

HIGHWAY WORK PROPOSAL

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

Proposal Number:

Ø 6

COUNTY	STATE PROJECT ID	FEDERAL PROJECT ID	PROJECT DESCRIPTION	HIGHWAY
Washington	2475-00-70	WISC 2015 488	Orchard Road, Village of Germantown Donges Bay Road Intersection	STH 145

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: September 15, 2015 Time (Local Time): 9:00 AM	Firm Name, Address, City, State, Zip Code
Contract Completion Time One Hundred Six (106) Working Days	SAMPLE NOT FOR BIDDING PURPOSES
Assigned Disadvantaged Business Enterprise Goal 10%	This contract is not subject to 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 Concrete pavement, HMA pavement, storm sewer, sanitary sewer and water main, base aggregate, excavation common, signing, pavement marking, overhead sign support, and restoration.	
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 ExpressTM web site.
 2. Use ExpediteTM software to enter a unit price for every item in the schedule of items.
 3. Submit the bid according to the requirements of ExpediteTM software and the Bid ExpressTM 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 ExpressTM 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 ExpediteTM 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 ExpressTM web site to assure that the schedule of items is prepared properly.

- (2) Staple an 8 1/2 by 11 inch printout of the ExpediteTM 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 ExpediteTM 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 ExpediteTM 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 ExpediteTM generated schedule of items is not the same on each page.
 2. The check code printed on the printout of the ExpediteTM generated schedule of items is not the same as the check code for that proposal provided on the diskette or CD ROM.
 3. The diskette or CD ROM is not submitted at the time and place the department designates.

C Waiver of Electronic Submittal

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

PROPOSAL BID BOND

DT1303 1/2006

Wisconsin Department of Transportation

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

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

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

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

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

PRINCIPAL

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

(Signature and Title)

(Company Name)

(Signature and Title)

(Company Name)

(Signature and Title)

(Company Name)

(Signature and Title)

NOTARY FOR PRINCIPAL

(Date)

State of Wisconsin)
) ss.
_____ County)

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

(Signature, Notary Public, State of Wisconsin)

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

(Date Commission Expires)

Notary Seal

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

(Signature of Attorney-in-Fact)

NOTARY FOR SURETY

(Date)

State of Wisconsin)
) ss.
_____ County)

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

(Signature, Notary Public, State of Wisconsin)

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

(Date Commission Expires)

Notary Seal

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

CERTIFICATE OF ANNUAL BID BOND

DT1305 8/2003

Wisconsin Department of Transportation

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

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

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

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

(Signature of Authorized Contractor Representative)

(Date)

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.

[illegible]

DECEMBER 2000

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

Instructions for Certification

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

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

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

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

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

Special Provisions

Table of Contents

Article	Description	Page #
1.	General.....	4
2.	Scope of Work.	4
3.	Prosecution and Progress.	4
4.	Lane Rental Fee Assessment.	6
5.	Traffic.	7
6.	Holiday Work Restrictions.	9
7.	Utilities.....	10
8.	Municipality Acceptance of Sanitary Sewer and Water Main Construction.	15
9.	Referenced Construction Specifications.	15
10.	Other Contracts.	15
11.	Information to Bidders, U.S. Army Corps of Engineers Section 404 Permit.....	16
12.	Construction Over or Adjacent to Navigable Waters.	16
13.	Erosion Control.....	16
14.	Maintaining Drainage.	18
15.	Notice to Contractor – Emerald Ash Borer.....	18
16.	Notice to Contractor, Topsoiling and Restoration.	22
17.	Public Convenience and Safety.	22
18.	Coordination with Businesses and Residents.	22
19.	Abandoning Sewer, Item 204.0291.S.	23
20.	Select Borrow.....	23
21.	Backfill Coarse Aggregate Size No. 1, Item 209.0300.S.01.....	23
22.	QMP Subgrade.....	24
23.	QMP Base Aggregate.	34
24.	Base Aggregate Dense 1¼-Inch for Lower Base Layers.....	42
25.	Protection of Concrete.	42
26.	Concrete Maturity Testing.	42
27.	QMP HMA Pavement Nuclear Density.....	44
28.	Adjusting Manhole Covers.	51
29.	Cover Plates Temporary, Item 611.8120.S.	52
30.	Insulation Board Polystyrene, 4-Inch, Item 612.0902.S.01.....	52
31.	Landscape Planting Surveillance and Care Cycles.....	53
32.	Sign Supports Concrete Masonry.	53
33.	Signs Type I and II.....	54
34.	Pavement Marking Grooved Wet Reflective Contrast Tape, 8-Inch, Item 646.0843.S.	55
35.	Slurry Backfill, Item SPV.0035.01.	58
36.	Lighting Control Cabinet 120/240 24-Inch, Item SPV.0060.01.....	58
37.	Manhole 9-FT Diameter, Item SPV.0060.03.....	59
38.	Catch Basin 8-FT, Item SPV.0060.04.	60

39.	Pavement Marking Grooved Preformed Thermoplastic Arrows Type 2, Item SPV.0060.05; Arrows Type 3R, Item SPV.0060.06; Words, Item SPV.0060.07.	61
40.	Concrete Curb and Gutter 18-Inch Type A Full Depth Reverse Slope Gutter, Item SPV.0090.01.	64
41.	Pavement Marking Grooved Preformed Thermoplastic Crosswalk 6-Inch, Item SPV.0090.02; Yield Line 18-Inch, Item SPV.0090.03.	64
42.	Split Rail Fence SPV.0090.04.	68
43.	Pavement Marking Grooved Preformed Plastic Tape 4-Inch Yellow, Item SPV.0090.05; 12-Inch Yellow, Item SPV.0090.06.	68
44.	BioLogs Delivered, Item SPV.0090.21; BioLog Installed, Item SPV.0090.22.	71
45.	Lighting System Integrator, Item SPV.0105.01.	71
46.	Lighting System Survey, Item SPV.0105.02.	73
47.	Concrete Pavement Joint Layout, Item SPV.0105.03.	73
48.	Concrete Sidewalk 8-Inch, Item SPV.0165.01.	74
49.	Concrete Sidewalk 5-Inch Colored, Item SPV.0165.02; 8-Inch Colored, Item SPV.0165.03.	75
50.	Concrete Pavement Colored 8-Inch, Item SPV.0180.01.	75
51.	Geotextile Fabric Type FF, Item SPV.0180.02.	78
52.	Sanitary Sewer - Abandon 4-Inch PVC Sanitary Service at Main, SPV.0060.14; Install R-1661 Bolt Down Casting, SPV.0060.21; Verify Exact Location and Elevation of Village Utilities, SPV.0060.24; Adjusting Sanitary Sewer Manhole Chimneys and Install New Castings, SPV.0060.35; Salvage Castings, SPV.0060.37; Install Tracer Wire, SPV.0090.10; Install 10-Inch PVC Sanitary Sewer Main Pipe, SPV.0090.11; Install 8-Inch PVC Sanitary Sewer Main Pipe, SPV.0090.12; Install 6-Inch PVC Service Off Sewer Main, SPV.0090.17; Extend Existing 6-Inch PVC Service; SPV.0090.19; Install 48-Inch I.D. Precast Concrete Sanitary Manhole Structure, SPV.0200.01; Rebuild 48-Inch I.D. Precast Concrete Sanitary Manhole Structure, SPV.0200.02; Install HDPE Adjusting Rings, SPV.0200.03; Install Concrete Adjusting Rings, SPV.0200.04.	79
53.	Water Main – Remove Only Valve Box, SPV.0060.02; Minor Adjustment, SPV.0060.08; Replacing Water Boxes Top Section, SPV.0060.09; Replacing Water Boxes Mid-Section, SPV.0060.10; Replacing Water Boxes Full Depth, SPV.0060.11; Remove 12-Inch Gate Valve and Box Water Main Pipe, SPV.0060.12; Install 12-Inch D.I. Cap, SPV.0060.13; Remove Existing Hydrant, Aux. Valve and D.I. Tee, SPV.0060.15; Relocate Existing Hydrant, Aux. Valve and D.I. Tee, SPV.0060.16; Remove Existing Hydrant, SPV.0060.17; Relocate Existing Hydrant, SPV.0060.18; Install Marker Flag, SPV.0060.19; Install 12-Inch x 6-Inch Live Tap Tee, SPV.0060.20; Remove and Salvage Hydrant and Auxillary Valve, SPV.0060.22; Install 12-Inch D.I. End Pipe Cap, SPV.0060.23; Abandon 1-Inch Water Service at Main, SPV.0060.25; Install 16-Inch Stainless Steel Band, SPV.0060.26; Install 12-Inch Stainless Steel Band, SPV.0060.27; Remove Curb Stop Box, SPV.0060.28; Install 12-Inch Mainline Gate Valve and Box, SPV.0060.29; Install 8-Inch Mainline Gate Valve and Box, SPV.0060.30; Install Hydrant Only, SPV.0060.31; Install Hydrant Assembly, SPV.0060.32; Install 16-Inch x 8-Inch Water Main Live Tap, SPV.0060.33; Relocate Existing Water Main Pipe, SPV.0060.34; Adjusting Water Valve Manhole Chimneys and	

Re-Use Castings, SPV.0060.36; Install 6-Inch Gate Valve and Box, SPV.0060.38; 2-Inch Corporation Valve, SPV.0060.39; 2-Inch Curb Stop Valve, SPV.0060.40; 2-Inch Curb Stop Box, SPV.0060.41; Install 6-Inch D.I. End Pipe Cap, SPV.0060.42; Slurry Fill 12-Inch PVC Water Main Pipe, SPV.0090.07; Remove 12-Inch PVC Water Main Pipe, SPV.0090.08; Install 6-Inch PVC Lead Pipe, SPV.0090.09; Install Tracer Wire, SPV.0090.10; Install 12-Inch C-900 PVC Water Main Pipe, SPV.0090.13; Install 8-Inch C-900 PVC Water Main Pipe, SPV.0090.14; Install 6-Inch C-900 PVC Water Main Pipe, SPV.0090.15; Install 16-Inch C-900 PVC Water Main Pipe, SPV.0090.16; Install 6-Inch PVC Water Service, SPV.0090.18; Install 2-Inch HDPE Water Service Directionally Drilled; SPV.0090.20. 92

SPECIAL PROVISIONS

1. General.

Perform the work under this construction contract for Project 2475-00-70, Orchard Road, Village of Germantown, Donges Bay Road Intersection, STH 145, Washington County, Wisconsin as the plans show and execute the work as specified in the State of Wisconsin, Department of Transportation, Standard Specifications for Highway and Structure Construction, 2015 Edition, as published by the department, and these special provisions.

If all or a portion of the plans and special provisions are developed in the SI metric system and the schedule of prices is developed in the US standard measure system, the department will pay for the work as bid in the US standard system.

100-005 (20141107)

2. Scope of Work.

The work under this contract shall consist of excavation common, storm sewer removals, storm sewer, base aggregate, curb and gutter, HMA pavement, concrete pavement including HES concrete, lighting, signing, pavement marking, sanitary sewer and water main, overhead sign support, erosion control, restoration and all incidental items necessary to complete the work as shown on the plans and included in the proposal and contract.

104-005 (20090901)

3. Prosecution and Progress.

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

Provide the time frame for construction of the project within the 2016 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 10 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.

Note: A hard closure does not permit any traffic through the barricades. A soft closure is a closure using the 50-foot offset between the barricades that allow local traffic to access the work zone. Both types of traffic control closures are noted below within the Phasing text.

A summary of the work within each stage is as follows:

Phase 1

Construct segments of watermain located beneath the existing Donges Bay Road. Install enough watermain to avoid interfering with vehicular traffic in subsequent stages. Contractor is allowed to close Donges Bay Road east of STH 145 for two consecutive working days to complete this work. Donges Bay Road shall be re-opened to traffic by 7:00 PM of the second working day.

Phase 2

Construct segments of watermain, sanitary sewer and storm sewer within the construction limits north of Donges Bay Road. Contractor will be allowed to close STH 145 north of Donges Bay Road between the hours of 9:00 AM and 4:00 PM daily for a period of four weeks to complete watermain and sanitary sewer construction and sufficient storm sewer to continue storm sewer work in subsequent phases. No closures are allowed on Saturdays or Sundays. Construct temporary road segments north of Donges Bay Road.

Phase 3

Continue construction of temporary road along STH 145. Build portions of STH 145 along the east side of existing STH 145. Construct east and west portions of Donges Bay Road.

Phase 4

Construct southbound side of STH 145. Install storm sewer within workzones.

During Phase 4, the St. John's United Church of Christ Fall Country Arts, Crafts, and Antique Flea Market will be held. The market will be held the second Saturday in September, on September 12, 2015, between the hours of 9:00 AM - 4:00 PM. The contractor shall confirm if the second weekend in September, in 2016, is the same weekend for this market and accommodate the market by shutting down operations at noon the Friday prior to the market. St. John's United Church of Christ is located at N104 W14181 Donges Bay Road, Germantown, WI. The contractor can call (262) 251-0365 for more information.

Phase 5

Construct the remaining portions of the median curb & gutter, sidewalk on north and south legs of the intersection. These areas will utilize the shoulder closure or lane shift details found in the standard detail drawings. Complete all remaining concrete and curb and gutter and landscaping of the roundabout. Remove and restore all temporary roadway segments. Some of this work must be completed while the northbound traffic is still out on the temporary pavement. The initial work zone area for the northbound STH 145 is crosshatched and noted on the plan set. This work zone area must be completed before sliding traffic over; pulling out temporary pavement and completing the outside curb line, sidewalk and providing restoration. Phase 5 traffic control shows one side of the switch, inside pavement marking that will be used once the proposed through lane and likely the shoulder are paved. The contractor shall figure out the best logical match, while maintaining an 11' through lane and keeping the finished surface quality in mind. The

south end work shall be completed as follows: inside work zone, outside traffic and then swap, completing outside work, while traffic is switched to the newly constructed proposed facility.

Contractor Coordination

Hold weekly scheduling meetings to discuss the near term schedule activities, address any long-term schedule issues, and discuss any relevant technical issues. Develop a rolling three week schedule identifying the previous week worked and a two week “look ahead”. Provide sufficient detail to include actual and planned activities and all the subcontractors for offsite and construction activities, addressing all activities including lane closure schedules to be performed and identifying issues requiring engineering action or input. Submit plans for all traffic control for review by the engineer and approval a minimum of one week prior to implementation.

4. Lane Rental Fee Assessment.

A General

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

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

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

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

A.1 Lane Rental Fee Assessment

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

\$500 per lane per 15 minutes

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

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

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

B (Vacant)

C (Vacant)

D Measurement

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

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

E (Vacant)

5. Traffic.

General

The construction sequence, including the associated traffic control, shall be substantially accomplished as detailed in the Traffic Control Plans, and as described herein.

Maintain access at all times to all driveways located along the STH 145 and Donges Bay Road, and all the other side roads within the project limits unless otherwise noted in the plans. Notify the property occupant 5 days in advance of the driveway reconstruction to verify closure or staged driveway construction methods. Some driveways with adequate width shall be built half at a time, with the 1st half receiving high early strength concrete.

Coordinate traffic requirements under this contract with other adjacent and concurrent department or local municipality projects. Implementing and coordinate with other contractors all traffic control as shown on the plans. Modifications to the traffic control plan may be required by the engineer to be safe and consistent with adjacent work by others. Project 2712-00-71 will be constructed concurrently. The contractors shall coordinate with each other to eliminate any duplication, eliminate conflicting traffic control, and to provide the least impact to the residents.

Unless detailed in the plans, do not begin or continue any work that closes traffic lanes outside the allowed time periods specified in this article.

Do not store equipment, vehicles, or materials on adjacent streets beyond the project limits without specific approval of the engineer.

Advanced Notification

Provide the following minimum advance notification to the engineer for incorporation into the Wisconsin Lane Closure System.

Local Street openings/closings	7 calendar days
Project Start	14 calendar days
Construction stage changes	14 calendar days
Detours	14 calendar days

Notify the engineer and WisDOT Statewide Traffic Operations Center, (414) 227-2142, if there are any changes in the schedule, early completions, or cancellations of scheduled work.

Staging

Perform construction operations on STH 145 in stages as shown in the traffic control/construction staging plan. The construction stages are:

Project 2475-00-70

A summary of the work within each stage is as follows:

Phase 1

STH 145 is open to through traffic in both directions. STH 145 is a two lane rural roadway, one lane in each direction. Donges Bay Road shall be open on the west leg of the intersection and closed on the east leg, with a hard closure. Donges Bay Road is also a two lane rural roadway, with one lane in each direction.

Phase 2

Phase 2 shall have STH 145 closed on the north leg for a 4 week period, over the middle of the day, between rush hours. STH 145 can be shut down between the hours of 9:00 AM and 4:00 PM Donges Bay Road shall be open to through traffic along both east and west legs of the intersection. STH 145 south leg will also remain open. Northbound traffic on STH 145 shall have the option of following a detour along the east or west leg of the intersection.

Phase 3

Keep the 2 lanes of STH 145 open (one northbound, one southbound) to through traffic throughout this phase. No turns shall be permitted at Donges Bay Road, since a hard closure at the side road will be in place. Donges Bay Road shall have a soft closure at the far east and west project limits, permitting local traffic to access Donges Bay Road from the far west and far east end construction limits. The hard closure / detour shall remain in effect until the end of Phase 4.

Phase 4

Keep the 2 lanes of STH 145 open (one northbound, one southbound) to through traffic throughout this phase. Southbound STH 145 traffic shall now be shifted onto the new roadway, east of the existing STH 145. Southbound STH 145 traffic shall travel on temporary pavement in many areas, including the south leg median, central island, north median and temporary pavement along the far north end of the north leg. Donges Bay Road remains closed at STH 145 with a hard closure, while the construction limits still have the soft closure, “closed to through traffic” signage. At the end of Phase 4, the hard closure at STH 145 and Donges Bay Road intersection is removed and Donges Bay Road is fully open to traffic. Full operation of the roundabout circle is not permitted however. Maintain sidewalk closures throughout this stage, through the end of the project. All roadways are now open to through traffic with the exception of the roundabout lane on the north side and south side. No left turn movements shall be permitted until the end of Phase 5.

Phase 5

Restrict use in sidewalks, paths and ramps and maintain closure of these areas until the end of Phase 5.

STH 145 and Donges Bay Road are open to traffic, with one lane in each direction. The roundabout circle and through or left movements are prohibited. Phase 5 also requires and inside / outside traffic control switch in order to fully complete the proposed paving and median work. Complete the paving from the northbound reference line out to the east to a logical joint or match line, between Stations 481NB+25 and 484NB+50. This work must be completed while the northbound traffic is still out on the temporary paving from installed in Phase 3, utilized in Phase 4. Maintain the northbound through traffic on the Phase 4 northbound lane layout until the proposed northbound through lane work is completed. The initial work zone area for this northbound STH 145 Phase 5 is crosshatched and noted on the plan set. This work zone area must be completed before sliding traffic over; pulling out temporary pavement and completing the outside curb line, sidewalk and providing restoration.

Phase 5 traffic control shows one side of the switch, inside pavement marking that will be used once the proposed through lane and likely the shoulder are paved.

6. Holiday Work Restrictions.

Do not perform work on, nor haul materials of any kind along or across any portion of the highway carrying STH 145 traffic, and entirely clear the traveled way and shoulders of such portions of the highway of equipment, barricades, signs, lights, and any other material that might impede the free flow of traffic during the following holiday periods:

- From noon Friday, March 25, 2016 to 7:00 AM Monday, March 28, 2016 for Easter;
- From noon Friday, May 27, 2016 to 7:00 AM Tuesday, May 31 for Memorial Day;
- From noon Friday, July 1, 2016 to 7:00 AM Tuesday, July 5, 2016 for Independence Day;
- From noon Friday, September 2, 2016 to 7:00 AM Tuesday, September 6, 2016 for Labor Day;
- From noon Friday, September 9, 2016 to 7:00 AM Monday, September 12, 2016 for St. John United Church of Christ Fall Country Arts, Crafts, and Antique Flea Market;
- From noon Wednesday, November 23, 2016 to 7:00 AM Monday, November 28, 2016 for Thanksgiving.

107-005 (20050502)

7. Utilities.

This contract does come under the provision of Administrative Rule Trans 220.

107-065 (200805010)

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

Contact each utility company listed in the plans, prior to preparing bids, to obtain current information on the status of existing and any new utility relocation work. Existing street light poles, hydrant and utility poles are to remain in place during construction. Conduct an on-site visit prior to bidding to determine any special measures required for proper clearance between trees, hydrants and poles and the construction and paving equipment.

AT&T WI has an underground fiber optic line running east and west along the south side of the Donges Bay Road. AT&T plans to retire most of this line in-place. AT&T plans to relocate and bury a new copper wire south of the sidewalk and one foot inside the right-of-way line from Station 197EB+00 to 204EB+00. This line will jump further south in between Stations 202EB+50 and 204EB+00, where the right-of-way jumps further away from the roadway.

AT&T will be placing a new copper cable crossing at station 202+50 to the north right-of-way and following the R/W east then north along STH 145 to approximately Station 491SB+00 ending at the utility pole. AT&T will abandon 2 pvc to the west out of mh #1A66 at Station 493NB+25

AT&T proposed to place 2 PC 4C (PVC) beginning at the vault at Station 487SB+60 LT to the vault at station 493NB+25 RT; continuing to the vault at Station 480NB+90 RT.

The above work will be done prior to construction and will be permitted through DOT and the Village of Germantown.

AT&T has an existing 6 MTD package underground beginning at Station 481NB+25 through the entire road project to Station 495NB+00. In addition to the conduit package there are 3 underground vaults one at Station 487SB+60 15'LT, one at Station 493NB+25 5'RT, the other at Station 480NB+90 RT, each vault is 9'x4'x5'8" I.D. and runs parallel with STH 145 (Fond Du Lac Ave.). The vault at Station 487SB+60 15'LT has a distance from the rim to the top of the structure of 46 1/2"; the vault roof may be in the subgrade and will need to be worked around. The vault at Station 493NB+25 5'RT has 38" of cover; the roof may be in the subgrade and will need to be worked around. The vault at Station 480NB+90 is outside of the road project limits.

The manholes are to remain in place and will be utilized; the existing conduit will be retired in place. All 3 manhole lids will need adjustment during the road project, each will take 1 day. AT&T will request a five day notice prior to these adjustments.

All arial cables will be adjusted according to WE energies schedule which is tentatively January 2016.

AT&T WI field contact person:

Mr. Alper Kolcu
Office: (262)970-8494
Mobile: (262)352-3791
Fax: (262) 896 7435
E-mail: ak308x@att.com

Germantown Sanitary owns the sanitary sewer throughout the project. This project allows the village the opportunity to extend the sanitary sewer north along STH 145. The village plans to have the contractor complete improvements to the sanitary sewer during construction. A 10-inch PVC trunk line and 6-inch or 8-inch laterals are planned. The plan set has the water main and sanitary sewer details and design provided on the same utility sheets.

The contractor shall coordinate with the village prior to and during the work to ensure Village approval of the finished product.

Germantown's field contact person:

Brionne R. Bischke, P.E., Village Engineer
N112 W17001 Mequon Road Germantown, WI 53022-0337
Office: (262) 250-4724
Mobile: (414) 975-4699
E-mail: bbischke@village.germantown.wi.us

Germantown Water owns the water main running north and south along the right-of-way line at the east side of STH 145. The existing main runs north of the intersection for roughly 160 feet. The Village plans to have the contractor complete improvements to the water main during construction. Some water main will be removed. Water laterals will be installed across the roadways, hydrants and valves will be adjusted or relocated, and a new run of 12" PVC water main pipe will be installed. The plan set has the water main and sanitary sewer details and design provided on the same utility sheets.

The contractor shall coordinate with the Village prior to and during the work to ensure Village approval of the finished product.

Germantown's field contact person:

Brionne R. Bischke, P.E., Village Engineer
N112 W17001 Mequon Road Germantown, WI 53022-0337
Office: (262) 250-4724
Mobile: (414) 975-4699
E-mail: bbischke@village.germantown.wi.us

Time Warner Cable (TWC) has overhead cable on We Energies poles running east and west along the south side of Donges Bay Road, along the south bank of the existing stream and along the south right-of-way line of the west leg of the intersection. TWC also has aerial cable running north along STH 145, crossing STH 145 diagonally from the northwest quadrant of the existing intersection to the east side of STH 145 and then back to the west side of STH 145 in the next segment of cable.

One pole requires relocation by We Energies. TWC will follow We Energies pole relocation, and reconnect once the pole is relocated. This work will be completed prior to construction of the stream. The pole will move from Station 209+72 to the west 10 feet.

The diagonal overhead crossing of STH 145 will be eliminated. The cable will now run directly north-south, along the west side of STH 145. The new cable run will start at approximately Station 487NB+50, LT (southwest corner of existing intersection) and continue north to Station 492NB+00, LT. These new cable runs will be attached to We Energies poles. At Station 492NB+00, the lines will cross STH 145 to a new pole on the east right-of-way line.

