set ID: Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
2170	SPV.0090 Special 14. Sanitary Sewer 8 Inch	764.000 LF	_____.____	_____.____
2180	SPV.0090 Special 16. Sanitary Sewer Laterals 6 Inch	228.000 LF	_____.____	_____.____
2190	SPV.0090 Special 17. Televising Sanitary Sewer	764.000 LF	_____.____	_____.____
2200	SPV.0090 Special 20. Railing Steel Pedestrian, Type C3, Special	230.000 LF	_____.____	_____.____
2210	SPV.0105 Special 01. Concrete Pavement Joint Layout	LS	LUMP SUM	_____.____
2220	SPV.0105 Special 03. Grading and Shaping for Widening Calumet Drive	LS	LUMP SUM	_____.____
2230	SPV.0105 Special 05. Construction Staking Sanitary Sewer	LS	LUMP SUM	_____.____
2240	SPV.0105 Special 06. Remove and Salvage Traffic Signals STH 42 & North Ave	LS	LUMP SUM	_____.____
2250	SPV.0105 Special 10. Vehicular Video Detection System 4-Camera (Calumet Dr and North Ave)	LS	LUMP SUM	_____.____
2260	SPV.0105 Special 12. Traffic Signal Preemption and Priority Control System	LS	LUMP SUM	_____.____
2270	SPV.0105 Special 13. Remove Traffic Signals STH 42 & CTH J / DL	LS	LUMP SUM	_____.____
2280	SPV.0120 Special 01. Water for Seeded Areas	7.000 MGAL	_____.____	_____.____
2290	SPV.0165 Special 01. Thickened Edge Concrete Sidewalk	1,587.000 SF	_____.____	_____.____
2300	SPV.0165 Special 02. Concrete Retaining Curb	420.000 SF	_____.____	_____.____

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Alt Set ID: Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
2310	SPV.0180 Special 01. Sealing Concrete Pavement Joints	19,781.000 SY	_____.____	_____.____
2320	SPV.0195 Special 01. Exc Haul & Disposal Of Petrol Contam Soil & Manage Petrol Contam Groundwater	500.000 TON	_____.____	_____.____
2330	SPV.0200 Special 01. Sanitary Sewer Manholes 48-Inch Diameter	56.480 VF	_____.____	_____.____
2340	SPV.0200 Special 02. Sanitary Sewer Manhole Liner	64.000 VF	_____.____	_____.____
	Section: 0001		Total:	_____.____
			Total Bid:	_____.____

PLEASE ATTACH SCHEDULE OF ITEMS HERE