Two underground 2-inch ducts will be bored into place (directional drilled) along Donges Bay Road. The first is at Station 199EB+26 and the second is at 211EB+37. The drilling should place the 2 ducts at 60 inches of depth from finished grade on the west leg and 72 inches of depth at the second site, on the east leg of the intersection. These will be drilled in across Donges Bay Road, in a north-south direction.

The two existing crossings at station 199EB+26 and 211EB+37 will be abandoned in place. Coordinate with TWC prior to excavating in this area to ensure the old lines have been abandoned and can be pulled out if encountered.

TWC requires We Energies to place new poles prior to their work being completed, and needing roughly 60 days to complete. TWC plans to complete their work prior to construction, approximately by the end of March 2016.

TWC field contact person:

Mr. Steve Cramer

Office: (414)277-4045

Mobile: (414)688-2385

E-mail: steve.cramer@twcable.com

We Energies – Electric has both overhead and underground lines within the project limits. The overhead lines primarily run north and south along the west side of STH 145. Along Donges Bay Road, these overhead lines run along the south side of the roadway. We Energies plans on setting four new poles. Three of the poles will go along STH 145, on the north leg and one will go in the northeast quadrant near the new roundabout. The power pole placed in the northeast quadrant, approximately Station 208EB+60, will help to feed power to the lighting cabinet and the relocated Village of Germantown Monument.

Two of the other new poles straddle STH 145, at Station 492NB+00, approximately. TWC will be on these same poles. The last pole is roughly at Station 489SB+25, LT, out near the right-of-way line.

A couple of poles near the intersection will be coming out. One of them is in the southeast corner of the existing intersection, while the other is just northwest of the village's monument.

The power pole in the southwest corner of the intersection may require holding of the pole by We Energies during the storm sewer manhole construction and adjacent storm sewer pipe installation. The contractor shall coordinate with We Energies prior to digging in this area.

We Energies - Electric field contact person:

Mr. Al Schmitt

Phone: (262) 338-7662

Mobile Phone: (414) 322-1824

Email: alan.schmitt@we-energies.com

We Energies – Gas will be replacing the existing 4" pe main running along the South side of Donges Bay, within the pavement or edge of roadway, with a new 6" pe main, from Station 198+00EB- 205+96EB. The old line will be abandoned in place. The new line will be located in an easement, along the south right-of-way line.

We Energies will be replacing the existing 4" pe main, which sits north of the roadway, running along the North side of Donges Bay Road, with a new 6" pe, main from Station 205+56EB-213+50EB. The old 4" line will be abandoned in place.

We Energies will be replacing the existing 6" steel gas main running along STH 145, with a new 8" pe main, from Station 481+08SB-496+75SB. The old 6" line ran along the east side of the existing STH 145. This line will also be abandoned in place.

All of the abandoned lines will need to be crossed in one or more locations to install the storm sewer. The proposed lighting and village water main of sanitary sewer likely cross the abandoned lines too.

We Energies will be installing a new 24" high pressure steel main along the north side of Donges Bay Rd from Station 197+00EB-214+00EB. The installation of this main is dependent on the approval by the Public Service Commission.

A Watchdog will be required when working within 5' of this main.

We Energies will be installing a new 12" steel gas main crossing to the proposed regulation site at the SE corner of the intersection, station 485+50. The installation of this main is dependent on the approval by the Public Service Commission and obtaining easements.

We Energies will be installing a new 6" high pressure steel gas main crossing to the proposed regulation side at the SE corner of the intersection, at approximately station 208+00. We will also be installing a valve cluster on the north side of Donges Bay Road.

The contractor will need a watchdog when digging within 5' of mains 8" or larger or high pressure. The contractor shall get in contact with our locating contractor, to coordinate the Watchdog. The contractor shall call (800) 261-5325

If valves or test stands are damaged or need adjustment the contractor shall call (800) 261-5325. We will send someone out to fix or adjust them. We Energies needs a minimum of three days notification if we have to excavate to allow for diggers hotline to locate the area. Do not park equipment or store material over any of the valves or test stands.

We Energies will be sand padding and slurry backfilling the 24" main where main is under pavement and sidewalk. Our trench width will be approx 6' of width, the contractor shall call for a watchdog and verify main depth while perform the EBS work. The contractor shall try and leave as much of the backfilled material in place over the newly placed lines. Coordinate subgrade grading, subbase and base aggregate placement to try and minimize any backfilling disturbance.

We Energies plans to complete their work prior to construction in March 2016.

We Energies - Gas field contact person:
Mr. Joe Dable
500 S. 116th Street West Allis, WI 53214
Phone: (414) 944-5543
Mobile Phone: (414) 303-0310
Email: joe.dable@we-energies.com

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

Both the department and Village of Germantown personnel will inspect construction of sanitary sewer and water main under this contract. Construction staking and testing will be by the Village of Germantown. The contractor shall confirm the staking with the Village of Germantown before beginning excavation for the install. Testing will only be completed when Village of Germantown staff is either on-site or aware the testing is taking place. Any testing results produced while Village staff is not on-site shall be shared with the Village of Germantown staff. The contractor shall coordinate with the Village of Germantown to determine to what extent the Village of Germantown would like to be involved and present, and accommodate their requests. The acceptance of the sanitary sewer and water main construction will be by the Village of Germantown.

105-001 (20140630)

9. Referenced Construction Specifications.

Construct the sanitary sewer and water main improvements conforming to the “Sixth Edition of the Standard Specifications for Sewer and Water Construction in Wisconsin, including Updated Addendum 2.” 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. Other Contracts.

Coordinate your work in accordance to standard spec 105.5.

Modifications to the traffic control plan may be required by the engineer to be safe and consistent with adjacent work by others.

It is expected that routine maintenance by the city and county personnel may be required at certain times concurrently with the work being done under this contract.

The following contracts are anticipated to be under construction within the time period of this contract, unless otherwise indicated:

2016

Donges Bay Road reconstruction contract to west:

ID 2712-00-71, Pilgrim Road to Magnolia Avenue, in the Village of Germantown, Washington County.

11. Information to Bidders, U.S. Army Corps of Engineers Section 404 Permit.

The department has obtained a U.S. Army Corps of Engineers Section 404 permit. Comply with the requirements of the permit in addition to requirements of the special provisions. A copy of the permit is available from the regional office by contacting Nguyen Ly at (262) 548-8739
107-054 (20080901)

12. Construction Over or Adjacent to Navigable Waters.

Supplement standard spec 107.19 with the following:

The unnamed tributary to Menomonee River is classified as a navigable waterway.
107-060 (20040415)

13. Erosion Control.

Supplement standard spec 107.20 with the following:

Erosion control best management practices (BMP's) shown on the plans are at suggested locations. The actual locations will be determined by the contractor's ECIP and by the engineer. Include each dewatering (mechanical pumping) operation in the ECIP submittal. The ECIP will supplement information shown on the plans and not reproduce it. The ECIP will identify how to implement the project's erosion control plan. ECIP will demonstrate timely and diligently staged operations, continuing all construction operations methodically from the initial removals and topsoil stripping operations through the subsequent grading, paving, and re-application of top soil to minimize the period of exposure to possible erosion.

Provide the ECIP 14 days prior to the pre-construction conference. Provide 1 copy of the ECIP to the department and 1 copy of the ECIP to the WDNR Liaison (Kristina Betzold, (414) 263-8517, Kristina.betzold@wisconsin.gov). Do not implement the ECIP until department approval, and perform all work in accordance to the approved ECIP.

Maintain Erosion Control BMP's until permanent vegetation is established or until the engineer determines that the BMP is no longer required.

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

Re-apply topsoil on graded areas, as designated by the engineer, immediately after grading is completed within those areas. Seed, fertilize, and mulch/erosion mat top-soiled areas, as designated by the engineer, within 5 days after placement of topsoil. If graded areas are left not completed and exposed for more than 14 days, seed those areas with temporary seed.

Do not allow any excavation for; structures, utilities, grading, maintaining drainage that requires dewatering (mechanical pumping) of water containing sediments (sand, silt, and clay particles) to leave the work site or discharge to a storm water conveyance system without sediment removal treatment. Prior to each dewatering operation, submit to the department a separate ECIP amendment describing in words and pictorial format an appropriate BMP for sediment removal, in accordance to WisDNR Storm Water Construction Technical Standard, Code 1061, Dewatering. Include reasoning, location, and schedule duration proposed for each operation. Per Code 1061, include all selection criteria: site assessment, dewatering practice selection, calculations, plans, specifications, operations, maintenance, and location of proposed treated water discharge. Provide a stabilized discharge area. If directing discharge towards or into an inlet structure, provide additional inlet protection for back-up protection. Dewatering will be paid for under the items used for sediment basins.

If dewatering is required, pump the water removed into a settling basin before it is allowed to reenter the storm/combined sewer system. The cost of settling basin(s) construction will be paid for as erosion bales and geotextile fabric Type FF. Maintenance, operation and removal of temporary settling basin(s) will be incidental to the cost of constructing the settling basin(s). It will not be paid for separately. The design of settling basin(s) shall be approved by the engineer.

Supplement standard spec 107.18 with the following:

Take adequate precautions to install and maintain necessary erosion and sediment control during grading and construction operations at curbs and gutters, and at other locations as determined by the engineer. Protect storm drain inlets and manholes at locations determined by the engineer with a filter fabric or equivalent barrier meeting accepted design criteria, standards, and specifications.

Do not store equipment or material in areas that are within 10 feet of wetlands or existing waterways.

Do not use fertilizer in areas that are within 10 feet of wetlands or existing waterways.

Place stockpiled spoil material on an upland site an adequate distance from the stream and any open water created by excavation. Install silt fence between the spoil pile and excavation site and between any disturbed area and the waterway. Seed and mulch, or sod all disturbed areas as designated in the plans as soon as possible following construction. Leave the silt fence in place until the seeded area has produced sufficient grass cover to stabilize the area and thereby reduce the danger of site erosion.

Store all containers (drums of concrete curing agents, petroleum storage tanks, pressurized gas cylinders, etc.) in secure locations to avoid an attractive nuisance and to prevent vandalism, spills, and unwanted dumping. If abandoned containers are found, notify Mike Thompson, DNR (414) 263-8648 or the DNR Hotline (24hrs/day) (800) 943-0003 to report the incident.

Bloom Rev. 1_20150428

14. Maintaining Drainage.

Maintain drainage at and through worksite during construction in accordance to standard specs 107.22, 204, 205 and 520.

Use existing storm sewers, existing culvert pipes, existing drainage channels, temporary culvert pipes, or temporary drainage channels to maintain existing surface and pipe drainage. Pumps may be required to drain the surface, pipe, and structure discharges during construction. Costs for furnishing, operating, and maintaining the pumps is considered incidental to the project.

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

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

Dewatering (Mechanical Pumping) for treatment Water (sediment-laden) Operations

If dewatering operations require pumping of water containing sediments (sand, silt, and clay particles), the discharge will not be allowed to leave the work site or discharge to a storm water conveyance system without sediment removal treatment. Refer to article Erosion Control in these special provisions for additional requirements.

SEF Rev. 15_0209

15. Notice to Contractor – Emerald Ash Borer.

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

Supplement standard spec 201.3 with the following:

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

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

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

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

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

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

The quarantine of ash trees includes all horticultural cultivars of the species listed above.

Note that blue ash twigs are 4-sided. All other Wisconsin ash trees have round stems. Also, Mountain ash (*Sorbus americana* and *S. decora*) is not a true ash and is not susceptible to EAB infestation.

The contractor shall be responsible for hiring a certified arborist to identify all ash trees that will be cleared and grubbed for the project. In addition, prior to scheduled clearing and grubbing activities, the arborist shall mark all ash trees with florescent lime flagging tied around the trunk perimeter.

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

ATCP 21.17 Emerald ash borer; import controls and quarantine.

Importing or Moving Regulated Items from Infested Areas; Prohibition.

Except as provided in subparagraph (3), no person may do any of the following:

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

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

Regulated Items. The following are regulated items for purposes of subparagraph (1):

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

Ash trees.

Ash limbs, branches, and roots.

Ash logs, slabs or untreated lumber with bark attached.

Cut firewood of all non-coniferous species.

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

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

Regulatory Considerations

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

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

Chipped Ash Trees

May be left on site if used as landscape mulch within the project limits. If used as mulch on site, chips may not be applied at a depth greater than standard mulch applications as this will impede germination of seeded areas.

May be buried on site within the right-of-way in accordance to standard spec 201.3 (14).

May be buried on adjacent properties to projects within the quarantined zone with prior approval of the engineer in accordance to standard spec 201.3 (15).

May be trucked to a licensed landfill within the quarantined zone with the engineer's approval in accordance to standard spec 201.3 (15).

Burning chips is optional if in compliance with standard spec 201.3.

Chips must be disposed of immediately if not used for project mulching and may not be stockpiled and left on site for potential transport by others. Chips may be stockpiled temporarily if they will be used for project mulching and are not readily accessible to the public.

Chipper equipment must be cleaned following post-chipping activities to ensure no spread of wood chip debris into non-quarantined counties.

Ash logs, Branches, and Roots

May be buried without chipping within the existing right-of-way or on adjacent properties in accordance to standard spec 201.3 (14)(15).

May be trucked to a licensed landfill within the quarantined zone with the engineer's approval in accordance to standard spec 201.3 (15).

Burning is optional if in compliance with standard spec 201.3.

Ash logs, branches, and roots must be disposed of immediately and may not be stockpiled.

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

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

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

Furnishing and Planting Plant Materials

Supplement standard spec 632.2.2 with the following:

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

Updates for Compliance

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

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

Regulated Items

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

16. Notice to Contractor, Topsoiling and Restoration.

Topsoil shall be placed and permanently restored on each leg of the roundabout once the fill has been placed to the subgrade shoulder point height including foreslope, ditch bottom, and backslopes out to the slope intercepts. The contractor shall show timing of these EC mobilizations as part of proposed schedule in the ECIP.

17. Public Convenience and Safety.

Revise standard spec 107.8(6) as follows:

Check for and comply with local ordinances governing the hours of operation of construction equipment. Do not operate motorized construction equipment from 7:00 PM until the following 7:00 AM, unless prior written approval is obtained from the engineer.
107-001 (20060512)

18. Coordination with Businesses and Residents.

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

19. Abandoning Sewer, Item 204.0291.S.

A Description

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

B Materials

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

C Construction

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

D Measurement

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

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
204.0291.S	Abandoning Sewer	CY

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

204-050 (20080902)

20. Select Borrow.

Conform to the requirements of standard spec 208 and as hereinafter provided.

Material

Furnish and use material that consists of granular material meeting the requirements of granular backfill, Grade Number 2, in accordance to standard spec 209.2.

208-005 (20031103)

21. Backfill Coarse Aggregate Size No. 1, Item 209.0300.S.01.

A Description

This special provision describes furnishing and placing coarse aggregate backfill as shown on the plans and as hereinafter provided.

B Materials

Provide clean concrete aggregate graded in accordance to the requirements as specified under standard spec 501.2.5.4.4. The soundness and wear requirements are deleted from this material.

C Construction

Construct the coarse aggregates in accordance to standard spec 209.3.

D Measurement

The department will measure Backfill Coarse Aggregate Size No. 1 in volume by the cubic yard in the vehicle.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
209.0300.S.01	Backfill Coarse Aggregate Size No. 1	CY

Payment is full compensation for furnishing and installing the aggregate.
209-030 (20030820)

22. QMP Subgrade.**A Description**

This special provision describes requirements for subgrade materials within the roadway foundation as defined in standard spec 101.3. Conform to standard spec 207 as modified in this special provision for all work within the roadway foundation at the following locations:

- STH 145
- Donges Bay Road

Provide and maintain a quality control program. A quality control program is defined as all activities, including process control inspection, sampling and testing, documentation, and necessary adjustments in the process that are related to the construction of subgrade which meets all the requirements of this provision.

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

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

B Materials

B.1 Quality Control Plan

Submit a comprehensive written quality control plan to the engineer at or before the pre-construction meeting. Do not perform grading work before the engineer reviews and accepts the plan. Construct the project as the plan provides.

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 the contractor's laboratory 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 process that will be used, and action time frames.
3. An outline for resolving a process control problem. Include responsible personnel, required documentation, and appropriate communication steps.
4. Location of the QC laboratory, retained sample storage, and control charts and other documentation.
5. A summary of the locations and calculated quantities to be tested under this provision.
6. An explanation regarding the basis of acceptance for material that cannot be tested by nuclear methods due to a high percentage of oversized particles.

B.2 Personnel

Perform the quality control sampling, testing, and documentation required under this provision using HTCP certified technicians. Have a grading technician certified under HTCP at level I present at the site during all subgrade fill placement, compaction, and nuclear testing activities. Have a nuclear density technician certified under HTCP at level I perform field density and field moisture content testing.

B.3 Laboratory

Perform quality control testing in a department-qualified laboratory. Obtain information on the Wisconsin laboratory qualification program from:

Materials Laboratory
3502 Kinsman Boulevard
Madison, Wisconsin 53704-2583
Telephone: (608) 246-7938
<http://www.dot.state.wi.us/business/engrserv/lab-qualification.htm>

B.4 Equipment

Furnish the necessary equipment and supplies for performing quality control testing. Ensure that all testing equipment conforms to the equipment specifications applicable to the required testing methods. The engineer may inspect the measuring and testing devices

to confirm both calibration and condition. Calibrate all testing equipment according to the CMM and maintain a calibration record at the laboratory.

Furnish nuclear gauges from the department's approved product list at <http://www.atwoodsystems.com/materials>. Ensure that the gauge manufacturer or an approved calibration service calibrates the gauge within 12 months before using it on the project. Retain a copy of the calibration certificate with the gauge. Nuclear density gauge calibration verification is required daily when earthwork construction operations require testing under this special provision article. This calibration verification shall be performed using the departments "Validator" apparatus which is located at the WisDOT I-94 Construction Field Office: 5675 South 27th Street, Milwaukee, WI 53221. The contractor must establish a standard gauge reading for the "Validator" using the ten test average method. The source emitter depth for calibration verification, in the direct transmission mode, will be determined by the engineer. This procedure will establish the "Validator" apparatus, as the contractor's project reference site.

Conform to ASTM D 2950 and CMM 8.15 for density testing and gauge monitoring methods. Perform nuclear gauge measurements using gamma radiation in the backscatter or direct transmission position. Perform each test for 4 minutes of nuclear gauge count time.

B.5 Soil Source Study

Conduct and submit a soil source study before beginning of grading operations. Ensure that this study identifies each distinct soil type on the project within the top 15 feet of cut areas and all borrow material. Provide the in-bank natural moisture content for each soil. Develop moisture-density curves for each identified soil type by utilizing AASHTO T 99 with a minimum of 5 individual points, and a zero air voids curve at a specific gravity of 2.65. Determine the maximum density and corresponding optimum moisture level for each soil type. Develop a site-specific family of Proctor curves for this contract from the completed soil source study and submit to the engineer for review and acceptance.

Perform characterization tests on each of the soil types selected for the soil source study. The tests include AASHTO T 89, AASHTO T 90, AASHTO T 27, and AASHTO T 11. Classify each soil type selected according to the AASHTO soil classification system based on the characterization tests. Do not begin grading operations until the engineer accepts the soil source study.

Use the soil types identified in the soil source study with corresponding maximum densities and optimum moisture values to determine the compaction compliance on the project. Continue the soil source study in those areas of cuts greater than 15 feet that were not accessible during the initial study. Include data on additional soil types if project conditions change. Ensure that tests of additional soil types are complete and the engineer accepts the results before incorporating the material into the roadway foundation.

Split each Proctor sample and identify so as to provide comparison with the department's test results. Unless the engineer directs otherwise, retain the QC split samples for 14 calendar days and promptly deliver the department's split samples to the department at:

Regional Materials Laboratory
935 S. 60th Street
West Allis, Wisconsin 53214
Telephone: (414) 266-1158

Retain and identify two representative samples of each Proctor. Submit one sample to the engineer. Retain one sample on site for use when performing textural identification.

B.6 Quality Control Documentation

B.6.1 Control Charts

Maintain separate control charts for the field density and field moisture content of each grading area. Designate grading areas within the project as follows:

1. Embankment portions of the project, except within 200 feet of bridge abutments.
2. Embankment within 200 feet of bridge abutments.
3. Subgrade cut portions of the project.
4. Embankment in pipe culvert trenches.
5. Structure and granular backfill placed at bridge abutments.

Ensure that all tests are recorded and become part of the project records. Plot required test results on the control charts. Include random and engineer-requested testing but only include the contractor's randomly selected QC test results in the 4-point running average. The contractor may plot other contractor-performed process control or informational tests on the control charts, but do not include them in 4-point running averages.

Post control charts in an engineer-approved location and update daily. Ensure that the control charts include the project number, the test number, each test element, the applicable control limits, the contractor's individual test results, the running average of the last 4 data points, and the engineer's quality verification test data points. Use the control charts as part of a process control system for identifying potential problems and assignable causes. Format control charts according to the CMM.

Submit control charts to the engineer in a neat and orderly manner within 10 business days after completing subgrade construction.

B.6.2 Records

Document all observations, inspection records, adjustments to fill placement procedures, soil changes, and test results daily. Note the results of the observations and inspection records as they occur in a permanent field record.

Provide copies of the field density and field moisture running average calculation sheets, the one-point Proctor tests, records of procedure adjustments, and soil changes to the engineer daily.

Submit original testing records to the engineer in a neat and orderly manner within 10 business days after completing subgrade construction.

B.7 Contractor Testing

B.7.1 General

Have a grading technician certified under HTCP at level I present during all subgrade fill placement, compaction, and testing. Have a nuclear density technician certified under HTCP at level I perform the testing for field density and field moisture content. During subgrade construction, use sampling and testing methods identified in the CMM to perform the required tests at randomly selected locations at the indicated minimum frequency for each grading area.

Determine the cubic yards for testing based on a total load count system the engineer and contractor agree to.

For each test, provide the cubic yards represented and the test location to within 2 feet horizontally and 0.5 feet vertically.

Test areas of suspect compaction or areas which appear to be nonconforming as determined by the engineer.

B.7.2 Field Density and Field Moisture

Perform the field density and field moisture tests using the nuclear density meter method according to AASHTO T 310. Ensure that each field density test material is related to one of the specific soil types identified in the soil source study in determining the percent compaction. Use textural identification as the primary method of establishing this relationship. Utilize the representative samples retained from the soil source study when performing the textural identification. Use a coarse particle correction according to AASHTO T 224.

If field density and field moisture tests cannot be performed by the nuclear density method due to a high percentage of oversized particles as determined according to AASHTO T 99, observe the placement of the embankment and document the basis of acceptance. Document daily quantities of untested embankment and locations where untested embankment is placed, and keep a cumulative quantity of untested embankment material for the duration of the project. Include the daily documentation and a summary of the cumulative quantity of untested embankment material with the project records.

B.7.3 One-Point Proctor

Obtain a representative sample of the fill material and test according to AASHTO T 272. Compare the sample to the curves developed in the soils source study to determine the maximum dry density and optimum moisture. Use the appendix for AASHTO T 272 as a guide in this determination.

B.7.4 Testing Frequency

B.7.4.1 Subgrade Embankment

Perform the required tests at the following frequencies:

Test	Minimum Frequency
Field Density and Moisture (AASHTO T 310)	One per 2,000 cubic yards or one test per grading area per day whichever yields the most tests.
One-Point Proctor (AASHTO T 272)	One per 9,000 cubic yards.

B.7.4.2 Subgrade Embankment Within 200 Feet of Bridge Abutments

Perform the required tests at the following frequencies:

Test	Minimum Frequency
Field Density and Moisture (AASHTO T 310)	One per 1,000 cubic yards or one test per grading area per day whichever yields the most tests.
One-Point Proctor (AASHTO T 272)	One per 9,000 cubic yards.

B.7.4.3 Subgrade Cut

Perform the required tests at the following frequencies:

Test	Minimum Frequency
Field Density and Moisture (AASHTO T 310)	One test per 1,000 linear feet or one test per cut area whichever yields the most tests. The testing will be completed at the finished subgrade elevation.

B.7.4.4 Subgrade Embankment in Pipe Culvert, Sewer and Waterline Trenches

Perform the required tests at the following minimum frequencies per trench run between structures. Test trenches individually at the frequency listed below. For example, lateral lines and trunk lines are to be considered individual trenches:

Test	Minimum Frequency
Field Density and Moisture (AASHTO T 310)	One test per 100 CY of backfill placed or one test per day whichever yields the most tests.
One-Point Proctor (AASHTO T 272)	One per 3,000 cubic yards.

B.7.4.5 Structure and Granular Backfill at Bridge Abutments

Perform the required tests at the following minimum frequencies:

Test	Minimum Frequency
Field Density and Moisture (AASHTO T 310)	One test per 2 feet of vertical backfill height per abutment.
One-Point Proctor (AASHTO T 272)	One per 3,000 cubic yards.

B.7.5 Compaction Zones**B.7.5.1 Subgrade Embankment**

Embankment material placed within 6 feet of the finished subgrade elevation is classified as upper zone material. Material placed more than 6 feet below the finished subgrade elevation is classified as lower zone material.

B.7.5.2 Subgrade Embankment Within 200 Feet of Bridge Abutments

All embankment material placed within 200 feet of bridge abutments is subject to the quality controls for upper zone material.

B.7.5.3 Subgrade Cut

Subgrade material in cut areas is subject to the quality controls for upper zone material.

B.7.5.4 Subgrade Embankment in Culvert Pipe Trenches

Material placed within culvert pipe trenches is subject to the quality controls for the zone that the material is located in.

B.7.5.5 Structure and Granular Backfill at Bridge Abutments

All backfill material placed adjacent to bridge abutments is subject to the quality controls for upper zone material.

B.7.6 Control Limits**B.7.6.1 Field Density**

The lower control limit for field density measurements in the upper zone is a minimum of 95.0% of the maximum dry density as determined by AASHTO T 99 or T 272 for the 4-point running average and a minimum of 92.0% of the maximum dry density for any individual test.

The lower control limit for field density measurements in the lower zone is a minimum of 93.0% of the maximum dry density as determined by AASHTO T 99 or T 272 for the 4-point running average and a minimum of 90.0% of the maximum dry density for any individual test.

B.7.6.2 Field Moisture Content

The upper control limit for the field moisture content in the upper and lower zones is 105.0% of the optimum moisture as determined by AASHTO T 99 or T 272 for the 4-point running average.

The lower control limit for the field moisture content in the upper and lower zones is 65.0% of the determined optimum moisture for the 4-point running average. There is no lower control limit for the field moisture of material having less than 5% passing the No. 200 sieve.

B.7.7 Corrective Action

Notify the engineer if an individual field density test falls below the individual test control limit. The subgrade in this area is unacceptable. Perform corrective actions, acceptable to the engineer, to improve the density of the subgrade material. After corrective action, perform a randomly located retest within the represented quantity to ensure that the material is acceptable.

Notify the engineer if the field density or field moisture running average point falls below the running average control limit for field density or outside the control limits for field moisture. The subgrade in this area is unacceptable. Perform corrective actions, acceptable to the engineer, to improve the quality of the material represented by the running average point. Retest each corrected area at a new random location within its represented quantity and determine a new 4-point running average. If the new running average is not acceptable, perform further corrective actions and retest at new random locations.

If the contractor's control data is proven incorrect resulting in a field density or field moisture point falling below the control limit for field density or outside the control limits for field moisture, the subgrade is unacceptable. Employ the methods described above for unacceptable material.

B.8 Department Testing

B.8.1 General

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 verification and independent assurance personnel for the project.

The department will provide field density and field moisture test results to the contractor on the day of testing. Test results from Proctor split samples will be provided to the contractor within 7 business days after the sample has been received by the department.

B.8.2 Verification Testing

The department will have an HTCP technician, or ACT under the direction of a certified technician, perform QV sampling and testing. Department verification testing personnel must meet the same certification level requirements specified for contractor testing

personnel for each test being verified. The department will notify the contractor before testing so the contractor can observe QV testing.

The department will test field density and field moisture randomly at locations independent of the contractor's QC work. The department will use split samples for verification of Proctor testing. In all cases, the department will conduct the verification tests in a separate laboratory and with separate equipment from the contractor's QC tests.

The department will perform verification testing as follows:

1. The department will conduct verification tests on Proctor split samples taken by the contractor. These samples may be from the Soil Source Study or the one-point Proctor or sample locations chosen by the engineer from anywhere in the process. The minimum verification testing frequency is one per 90,000 cubic yards, with at least one for each soil type identified in the Soil Source Study.
2. The department will test the first split sample obtained by the contractor for the one-point Proctor. The engineer may select any contractor-retained sample for verification testing.
3. The department will conduct at least one verification test for field density and field moisture per 30,000 cubic yards.

Plot verification tests on the contractor's quality control charts as specified in B.6.1. Do not include verification tests in the 4-point running average.

If verification tests are within specified control limits, no further action is required. If verification tests are not within specified control limits, the engineer and contractor will jointly investigate any testing discrepancies. The investigation may include additional testing as well as review and observation of both the department's and contractor's sampling and testing procedures and equipment. Both parties will document all investigative work.

Correct all deficiencies. If the contractor does not respond to an engineer request to correct a deficiency or resolve a testing discrepancy, the engineer may suspend grading work until action is taken. Resolve disputes as specified in B.9.

B.8.3 Independent Assurance Testing

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

Plot the independent assurance tests on the contractor's quality control charts as specified in B.6.1. Do not include independent assurance tests in the 4-point running average.

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 grading work until action is taken. Resolve disputes as specified in B.9.

B.9 Dispute Resolution

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.

If the project personnel cannot resolve a dispute and the dispute affects payment or could result in incorporating nonconforming 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 tests 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.

B.10 Acceptance

The department will accept the material tested under this provision based on the contractor QC tests unless it is shown through verification testing or the dispute resolution process that the contractor's test results are in error.

C (Vacant)

D (Vacant)

E Payment

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

23. QMP Base Aggregate.

A Description

A.1 General

- (1) This special provision describes contractor quality control (QC) sampling and testing for base aggregates, documenting those test results, and documenting related production and placement process changes. This special provision also describes department quality verification (QV), independent assurance (IA), and dispute resolution.
- (2) Conform to standard spec 301, 305, and 310 as modified here in this special provision. Apply this special provision to material placed under all of the Base Aggregate Dense and Base Aggregate Open Graded bid items, except do not apply this special provision to material classified as reclaimed asphaltic pavement placed under the Base Aggregate Dense bid items.
- (3) Do not apply this special provision to material placed under the Aggregate Detours, Salvaged Asphaltic Pavement Base, Breaker Run, Select Crushed, Pit Run, Subbase, or Riprap bid items.
- (4) Provide and maintain a quality control program, defined as all activities related to and documentation of the following:
 1. Production and placement control and inspection.
 2. Material sampling and testing.
- (5) Chapter 8 of the department's construction and materials manual (CMM) provides additional detailed guidance for QMP work and describes required sampling and testing procedures. The contractor may obtain the CMM from the department's web site at:

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

A.2 Contractor Testing for Small Quantities

- (1) The department defines a small quantity, for each individual Base Aggregate bid item, as a plan quantity of 9000 tons or less of material as shown in the schedule of items under that bid item.
- (2) The requirements under this special provision apply equally to a small quantity for an individual bid item except as follows:
 1. The contractor need not submit a full quality control plan but shall provide an organizational chart to the engineer including names, telephone numbers, and current certifications of all persons involved in the quality control program for material under affected bid items.

2. Divide the aggregate into uniformly sized sublots for testing as follows:

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

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

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

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

3. No control charts are required. Submit aggregate load-out and placement test results to the engineer within one business day of obtaining the sample. Assure that all properties are within the limits specified for each test.

4. Department verification testing is optional for quantities of 6000 tons or less.

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

B Materials

B.1 Quality Control Plan

- (1) Submit a comprehensive written quality control plan to the engineer at or before the pre-construction meeting. Do not place base before the engineer reviews and comments on the plan. Construct the project as that plan provides.
- (2) Do not change the quality control plan without the engineer's review. Update the plan with changes as they become effective. Provide a current copy of the plan to the engineer and post in each of the contractor's laboratories as changes are adopted. Ensure that the plan provides the following elements:
1. An organizational chart with names, telephone numbers, current certifications and/or titles, and roles and responsibilities of QC personnel.
 2. The process used to disseminate QC information and corrective action efforts to the appropriate persons. Include a list of recipients, the communication means that will be used, and action time frames.
 3. A list of source and processing locations, section and quarter descriptions, for all aggregate materials requiring QC testing.
 4. Test results for wear, sodium sulfate soundness, freeze/thaw soundness, and plasticity index of all aggregates requiring QC testing. Obtain this information from the region materials unit or from the engineer.
 5. Descriptions of stockpiling and hauling methods.

6. Locations of the QC laboratory, retained sample storage, and where control charts and other documentation is posted.
7. An outline for resolving a process control problem. Include responsible personnel, required documentation, and appropriate communication steps.

B.2 Personnel

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

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

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

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

B.3 Laboratory

- (1) Perform QC testing at a department-qualified laboratory. Obtain information on the Wisconsin laboratory qualification program from:
Materials Management Section
3502 Kinsman Blvd.
Madison, WI 53704
Telephone: (608) 246-5388
<http://www.dot.state.wi.us/business/engrserv/lab-qualification.htm>

B.4 Quality Control Documentation

B.4.1 General

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

B.4.2 Records

- (1) Document all placement observations, inspection records, and control adjustments daily in a permanent field record. Also include all test results in the project records. Provide test results to the engineer within 6 hours after obtaining a sample. For 3-inch

base, extend this 6-hour limit to 24 hours. Post or distribute tabulated results using a method mutually agreeable to the engineer and contractor.

B.4.3 Control Charts

- (1) Plot gradation and fracture on the appropriate control chart as soon as test results are available. Format control charts according to CMM 8.30. Include the project number on base placement control charts. Maintain separate control charts for each base aggregate size, source or classification, and type.
- (2) Provide control charts to the engineer within 6 hours after obtaining a sample. For 3-inch base, extend this 6-hour limit to 24 hours. Post or distribute charts using a method mutually agreeable to the engineer and contractor. Update control charts daily to include the following:
 1. Contractor individual QC tests.
 2. Department QV tests.
 3. Department IA tests.
 4. Four-point running average of the QC tests.
- (3) Except as specified under B.8.2.1 for nonconforming QV tests, include only QC tests in the running average. The contractor may plot process control or informational tests on control charts, but do not include these tests, conforming QV tests, or IA tests in the running average.

B.5 Contractor Testing

- (1) Test gradation, fracture, liquid limit and plasticity index during placement for each base aggregate size, source or classification, and type.
- (2) Test gradation once per 3000 tons of material placed. Determine random sample locations and provide those sample locations to the engineer. Obtain samples after the material has been bladed, mixed, and shaped but before compacting; except collect 3-inch samples from the stockpile at load-out. Do not sample from material used to maintain local traffic or from areas of temporary base that will not have an overlying pavement. On days when placing only material used to maintain local traffic or only temporary base that will not have an overlying pavement, no placement testing is required.
- (3) Split each contractor QC sample and identify it according to CMM 8.30. Retain the split for 7 calendar days in a dry, protected location. If requested for department comparison testing, deliver the split to the engineer within one business day.
- (4) The engineer may require additional sampling and testing to evaluate suspect material or the technician's sampling and testing procedures.
- (5) Test fracture for each gradation test until the fracture running average is above the lower warning limit. Subsequently, the contractor may reduce the frequency to one test per 10 gradation tests if the fracture running average remains above the warning limit.

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

B.6 Test Methods

B.6.1 Gradation

- (1) Test gradation using a washed analysis conforming to the following as modified in CMM 8.60:
Gradation..... AASHTO T 27
Material finer than the No. 200 sieve..... AASHTO T 11
- (2) For 3-inch base, if 3 consecutive running average points for the percent passing the No. 200 sieve are 8.5 percent or less, the contractor may use an unwashed analysis. Wash at least one sample out of 10. If a single running average for the percent passing the No. 200 sieve exceeds 8.5 percent, resume washed analyses until 3 consecutive running average points are again 8.5 percent passing or less.
- (3) Maintain a separate control chart for each sieve size specified in standard spec 305 or 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 2 consecutive running averages exceed a warning limit, the engineer and contractor will discuss appropriate corrective action. Perform the engineer's recommended corrective action and increase the testing frequency as follows:
 1. For gradation, increase the QC testing frequency to at least one randomly sampled test per 1000 tons placed.
 2. For fracture, increase the QC testing frequency to at least one test per gradation test.
- (3) If corrective action improves the property in question such that the running average after 4 additional tests is within the warning limits, the contractor may return to the testing frequency specified in B.5.3. If corrective action does not improve the property in question such that the running average after 4 additional individual tests is still in the warning band, repeat the steps outlined above starting with engineer notification.
- (4) If the running average exceeds a control limit, material starting from the first running average exceeding the control limit and ending at the first subsequent running average inside the control limit is nonconforming and subject to pay reduction.
- (5) For individual test results significantly outside the control limits, notify the engineer, stop placing base, and suspend other activities that may affect the area in question. The engineer and contractor will jointly review data, data reduction, and data analysis; evaluate sampling and testing procedures; and perform additional testing as required to determine the extent of potentially unacceptable material. The engineer may direct the contractor to remove and replace that material. Individual test results are significantly outside the control limits if meeting one or more of the following criteria:
 1. A gradation control limit for the No. 200 sieve is exceeded by more than 3.0 percent.
 2. A gradation control limit for any sieve, except the No. 200, is exceeded by more than 5.0 percent.
 3. The fracture control limit is exceeded by more than 10.0 percent.

B.8 Department Testing

B.8.1 General

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

B.8.2 Verification Testing

B.8.2.1 General

- (1) The department will have an HTCP technician, or ACT working under a certified technician, perform QV sampling and testing. Department verification testing personnel must meet the same certification level requirements specified in B.2 for contractor testing personnel for each test result being verified. The department will notify the contractor before sampling so the contractor can observe QV sampling.
- (2) The department will conduct QV tests of each base aggregate size, source or classification, and type during placement conforming to the following:
 1. One non-random test on the first day of placement.
 2. At least one random test per 30,000 tons, or fraction of 30,000 tons, placed.
- (3) The department will sample randomly, at locations independent of the contractor's QC work, collecting one sample at each QV location. The department will collect QV samples after the material has been bladed, mixed, and shaped but before compacting; except, for 3-inch aggregates, the department will collect samples from the stockpile at load-out. The department will split each sample, test half for QV, and retain half.
- (4) The department will conduct QV tests in a separate laboratory and with separate equipment from the contractor's QC tests. The department will use the same methods specified for QC testing.
- (5) The department will assess QV results by comparing to the appropriate specification limits. If QV test results conform to the specification, the department will take no further action. If QV test results are nonconforming, add the QV to the QC test results as if it were an additional QC test.

B.8.3 Independent Assurance

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

1. Split sample testing.
 2. Proficiency sample testing.
 3. Witnessing sampling and testing.
 4. Test equipment calibration checks.
 5. Reviewing required worksheets and control charts.
 6. Requesting that testing personnel perform additional sampling and testing.
- (2) If the department identifies a deficiency, and after further investigation confirms it, correct that deficiency. If the contractor does not correct or fails to cooperate in resolving identified deficiencies, the engineer may suspend placement until action is taken. Resolve disputes as specified in B.9.

B.9 Dispute Resolution

- (1) The engineer and contractor should make every effort to avoid conflict. If a dispute between some aspect of the contractor's and the engineer's testing program does occur, seek a solution mutually agreeable to the project personnel. The department and contractor may review the data, examine data reduction and analysis methods, evaluate sampling and testing procedures, and perform additional testing. Use ASTM E 178 to evaluate potential statistically outlying data.
- (2) Production test results, and results from other process control testing, may be considered when resolving a dispute.
- (3) If the project personnel cannot resolve a dispute, and the dispute affects payment or could result in incorporating non-conforming product, the department will use third party testing to resolve the dispute. The department's central office laboratory, or a mutually agreed on independent testing laboratory, will provide this testing. The engineer and contractor will abide by the results of the third party tests. The party in error will pay service charges incurred for testing by an independent laboratory. The department may use third party test results to evaluate the quality of questionable materials and determine the appropriate payment. The department may reject material or otherwise determine the final disposition of nonconforming material as specified in standard spec 106.5.

C (Vacant)

D (Vacant)

E Payment

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

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

301-010 (20100709)

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

Replace standard spec 305.2.2.1(2) with the following:

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

305-020 (20080902)

25. Protection of Concrete.

Add the following to standard spec 415.3.14 as follows:

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

Providing the finisher(s), the necessary equipment, and materials shall be construed to be included in the contract unit price for each concrete item.

26. Concrete Maturity Testing.

A Description

This special provision requires using concrete maturity testing to determine strength for project control of concrete pavement, falsework removal, and structural concrete under the designated subsections of the standard specifications as follows:

Duration of the curing period	415.3.12
Duration of the cold weather protection period	415.3.15
Opening to service	415.3.17
Removing falsework	502.3.4.2
Duration of the required curing period	502.3.8
Duration of the cold weather protection period	502.3.9
Opening to service	502.3.10.1

The requirement for determining strength by the concrete maturity testing method supersedes all provisions for strength determination by other methods or provisions based on equivalent days within those designated subsections. The concrete maturity testing requirement also applies to all other provisions referencing strength determination under these designated subsections.

B Materials

Provide a maturity testing system that uses data-encrypted sensor devices permanently embedded in the field-placed concrete. Data-encrypted sensors have a chip that records both temperature and time information that can be downloaded to a reading device not permanently attached to those sensors.

Provide the department with a maturity reading device for each maturity testing system utilized on the project. Devices provided for the department use will become department property under the contract.

C Construction

Develop a strength/maturity relationship for each concrete mix design used under the contract. Base that relationship on strength results of cylinders from pavement, appurtenant construction, ancillary concrete, or structural masonry units incorporated into the work and using those same mixes. Submit the maturity test results to the engineer for approval before proceeding with the next pour using that mix. Develop a new strength/maturity relationship every time the mix changes, when average daily temperature changes by 30° F (17° C) or more, or if engineer verification cylinder strength varies more than 10 percent from the required opening strength when tested at the calibrated opening maturity.

Conform to the department's procedure for developing the strength/maturity relationship, field calibration of the resulting curve, and for all maturity testing. Use a mix-specific datum temperature per Annex A1 of ASTM C1074. Develop data points for the strength/maturity relationship up to 120 percent of the highest required opening strength for each mix design.

For mainline concrete pavement placements, place two probes at the beginning of the day's placement and two probes at the end of the day's placement. Place at least one sensor for each 100 cubic yards (76 m³) of concrete placed under non-pavement bid items. Place additional probes as the engineer directs at no additional cost to the department. The resulting concrete maturity test data, after engineer verification, will apply to concrete on the same project conforming to the following:

1. The same mix design as the test location.
2. Cured under conditions similar to or more favorable than that of the test location.
3. Placed on or before the time the test location was placed.

Each work week provide a set of three verification cylinders to the engineer for each strength/maturity field calibration curve currently in use on the project. The engineer will designate the sampling location for the verification cylinders. Provide two cylinders for compressive strength testing and one with a data-encrypted sensor embedded in its center for maturity evaluation. Cast and cure these cylinders on-site as the engineer directs and conforming to the requirements of ASTM 31 for field curing. Deliver them to the engineer promptly after attaining 50 percent of their opening maturity so the engineer can perform verification testing as closely as possible to the opening maturity level.

D (Vacant)

E Payment

No additional payment will be made by the department for maturity testing.

27. QMP HMA Pavement Nuclear Density.

A Description

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

- (1) This special provision describes density testing of in-place HMA pavement with the use of nuclear density gauges. Conform to standard spec 460 as modified in this special provision.
- (2) Provide and maintain a quality control program defined as all activities and documentation of the following:
 1. Selection of test sites.
 2. Testing.
 3. Necessary adjustments in the process.
 4. Process control inspection.
- (3) Chapter 8 of the department's construction and materials manual (CMM) provides additional detailed guidance for QMP work and describes required procedures. Obtain the CMM from the department's web site at:
<http://roadwaystandards.dot.wi.gov/standards/cmm/index.htm>
- (4) The department's Materials Reporting System (MRS) software allows contractors to submit data to the department electronically, estimate pay adjustments, and print selected reports. Qualified personnel may obtain MRS software from the department's web site at:

<http://www.atwoodsystems.com/mrs>

B Materials

B.1 Personnel

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

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

B.2 Testing

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

B.3 Equipment

B.3.1 General

- (1) Furnish nuclear gauges from the department's approved product list at <http://www.dot.wisconsin.gov/business/engrserv/approvedprod.htm>.
- (2) Have the gauge calibrated by the manufacturer or an approved calibration service within 12 months of its use on the project. Retain a copy of the manufacturer's calibration certificate with the gauge.
- (3) Prior to each construction season, and following any calibration of the gauge, the contractor must perform calibration verification for each gauge using the reference blocks located in the department's central office materials laboratory. To obtain information or schedule a time to perform calibration verification, contact the department's Radiation Safety Officer at:
Materials Management Section
3502 Kinsman Blvd.
Madison, Wisconsin 53704
Telephone: (608) 243-5998

B.3.2 Correlation of Nuclear Gauges

B.3.2.1 Correlation of QC and QV Nuclear Gauges

- (1) Select a representative section of the compacted pavement prior to or on the first day of paving for the correlation process. The section does not have to be the same mix design.
- (2) Correlate the 2 or more gauges used for density measurement (QC, QV). The QC and QV gauge operators will perform the correlation on 5 test sites jointly located. Record each density measurement of each test site for the QC, QV and back up gauges.
- (3) Calculate the average of the difference in density of the 5 test sites between the QC and QV gauges. Locate an additional 5 test sites if the average difference exceeds 1.0 lb/ft³. Measure and record the density on the 5 additional test sites for each gauge.
- (4) Calculate the average of the difference in density of the 10 test sites between the QC and QV gauges. Replace one or both gauges if the average difference of the 10 tests exceeds 1.0 lb/ft³ and repeat correlation process from B.3.2.1 (2).

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

B.3.2.2 Correlation Monitoring

- (1) After performing the gauge correlation specified in B.3.2.1, establish a project reference site approved by the department. Clearly mark a flat surface of concrete or asphalt or other material that will not be disturbed during the duration of the project. Perform correlation monitoring of the QC, QV, and all back-up gauges at the project reference site.
- (2) Conduct an initial 10 density tests with each gauge on the project reference site and calculate the average value for each gauge to establish the gauge's reference value. Use the gauge's reference value as a control to monitor the calibration of the gauge for the duration of the project.
- (3) Check each gauge on the project reference site a minimum of one test per day if paving on the project. Calculate the difference between the gauge's daily test result and its reference value. Investigate if a daily test result is not within 1.5 lb/ft³ of its reference value. Conduct 5 additional tests at the reference site once the cause of deviation is corrected. Calculate and record the average of the 5 additional tests. Remove the gauge from the project if the 5-test average is not within 1.5 lb/ft³ of its reference value established in B.3.2.2(2).
- (4) Maintain the reference site test data for each gauge at an agreed location.

B.4 Quality Control Testing and Documentation

B.4.1 Lot and Sublot Requirements

B.4.1.1 Mainline Traffic Lanes, Shoulders, and Appurtenances

- (1) A lot consists of the tonnage placed each day for each layer and target density specified in standard spec 460.3.3.1. A lot may include partial sublots.
- (2) Divide the roadway into sublots. A sublot is 1500 lane feet for each layer and target density.
- (3) A sublot may include HMA placed on more than one day of paving. Test sublots at the pre-determined random locations regardless of when the HMA is placed. No additional testing is required for partial sublots at the beginning or end of a day's paving.
- (4) If a resulting partial quantity at the end of the project is less than 750 lane feet, include that partial quantity with the last full sublot of the lane. If a resulting partial quantity at the end of the project is 750 lane feet or more, create a separate sublot for that partial quantity.

- (5) Randomly select test locations for each subplot as specified in CMM 8.15 prior to paving and provide a copy to the engineer. Locate and mark QC density test sites when performing the tests. Perform density tests prior to opening the roadway to traffic.
- (6) Use Table 1 to determine the number of tests required at each station, depending on the width of the lane being tested. When more than one test is required at a station, offset the tests 10 feet longitudinally from one another to form a diagonal testing row across the lane.

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

Table 1

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

- (1) A lot represents a combination of the total daily tonnage for each layer and target density.
- (2) Each side road, crossover, turn lane, ramp, and roundabout must contain at least one subplot for each layer.
- (3) If a side road, crossover, turn lane, or ramp is 1500 feet or longer, determine sublots and random test locations as specified in B.4.1.1.
- (4) If a side road, crossover, turn lane, or ramp is less than 1500 feet long, determine sublots using a maximum of 750 tons per subplot and perform the number of random tests as specified in Table 2.

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

Table 2

B.4.2 Pavement Density Determination

B.4.2.1 Mainline Traffic Lanes and Appurtenances

- (1) Calculate the average subplot densities using the individual test results in each subplot.
- (2) If all subplot averages are no more than one percent below the target density, calculate the daily lot density by averaging the results of each random QC test taken on that day's material.

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

B.4.2.2 Mainline Shoulders

B.4.2.2.1 Width Greater Than 5 Feet

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

B.4.2.2.2 Width of 5 Feet or Less

- (1) If all subplot test results are no more than 3.0 percent below the minimum target density, calculate the daily lot density by averaging all individual test results for the day.
- (2) If a subplot test result is more than 3.0 percent below the target density, the engineer may require the unacceptable material to be removed and replaced with acceptable material or allow the nonconforming material to remain in place with a 50 percent pay reduction. Determine the limits of the unacceptable material according to B.4.3.

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

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

B.4.2.4 Documentation

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

B.4.3 Corrective Action

- (1) Notify the engineer immediately when an individual test is more than 3.0 percent below the specified minimum in standard spec 460.3.3.1. Investigate and determine the cause of the unacceptable test result.
- (2) The engineer may require unacceptable material specified in B.4.3(1) to be removed and replaced with acceptable material or allow the nonconforming material to remain in place with a 50 percent pay reduction. Determine limits of the unacceptable area by measuring density of the layer at 50-foot increments both ahead and behind the point of unacceptable density and at the same offset as the original test site. Continue testing at 50-foot increments until a point of acceptable density is found as specified in standard spec 460.5.2.2(1). Removal and replacement of material may be required if extended testing is in a previously accepted subplot. Testing in a previously accepted subplot will not be used to recalculate a new lot density.
- (3) Compute unacceptable pavement area using the product of the longitudinal limits of the unacceptable density and the full subplot width within the traffic lanes or shoulders.
- (4) Retesting and acceptance of replaced pavement will be according to standard spec 105.3.

- (5) Tests indicating density more than 3.0 percent below the specified minimum, and further tests taken to determine the limits of unacceptable area, are excluded from the computations of the subplot and lot densities.
- (6) If 2 consecutive subplot averages within the same paving pass and same target density are more than one percent below the specified target density, notify the engineer and take necessary corrective action. Document the locations of such sublots and the corrective action that was taken.

B.5 Department Testing

B.5.1 Verification Testing

- (1) The department will have a HTCP certified technician, or ACT working under a certified technician, perform verification testing. The department will test randomly at locations independent of the contractor's QC work. The department will perform verification testing at a minimum frequency of 10 percent of the sublots and a minimum of one subplot per mix design. The sublots selected will be within the active work zone. The contractor will supply the necessary traffic control for the department's testing activities.
- (2) The QV tester will test each selected subplot using the same testing requirements and frequencies as the QC tester.
- (3) If the verification subplot average is not more than one percent below the specified minimum target density, use the QC tests for acceptance.
- (4) If the verification subplot average is more than one percent below the specified target density, compare the QC and QV subplot averages. If the QV subplot average is within 1.0 lb/ft^3 of the QC subplot average, use the QC tests for acceptance.
- (5) If the first QV/QC subplot average comparison shows a difference of more than 1.0 lb/ft^3 each tester will perform an additional set of tests within that subplot. Combine the additional tests with the original set of tests to compute a new subplot average for each tester. If the new QV and QC subplot averages compare to within 1.0 lb/ft^3 , use the original QC tests for acceptance.
- (6) If the QV and QC subplot averages differ by more than 1.0 lb/ft^3 after a second set of tests, resolve the difference with dispute resolution specified in B.6. The engineer will notify the contractor immediately when density deficiencies or testing precision exceeding the allowable differences are observed.

B.5.2 Independent Assurance Testing

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

independent assurance review according to the department's independent assurance program.

B.6 Dispute Resolution

- (1) The testers may perform investigation in the work zone by analyzing the testing, calculation, and documentation procedures. The testers may perform gauge correlation according to B.3.2.1.
- (2) The testers may use correlation monitoring according to B.3.2.2 to determine if one of the gauges is out of tolerance. If a gauge is found to be out of tolerance with its reference value, remove the gauge from the project and use the other gauge's test results for acceptance.
- (3) If the testing discrepancy cannot be identified, the contractor may elect to accept the QV subplot density test results or retesting of the subplot in dispute within 48 hours of paving. Traffic control costs will be split between the department and the contractor.
- (4) If investigation finds that both gauges are in error, the contractor and engineer will reach a decision on resolution through mutual agreement.

B.7 Acceptance

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

C (Vacant)

D (Vacant)

E Payment

E.1 QMP Testing

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

E.2 Disincentive for HMA Pavement Density

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

E.3 Incentive for HMA Pavement Density

- (1) Delete standard spec 460.5.2.3.
- (2) If the lot density is greater than the minimum specified in standard spec table 460-3 and all individual air voids test results for that mixture are within +1.0 percent or -0.5 percent of the design target in standard spec table 460-2, the department will adjust pay for that lot as follows:

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

- (3) The department will adjust pay under the Incentive Density HMA Pavement bid item. Adjustment under this item is not limited, either up or down, to the bid amount shown on the schedule of items.
 - (4) If a traffic lane meets the requirements for disincentive, the department will not pay incentive on the integrally paved shoulder.
 - (5) Submit density results to the department electronically using the MRS software. The department will validate all contractor data before determining pay adjustments.
- 460-020 (20100709)

28. Adjusting Manhole Covers.

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

Adjust manhole covers located in pavement areas in two separate operations. Initially, remove designated manhole covers along with sufficient pavement to permit installation of temporary cover plate over the opening. Fill the excavated area with asphaltic pavement mixture, which shall remain in place until contract milling and paving operations permit setting the manhole frames to grade. During the second phase, remove the asphaltic pavement mixture surrounding the manhole plus the temporary cover plate, and set the manhole cover to final grade. The department will measure and pay for the items of asphaltic pavement mixture, temporary cover plate, milling, and paving separately.

Revise standard spec 611.3.7 by deleting the last paragraph.

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

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

611-005 (20030820)

29. Cover Plates Temporary, Item 611.8120.S.

A Description

This special provision describes furnishing, installing and removing a steel plate to cover and support asphaltic pavement and traffic loading at manholes, inlets and similar structures during milling and paving operations.

B Materials

Provide a 0.25-inch minimum thickness steel plate that extends to the outside edge of the existing masonry.

C (Vacant)

D Measurement

The department will measure Cover Plates Temporary, acceptably completed in place, as units.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
611.8120.S	Cover Plates Temporary	Each

Payment is full compensation for furnishing, installing, and removing the cover plates; and for furnishing all labor, tools, equipment, and incidentals necessary to complete the work.

The steel plates shall become the property of the contractor when no longer needed in the contract work.

611-006 (20030820)

30. Insulation Board Polystyrene, 4-Inch, Item 612.0902.S.01.

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 4-Inch	SY

Payment is full compensation for furnishing all excavation; and for furnishing and placing the insulation board.

612-005 (20030820)

31. Landscape Planting Surveillance and Care Cycles.

If the care specialist fails to perform any of the required care cycles as specified in standard spec 632.3.19.1, the department will assess daily damages in the amount of \$200 to cover the cost of performing the work with other forces. The department will assess these damages for each day the requirements of the care cycle remain incomplete, except when the engineer extends the required time period.

632-005 (20070510)

32. Sign Supports Concrete Masonry.

Add the following to standard spec 636.3.2:

- (3) The contractor is responsible for drilling or excavating and maintaining a stable open excavation for subsequent installation of drilled footings for sign structure foundations as shown in the plans. The subsurface conditions vary across the project site and are not necessarily the same at each sign structure foundation in the project. Anticipate the possibility of encountering randomly interlaced seams of loose, permeable sand or gravel of substantial thickness situated within glacial clays and till deposits; saturated soils; ground water; isolated cobbles or boulders; and nested cobbles and boulders at any sign structure foundation when selecting equipment and methods for drilling or otherwise excavating. Partial or full depth temporary casing may be required to maintain the stability of the excavation prior to placement of reinforcement and filling the excavation with concrete.

The contractor is strongly advised to obtain and review the Geotechnical Exploration and Foundation Evaluation Reports for the sign structures and as well as nearby structures to the sign structure foundation being constructed. See article "Geotechnical Investigation Information" in these special provisions for information on obtaining geotechnical reports.

Add the following paragraph to standard spec 636.3.3:

- (8) For drilled foundations, no more than 3 inches of standing water is permitted in the bottom of the drilled excavation immediately prior to placing concrete masonry in the excavation.

Replace standard spec 636.5.2(1) with the following:

Payment for Sign Supports Concrete Masonry is full compensation for providing, transporting, placing and curing the concrete; for providing and removing casing if applicable; for providing required ground rods; for furnishing all required excavating; for placing post stubs or anchor bolts, and for providing and placing electrical conduit if required; for pumping of ground water seepage if applicable; for cleaning-up, repairing damage, and for disposing of excavation and surplus materials.

33. Signs Type I and II.

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

Add the following to standard spec 637.2.2.2:

Furnish Type I Signs with Type IX or greater reflective sheeting in lieu of High intensity sheeting.

Add the following to standard spec 637.2.4:

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

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

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

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

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

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

Add the following to standard spec 637.3.2.1:

(3) Provide the engineer with 3 copies of drawings of the signs proposed to be furnished under this contract for approval.

Add the following to standard spec 637.3.3.2(2):

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

Add the following to standard spec 637.3.3.3(3):

Furnish and install new aluminum vertical sign support beams on each sign and new U-bolts to attach each beam to the top and bottom cord of the sign bridge truss for Type I or Type II Signs and type I signs on overhead sign supports incidental to sign.
637-SER1 (20101021)

34. Pavement Marking Grooved Wet Reflective Contrast Tape, 8-Inch, Item 646.0843.S.

A Description

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

B Materials

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

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

C Construction

C.1 General

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

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

Plane a minimum number of passes to create a grooved surface per manufacturer's recommendations.

C.2 Groove Depth

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

C.3 Groove Width – Longitudinal Markings

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

C.4 Groove Position

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

C.5 Groove Cleaning

C.5.1 Concrete

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

If water is used in the grooving process, allow the groove to dry a minimum of 24 hours after groove cleaning, and prior to pavement marking application. The groove surface shall be clean and dry before applying the adhesive, and the pavement marking tape. Use a high-pressure air blower with at least 185 ft³/min air flow and 120 psi air pressure to clean the groove; use of the air blower does not decrease the amount of time required for the groove to dry.

C.5.2 New Asphalt

Groove pavement five or more days after paving.

Use a high-pressure air blower with at least 185 ft³/min air flow and 90 psi air pressure to clean the groove.

C.5.3 Existing Asphalt

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

Use a high-pressure air blower with at least 185 ft³/min air flow and 90 psi air pressure to clean the groove.

C.6 Tape Application

Apply the tape when both the air and surface temperature are 40 degrees F and rising.

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

- 1) For the Southeast Region and the ozone non-attainment Northeast Region counties of Sheboygan, Manitowoc, and Kewaunee:
 - Apply SPA-60 during May 1 to September 30, both dates inclusive due to Volatile Organic Compound Limitations..
 - Apply P-50 during October 1 to April 30, both dates inclusive. –
- 2) For the remainder counties:
 - Apply either adhesive.

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

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

D Measurement

The department will measure Pavement Marking Grooved Wet Reflective Contrast Tape 8-Inch for grooved applications in length by the linear foot of tape placed according to the contract and accepted.

E Payment

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

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

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

35. Slurry Backfill, Item SPV.0035.01.

A Description

This provision describes furnishing and placing backfill slurry in accordance the standard specifications for Sewer & Water Construction in Wisconsin, latest edition, and as hereinafter provided.

B Materials

Use aggregates that conform to the standard specifications for Sewer & Water Construction, chapter 8.43.8 for class “C” concrete mix with cement deleted. Weigh aggregates at a batch plant suitable for batching concrete masonry. The material shall be mixed with water to inundate the aggregate sufficient to provide a 3-inch slump. In special cases, engineer may require Sand Slurry consisting of 50 pounds of flyash and a 1/2 bag of Portland cement per yard of mix.

C Construction

Mix and deliver to project site using a truck mixer. Discharge in manner to prevent segregation. Completely fill excavation in a single operation. Follow depth of slurry as noted in construction details. For storm sewer construction use “Backfill Slurry Detail – Trench” and for water main construction use “Water main Details” provided in the plans. Backfill consolidation or compaction effort of slurry will not be required. Twelve hours shall elapse before paving over the backfill.

D Measurement

The department will measure Slurry Backfill in volume by the cubic yard of material placed and accepted. Such volume shall be computed from actual measurements of the trench area to be backfilled. In irregular or inaccessible areas, the engineer may allow volume to be determined by other appropriate methods.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0035.01	Slurry Backfill	CY

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

36. Lighting Control Cabinet 120/240 24-Inch, Item SPV.0060.01.

A Description

This special provision describes furnishing and installing Lighting Control Cabinets shown on the plans.

B Materials

Furnish Lighting Control Cabinet (120/240 volt) from the department qualified electrical product list.

C Construction

Duplex Contingence Receptacle

Provide a specification grade, 15A, GFCI receptacle flush-mounted on the dead front door accessible from the front.

Provide dedicated 15A, single-pole breaker to feed receptacle.

Door Activated Light

Provide keyless, medium base lamp holder on cabinet ceiling, including surface-mounted box.

Provide button-type light at top of exterior door opening switch that operates the light when outer door is opened/closed.

Provide dedicated 15A, single-pole breaker to feed light.

Control breaker shall be 15 amps, single pole 120V, bolt on, UL listed. The circuit breaker shall have 10K AIR rating at 120V, terminal for minimum wire size 14 AWG and maximum wire size 8 AWG.

Furnish shop drawings as specified in standard spec 506.3.2, except submit 5 copies with the materials list. Ensure the drawings contain sufficient detail to allow satisfactory review and show the dimensions of all equipment shown in the plans.

D Measurement

The department will measure Lighting Control Cabinet 120/240 24-Inch as each individual cabinet, 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.0060.01	Lighting Control Cabinet 120/240 24-Inch	Each

Payment is full compensation for furnishing and installing all materials, including cabinet, circuit wiring connections, hardware, and fittings necessary to install the cabinet.

37. Manhole 9-FT Diameter, Item SPV.0060.03.

A Description

Construct manholes as shown on the plans, as directed by the engineer in accordance with the pertinent requirements of standard spec 611 and as hereinafter provided.

B Materials

Furnish precast sections in accordance with standard spec 611.2.

C Construction

Perform work in accordance to standard spec 611.3.

D Measurement

The department will measure Manhole 9-FT by each individual unit acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.03	Manhole 9-FT	EACH

Payment is full compensation for providing all materials, including all masonry, storm sewer connections, steps or other fittings; for all excavation, backfilling, and properly disposing of surplus materials; and for cleaning out and restoring the work site. The department will pay for covers, including frames, grates and lids separately.

38. Catch Basin 8-FT, Item SPV.0060.04.**A Description**

Construct catch basin as shown on the plans, as directed by the engineer in accordance with the pertinent requirements of standard spec 611 and as hereinafter provided.

B Materials

Furnish Catch Basin 8-FT in accordance to standard spec 611.2.

C Construction

Construct Catch Basin 8-FT in accordance to standard spec 611.3.

D Measurement

The department will measure Catch Basin 8-FT 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.0060.04	Catch Basin 8-FT	Each

Payment is full compensation for providing all materials, including all masonry, storm sewer connections, steps or other fittings; for all excavation, backfilling, and properly disposing of surplus materials; and for cleaning out and restoring the work site. The department will pay for covers, including frames, grates and lids separately.

39. Pavement Marking Grooved Preformed Thermoplastic Arrows Type 2, Item SPV.0060.05; Arrows Type 3R, Item SPV.0060.06; Words, Item SPV.0060.07.

A Description

This special provision describes furnishing, grooving and installing preformed thermoplastic pavement markings for grooved applications as shown on the plans, according to standard spec 646, and as hereinafter provided.

A.1

The markings must be a resilient white thermoplastic product, wherein every other shaped portion contains glass beads or abrasives with a minimum hardness of 7 (Mohs scale). The marking must be resistant to the detrimental effects of motor fuels, lubricants, hydraulic fluids, etc. Lines, legends and symbols are capable of being affixed to bituminous and/ or Portland cement concrete pavements by the use of the normal heat of a propane torch.

A.2

The markings must be capable of conforming to pavement contours, breaks, and faults through the action of traffic at normal pavement temperatures. The markings shall have resealing characteristics, such that it is capable of fusing with itself and previously applied thermoplastic when heated with the torch.

A.3

The marking shall not have minimum ambient and road temperature requirements for application, storage, or handling.

B Materials

Must be composed of an ester modified resin resistant to degradation by motor fuels, lubricants etc. in conjunction with aggregates, pigments, binders abrasives, and glass beads which have been factory produced as a finished product, and meets the requirements of the current edition of the Manual on Uniform Traffic Control Devices for Streets and Highways. The thermoplastic material conforms to AASHTO designation M249-70 (98), with the exception of the relevant differences due to the material being supplied in a performed state.

B.1 Graded Glass Beads

B.1.1

The material must contain a minimum of thirty percent intermixed graded glass beads by weight. The intermixed beads shall be clear and transparent. Not more than twenty percent consists of irregular fused spheroids, or silica. The index of refraction shall not be less than 1.50.

B.1.2

The material must have factory applied coated surface beads and abrasives in addition to the intermixed beads at a rate of 1/2 lb. (+/- 20%) per 11 square foot. The surface beads and abrasives must be applied so that every other shaped portion contains glass beads, or

abrasives with a minimum hardness of 7(Mohs scale).These factory applied coated surface beads shall have the following specifications:

- 1) Minimum 80% rounds
- 2) Minimum refractive index of 1.5
- 3) Minimum SiO₂ content of 70%;
- 4) Maximum iron content of 0.1%;

Size Gradation		Retained, %	Passing, %
US Mesh	Um		
12	1700	0-2%	98 – 100%
14	1400	0 – 6%	94 – 100%
16	1180	1 – 21%	79 – 99%
18	1000	28 – 62%	38 – 72%
20	850	62 – 71%	29 – 38%
30	600	67 – 77%	23 – 33%
50	300	86 – 95%	5 – 14%
80	200	97 – 100%	0 – 3%

B.2 Pigments

B.2.1 White

The material shall be manufactured with sufficient titanium dioxide pigment to meet FHWA Docket No. FHWA-99-6190 Table 5 and Table 6 as revised and corrected.

B.3 Heating Indicators

The top surface of the material (same side as the factory applied surface beads) shall have regularly spaced indents. These indents act as a visual cue during application that the material has reached a molten state so satisfactory adhesion and proper bead embedment has been achieved and a post-application visual cue that the installation procedures have been followed.

B.4 Skid Resistance

The surface of the preformed retroreflective materials, wherein every other shaped portion contains glass beads, or abrasives with a hardness of 7 (Mohs scale), shall upon application provide a minimum skid resistance value of 60 BPN when tested according to ASTM: E 303.

B.5 Thickness

The material must be supplied at a minimum thickness of 90 mils (2.29 mm).

B.6 Retroreflectivity

The preformed retroreflective marking materials upon application shall exhibit adequate and uniform nighttime retroreflectivity. The marking materials shall have the following retroreflectivity as measured using a Delta LTL 2000 or LTL-X Retroreflectometer.

White preformed reflective marking materials-minimum of 275 med-m⁻²-lx⁻¹

Note: Initial retroreflection and skid resistance are affected by the amount of heat applied during installation. When ambient temperatures are such that greater amounts of heat are required for proper installation, initial retroreflection and skid resistance levels may be affected

B.7 Environmental Resistance

The material must be resistant to deterioration due to exposure to sunlight, water, salt or adverse weather conditions and impervious to oil and gasoline.

B.8 Abrasives

The material must have a factory applied surface adhesives, wherein every other shaped portion contains glass beads, or abrasives with a minimum hardness of 7(Mohs scale).

C Application

C.1

Location of Pavement Marking Grooved Preformed Thermoplastic Arrows Type X and Pavement Marking Grooved Preformed Thermoplastic Words shall be approved by engineer prior to installations.

Apply preformed marking as the manufacturer specifies, the pavement shall be grooved to receive the preformed material and the leading edge of all installations shall be heated and beveled; provide the engineer with the manufacturer's specifications. Cut groove to a depth of 100 mils +/- 10 mils. The groove may be 0 to 4 inches from the perimeter of the special marking. The engineer will evaluate the performance of the preformed marking as specified in standard spec 646.3.3.4.

C.2 Asphalt

The Materials shall be applied using the propane torch method recommended by the manufacturer. The material must be able to be applied without minimum requirements for ambient and road temperatures and without any preheating of the pavement to a specific temperature. The material must able to be applied without the use of a thermometer. The pavement shall be clean, dry and free of debris. Supplier must enclose application instructions with each box/package.

C.3 Portland Concrete

The same application procedure shall be used as described under section C2. However a compatible sealer may be applied before application to assure proper adhesion.

D Measurement

The department will measure Pavement Marking Grooved Preformed Thermoplastic (Type) by each pavement marking, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.05	Pavement Marking Grooved Thermoplastic Arrows Type 2	Each
SPV.0060.06	Pavement Marking Grooved Thermoplastic Arrows Type 3R	Each
SPV.0060.07	Pavement Marking Grooved Thermoplastic Words	Each

Payment is full compensation for cleaning and preparing the pavement surface; furnishing and installing the material; and for removing temporary pavement marking, if necessary.

40. Concrete Curb and Gutter 18-Inch Type A Full Depth Reverse Slope Gutter, Item SPV.0090.01.

A Description

This special provision describes constructing concrete curb and gutter according to the pertinent requirements of standard spec 601, as shown in the plans, and as hereinafter provided.

B Materials

Provide concrete meeting the requirements of standard spec 601.2.

C Construction

Construct the concrete curb and gutter in conformance with standard spec 601.3.

D Measurement

The department will measure Concrete Curb and Gutter 18-Inch Type A Full Depth Reverse Slope Gutter by the linear foot, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.01	Concrete Curb and Gutter 18-Inch Type A Full Depth Reverse Slope Gutter	LF

Payment is full compensation for furnishing all foundation excavation and preparation; for providing all materials including concrete, expansion joints, for placing, finishing, protecting, and curing; and for sawing joints.

41. Pavement Marking Grooved Preformed Thermoplastic Crosswalk 6-Inch, Item SPV.0090.02; Yield Line 18-Inch, Item SPV.0090.03.

A Description

This special provision describes furnishing, grooving and installing preformed thermoplastic pavement markings for grooved applications as shown on the plans, according to standard spec 646, and as hereinafter provided.

A.1

The markings must be a resilient white thermoplastic product, wherein every other shaped portion contains glass beads or abrasives with a minimum hardness of 7 (Mohs scale). The marking must be resistant to the detrimental effects of motor fuels, lubricants, hydraulic fluids, etc. Lines, legends and symbols are capable of being affixed to bituminous and/ or Portland cement concrete pavements by the use of the normal heat of a propane torch.

A.2

The markings must be capable of conforming to pavement contours, breaks, and faults through the action of traffic at normal pavement temperatures. The markings shall have resealing characteristics, such that it is capable of fusing with itself and previously applied thermoplastic when heated with the torch.

A.3

The marking shall not have minimum ambient and road temperature requirements for application, storage, or handling.

B Materials

Must be composed of an ester modified resin resistant to degradation by motor fuels, lubricants etc. in conjunction with aggregates , pigments, binders abrasives, and glass beads which have been factory produced as a finished product, and meets the requirements of the current edition of the Manual on Uniform Traffic Control Devices for Streets and Highways. The thermoplastic material conforms to AASHTO designation M249-70 (98), with the exception of the relevant differences due to the material being supplied in a performed state.

B.1 Graded Glass Beads

B.1.1

The material must contain a minimum of thirty percent intermixed graded glass beads by weight. The intermixed beads shall be clear and transparent. Not more than twenty percent consists of irregular fused spheroids, or silica. The index of refraction shall not be less than 1.50.

B.1.2

The material must have factory applied coated surface beads and abrasives in addition to the intermixed beads at a rate of 1/2 lb. (+/- 20%) per 11 square foot. The surface beads and abrasives must be applied so that every other shaped portion contains glass beads, or abrasives with a minimum hardness of 7(Mohs scale).These factory applied coated surface beads shall have the following specifications:

- | | |
|------------------------------------|---|
| 3) Minimum 80% rounds | 3) Minimum SiO ₂ content of 70%; |
| 4) Minimum refractive index of 1.5 | 4) Maximum iron content of 0.1%; |

Size Gradation		Retained, %	Passing, %
US Mesh	Um		
12	1700	0-2%	98 – 100%
14	1400	0 – 6%	94 – 100%
16	1180	1 – 21%	79 – 99%
18	1000	28 – 62%	38 – 72%
20	850	62 – 71%	29 – 38%
30	600	67 – 77%	23 – 33%
50	300	86 – 95%	5 – 14%
80	200	97 – 100%	0 – 3%

B.2 Pigments

B.2.1 White

The material shall be manufactured with sufficient titanium dioxide pigment to meet FHWA Docket No. FHWA-99-6190 Table 5 and Table 6 as revised and corrected.

B.3 Heating Indicators

The top surface of the material (same side as the factory applied surface beads) shall have regularly spaced indents. These indents act as a visual cue during application that the material has reached a molten state so satisfactory adhesion and proper bead embedment has been achieved and a post-application visual cue that the installation procedures have been followed.

B.4 Skid Resistance

The surface of the preformed retroreflective materials, wherein every other shaped portion contains glass beads, or abrasives with a hardness of 7 (Mohs scale), shall upon application provide a minimum skid resistance value of 60 BPN when tested according to ASTM: E 303.

B.5 Thickness

The material must be supplied at a minimum thickness of 90 mils (2.29 mm).

B.6 Retroreflectivity

The preformed retroreflective marking materials upon application shall exhibit adequate and uniform nighttime retroreflectivity. The marking materials shall have the following retroreflectivity as measured using a Delta LTL 2000 or LTL-X Retroreflectometer.

White preformed reflective marking materials-minimum of $275 \text{ med-m}^{-2}\text{-lx}^{-1}$

Note: Initial retroreflection and skid resistance are affected by the amount of heat applied during installation. When ambient temperatures are such that greater amounts of heat are required for proper installation, initial retroreflection and skid resistance levels may be affected

B.7 Environmental Resistance

The material must be resistant to deterioration due to exposure to sunlight, water, salt or adverse weather conditions and impervious to oil and gasoline.

B.8 Abrasives

The material must have a factory applied surface adhesives, wherein every other shaped portion contains glass beads, or abrasives with a minimum hardness of 7(Mohs scale).

C Application

C.1

Location of Pavement Marking Grooved Preformed Thermoplastic Yield Line and Crosswalk shall be approved by engineer prior to installations.

Apply preformed marking as the manufacturer specifies, the pavement shall be grooved to receive the preformed material and the leading edge of all installations shall be heated and beveled; provide the engineer with the manufacturer's specifications. Cut groove to a depth of 100 mils +/- 10 mils. The groove may be 0 to 4 inches from the perimeter of the special marking. The engineer will evaluate the performance of the preformed marking as specified in standard spec 646.3.3.4.

C.2 Asphalt

The Materials shall be applied using the propane torch method recommended by the manufacturer. The material must be able to be applied without minimum requirements for ambient and road temperatures and without any preheating of the pavement to a specific temperature. The material must able to be applied without the use of a thermometer. The pavement shall be clean, dry and free of debris. Supplier must enclose application instructions with each box/package.

C.3 Portland Concrete

The same application procedure shall be used as described under section C2. However a compatible sealer may be applied before application to assure proper adhesion.

D Measurement

The department will measure Pavement Marking Grooved Thermoplastic (Type) (Size) by the linear foot of pavement marking, 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.0090.02	Pavement Marking Grooved Thermoplastic Crosswalk 6-Inch	LF
SPV.0090.03	Pavement Marking Grooved Thermoplastic Yield Line 18-Inch	LF

Payment is full compensation for cleaning and preparing the pavement surface; furnishing and installing the material; and for removing temporary pavement marking, if necessary.

42. Split Rail Fence SPV.0090.04.

A Description

This special provision describes furnishing and installing a split rail fence along the pedestrian and bike trail retaining wall, as shown on the plans.

B Materials

Timber for the rail shall conform to standard spec 507. The timber shall be select Southern Yellow Pine No. 1 or Douglas Fir.

The timber shall be treated with ammoniacal copper quat solution (ACQ) according to standard spec 507.2.3.

C Construction

The split rail posts shall be installed vertical. The split rails shall be installed parallel to the grade of the pedestrian and bike trail. The horizontal and diagonal members shall be installed on the front face or side facing the trail.

D Measurement

The department will measure Split Rail Fence in place by length in linear feet, 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.0090.04	Split Rail Fence	LF

Payment is full compensation for furnishing and installing all materials including split rails and posts.

43. Pavement Marking Grooved Preformed Plastic Tape 4-Inch Yellow, Item SPV.0090.05; 12-Inch Yellow, Item SPV.0090.06.

A Description

This special provision describes furnishing, grooving, and installing preformed plastic pavement marking tape as shown on the plans, in accordance to standard spec 646, and as hereinafter provided.

B Materials

Furnish grooved preformed plastic pavement marking tape and adhesive material, if required, from the department's approved products list.

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

C Construction

C.1 General

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

Plane the grooved lines in accordance to details in the plan. Use grooving equipment with a free-floating, independent cutting or grinding head. Plane a minimum number of passes to create a smooth groove.

C.2 Groove Depth

Cut the groove to a depth of 120 mils \pm 10 mils from the pavement surface or, if tined, from the high point of the tined surface. Measure depth using a straightedge placed perpendicular to the groove. The department may periodically check groove depths.

C.3 Groove Width – Longitudinal Markings

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

C.4 Groove Position

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

C.5 Groove Cleaning

C.5.1 Concrete

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

If water is used in the grooving process, allow the groove to dry a minimum of 24 hours after groove cleaning, after removal of excess water, and prior to pavement marking application. Clean and dry the groove for proper application of the adhesive, and placement of the pavement marking. Use a high-pressure air blower with at least 185 ft³/min air flow and 90 psi air pressure to clean the groove; use of the air blower does not decrease the amount of time required for the groove to dry.

C.5.2 New Asphalt

Groove pavement 5 or more days after paving.

If opening to traffic an asphalt lane that is not grooved, place temporary pavement marking. For asphalt lanes not open to traffic, temporary pavement marking is not required.

Use a high-pressure air blower with at least 185 ft³/min air flow and 90 psi air pressure to clean the groove.

C.5.3 Existing Asphalt

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

Use a high-pressure air blower with at least 185 ft³/min air flow and 90 psi air pressure to clean the groove.

C.6 Tape Application

Apply the tape when both the air and surface temperature are 40 degrees F and rising.

Apply tape in the groove as per manufacturer's recommendations. If manufacturer's recommendations require surface preparation adhesive, apply an adhesive with lower than 91g/l VOC during the following period of time due to Volatile Organic Compound Limitations:

May 1 to September 30, both dates inclusive – the Southeast Region and the ozone non-attainment Northeast Region counties of Sheboygan, Manitowoc, and Kewaunee.

Use any adhesive from the preformed plastic approved products list in the remainder counties and for the remainder of the year.

The adhesive must be dry (feels tacky but is no longer in liquid form) and have a matte finish rather than a glossy wet appearance.

Tamp the pavement marking tape with a tamper cart roller cut to fit the groove. Tamp three complete cycles with grooved modified equipment.

D Measurement

The department will measure Pavement Marking Grooved Preformed Plastic Tape (Width) Yellow in length by the linear foot of tape, 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.0090.05	Pavement Marking Grooved Preformed Plastic Tape 4-Inch Yellow	LF
SPV.0090.06	Pavement Marking Grooved Preformed Plastic Tape 12-Inch Yellow	LF

Payment is full compensation for cleaning and preparing the pavement surface; furnishing and installing the material; furnishing, placing, and removing temporary pavement marking, if necessary.

44. BioLogs Delivered, Item SPV.0090.21; BioLog Installed, Item SPV.0090.22.

A Description

This work shall consist of furnishing and placing BioLog(s) at the locations shown on the plans, or as directed by the engineer, and as hereinafter provided.

B Materials

Bio-Log material must be pre-qualified by the department prior to use. In general, the biolog material shall be a constructed of a coconut fiber with natural fiber twine netting covering the log.

C Construction

BioLogs shall be delivered and installed using the specifications in the plan and special provisions. Bio-Logs shall be securely anchored by burying the bottom one-third of the log and fastening them to stakes.

D Measurement

The department will measure BioLogs Delivered and BioLog Installed by the linear foot, in place for each log, 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.0090.21	BioLogs Delivered	LF
SPV.0090.22	BioLog Installed	LF

Payment is full compensation for furnishing and installing the logs; transporting and placing; anchoring and supplying fastening materials.

45. Lighting System Integrator, Item SPV.0105.01.

A Description

These special provisions describe coordinating lighting with various parties; record keeping, and documentation. Where the department is responsible for freeway lighting operation, maintenance, or utility locates on existing systems or systems overlapping project boundaries, the contractor's freeway lighting integrator will serve as the contractor's liaison to the department's electrical operations unit.

B Personnel Qualifications

Assign personnel experienced in underground utility construction and department lighting specifications and practices.

C Construction

At any one time during the project, the contractor shall assign one individual person as the freeway lighting integrator.

The freeway lighting integrator shall:

1. Familiarize himself with the location and nature of existing lighting circuits. This familiarity shall include the extent of any lighting system that overlaps project limits.
2. Maintain a file of applicable permits or licenses issued to the contractor, and convey copies to the engineer.
3. Keep with him at all times a contact list of affected lighting personnel.
4. Maintain a record of tagouts and the clearance of tagouts.
5. Interface with department electrical personnel to determine how contract limits might affect maintenance or operation of existing systems.
6. Maintain ongoing contact with the department's Diggers' Hotline Coordinator to ensure that each of the two persons knows that all requested utility locates are marked in the field by the appropriate party. The intent here is to assure coordination. This special provision does not transfer additional utility locating responsibilities to the contractor, beyond those responsibilities already assigned to him by other provisions of the contract.
7. Inform the department of any lighting outages, including outside the project limits where a lighting system crosses the project boundary.
8. Maintain in any format real-time records of existing, removed and new lighting facilities. Include utility service extensions. Additional required records will include temporary connections and their ultimate removal.
9. Maintain records of tests, including: "meg" tests, amperage draw per circuit leg, voltage reading at the disconnect, and voltage reading at the furthest pole per circuit leg. Convey these records at time of acceptance or partial acceptance.
10. At the time of acceptance or partial acceptance, convey as-built drawings in both the following formats: plan redlines and .dgn electronic. Include utility service extensions.
11. Secure copies of operators manuals, tear sheets, etc. as may be provided by manufacturers of some lighting materials, and convey a minimum of three sets to the department.
12. Work with the engineer to notify department electrical personnel of acceptance or partial acceptance.
13. Perform related duties as may be needed to ensure continuity of freeway lighting during construction, and orderly transfer upon completion.

D Measurement

The department will measure Lighting System Integrator as one complete lump sum unit of work per each pay item, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.01	Lighting System Integrator	LS

Payment is full compensation for personnel costs; and for all required coordination, record-keeping, and documentation..

46. Lighting System Survey, Item SPV.0105.02.**A Description**

These special provisions describe performing lighting system survey using Global Position System (GPS).

B (Vacant)**C Construction**

Locate and survey using GPS all the lighting units and control cabinets. Maintain neat, orderly, and complete survey notes. Enter the coordinates into a Microsoft Excel 2007 spreadsheet along with other required fields as specified by WisDOT.

D Measurement

The department will measure Lighting System Survey for all lighting units and control cabinets as a single lump sum unit of work, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.02	Lighting System Survey	LS

Payment is full compensation for locating and surveying all the lighting units and control cabinets.

47. Concrete Pavement Joint Layout, Item SPV.0105.03.**A Description**

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

B (Vacant)**C Construction**

Plan and locate all points necessary to establish the horizontal position of the transverse and longitudinal joints in the concrete to prevent uncontrolled cracking. Submit a joint

layout design to the engineer before paving each intersection. Mark the location of all concrete joints in the field. Follow the plan details for joints in concrete making adjustments as required to fit field conditions.

D Measurement

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

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.03	Concrete Pavement Joint Layout	LS

Payment is full compensation for providing the intersection joint layout designs and marking all joints in the field. The department will adjust pay for crack repairs as specified in standard spec 415.5.3.

48. Concrete Sidewalk 8-Inch, Item SPV.0165.01.

A Description

This special provision describes constructing concrete sidewalk 8-inch thick according to the pertinent requirements of standard spec 602, as shown in the plans, and as hereinafter provided.

B Materials

Furnish materials conforming to standard spec 602.2.

C Construction

Construct the concrete sidewalk in conformance with standard spec 602.3.

D Measurement

The department will measure Concrete Sidewalk 8-Inch by the square foot, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0165.01	Concrete Sidewalk 8-Inch	SF

Payment is full compensation for furnishing all foundation excavation and preparation; for providing all materials including concrete, expansion joints, for placing, finishing, protecting, and curing; and for sawing joints.

49. Concrete Sidewalk 5-Inch Colored, Item SPV.0165.02; 8-Inch Colored, Item SPV.0165.03.

A Description

This special provision describes constructing colored concrete sidewalk 5-inches and 8-inches thick according to the pertinent requirements of standard spec 602, as shown in the plans, and as hereinafter provided.

Concrete contractor must have experience successfully installing colored concrete and shall provide upon engineer's request a written list of references specific to colored concrete projects in the upper Midwest.

B Materials

Furnish materials conforming to standard spec 602.2 for the sidewalk and standard spec 405.2 for the concrete coloring.

C Construction

Construct the colored concrete sidewalk in conformance with standard specs 602.3 and 405.3.

Integrally color the concrete using non-fading synthetic iron oxides conforming to ASTM C979. Follow color pigment manufactures recommendations for minimum and maximum percentage of loading by weight of the cementitious materials in the mix.

D Measurement

The department will measure Concrete Sidewalk (Inch) Colored by the square foot, 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.0165.02	Concrete Sidewalk 5-Inch Colored	SF
SPV.0165.03	Concrete Sidewalk 8-Inch Colored	SF

Payment is full compensation for furnishing all foundation excavation and preparation; for providing all materials including concrete and color pigments, expansion joints, for placing, finishing, protecting, and curing; and for sawing joints.

50. Concrete Pavement Colored 8-Inch, Item SPV.0180.01.

A Description

Construct colored concrete pavement in accordance to the standard specifications, as shown on the plans, and as hereinafter provided.

B Materials

B.1 Concrete

Conform to standard spec 501 and as follows:

Integrally color the concrete using non-fading synthetic iron oxides conforming to ASTM C979 at a minimum percent loading of 6% and a maximum percent loading of 8% by weight of the cementitious materials in the mix.

Match the concrete color to Federal Standard 595 Color Server, FS color 31136.

Add integral concrete colorant according to manufacturer's instructions.

Maintain mix characteristics for all colored concrete requiring a matching finish. Use the same source, brand, type, and color of portland cement, supplementary cementitious materials, aggregates and admixtures for colored concrete throughout the project. Use constant cement content, supplementary cementitious material content and water/cementitious materials ratio in the concrete mix to maintain consistent color.

B.2 Concrete Curing

Supply a clear, non-yellowing liquid membrane-forming clear curing compound conforming to AASHTO M 148, type 1.

B.3 Admixtures

Use admixtures designed for use and compatible with colored concrete pigments. Do not use calcium chloride or admixtures containing chlorides.

B.4 Mix Approval

B.4.1 General

Perform preliminary laboratory and/or field trial batching to establish the mix proportions necessary to meet the final concrete characteristics. Submit to the engineer the final mix design including specific sources and/or trade names as applicable for all materials.

B.5. Antiquing Release Agent

Use an antiquing powder release agent that is compatible with the coloring materials.

The antiquing release agent color shall be light grey and shall closely match to Federal Standard 595 Color Server, FS color 16251. Provide manufacturer's color chart for antiquing release agent to engineer for approval before use.

B.6. Concrete Sealant

Use concrete sealant that is compatible with installation methods.

Prime Sealant: Glossy.

Secondary Sealant: Matte.

C Construction

Construct colored concrete in accordance to standard spec 416 and the standard special provision for QMP Concrete Ancillary and as herein provided.

C.1 Equipment

Equipment and tools necessary for performing all parts of the work shall be satisfactory as to design, capacity and mechanical condition for the purposes intended. Repair, improve, replace or supplement all equipment that is not maintained in full working order, or which is proven inadequate to obtain the results prescribed.

C.2 Placement

Produce colored concrete in full cubic yard increments.

Produce consistent colored concrete mixes. Once colored concrete placement has started, the engineer will not allow variations in the amounts, types, or source of materials with the exception of minor adjustments of water and air-entraining agent as necessary. Other changes require the contractor to repeat the mix approval process.

Colored concrete mixes for matching colored items shall be consistent. If the contractor chooses to provide mixes with high early strength concrete, then all colored concrete for matching colored items shall be provided as high early strength concrete.

Schedule colored concrete placement to minimize exposure to rapid drying conditions, wind and full sun, before curing materials are applied. Do not place colored concrete if rain, snow, or freezing temperature is forecast within 24-hours.

Cover and protect adjacent construction and concrete from discoloration and spillage during placement and curing of colored concrete. Remove and replace discolored concrete as the engineer directs.

Perform finishing operations consistently to avoid discoloration in the finished colored concrete. Do not begin finishing until bleed water has left the surface. Addition of surface water for aiding in finishing (often referred to as blessing the concrete) is not allowed. If water is added to the surface of the colored concrete once concrete is in place, the engineer will reject the colored concrete. During final finishing and texturing apply all strokes in the same direction.

Cure colored concrete in accordance to standard spec 415.3.12, using the impervious coating or impervious sheeting method. Protect colored concrete from premature drying and excessive cold or hot temperatures by prompt application of curing materials. Do not allow plastic sheeting to come in contact with colored concrete.

Shake or spray antiquing release agent over concrete surface after applying the color hardeners.

Protect the colored concrete from damage. Do not permit construction traffic or material storage on colored concrete. Exclude other foot traffic from colored concrete for at least 24 hours after placement.

C.3 Finishing

Allow concrete to cure for 24 hours after application of the antiquing release agent.

Pressure wash concrete surface to remove approximately 80% of the antiquing release agent.

Spray or roll on a single layer of gloss sealant. Follow by spraying on a single coat of matte finish sealer. Do not roll matte finish sealer onto concrete surfaces.

Protect the colored concrete from damage. Do not permit construction traffic or material storage on colored concrete. Exclude other foot traffic from colored concrete for at least 24 hours after finishing.

D Measurement

The department will measure Concrete Pavement Colored 8-Inch conforming to standard spec 415.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0180.01	Concrete Pavement Colored 8-Inch	SY

Payment is full compensation for preparing the foundation, unless provided otherwise; and for developing mix designs; for furnishing materials (including concrete masonry, colored pigments, sealers, joint and bond breakers, and retarders), hauling, preparing, placing, curing, and protecting the concrete; for sawing required for construction of colored concrete; for finishing the concrete as indicated in plans; for jointing and joint materials, tie bars, dowel bars; for measuring opening strength including fabricating and testing cylinders, obtaining and testing cores, and evaluating maturity; and for furnishing all removal of colored concrete.

51. Geotextile Fabric Type FF, Item SPV.0180.02.

A Description

This special provision describes furnishing, installing and removing geotextile fabric and fabric hold down systems for filtering storm water, as shown in the plans and as hereinafter provided.

B Materials

Furnish type FF geotextile fabrics conforming to standard spec 645.2.1 except use a woven polypropylene fabric. Furnish type FF geotextile fabrics selected from the department's

erosion control product acceptability list (PAL). Obtain copies of the erosion control PAL and prequalification procedure from the Bureau of Technical Services.

C Construction

Meet the pertinent requirements as set forth in standard spec 645.3 and as follows:

Install in accordance to the plan details for the intended use in such a manner to preclude ripping and tearing of the fabric, or otherwise rendering the fabric or assembly ineffective for its intended use.

D Measurement

The department will measure Geotextile Fabric, Type FF by the square yard of surface area of the fabric placed, 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.0180.02	Geotextile Fabric, Type FF	SY

Payment is full compensation for furnishing, transporting, installing and removing the fabric and fabric hold down systems.

- 52. Sanitary Sewer - Abandon 4-Inch PVC Sanitary Service at Main, SPV.0060.14; Install R-1661 Bolt Down Casting, SPV.0060.21; Verify Exact Location and Elevation of Village Utilities, SPV.0060.24; Adjusting Sanitary Sewer Manhole Chimneys and Install New Castings, SPV.0060.35; Salvage Castings, SPV.0060.37; Install Tracer Wire, SPV.0090.10; Install 10-Inch PVC Sanitary Sewer Main Pipe, SPV.0090.11; Install 8-Inch PVC Sanitary Sewer Main Pipe, SPV.0090.12; Install 6-Inch PVC Service Off Sewer Main, SPV.0090.17; Extend Existing 6-Inch PVC Service; SPV.0090.19; Install 48-Inch I.D. Precast Concrete Sanitary Manhole Structure, SPV.0200.01; Rebuild 48-Inch I.D. Precast Concrete Sanitary Manhole Structure, SPV.0200.02; Install HDPE Adjusting Rings, SPV.0200.03; Install Concrete Adjusting Rings, SPV.0200.04.**

A Description

PART 1

Section includes all, labor, materials, equipment, and related services for installing underground piping, structures, and appurtenances for sanitary sewer.

The contractor shall sequence construction so as to minimize disruption of sanitary services to all wastewater utility users.

The contractor shall be responsible for Digger's Hotline locates, site safety, resident access, traffic control, and protection of existing facilities, features and structures at all times.

GOVERNING AGENCIES AND APPLICABLE CODES/GUIDELINES/REGULATIONS

A. Wisconsin State Statutes and Administrative Code

1. Chapter NR 110
2. Chapter DSPS 382 (formerly Comm 82)

B. Milwaukee Metropolitan Sewerage District (MMSD)

1. MMSD Rules, including Chapter 2

C. State of Wisconsin Department of Transportation (WisDOT)

1. WisDOT Standard Specifications for Highway and Structure Construction
2. WisDOT Facility Development Manual (FDM)

D. Village of Germantown

1. Municipal Code
2. Stormwater Management Requirements
3. Design, Drafting and Construction Standards and Specifications (Sec. 1-9)
4. Village Board and Committee actions
5. DPW Director, Village Engineer, Utility Superintendent discretion

E. Other

1. Standard Specifications for Sewer and Water Construction in Wisconsin (Standard Specifications)
2. Southeast Wisconsin Regional Planning Commission (SEWRPC)
3. Manufacturer specifications

1.04 QUALITY ASSURANCE

- A. Work described in specifications and shown on the construction drawings, and all work necessary to completely finish work as described and shown, is to be executed in a professional manner.
- B. All work shall be done by persons who are thoroughly experienced and trained in their particular trade or craft.

- C. The contractor shall ensure that persons making heat fusion joints and electrofusions for HDPE pipe have received training in the manufacturer's recommended procedure. contractor shall maintain and provide records of trained personnel, and shall certify training was received not more than 12 months before commencing construction.

1.05 METHODS OF MEASUREMENT/BASIS OF PAYMENT

- A. No explicit direct payment shall be made for incidental work under this section. Contractor shall include all direct and indirect costs for this work in unit prices provided.
- B. Include all connections of manholes, clean outs, services, existing mains of various size, and associated appurtenances in the unit prices provided.

1.06 SITE CONDITIONS

- A. Protect existing buildings, patios, gardens, vehicles, landscaping, walks, roads, fences, drives, curbs, utilities, and other features from damage from work of this section.
- B. In event of damage, immediately make all repairs and replacements necessary subject to approval of engineer and at no additional cost to owner.

PART 2 – DESIGN CRITERIA

2.01 GENERAL

- A. Min. mainline dia. = 8" DIPS; Min. lateral dia. = 6" DIPS.
- B. Situate manholes along centerline of roadway with a max. 5' offset.
- C. Min. slopes for mainlines shall conform to NR 110.13, Table 1 as follows:

1. 8-inch	0.40 (feet/100 feet)
2. 10-inch	0.28 (feet/100 feet)
3. 12-inch	0.22 (feet/100 feet)
4. 15-inch	0.15 (feet/100 feet)
5. 18-inch	0.12 (feet/100 feet)
6. 21-inch	0.10 (feet/100 feet)
7. 24-inch	0.08 (feet/100 feet)
- D. Min. cover above mainlines and risers = 7' depth; depths < 7' require polystyrene board insulation conforming to Standard Specifications Ch. 4.17.0 and 8.50.2.

- E. Sewer depths shall provide gravity flow for basement floor drains and plumbing fixtures. “Hung” services are prohibited. Grinder pumps may be considered by village engineer.
- F. Max. manhole spacing for 15” dia. or less DIPS mainline = 400’.
- G. Max. manhole spacing for > 15” dia. DIPS mainline shall conform to NR 110.13(3)(b).
- H. Manholes shall connect 2 pipes having differing dia.
- I. Min. elevation difference between influent and effluent pipes in manholes = 0.1’.
- J. Max. elevation difference between influent and effluent pipes without outside drop in manholes = 2.0’.
- K. Pipe with cover depths > 20’ shall have the pipe material approved by the engineer and shall be designed conforming to Standard Specifications Ch. 5.3.12 and Table 12.

PART 3 – MAINLINE PIPE, APPURTENANCES, AND OTHER MATERIALS

3.01 POLYVINYL CHLORIDE (PVC)

- A. 15” dia. or less DIPS = PSM SDR-35 PVC. Conform to Standard Specifications Ch. 8.10.0 and ASTM D-3034.
- B. 18” dia. or greater DIPS = pipe stiffness of 46 psi. Conform to ASTM F-679.
- C. Pipe joints = Rubber gaskets. Conform to Standard Specification Ch. 8.10.6(a) and ASTM D-3212.
- D. Force main = PVC water class pipe. 4” through 12” dia. = Class 150-DR18 conforming to AWWA C-900, conforming to Standard Specification Ch. 4.6.0 and 8.20.01.
 - 1. Fittings = ductile iron conforming to Standard Specifications Ch. 8.22.0.
 - a. 4” through 12” dia. = Class 250 mechanical joints.
 - 2. Nuts and Bolts = Cor-Blue™
 - 3. Mechanical joint retainer glands = Mega-Lug™; Buttresses also required.
 - 4. Tees, crosses, bends, offsets, and other fittings shall conform to Standard Specification Ch. 8.22.0. Acceptable supplier shall be Tyler or equal.
 - 5. Triple wrap all ductile iron fittings with polyethylene. Conform to Standard Specifications Ch. 4.4.4 and 8.21.0.

3.02 HIGH DENSITY POLYETHYLENE (HDPE)

- A. Force main = HDPE pressure pipe and fittings conforming to AWWA C-900 and ASTM F-714 for DIPS with SDR-11. DIPS pipe shall have equally spaced green longitudinal stripes co-extruded into outside surface.
- B. Connections and fittings: Joined by heated butt fusion. Conform to ASTM D2657 and manufacturer specifications. Internal/external beads shall not be removed.
- C. Main and branch joints: Joined by electrofusion conforming to manufacturer specifications. Internal/external beads shall not be removed.
- D. HDPE MJ adaptors: Connections to mechanical joint pipe, fittings, valves, and other appurtenances that conform to AWWA C111/ANSI A21.11. MJ adapters shall be installed incorporating extended Cor-Blue™ nuts and bolts and standard gland and gasket.

3.03 FUSIBLE PVC C900

- A. Conform to Standard Specifications Ch. 4.6.0 and 8.20.0, Class 150-DR18 and to AWWA C-900.
- B. Connections: Restrained or non-restrained retainer gland product for PVC pipe, as well as for MJ or flanged fittings.
- C. PVC Gasketed, Push-On Fittings: Gasketed PVC, push-on type couplings and fittings, including bends, tees, and couplings as shown in the drawings.
- D. Sweeps or Bends: Not > 22.5 degrees, and shall be used in nominal diameters ranging from 4 inch through 16 inch.
- E. Connection Hardware: Bolts and nuts for buried service shall be made of non-corrosive, high-strength, low-alloy steel having the characteristics specified in ANSI/AWWA C111/A21.11.

3.04 TRACER WIRE

- A. Force main = Insulated solid copper #8 wire, placed parallel to and above the sanitary sewer
- B. Laterals = Insulated solid copper #8 wire, placed parallel to and above the lateral. GPS survey of lateral locations can substitute for the tracer wire.
- C. Directionally drilled pipe = Min. 7/16" PVC-coated stainless steel aviation cable
- D. Spacing of tape = 10' intervals

- E. Splicing = spliced, soldered, and wrapped with Plyflex low voltage splice kit, manufactured by Plymouth Rubber Co. (or engineer approved equal)
- F. Splicing between marker posts is prohibited.
- G. Location box spacing = 300 feet max.
- H. Continuity testing: Provide a temporary above-ground wire between adjacent location boxes. Connect ohm meter in a series loop with detector wire and above-ground wire. Circuit resistance shall not exceed 5 ohms.

3.05 WARNING TAPE

- A. Terra Tape Standard 250 manufactured by Reef Industries, Inc., Shieldtec manufactured by Empire Level Manufacturing Corp., Milwaukee, WI, (or engineer approved equal). Tape shall read “Caution – Sanitary Line Buried Below”. Tape shall be green and 3” wide. Install over the cover material.

PART 4 – BEDDING, COVER AND BACKFILL

4.01 BEDDING

- A. Class “B” conforming to Standard Specifications Ch. 3.2.6(b) and File No. 4, Part IX
- B. 3/8” crushed stone chips. Conform to Standard Specifications Ch. 8.43.2, Table 32
- C. Conform to Standard Specifications Ch. 4.3.3
- D. Prohibited: Sand; gravel

4.02 COVER

- A. 3/8” crushed stone chips conforming to Standard Specifications Ch. 8.43.2, Table 32, File No. 4, and Ch. 8.43.3
- B. 12” above the top of pipe
- C. Prohibited: Sand; gravel

4.03 BACKFILL

- A. Aggregate slurry under Village-owned pavements and state owner pavements: Required from bottom of trench to subgrade elevation.
- B. Granular where specified: Crushed gravel. Conform to Standard Specification Ch. 8.43.4, Table 39 Graded Aggregates, 1½” Graded Crushed Stone.

- C. Spoil not under pavements: Spoil material. Conform to Standard Specifications Ch. 8.43.5
- D. Consolidation: Mechanical compaction. Conform to Standard Specification Ch. 2.6.14(b). Conform to 95% Standard Proctor Density tested at contractor's expense.
- E. Initial Lift = Max. 2 feet; Subsequent Lifts = Max. 1½ feet
- F. Prohibited: Debris; frozen material; large clods or stones; organic material; blast rock; stones larger than 6"; sand. Contractor shall haul away and dispose of these materials at contractor's expense.

PART 5 – MANHOLES

5.01 CHARACTERISTICS

- A. Precast Required: Conform to Standard Specifications Ch. 8.39.0 and File No. 12.
- B. Wall Thickness = Min. 5"
- C. Min. MH Dia
 - 1. 48" for 8-24" dia. pipes
 - 2. 60" for 30-42" dia. pipes
 - 3. 72" for > 42" dia. pipes
- D. Min. elevation difference between influent and effluent pipes in manholes = 0.1'
- E. Max. elevation difference between influent and effluent pipes without outside drop in manholes = 2.0'
- F. Cone sections = Eccentric (concentric cones are prohibited)
- G. Lift holes: Exterior lift holes only (interior lift holes are prohibited)
- H. Benches: Full benches are prohibited. Conform to Standard Specifications Ch. 3.5.4(c) and File No. 13. w/o full benches and w/ long radii.

5.02 SPRAY EPOXY COATING

- A. MH Exterior: 2 coats (black) of Ameron International, Amercoat 78 HB at 8-10 mils ea.
- B. MH Interior: 2 coats (white) of Permite PCS-9043 Type II Permox pipe glaze at 20 mils ea.

- C. Coatings shall be applied by suppliers at the plant

5.03 OUTSIDE DROP

- A. Conform to Standard Specifications Ch. 3.5.8 and File No. 19/20.
- B. 1 full-length of pipe shall precede the tee connecting the manhole and the drop segment.

5.04 JOINT SEALS

- A. Kentseal butyl rubber sealant (or engineer approved equal)
- B. External: MacWrap External Joint Sealers by MarMac Manufacturing (or engineer approved equal). Conform to ASTM C877, Type II
 - 1. 9" wide collar, outer layer of polyethylene, min. 4000 psi tensile strength, min. 1500 psi tear resistance, under layer of rubberized mastic reinforced with woven polypropylene fabric
 - 2. 2 stainless steel straps within the collar 3/4" from edges confined with tube isolated from mastic and allowed to slip freely
 - 3. Min. 6" overlap with closing flap to cover straps
- C. External for MH w/ Precast Outside Drop: EZ-Wrap by Press Seal Gasket Corp primed with EZ-Stick No. 4 primer
- D. Extruded butyl adhesive tape bonded to the concrete

5.05 CHIMNEYS (vacant – not applicable)

5.06 FRAMES and COVERS

- A. Frame in Pavement: Neenah R-1661 frame w/ solid gasketed lid and 2 concealed pick holes. Conform to Standard Specifications Ch. 3.5.0
- B. Frame in Turf: Neenah R-1661 bolt-down frame w/ solid gasketed lid and 2 concealed pick holes. Conform to Standard Specifications Ch. 3.5.0. Bolts coated with anti-seize compound. Frames to be anchored to chimney with 1/2" dia. stainless steel anchor studs extending 6" into chimney and sealed with Permatex Ultra Series black, blue or grey
- C. Pavement Ring: Neenah R-1979 Series Ref. #1661-7158
- D. Elevations: Top of frame = binder grade; Paving ring for surface lift adjustment

5.07 CONNECTIONS

- A. Kor-N-Seal boots (or engineer approved equal). Factory installed for new manholes. Conform to Standard Specifications Ch. 3.4.7(c) and ASTM C-425/C-443.
- B. Connections shall be cored. Cutting or breaking is prohibited.
- C. Bulkheads for future connections: Conform to Standard Specifications Ch. 3.2.25 and File #13A

5.08 STEPS

- A. Conform to Standard Specifications Ch. 2.5.4(g) and 8.40.0, and File #15 and #12
- B. Prohibited: Steps in chimneys

5.09 SAMPLING MANHOLES

- A. Required at all non-residential laterals
- B. Conform to Germantown detail and Standard Specifications Ch. 3.5.8(f), File #23
- C. Min. dia. = 48"

5.10 GROUT

- A. If approved by village engineer and utility superintendent, contractor may use acrylamide or polyurethane grout for manhole repair/rehabilitation.

5.11 CHIMNEYS

- A. Depth: Min. = 2", Max. = 16" (measured bottom of frame to top of cone)
- B. HDPE or EPP 5000 Series rings meeting ASTM D4976 or ASTM D3575
- C. HDPE Rings in Pavements:
 - Drill two 1/2" diameter holes 180° apart on mandatory 2" thick EPP ring (Cretex part number 40-27GF-200). Drill into corbelled section of the manhole, ring shall be drilled prior to placing on manhole.
 - Apply 2 beads of M-1 adhesive 1/2"x1/2" on corbal. Install drilled EPP ring and anchor with a 4" Rawl Power Bolt utilizing a 2" diameter fender washer. Tighten until bolt head is flush with the top of the 2" ring.
 - Install 1/4" Ladtech topper ring set in M-1 Adhesive as described above.
 - Dry stack chimney to proper height, including solid HDPE topper ring. Pay special attention to slope and use appropriate slope rings.
 - Once desired height and slope are achieved, mark rings to align desired stacking order and placement.

- Apply bead of caulk around lip of adjusting ring and re-stack rings. Apply 2 beads of caulk on topper ring, one towards the outside and one towards the inside. Topper ring does not have a locking lip so be cautious ring does not slip during seal installation.
- Install seal per manufactures specifications.
- D. Adhesives: M-1 (Chem-Link Corp.) used on EPP rings. Gun grade butyl rubber adhesive sealant on HDPE rings
- E. Seals: Order-to-fit Adaptor internal/external w/ rubber sleeve sealing exterior from frame to corbel
- F. PE Wrap: Install double 8-mil polyethylene wrap from top of frame to 84" min. depth.
- G. Prohibited: Cracked rings; all forms of wedges; back-plastering
- H. EPP Rings in Turf:
 - Drill two ½" diameter holes 180° apart on mandatory 2" thick EPP ring (Cretex part number 40-27G-200). Drill into corbelled section of the manhole, ring shall be drilled prior to placing on manhole.
 - Apply 2 beads of M-1 adhesive 1/2"x1/2" on corbal. Install drilled EPP ring and anchor with a 4" Rawl Power Bolt utilizing a 2" diameter fender washer. Tighten until bolt head is flush with the top of the 2" ring.
 - Dry stack chimney to proper height, including solid Grade Finish ring. Pay special attention to slope and use appropriate slope rings.
 - Once desired height and slope are achieved, mark rings to align desired stacking order and placement.
 - Apply 2 beads of M-1 in keyway area of adjusting rings and re-stack rings.
 - Adjusting rings will be lag bolted in 4" height increments with a ½" x 5" steel wood lag bolt and 2" fender washer with bolts alternating 180° apart with each 4" rise in height.
 - Install seal per manufactures specifications.

PART 6 – LATERALS

6.01 PIPE

- A. PVC SDR-35 conforming to Standard Specifications Ch. 5.3.10 and 8.10.0 w/ rubber gasketed joints conforming to Standard Specification Ch. 8.41.4
- B. Min. 6" dia.

6.02 CONNECTIONS

- A. Wye for New Sewer = Prefabricated
- B. 8"x6" Wye for Exist Sewer = 8"x6" factory wye with 2 repair couplings
- C. > 8"x6" Wye for Exist Sewer = Inserta-Tee conforming to Standard Specifications Ch. 5.3.2 and Table 10 cored in the upper pipe quadrant (30°) with 45° bend

- D. Bentonite dam = Construct bentonite dam at each lateral in areas of high seasonal groundwater (Included in cost of lateral items)
- E. Existing Lateral: Use Fernco. If reducer needed, install at right-of-way boundary. Gaps shall be < 1/8”.
- F. Prohibited: Lateral connections to manholes; Ferncos on clay or concrete pipe.

6.03 GENERAL

- A. Installation: Conform to Standard Specifications Ch. 5.3.0, 5.3.5 and File No. 50
- B. Extend to right-of-way.
- C. Cap at right-of-way. Water-proof, leak-proof.
- D. Marker board = 2”x4”. Length from bottom of pipe to 3’ above proposed final ground surface. Top 1’ painted green.

PART 7 – INSPECTION AND TESTING

7.01 SCHEDULING

- A. Contact Engineering Dept. (262) 250-4721 two business days before construction to schedule inspection(s).

7.02 MAINLINE TESTING

- A. Deflection, Alignment and Bore: Conform to Standard Specifications Ch. 3.2.6(i)(4) and File No. 30 for 5% deflection limit.
- B. Low Pressure Air Test: Conform to Standard Specifications Ch. 3.7.3, 5.4.3 and File No. 31.
- C. Utility Superintendent will conduct CCTV and if applicable dye flooding testing.
- D. Force Main Hydrostatic Test: Conform to Standard Specifications Ch. 4.15.0. Include appurtenances.
- E. Contractor shall repair mainlines failing tests until acceptable to village engineer and utility superintendent at contractor’s expense.

7.03 MANHOLE VACUUM TESTING

- A. Conform to Standard Specifications Ch. 3.7.6
- B. Contractor shall perform testing after pavements are installed
- C. Min. Test Time in Seconds for Manhole Dia.

Depth (ft)	42" Dia. MH	48" Dia. MH	60" Dia. MH	72" Dia. MH
8	17	20	26	33
10	21	25	33	41
12	25	30	39	49
14	30	35	45	57
16	34	40	52	67
18	38	45	59	73
20	42	50	65	81
22	46	55	72	89
24	51	59	78	97
26	55	64	85	105
28	59	69	91	113
30	63	74	98	121

- D. Contractor shall repair manholes failing tests until acceptable to village engineer and utility superintendent at contractor's expense.

PART 8 – LIST OF VILLAGE STANDARD DETAILS

8.01 GENERAL

- A. Outside Drop Sanitary Manhole
- B. Sanitary Manhole Chimney Rebuild
- C. Sanitary and Sampling Manhole
- D. Sanitary Sewer Lateral
- E. Trench

PART 9 – OTHER REQUIREMENTS

9.01 GENERAL

- A. Contractor shall be responsible for Digger's Hotline locates, site safety, resident access, traffic control, erosion and sediment control, and protection of existing facilities, features and structures at all times

- B. At the beginning of construction, contractor shall install a mechanical plug at the new connection to existing manhole(s). The Utility Superintendent will remove and return the plug(s) after the constructed system has been accepted.
- C. At end of each day and during breaks, contractor shall install water-proof, leak-proof plugs
- D. At end of each day, open excavations shall not exceed 25 feet in length.
- E. All lateral trenches shall be backfilled at end of day.
- F. At end of each day, contractor shall erect barricades with flashers and snow fencing surrounding excavations.
- G. Mainline Installation: Conform to Standard Specifications Ch. 3.2.0
- H. Sawcut Exist Pavements: Wheel mounting saw required. Sawcut full-depth.

9.02 HEALTH AND SAFETY

- A. Contractor is responsible to determine health and safety requirements sufficient to provide for employee protection.
- B. Contractor shall comply with all federal codes, State of Wisconsin statutes and regulations, and Village of Germantown ordinances and specifications, and with any site specific safety plans developed by engineer.
- C. At end of each working day, open excavations shall not exceed 25' in length and shall be clearly protected with snow fence erected around the open excavation.

9.03 DOCUMENTATION

- A. Engineer will keep a continuous field record of work. Contractor shall assist engineer in collecting the following data as needed:
 - 1. Date and time of beginning and completion of each work day.
 - 2. Equipment on site.
 - 3. Material used.
 - 4. Location of installed pipe.
 - 5. Any other applicable information.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.14	Abandon 4-Inch PVC Sanitary Service at Main	Each
SPV.0060.21	Install R-1661 Bolt Down Casting	Each
SPV.0060.24	Verify Exact Location and Elevation of Village Utilities	Each
SPV.0060.35	Adjusting Sanitary Sewer Manhole Chimneys and Install New Castings	Each
SPV.0060.37	Salvage Castings	Each
SPV.0090.10	Install Tracer Wire	LF
SPV.0090.11	Install 10-Inch PVC Sanitary Sewer Main Pipe	LF
SPV.0090.12	Install 8-Inch PVC Sanitary Sewer Main Pipe	LF
SPV.0090.17	Install 6-Inch PVC Service Off Sewer Main	LF
SPV.0090.19	Extend Existing 6-Inch PVC Service	LF
SPV.0200.01	Install 48-Inch I.D. Precast Concrete Sanitary Manhole Structure	VF
SPV.0200.02	Rebuild 48-Inch I.D. Precast Concrete Sanitary Manhole Structure	VF
SPV.0200.03	Install HDPE Adjusting Rings	VF
SPV.0200.04	Install Concrete Adjusting Rings	VF

Payment is full compensation for furnishing, transporting, installing and removing the existing facilities, installing new utility lines and appurtenances; and for furnishing all labor, tools, equipment, and incidentals necessary to complete the contract work.

- 53. Water Main – Remove Only Valve Box, SPV.0060.02; Minor Adjustment, SPV.0060.08; Replacing Water Boxes Top Section, SPV.0060.09; Replacing Water Boxes Mid-Section, SPV.0060.10; Replacing Water Boxes Full Depth, SPV.0060.11; Remove 12-Inch Gate Valve and Box Water Main Pipe, SPV.0060.12; Install 12-Inch D.I. Cap, SPV.0060.13; Remove Existing Hydrant, Aux. Valve and D.I. Tee, SPV.0060.15; Relocate Existing Hydrant, Aux. Valve and D.I. Tee, SPV.0060.16; Remove Existing Hydrant, SPV.0060.17; Relocate Existing Hydrant, SPV.0060.18; Install Marker Flag, SPV.0060.19; Install 12-Inch x 6-Inch Live Tap Tee, SPV.0060.20; Remove and Salvage Hydrant and Auxillary Valve, SPV.0060.22; Install 12-Inch D.I. End Pipe Cap, SPV.0060.23; Abandon 1-Inch Water Service at Main, SPV.0060.25; Install 16-Inch Stainless Steel Band, SPV.0060.26; Install 12-Inch Stainless Steel Band, SPV.0060.27; Remove Curb Stop Box, SPV.0060.28; Install 12-Inch Mainline Gate Valve and Box, SPV.0060.29; Install 8-Inch Mainline Gate Valve and Box, SPV.0060.30; Install Hydrant Only, SPV.0060.31; Install Hydrant Assembly, SPV.0060.32; Install 16-Inch x 8-Inch Water Main Live Tap,**

SPV.0060.33; Relocate Existing Water Main Pipe, SPV.0060.34; Adjusting Water Valve Manhole Chimneys and Re-Use Castings, SPV.0060.36; Install 6-Inch Gate Valve and Box, SPV.0060.38; 2-Inch Corporation Valve, SPV.0060.39; 2-Inch Curb Stop Valve, SPV.0060.40; 2-Inch Curb Stop Box, SPV.0060.41; Install 6-Inch D.I. End Pipe Cap, SPV.0060.42; Slurry Fill 12-Inch PVC Water Main Pipe, SPV.0090.07; Remove 12-Inch PVC Water Main Pipe, SPV.0090.08; Install 6-Inch PVC Lead Pipe, SPV.0090.09; Install Tracer Wire, SPV.0090.10; Install 12-Inch C-900 PVC Water Main Pipe, SPV.0090.13; Install 8-Inch C-900 PVC Water Main Pipe, SPV.0090.14; Install 6-Inch C-900 PVC Water Main Pipe, SPV.0090.15; Install 16-Inch C-900 PVC Water Main Pipe, SPV.0090.16; Install 6-Inch PVC Water Service, SPV.0090.18; Install 2-Inch HDPE Water Service Directionally Drilled; SPV.0090.20.

A Description

PART 1 – GENERAL

1.01 WORK INCLUDED

- A. Section includes all, labor, materials, equipment, and related services for installing underground piping, structures, and appurtenances. Work scope includes (but not limited to) Work Summary – Section 01010.
- B. Contractor shall sequence construction so as to minimize disruption of water services to all water utility users.
- C. Contractor shall be responsible for Digger’s Hotline locates, site safety, resident access, traffic control, and protection of existing facilities, features and structures at all times.

1.02 RELATED SECTIONS

- A. See Table of Contents

1.03 GOVERNING AGENCIES AND APPLICABLE CODES/GUIDELINES/REGULATIONS

- A. Wisconsin State Statutes and Administrative Code
 - 1. Chapter NR 811
 - 2. Chapter SPS 382 (formerly Comm 82)

B. State of Wisconsin Department of Transportation (WisDOT)

1. WisDOT Standard Specifications for Highway and Structure Construction
2. WisDOT Facility Development Manual (FDM)

C. Village of Germantown

1. Municipal Code
2. Design, Drafting and Construction Standards and Specifications (Sec. 1-9)
3. Village Board and Committee actions
4. DPW director, village engineer, utility superintendent discretion

D. Other

1. Standard Specifications for Sewer and Water Construction in Wisconsin (Standard Specifications)
2. Southeast Wisconsin Regional Planning Commission (SEWRPC)
3. Manufacturer specifications

1.04 QUALITY ASSURANCE

- A. Work described in specifications and shown on the construction drawings, and all work necessary to completely finish work as described and shown, is to be executed in a professional manner.
- B. All work shall be done by persons who are thoroughly experienced and trained in their particular trade or craft.
- C. The contractor shall ensure that persons making heat fusion joints and electrofusions for HDPE pipe have received training in the manufacturer's recommended procedure. Contractor shall maintain and provide records of trained personnel, and shall certify training was received not more than 12 months before commencing construction.

1.05 METHODS OF MEASUREMENT/BASIS OF PAYMENT

- A. No explicit direct payment shall be made for incidental work under this section. Contractor shall include all direct and indirect costs for this work in unit prices provided.
- B. Include all connections of hydrants, services, existing mains of various size, and associated appurtenances in the unit prices provided.

1.06 SITE CONDITIONS

- A. Protect existing buildings, patios, gardens, vehicles, landscaping, walks, roads, fences, drives, curbs, utilities, and other features from damage from work of this Section.
- B. In event of damage, immediately make all repairs and replacements necessary subject to approval of engineer and at no additional cost to owner.

1.07 SCOPE OF WORK

- A. Work scope includes (but not limited to) Work Summary – Section 01010.

PART 2 – DESIGN CRITERIA

2.01 GENERAL

- A. Residual Pressure = 20 psi min.; Static Pressure = 35 psi min. at proposed final ground surface
- B. Main Dia. = 8" min.; Lateral Dia. = 1½" min.
- C. Cover above Mainlines/Laterals = 6' min. depth from proposed final ground surface to pipe crown (or engineer-approved depth); depths < 5' require polystyrene board insulation conforming to Standard Specifications Ch. 4.17.0 and 8.50.2
- D. Live Taps required
- E. Insulation: Polystyrene board. Required when cover < 5' or within 2' of an underground structure. Required over hydrant leads beneath roadside ditches.
- F. Hydrant Locations: Intersections; Far end of cul-de-sac at lot line extended; Mid-block at lot line extended
- G. Hydrant Spacing: Residential = 350' max.; Commercial/Industrial = 500' max.
- H. Valve Locations: Intersections; Mid-block at lot line extended; Hydrant branches; 4 valves per Cross; 3 valves per Tee
- I. Air Vent Locations: Temporary ends; High points where there is no hydrant
- J. Connections shall be made under pressure.
- K. Buttresses: Concrete required. Conform to Standard Specifications 4.3.13 and File No. 43 through 46.

PART 3 – PIPE MATERIAL, FITTINGS AND APPURTENANCES

3.01 HIGH DENSITY POLYETHYLENE (HDPE)

- A. Required for new construction.
- B. USA-manufactured products preferred.
- C. Material = PE 3408 conforming to ASTM D 3350 cell classification 345464C. List material in PPI TR-4. Standard grade HDB rating = 1600 psi at 73°F. Conform to cell classification 345464E. Approved for potable water per NSF Standard 61. Conform to ASTM F714 for DIPS and AWWA C906 with a SDR of 11.
- D. Stripes = Equally-spaced blue longitudinal stripes co-extruded into pipe's outside surface
- E. Molded Fittings: Manufactured and tested conforming to ASTM D3261 and AWWA C906, and fully pressure rated to same internal rating as mating pipe.
- F. Fabricated fittings: Manufactured by heat fusion joining specially machined shapes cut from pipe, polyethylene sheet stock, or molded fittings. Prohibited: Non-pressure or low-pressure rated fabricated fittings.
- G. HDPE MJ Adapters = International Piping Products. Required for connections to mechanical joint pipe, fittings, valves, and other appurtenances. Conform to AWWA C111/ANSI A21.11.
- H. HDPE Flange Adapters: Possess sufficient bore length to be clamped in butt fusion-joining machine w/o stub-end holder. Serrate sealing surface to promote gasketless sealing. Fit w/ back-up rings having pressure-rating equal to pipe's. Chamfer or radius adapters. Flange bolts and nuts = Grade 3 or higher stainless steel.
- I. Nuts and Bolts = Cor-Blue™
- J. HDPE Connection to Existing Gasketed-joint Water Main: Use anchoring fitting and concrete cast-in-place thrust anchor (or engineer-approved method).
- K. Ductile Iron Fittings: Class 250 w/ MJ conforming to AWWA C153. Conform to Standard Specifications Ch. 8.22.0
- L. PE Wrap: Triple wrap and securely tape DI fittings, valves and valve boxes. Conform to Standard Specifications Ch. 4.4.4 and 8.21.0.
- M. Water Services: Dia. = ½" Min. Branch tap connections by electrofusion welded for corporation saddle.

- N. Joints: Plain pipe ends and fittings = Butt fusion. Main and branch fittings = Butt fusion or electrofusion. Internal and external beads shall not be removed.
- O. First Fusion: Each day, perform trial fusion and bent strap test. Conform to ASTM D2657. Allow trial fusion to completely cool before cutting test straps. Test strap length = 12" or 30 times wall thickness. Test strap width = 1" or 1.5 times wall thickness.

3.02 POLYVINYL CHLORIDE (PVC)

- A. Allowable for relays.
- B. USA-manufactured products preferred.
- C. Pipe = AWWA C-900, Class 150-DR18, push-on joints. Conform to Standard Specifications Ch. 4.6.0 and 8.20.0.
- D. Fittings = Ductile Iron, Class 250-Mechanical Joint Manufactured by Tyler (or engineer approved equal). Conform to Standard Specifications Ch. 8.22.0
- E. Mechanical Joints = Mega-Lug retainer glands w/ buttresses. Conform to Standard Specifications Ch. 4.3.13 and File No. 43-46.
- F. Nuts and Bolts = Cor-Blue™
- G. PE Wrap: Triple wrap and securely tape DI fittings, valves and valve boxes. Conform to Standard Specifications Ch. 4.4.4 and 8.21.0.
- H. Cleaning of Pipe: Keep interior pipe and structures clean. Conform to Standard Specifications Ch. 4.3.11

3.03 FUSIBLE PVC C-900

- A. May be allowable for new construction. Contact village engineer.
- B. USA-manufactured products preferred.
- C. Conform to Standard Specifications Ch. 4.6.0 and 8.20.0, Class 150-DR18 and to AWWA C-900.
- D. Connections: Restrained or non-restrained retainer gland product for PVC pipe, as well as for MJ or flanged fittings.
- E. PVC Gasketed, Push-On Fittings: Gasketed PVC, push-on type couplings and fittings, including bends, tees, and couplings as shown in the drawings

- F. Sweeps or Bends: Not > 22.5 degrees, and shall be used in nominal diameters ranging from 4 inch through 16 inch.
- G. Connection Hardware: Bolts and nuts for buried service shall be made of non-corrosive, high-strength, low-alloy steel having the characteristics specified in ANSI/AWWA C111/A21.11

3.04 TRACER WIRE

- A. Insulated #10 solid copper tracer wire on all HDPE and PVC water main, fittings, hydrant leads, and building services. Tape Spacing = 10' intervals max.
- B. Splicing: Spliced, soldered, and wrapped with "Plyflex" low voltage splice kit (or engineer approved equal)
- C. Daylighting: Wire shall be brought to grade in a 3" dia. vertical PVC conduit covered with a glued threaded plug. Pipe shall have a 4-ft min. bury depth, shall terminate no more than 3" above grade, and shall be located opposite the pumper nozzle at no more than 6" from the hydrant base. Tracer wire shall not be brought to grade within valve boxes.

3.05 CHLORINATION

- A. Calcium hypochlorite tablets affixed to inside top of pipe w/ approved adhesive (Permatex No. 1) in the line at the time of installation. Conform to AWWA C651 and Standard Specifications Ch. 4.3.12

PART 4 – BEDDING, COVER AND BACKFILL

4.01 BEDDING

- A. Class "B" conforming to Standard Specifications Ch. 3.2.6(b) and File No. 4, Part IX
- B. 3/8" crushed stone chips. Conform to Standard Specifications Ch. 8.43.2, Table 32
- C. Conform to Standard Specifications Ch. 4.3.3
- D. Prohibited: Sand; gravel

4.02 COVER

- A. 3/8" crushed stone chips conforming to Standard Specifications Ch. 8.43.2, Table 32, File No. 4, and Ch. 8.43.3
- B. 12" above the top of pipe

- C. Prohibited: Sand; gravel

4.03 BACKFILL

- A. Aggregate slurry under village-owned pavements and department owned pavements: Required from bottom of trench to subgrade elevation.
- B. Granular where specified: Crushed gravel. Conform to Standard Specification Ch. 8.43.4, Table 39 Graded Aggregates, 1½" Graded Crushed Stone.
- C. Spoil not under pavements: Spoil material. Conform to Standard Specifications Ch. 8.43.5
- D. Consolidation: Mechanical compaction. Conform to Standard Specification Ch. 2.6.14(b). Conform to 95% Standard Proctor Density tested at contractor's expense.
- E. Initial Lift = 2 feet max.; Subsequent Lifts = 1½ feet max.
- F. Prohibited: Debris; frozen material; large clods or stones; organic material; blast rock; stones larger than 6"; sand. Contractor shall haul away and dispose of these materials at contractor's expense.

PART 5 – VALVES

5.01 GENERAL

- A. USA-manufactured products preferred
- B. 6"-12" Dia. PVC Pipe = Mueller Model #2360, Kennedy "Kenseal II" (or engineer approved equal) resilient seated gate valves. Conform to Standard Specifications Ch. 4.8.2 and 8.27.0 and AWWA-C509.
- C. 14"-24" Dia. PVC Pipe = Mueller Model #2361, Kennedy "Kenseal II" (or engineer approved equal) resilient seated gate valves. Conform to Standard Specifications Ch. 4.8.2 and 8.27.0 and AWWA-C515.
- D. HDPE Pipe = Kennedy Model #7571DI resilient wedge gate valve with reduced wall
- E. Pressure Rating = 200 psi
- F. Stems shall be non-rising
- G. Valves shall open left
- H. Nuts and Bolts = Cor-Blue™

- I. All exposed valve hardware shall be T304 stainless steel.
- J. Corrosion protection: Conform to Standard Specifications Ch. 4.4.4
- K. Installation: Conform to Standard Specifications Ch. 4.8.2 and File No. 37
- L. Valve box adaptor: Adaptor #6 base by Adaptor, Inc. Milwaukee WI, w/ three-piece screw type. Conform to Standard Specifications Ch. 8.29.0. Incl. stationary rod if bury depth > 6½'
- M. Covers shall have word "WATER" cast on them.
- N. Elevations: Top of box = ¼-½" below binder grade; Raise to ¼" below final proposed surface grade when paving final pavement lift
- O. Prohibited: Manufactured rising rings
- P. Turning Valves and Hydrants: Only village personnel are authorized to turn valves and hydrants. Contractors are prohibited from turning valves and hydrants.

PART 6 – HYDRANTS

6.01 GENERAL

- A. USA-manufactured products preferred
- B. Manufacturer for Publicly-Owned Hydrants: Kennedy Guardian, traffic model with breakaway flanges, two 2-½" hose nozzles (7-½ NST) and one 4-½" pumper or steamer nozzle (4 NST), a 1-½" pentagon operating nut and CCW opening, 6" mechanical joint inlet connection.
- C. Manufacturer for Privately-Owned Hydrants: Mueller with built-in check valve.
- D. Bury Depth = 6.5' min. to pipe crown
- E. Conform to Standard Specifications Ch. 4.8.5 and 8.26.0
- F. Marker flag = 60" Hydro Finder.
- G. Pumper Nozzle Elevation = 18-24" above top of curb or grade
- H. Location = 3" behind back of curb
- I. Access Ramp: Where a hydrant lead crosses a road-side ditch, an access ramp with the appropriate size culvert will be installed. Width = 6' min. Extend 2' beyond the hydrant. Materials = 6" crushed stone base and 3" of asphalt surface course

- J. Turning Valves and Hydrants: Only village personnel are authorized to turn valves and hydrants. Contractors are prohibited from turning valves and hydrants.

6.02 CONNECTIONS

- A. USA-manufactured products preferred
- B. PVC pipe: Connect using flanged anchor tee with MJ w/ built-in restraint.
- C. HDPE pipe: Connect using HDPE branch saddle reducing tee or a flanged anchor tee.
- D. Nuts and Bolts = Cor-Blue™

6.03 EASEMENTS

- A. Required for public hydrants/hydrant leads.

6.04 PAINTING

- A. Color = Safety Red
- B. Preparation: Sandblast to 100% clean white metal from ground level up to top of hydrant. Dispose of spent materials. Fully enclose hydrant during blasting, priming, and painting. Air dryer must be used to prevent moisture in the air supply.
- C. Primer = Devoe 224 high build epoxy primer (or engineer-approved equal) to a thickness of 4-8 mils (1 mil=25.4 millimeters).
- D. Topcoat = Devoe 379UVA urethane epoxy (or engineer-approved equal) with a minimum thickness of 4 mils All hydrants must be fully enclosed during blasting, priming, and painting. Air dryer must be used to prevent moisture in the air supply.
- E. Weather conditions shall be as follows for hydrant priming and painting:
 - 1. Shall not be applied in the rain, wind, snow, mist, and fog or when hydrant temperatures are less than 5°F above the dew point
 - 2. Shall not be applied when the relative humidity is above 85% or the temperature is above 90°F.
 - 3. Shall not be applied if air or surface temperature is above 120°F.
 - 4. Shall not be applied if air or surface temperature is below 60°F or is expected to drop below 60°F within 24 hours.

PART 7 – WATER SERVICES

7.01 PIPE

- A. USA-manufactured products preferred
- B. Material: HDPE, AWWA C901, SDR-9. PE 3408 conforming to ASTM D 3350 cell classification 345464C. Standard grade HDB rating = 1600 psi at 73°F. Color material = Also conform to cell classification 345464E. Approved for potable water per NSF Standard 61.
- C. Conform to AWWA C901 with a SDR of 9
- D. Size, Single Family Home = 1½” Dia. min. (Copper Tub Size (CTS)) outside dia.
- E. Size, Commercial/Multifamily = 2” Dia. min. CTS outside dia.
- F. Joints: Electrofusion

7.02 CONNECTIONS

- A. USA-manufactured products preferred
- B. Service Taps for HDPE Pipe: Electro-fusion welded corporation saddle. Outlet size shall be 1½” or 2” CTS w/ brass CC threads. Conform to AWWA C800. Butt weld outlet. Saddles shall include an integral bar code for processor scanning. Manuf. = Central Plastics Company (or engineer-approved equal). Metal saddles are prohibited.
- C. Service Taps for PVC Pipe: Corporation stops w/ pack joint. Conform to Standard Specifications Chapter 8.30.0. Manuf. = Ford (FB1001-6-IDR7 for 1½” or FB1001-7-IDR7 for 2”), A.Y. McDonald (or engineer approved equal)
- D. Pipe Saddles: Required for all taps in water main that is not HDPE pipe (i.e. PVC and ductile iron). Supplier = Smith-Blair, all stainless steel, double bolt, 1½”, Number 372. Couplings = Ford, C44-55Q, 1½” for copper or plastic tubing.
- E. PVC 4” or Greater: Install under pressure. Tapping sleeves = Romac STS420 or Smith-Blair 665. Resilient seated gate valve w/ pressure rating = 200 psi. MJ connections. Nuts and Bolts = Cor-Blue™. Gate valve: Mueller No. 2360, Kennedy “Kenseal II”, (or engineer approved equal) w/ non-rising stems and corrosion protection.
- F. Curb Stop: Minneapolis pattern ball valve curb stop w/ pack joints. Placement: Right-of-way. Conform to Standard Specifications Ch. 8.30.0. Stiffeners at ea. compression type connection. Manuf. = Ford (B66-666M-IDR7 for 1½” or B66-777M-IDR7 for 2”), A.Y. McDonald (or engineer approved equal)

- G. Curb Stop Box: Minneapolis pattern curb stop valve boxes (Cast Iron Service Boxes) for each curb stop valve. Conform to Standard Specifications Ch. 8.25.0. Bury depth = $6\frac{1}{2}\pm$ ft. Lid = Two-piece w/ standard brass pentagon bolt plug, Type PL. Upper section shall be $1\frac{1}{4}$ ". Manuf. = Ford (EM2-65-56), A.Y. McDonald (or engineer approved equal). Must be visible at grade at all times.
- H. Couplings and Fittings: Compression type w/ insert stiffeners for plastic tubing conforming with AISI Type 304 (stainless steel)
- I. Nuts and Bolts = Cor-Blue™

7.03 ABANDONMENTS

- A. At Curb Stop: Permitted only when all existing pipe and appurtenances are defect-free, and authorized by Water Utility Superintendent.
- B. At Main: Remove corporation stop and saddle, then replace w/ stainless steel repair sleeve wrapped w/ polyethylene sheeting. Conform to Standard Specifications Ch. 4.4.4 and 8.21.0

7.04 GENERAL

- A. Installation: Conform to Standard Specifications Ch. 5.3.0, 5.3.5 and File No. 50
- B. Extend to right-of-way
- C. Cap at right-of-way. Water-proof, leak-proof.
- D. Marker board = 2" x 4". Length from bottom of pipe to 3' above proposed final ground surface. Top 1' painted blue.
- E. Tracer Wire: Insulated #10 solid copper tracer wire to be wrapped around outside of curb stop box for future connection to copper piping inside building.

PART 8 – SAMPLING STATION

8.01 GENERAL

- A. Locations Required: All Commercial/Industrial sites
- B. USA-manufactured products preferred
- C. Manufacturer: Kupferle Foundry Company, Eclipse Model No. 88 (freeze-proof).
- D. Situate so easily accessible

- E. Station shall be provided with an aluminum cover that locks.
- F. The station shall have an unthreaded nozzle, ¾" FIP inlet, an o-ring valve design, and all brass waterway

PART 9 – INSPECTION AND TESTING

9.01 SCHEDULING

- A. Contact Engineering Dept. (262) 250-4721 two business days before construction to schedule inspection(s).

9.02 GENERAL

- A. Keep trenches dry during pipe installation.
- B. Temporary Plugs: Required at end-of-day, during breaks, and any other time pipe is unattended.
- C. Defect Inspection: Inspect each pipe length and all appurtenances for defects. Remove or discard defective materials.
- D. Turning Valves and Hydrants: Only village personnel are authorized to turn valves and hydrants. Contractors are prohibited from turning valves and hydrants.
- E. Meters for Filling and Flushing: Obtain meter from Water Utility and install for all filling and flushing. Contractor shall pay for water use.
- F. Flushing: Conform to Standard Specifications Ch. 4.16.2. In areas serviced by sanitary sewer, obtain authorization from Wastewater Utility to direct flushed water into the nearest sanitary sewer manhole.
- G. Hydrant Painting: A village representative shall be present to witness blasting, priming and painting.

9.03 TESTING

- A. A village representative shall be present to witness all forms of testing.
- B. Contractor shall perform all testing, sampling and analyses.
- C. Hydrostatic Testing: Test all new water main and appurtenances under the supervision of Village personnel. A successful test is requisite to acceptance by the Village Public Works and Highway Committee.

1. HDPE Pipe: Fill w/ water, increase to test pressure, and allow stabilization. The test pressure shall be 1.5 times the operating pressure at the lowest point in the system. The pipe shall pass if the final pressure is within 5% of the test pressure for 1 hour. Conform to ASTM Sec. 9.8. For safety reasons, only hydrostatic pressure will be used. Conform to ASTM F2164.
 2. Test Duration for HDPE Pipe: Less than 8 hrs. If testing is not completed for any reason, de-pressurize and allow to “relax” for 8 hours before resuming test.
 3. PVC Pipe: Conform to Standard Specifications Ch. 4.15.0.
 4. Water service may be tested as part of the water main hydrostatic test or they may be tested individually as a live tap to the pressurized main. All fittings and connections shall be carefully inspected for any visible water leakage in accordance to Standard Specifications Ch. 5.5.18.
- D. Bacteriological Testing: Conform to Standard Specifications Ch. 4.16.0 and NR 811.07. Contractor shall provide analysis results to Village Engineering Dept. If the bacteriological test fails, conform to Standard Specifications Ch. 4.16.3 to re-chlorinate the main.
- E. Tracer Wire Connectivity: Signal Detection Distance = 1,000 feet min.

PART 10 – LIST OF VILLAGE STANDARD DETAILS

- A. HDPE Hydrant Branch
- B. Standard Hydrant Bollard
- C. Relocate Water Main HDPE Pipe
- D. Relocated Existing Water Main PVC Pipe Only
- E. HDPE Joint Restraint
- F. Water Main Reconnection
- G. Water Main Service Lateral Schematic

PART 11 – OTHER REQUIREMENTS

11.01 GENERAL

- A. Contractor shall be responsible for Digger’s Hotline locates, site safety, resident access, traffic control, erosion and sediment control, and protection of existing facilities, features and structures at all times
- B. At end of each day and during breaks, contractor shall install water-proof, leak-proof plugs
- C. At end of each day, open excavations shall not exceed 25 feet in length.
- D. All lateral trenches shall be backfilled at end of day.
- E. At end of each day, contractor shall erect barricades with flashers and snow fencing surrounding excavations.

F. Mainline Installation: Conform to Standard Specifications Ch. 4.3.0

G. Sawcut Exist Pavements: Wheel-mounting saw required. Sawcut full-depth.

11.02 HEALTH AND SAFETY

A. Contractor is responsible to determine health and safety requirements sufficient to provide for employee protection.

B. Contractor shall comply with all federal codes, State of Wisconsin statutes and regulations, and Village of Germantown ordinances and specifications, and with any site specific safety plans developed by engineer.

C. At end of each working day, open excavations shall not exceed 25' in length and shall be clearly protected with snow fence erected around the open excavation.

11.03 DOCUMENTATION

A. Engineer will keep a continuous field record of work. Contractor shall assist engineer in collecting the following data as needed:

1. Date and time of beginning and completion of each work day.
2. Equipment on site.
3. Material used.
4. Location of installed pipe.
5. Any other applicable information.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.02	Remove Only Valve Box	Each
SPV.0060.08	Minor Adjustment	Each
SPV.0060.09	Replacing Water Boxes Top Section	Each
SPV.0060.10	Replacing Water Boxes Mid-Section	Each
SPV.0060.11	Replacing Water Boxes Full Depth	Each
SPV.0060.12	Remove 12-Inch Gate Valve and Box Water Main Pipe	Each
SPV.0060.13	Install 12-Inch D.I. Cap	Each
SPV.0060.15	Remove Existing Hydrant, Aux. Valve and D.I. Tee	Each
SPV.0060.16	Relocate Existing Hydrant, Aux. Valve and D.I. Tee	Each
SPV.0060.17	Remove Existing Hydrant	Each
SPV.0060.18	Relocate Existing Hydrant	Each
SPV.0060.19	Install Marker Flag	Each
SPV.0060.20	Install 12-Inch x 6-Inch Live Tap Tee	Each
SPV.0060.22	Remove and Salvage Hydrant and Auxillary Valve	Each

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.23	Install 12-Inch D.I. End Pipe Cap	Each
SPV.0060.25	Abandon 1-Inch Water Service at Main	Each
SPV.0060.26	Install 16-Inch Stainless Steel Band	Each
SPV.0060.27	Install 12-Inch Stainless Steel Band	Each
SPV.0060.28	Remove Curb Stop Box	Each
SPV.0060.29	Install 12-Inch Mainline Gate Valve and Box	Each
SPV.0060.30	Install 8-Inch Mainline Gate Valve and Box	Each
SPV.0060.31	Install Hydrant Only	Each
SPV.0060.32	Install Hydrant Assembly	Each
SPV.0060.33	Install 16-Inch x 8-Inch Water Main Live Tap	Each
SPV.0060.34	Relocate Existing Water Main Pipe	Each
SPV.0060.36	Adjusting Water Valve Manhole Chimneys and Re-Use Castings	Each
SPV.0060.38	Install 6-Inch Gate Valve and Box	Each
SPV.0060.39	2-Inch Corporation Valve	Each
SPV.0060.40	2-Inch Curb Stop Valve	Each
SPV.0060.41	2-Inch Curb Stop Box	Each
SPV.0060.42	Install 6-Inch D.I. End Pipe Cap	Each
SPV.0090.07	Slurry Fill 12-Inch PVC Water Main Pipe	LF
SPV.0090.08	Remove 12-Inch PVC Water Main Pipe	LF
SPV.0090.09	Install 6-Inch PVC Lead Pipe	LF
SPV.0090.10	Install Tracer Wire	LF
SPV.0090.13	Install 12-Inch C-900 PVC Water Main Pipe	LF
SPV.0090.14	Install 8-Inch C-900 PVC Water Main Pipe	LF
SPV.0090.15	Install 6-Inch C-900 PVC Water Main Pipe	LF
SPV.0090.16	Install 16-Inch C-900 PVC Water Main Pipe	LF
SPV.0090.18	Install 6-Inch PVC Water Service	LF
SPV.0090.20	Install 2-Inch HDPE Water Service Directionally Drilled	LF

Payment is full compensation for furnishing, transporting, installing and removing the existing facilities, installing new utility lines and appurtenances; and for furnishing all labor, tools, equipment, and incidentals necessary to complete the contract work.

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

Phone: _____
Fax: _____
Email: _____

DBE Contractor Contact Person

Phone _____
Fax _____
Email _____

Please circle the jobs and items you will be quoting below

Proposal No.	1	2	3	4	5	6	7
County							

WORK DESCRIPTION:

Clear and Grub	X		X	X		X	X
Dump Truck Hauling	X		X	X		X	X
Curb & Gutter/Sidewalk, Etc.	X		X	X		X	X
Erosion Control Items	X		X	X		X	X
Signs and Posts/Markers	X		X	X		X	X
Traffic Control		X	X	X		X	X
Electrical Work/Traffic Signals		X	X	X		X	
Pavement Marking		X	X	X	X	X	X
Sawing Pavement		X	X	X	X	X	X
QMP, Base	X	X		X	X	X	X
Pipe Underdrain	X			X			
Beam Guard				X	X	X	X
Concrete Staining							X
Trees/Shrubs	X						X

Again please make every effort to have your quotes into our office by time deadline prior to the letting date.

We prefer quotes be sent via SBN but prime's preferred alternative's are acceptable.

If there are further questions please direct them to the prime contractor's contact person at phone number.

APPENDIX B BEST PRACTICES FOR PRIME CONTRACTOR & DBE SUBCONTRACTOR GOOD FAITH EFFORT

This list is not a set of requirements; it is a list of potential strategies

Primes

- Prime contractor open houses inviting DBE firms to see the bid “war room” or providing technical assistance
- Participate in speed networking and mosaic exercises as arranged by DBE office
- Host information sessions not directly associated with a bid letting;
- Participate in a formal mentor protégé or joint venture with a DBE firm
- Participate in WisDOT advisory committees i.e. TRANSAC, or Mega Project committee meetings
- Facilitate a small group DBE ‘training session’ Clarifying how your firm prepares for bid letting, evaluates subcontractors, preferred qualifications and communication methods
- Encourage subcontractors to solicit and highlight DBE participation in their quotes to you
- Quality of communication, not quantity creates the best results. Contractors should do as thorough a job as possible in communicating with DBE firms before the bid and provide any assistance requested to assure best possible bid.

DBE

- DBE firms should contact primes as soon as possible with questions regarding their quotes or bid; seven days prior is optimal.
- Continually check for contract addendums on the HCCI website through the Thursday prior to letting to stay abreast of changes.
- Review the status of contracts on the HCCI website reviewing the ‘apparent low bidder’ list, and bid tabs at a minimum.
- Prepare a portfolio or list of related projects and prime and supplier references; be sure to note transportation-related projects of similar size and scope, firm expertise and staffing.
- Participate in DBE office assessment programs
- Participate on advisory and mega-project committees
- Sign up to receive the DBE Contracting Update
- Consider membership in relevant industry or contractor organizations
- Active participation is a must. Quote as many projects as you can reasonably work on; quoting the primes and bidding as a prime with the department are the only ways to get work.

APPENDIX C

Types of Efforts considered in determining GFE

This list represents concepts being assessed; analysis requires additional steps

1. Whether the contractor attended any pre-solicitation or pre-bid meetings that were scheduled by WisDOT to inform DBEs of contracting and subcontracting opportunities;
2. Whether the contractor provided written notice to a reasonable number of specific DBEs that their interest in the contract was being solicited, in sufficient time to allow the DBEs to participate effectively;
3. Whether the contractor followed up initial solicitations of interest by contacting DBEs to determine if the DBEs were interested; returned the phone calls of interested DBE firms.
4. Whether the contractor selected portions of the work to be performed by DBEs in order to increase the likelihood of meeting the DBE goal;
5. Whether the contractor provided interested DBEs with adequate information about the plans, specifications and requirements of the contract;
6. Whether the contractor negotiated in good faith with interested DBEs, not rejected DBEs as unqualified without sound reasons based on a thorough investigation of their capabilities;
7. Whether the contractor made efforts to assist interested DBEs in being more competitive.
8. Whether the contractor effectively used the services of available minority community organizations: minority contractors groups, local, state, and Federal minority business assistance offices, and other organizations that provide assistance to small businesses and DBE firms.
9. Whether Prime used CRCS to identify DBE who specialize in relevant work areas.
10. Whether the contractor used available resources including contacting the DBE office, using WisDOT's website
11. Whether the contractor returned calls of firms expressing interest in a timely manner.

APPENDIX D
Good Faith Effort Evaluation Guidance
Excerpt from Appendix A of 49 CFR Part 26

APPENDIX A TO PART 26 -- GUIDANCE CONCERNING GOOD FAITH EFFORTS

- I. When, as a recipient, you establish a contract goal on a DOT assisted contract, a bidder must, in order to be responsible and/or responsive, make good faith efforts to meet the goal. The bidder can meet this requirement in either of two ways. First, the bidder can meet the goal, documenting commitments for participation by DBE firms sufficient for this purpose. Second, even if it doesn't meet the goal, the bidder can document adequate good faith efforts. This means that the bidder must show that it took all necessary and reasonable steps to achieve a DBE goal or other requirement of this part which, by their scope, intensity, and appropriateness to the objective, could reasonably be expected to obtain sufficient DBE participation, even if they were not fully successful.
- II. In any situation in which you have established a contract goal, part 26 requires you to use the good faith efforts mechanism of this part. As a recipient, it is up to you to make a fair and reasonable judgment whether a bidder that did not meet the goal made adequate good faith efforts. It is important for you to consider the quality, quantity, and intensity of the different kinds of efforts that the bidder has made. The efforts employed by the bidder should be those that one could reasonably expect a bidder to take if the bidder were actively and aggressively trying to obtain DBE participation sufficient to meet the DBE contract goal. Mere pro forma efforts are not good faith efforts to meet the DBE contract requirements. We emphasize, however, that your determination concerning the sufficiency of the firm's good faith efforts is a judgment call: meeting quantitative formulas is not required.
- III. The Department also strongly cautions you against requiring that a bidder meet a contract goal (i.e., obtain a specified amount of DBE participation) in order to be awarded a contract, even though the bidder makes an adequate good faith efforts showing. This rule specifically prohibits you from ignoring bona fide good faith efforts.
- IV. The following is a list of types of actions which you should consider as part of the bidder's good faith efforts to obtain DBE participation. It is not intended to be a mandatory checklist, nor is it intended to be exclusive or exhaustive. Other factors or types of efforts may be relevant in appropriate cases.
 - A. Soliciting through all reasonable and available means (e.g. attendance at pre-bid meetings, advertising and/or written notices) the interest of all certified DBEs who have the capability to perform the work of the contract. The bidder must solicit this interest within sufficient time to allow the DBEs to respond to the solicitation. The bidder must determine with certainty if the DBEs are interested by taking appropriate steps to follow up initial solicitations.
 - B. Selecting portions of the work to be performed by DBEs in order to increase the likelihood that the DBE goals will be achieved. This includes, where appropriate, breaking out contract work items into economically feasible units to facilitate DBE participation, even when the prime contractor might otherwise prefer to perform these work items with its own forces.
 - C. Providing interested DBEs with adequate information about the plans, specifications, and requirements of the contract in a timely manner to assist them in responding to a solicitation.

- D.
 - (1) Negotiating in good faith with interested DBEs. It is the bidder's responsibility to make a portion of the work available to DBE subcontractors and suppliers and to select those portions of the work or material needs consistent with the available DBE subcontractors and suppliers, so as to facilitate DBE participation. Evidence of such negotiation includes the names, addresses, and telephone numbers of DBEs that were considered; a description of the information provided regarding the plans and specifications for the work selected for subcontracting; and evidence as to why additional agreements could not be reached for DBEs to perform the work.
 - (2) A bidder using good business judgment would consider a number of factors in negotiating with subcontractors, including DBE subcontractors, and would take a firm's price and capabilities as well as contract goals into consideration. However, the fact that there may be some additional costs involved in finding and using DBEs is not in itself sufficient reason for a bidder's failure to meet the contract DBE goal, as long as such costs are reasonable. Also, the ability or desire of a prime contractor to perform the work of a contract with its own organization does not relieve the bidder of the responsibility to make good faith efforts. Prime contractors are not, however, required to accept higher quotes from DBEs if the price difference is excessive or unreasonable.
 - E. Not rejecting DBEs as being unqualified without sound reasons based on a thorough investigation of their capabilities. The contractor's standing within its industry, membership in specific groups, organizations, or associations and political or social affiliations (for example union vs. non-union employee status) are not legitimate causes for the rejection or non solicitation of bids in the contractor's efforts to meet the project goal.
 - F. Making efforts to assist interested DBEs in obtaining bonding, lines of credit, or insurance as required by the recipient or contractor.
 - G. Making efforts to assist interested DBEs in obtaining necessary equipment, supplies, materials, or related assistance or services.
 - H. Effectively using the services of available minority/women community organizations; minority/women contractors' groups; local, state, and Federal minority/women business assistance offices; and other organizations as allowed on a case-by-case basis to provide assistance in the recruitment and placement of DBEs.
- V. In determining whether a bidder has made good faith efforts, you may take into account the performance of other bidders in meeting the contract. For example, when the apparent successful bidder fails to meet the contract goal, but others meet it, you may reasonably raise the question of whether, with additional reasonable efforts, the apparent successful bidder could have met the goal. If the apparent successful bidder fails to meet the goal, but meets or exceeds the average DBE participation obtained by other bidders, you may view this, in conjunction with other factors, as evidence of the apparent successful bidder having made good faith efforts.

Appendix E

Small Business Network [SBN] Overview

The Small Business Network is a part of the Bid Express® service that was created to ensure that prime bidders have a centralized online location to find subs - including small and disadvantaged business enterprises (DBEs). It is available for prime bidders to use as part of their Basic Service subscription. Within the Small Business Network, **Prime Contractors** can:

1. Easily select proposals, work types and items:
 - a. After adding applicable work types, select items that you wish to quote. Enter the sub-quote quantities and add comments, if desired. Adding or removing items and work types can be done quickly. If needed, you can save the sub-quote for completion at a later time.
2. Create sub-quotes for the subcontracting community:
 - a. Create sub-quotes with ease using the intuitive sub-quote creator. In seven short steps, you can rapidly create a custom sub-quote directed to all subcontractors that bid on the applicable work types. Steps include: provide contact information and sub-quote expiration date, select letting and proposal, add work types and items, specify terms and conditions, upload attachments, and select vendors.
 - b. Create a sub-quote to send to subcontractors or suppliers that lists the items in a proposal that you want quoted
 - c. Create an unlimited number of sub-quotes for items you want quoted, and optionally mark them as a DBE-preferred request
 - d. Add attachments to sub-quotes
3. View sub-quote requests & responses:
 - a. After logging into the Bid Express service, you can quickly review all of your sub-quote requests and all unsolicited sub-quote requests from subcontractors. To simplify the Small Business Network home screen, sub-quote requests can be hidden with one click if they are not applicable.
 - b. View or receive unsolicited sub-quotes that subcontractors have posted, complete with terms, conditions and pricing
4. View Record of Subcontractor Outreach Effort:
 - a. For each sub-quote produced, a *Record of Subcontractor Outreach Effort* is generated that shows the response statistics for a particular sub-quote. If accepted by the letting agency, this report may serve as proof of a “Good Faith” effort in reaching out to the DBE community.
 - b. Easily locate pre-qualified and certified small and disadvantaged businesses
 - c. Advertise to small and disadvantaged businesses more efficiently and cost effectively
 - d. Document your interactions with subs/DBEs by producing an Outreach Report (may be accepted as proof of DBE outreach at the discretion of each agency)

The Small Business Network is a part of the Bid Express® service that was created to ensure that small businesses have a centralized area to access information about upcoming projects. It can help small businesses learn more about opportunities, compete more effectively, network with other contractors and subcontractors, and win more jobs.

1. View and reply to sub-quote requests from primes:
 - a. After logging into the Bid Express service, you can quickly review all incoming sub-quote requests and all unsolicited sub-quotes created by your company. Receive notifications by selected work type. To simplify on the Small Business Network home screen, sub-quote requests can be filtered by work types relevant to your interests, or hidden with one click if they are not applicable.
2. Select items when responding to sub-quote requests from primes:
 - a. You have the freedom to choose and price any number of items when responding to a sub-quote request. Quantities can be modified, and per-item comments are also available.
 - b. View requests for sub-quotes for work that primes have posted for projects they are bidding, add your pricing, terms, and conditions, and submit completed sub-quotes to the requesting primes
 - c. Add attachments to a sub-quote
3. Create and send unsolicited sub-quotes to specific contractors:
 - a. Create unsolicited sub-quotes with ease using the intuitive sub-quote creator. In eight short steps, you can rapidly create a custom sub-quote directed at any number of specific vendors of your choosing. Steps include: provide contact information and sub-quote expiration date, select letting and proposal, add work types and items, specify terms and conditions, upload attachments, and select vendors.
4. Easily select and price items for unsolicited sub-quotes:
 - a. After adding applicable work types, select items that you wish to quote. The extended price calculates automatically, cutting out costly calculation errors. Comments can be provided on an per-item basis as well.
 - b. Create an unsolicited sub-quote that lists the items from a proposal that you want to quote, include pricing, terms and conditions, and send it to selected prime/plan holder
 - c. Add attachments to a sub-quote
 - d. Add unsolicited work items to sub-quotes that you are responding to
5. Easy Access to Valuable Information
 - a. Receive a confirmation that your sub-quote was opened by a prime
 - b. View Bid Tab Analysis data from past bids, including the high, average and low prices of items.
 - c. View important notices and publications from DOT targeted to small and disadvantaged businesses
6. Accessing Small Business Network for WisDOT contracting opportunities
 - a. If you are a contractor not yet subscribing to the Bid Express service, go to **www.bidx.com** and select “Order Bid Express.” The Small Business Network is a part of the Bid Express Basic Service.
 - b. DBE firms can request a Bid Express Small Business Network Account at no cost by calling 414-438-4588

ADDITIONAL SPECIAL PROVISION 4

Payment to First-Tier Subcontractors

Within 10 calendar days of receiving a progress payment for work completed by a subcontractor, pay the subcontractor for that work. The prime contractor may withhold payment to a subcontractor if, within 10 calendar days of receipt of that progress payment, the prime contractor provides written notification to the subcontractor and the department documenting "just cause" for withholding payment.

The prime contractor may also withhold routine retainage from payments due subcontractors.

Payment to Lower-Tier Subcontractors

Ensure that subcontracting agreements at all tiers provide prompt payment rights to lower-tier subcontractors that parallel those granted first-tier subcontractors in this provision.

Release of Routine Retainage

After granting substantial completion the department may reduce the routine retainage withheld from the prime contractor to 75 percent of the original total amount retained.

When the Department sends the semi-final estimate the department may reduce the routine retainage withheld from the prime contractor to 10 percent of the original total amount retained.

Within 30 calendar days of receiving the semi-final estimate from the department, submit written certification that subcontractors at all tiers are paid in full for acceptably completed work and that no routine retainage is being withheld. The department will pay the prime contractor in full and reduce the routine retainage withheld from the prime contractor to zero when the department approves the final estimate.

This special provision does not limit the right of the department, prime contractor, or subcontractors at any tier to withhold payment for work not acceptably completed or work subject to an unresolved contract dispute.

ADDITIONAL SPECIAL PROVISION 6**ASP 6 - Modifications to the standard specifications**

Make the following revisions to the standard specifications:

450.3.2.1 General

Replace the entire text with the following effective with the January 2015 letting:

- (1) Do not place asphaltic mixture when the air temperature approximately 3 feet above grade, in shade, and away from artificial heat sources is less than 36 F for upper layers or 32 F for lower layers unless the engineer allows in writing. The contractor should place HMA pavement for projects on or north of STH 29 between May 1 and October 15 inclusive and for projects south of STH 29 between April 15 and November 1 inclusive. Notify the engineer at least one business day before paving.
 - (2) Unless the contract specifies otherwise, conform to the following:
 - Keep the road open to all traffic during construction.
 - Prepare the existing foundation for treatment as specified in 211.
 - Incorporate loose roadbed aggregate as a part of preparing the foundation, in shoulder construction, or dispose of as the engineer approves.
 - (3) Place asphaltic mixture only on a prepared, firm, and compacted base, foundation layer, or existing pavement substantially surface-dry and free of loose and foreign material. Do not place over frozen subgrade or base, or where the roadbed is unstable.
-

450.5 Payment

Replace the entire text with the following effective with the May 2015 letting:

- (1) All costs of furnishing, maintaining, and operating the truck scale or other weighing equipment and furnishing the weigh tickets are incidental to the contract.
 - (2) Nonconforming material allowed to remain in place is subject to price adjustment under 105.3.2.
 - (3) Full-depth sawing to remove integrally placed safety edge where not required is incidental to the contract.
 - (4) The contractor is responsible for the quality of HMA pavement placed in cold weather. If because of an excusable compensable delay under 108.10.3, the engineer directs the contractor to pave when the temperature is less than 36 F for the upper layer or less than 32 F for lower layers, the department:
 - Will relieve the contractor of responsibility for damage and defects the engineer attributes to cold weather paving.
 - Will not assess disincentives for density or ride.
-

455.3.2.1 General

Replace the paragraphs one and two with the following effective with the January 2015 letting:

- (1) Apply tack coat only when the air temperature is 32 F or more unless the engineer approves otherwise in writing. Before applying tack coat ensure that the surface is dry and reasonably free of loose dirt, dust, or other foreign matter. Do not apply if weather or surface conditions are unfavorable or before impending rains.
- (2) Use tack material of the type and grade the contract specifies. The contractor may, with the engineer's approval, dilute tack material as allowed under 455.2.4. Provide calculations using the asphalt content as-received from the supplier and subsequent contractor dilutions to show that as-placed material has 50 percent or more residual asphalt content. Apply at 0.050 to 0.070 gallons per square yard, after dilution, unless the contract designates otherwise. The engineer may adjust the application rate based on surface conditions. Limit application each day to the area the contractor expects to pave during that day.

460.2.2.3 Aggregate Gradation Master Range

Replace paragraph one with the following effective with the December 2014 letting:

- (1) Ensure that the aggregate blend, including recycled material and mineral filler, conforms to the gradation requirements in table 460-1. The values listed are design limits; production values may exceed those limits.

TABLE 460-1 AGGREGATE GRADATION MASTER RANGE AND VMA REQUIREMENTS

SIEVE	PERCENTS PASSING DESIGNATED SIEVES						
	NOMINAL SIZE						
	37.5 mm	25.0 mm	19.0 mm	12.5 mm	9.5 mm	SMA 12.5 mm	SMA 9.5 mm
50.0-mm	100						
37.5-mm	90 – 100	100					
25.0-mm	90 max	90 - 100	100				
19.0-mm	—	90 max	90 - 100	100		100	
12.5-mm	—	—	90 max	90 - 100	100	90 - 97	100
9.5-mm	—	—	—	90 max	90 - 100	58 - 72	90 - 100
4.75-mm	—	—	—	—	90 max	25 - 35	35 - 45
2.36-mm	15 – 41	19 - 45	23 - 49	28 - 58	20 - 65	15 - 25	18 - 28
75-µm	0 – 6.0	1.0 - 7.0	2.0 - 8.0	2.0 - 10.0	2.0 - 10.0	8.0 - 12.0	10.0 - 14.0
% MINIMUM VMA	11.0	12.0	13.0	14.0 ^[1]	15.0 ^[2]	16.0	17.0

^[1] 14.5 for E-0.3 and E-3 mixes.

^[2] 15.5 for E-0.3 and E-3 mixes.

460.3.4 Cold Weather Paving

Add a new subsection as follows effective with the May 2015 letting:

460.3.4 Cold Weather Paving**460.3.4.1 Cold Weather Paving Plan**

- (1) Submit a written cold weather paving plan to the engineer at the preconstruction meeting. In that plan outline material, operational, and equipment changes for paving when the air temperature approximately 3 feet above grade, in shade, and away from artificial heat sources is less than 40 F. Include the following:
- Use a department-accepted HMA mix design that incorporates a warm mix additive from the department's approved products list. Do not use a foaming process that introduces water into the mix.
 - Use additional rollers.

- (2) Engineer written acceptance is required for the cold weather paving plan. Engineer acceptance of the plan does not relieve the contractor of responsibility for pavement performance except as specified in 450.5(4).

460.3.4.2 Cold Weather Paving Operations

- (1) Do not place asphaltic mixture when the air temperature approximately 3 feet above grade, in shade, and away from artificial heat sources is less than 40 F unless a valid engineer-accepted cold weather paving plan is in effect.
- (2) If the national weather service forecast for the construction area predicts ambient air temperature less than 40 F at the projected time of paving within the next 24 hours, confirm or submit revisions to a previously engineer-accepted cold weather paving plan for engineer validation. Upon validation of the plan, the engineer will allow paving for the next day. Once in effect, pave conforming to the engineer-accepted cold weather paving plan for the balance of that work day or shift regardless of the temperature at the time of paving.

460.4 Measurement

Add paragraph two as follows effective with the January 2015 letting:

- (2) The department will measure HMA Cold Weather Paving by the ton of HMA mixture for pavement placed conforming to an engineer-accepted cold weather paving plan.

460.5.1 General

Revise paragraph one as follows effective with the January 2015 letting:

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

<u>ITEM NUMBER</u>	<u>DESCRIPTION</u>	<u>UNIT</u>
460.1100	HMA Pavement Type E-0.3	TON
460.1101	HMA Pavement Type E-1	TON
460.1103	HMA Pavement Type E-3	TON
460.1110	HMA Pavement Type E-10	TON
460.1130	HMA Pavement Type E-30	TON
460.1132	HMA Pavement Type E-30X	TON
460.1700	HMA Pavement Type SMA	TON
460.2000	Incentive Density HMA Pavement	DOL
460.4000	HMA Cold Weather Paving	TON

460.5.2.2 Disincentive for HMA Pavement Density

Revise paragraph two as follows effective with the January 2015 letting:

- (2) The department will not assess density disincentives for pavement placed in cold weather because of a department-caused delay as specified in 450.5(4).

460.5.2.4 Cold Weather Paving

Add a new subsection as follows effective with the May 2015 letting:

460.5.2.4 Cold Weather Paving

- (1) Payment for HMA Cold Weather Paving is full compensation for additional materials and equipment specified for cold weather paving under 460.3.4 including costs for preparing, administering, and following the contractor's cold weather paving plan. The department will not pay for HMA Cold Weather Paving for HMA placed on days when the department is assessing liquidated damages.
- (2) If HMA pavement is placed under 460.3.4 and the HMA Cold Weather Paving bid item is not in the contract, the department will pay for the additional costs specified in 460.5.2.4(1) as extra work. The department will pay separately for HMA pavement under the appropriate HMA Pavement bid items.

465.2 Materials

Replace paragraph two with the following effective with the December 2014 letting:

- (2) Under the other 465 bid items, the contractor need not submit a mix design. Furnish aggregates mixed with a type AC asphaltic material, except under the Asphaltic Curb bid item furnish PG58-28 asphaltic material. Use coarse and fine mineral aggregates uniformly coated and mixed with the asphaltic material in an engineer-approved mixing plant. The contractor may include reclaimed asphaltic pavement materials in the mixture.

506.3.2 Shop Drawings

Replace the entire text with the following effective with the May 2015 letting:

- (1) Ensure that shop drawings conform to the contract plans and provide additional details, dimensions, computations, and other information necessary for completely fabricating and erecting the work. Include project and structure numbers on each shop drawing sheet.
- (2) Check shop drawings and submit electronically to the department for review before beginning fabrication. For primary fabrication items, also certify that shop drawings conform to quality control standards by submitting department form DT2333. Department review does not relieve the contractor from responsibility for errors or omissions on shop drawings.
- (3) Shop drawings are part of the contract. The department must approve differences between shop drawings and contract plans. The contractor bears the costs of department-approved substitutions. Do not deviate from or revise drawings without notifying the department and resubmitting revised drawings.
- (4) Ensure that the fabricator delivers 3 sets of shop drawings for railroad structures to the railroad company upon contract completion.

Bid Items Added

Add the following new bid item effective with the January 2015 letting:

<u>ITEM NUMBER</u>	<u>DESCRIPTION</u>	<u>UNIT</u>
460.4000	HMA Cold Weather Paving	TON

Errata

Make the following corrections to the standard specifications:

501.3.2.4.4 Water Reducer

Correct errata by deleting the reference to footnote 6 for grade D concrete.

- (1) Add a water reducing admixture conforming to 501.2.3. Determine the specific type and rate of use based on the atmospheric conditions, the desired properties of the finished concrete and the manufacturer's recommended rate of use. The actual rate of use shall at least equal the manufacturer's recommended rate, and both the type and rate used require the engineer's approval before use.
-

506.5 Payment

Correct errata by changing the reference to 506.3.22.

- (9) The department will limit costs for inspections conducted under 506.3.22 to \$0.05 per pound of material and deduct costs in excess of that amount from payment due the contractor. The department will determine costs for in-house inspections based on hourly rates for department staff plus overhead and use invoiced costs for contracted-out inspections. The department will administer deductions for the contractor's share of the total inspection cost under the Excess Costs For Fabrication Shop Inspection administrative item.

ADDITIONAL SPECIAL PROVISION 7

- A. Reporting 1st Tier and DBE Payments During Construction
1. Comply with reporting requirements specified in the department's Civil Rights Compliance, Contractor's User Manual, Sublets and Payments.
 2. Report payments to all DBE firms within 10 calendar days of receipt of a progress payment by the department or a contractor for work performed, materials furnished, or materials stockpiled by a DBE firm. Report the payment as specified in A(1) for all work satisfactorily performed and for all materials furnished or stockpiled.
 3. Report payments to all first tier subcontractor relationships within 10 calendar days of receipt of a progress payment by the department for work performed. Report the payment as specified in A(1) for all work satisfactorily performed.
 4. All tiers shall report payments as necessary to comply with the DBE payment requirement as specified in A(2).
 5. Require all first tier relationships, DBE firms and all other tier relationships necessary to comply with the DBE payment requirement in receipt of a progress payment by contractor to acknowledge receipt of payment as specified in A(1), (2), (3) and (4).
 6. All agreements made by a contractor shall include the provisions in A(1), (2), (3), (4) and (5), and shall be binding on all first tier subcontractor relationships and all contractors and subcontractors utilizing DBE firms on the project.
- B. Costs for conforming to this special provision are incidental to the contract.

ADDITIONAL SPECIAL PROVISION 9

Electronic Certified Payroll Submittal

(1) Use the department's Civil Rights Compliance System (CRCS) to submit certified payrolls electronically. Details are available online through the department's highway construction contractor information (HCCI) site on the Labor, Wages, and EEO Information page at:

<http://wisconsindot.gov/Pages/doing-bus/civil-rights/labornwage/default.aspx>

(2) Ensure that all tiers of subcontractors, as well as all trucking firms, submit their weekly certified payrolls electronically through CRCS. These payrolls are due within seven calendar days following the close of the payroll period. Every firm providing physical labor towards completing the project is a subcontractor under this special provision.

(3) Upon receipt of contract execution, promptly make all affected firms aware of the requirements under this special provision and arrange for them to receive CRCS training as they are about to begin payrolls. The department will provide training either in a classroom setting at one of our regional offices or by telephone. Contact Tess Mulrooney at 608-267-4489 to schedule the training.

(4) The department will reject all paper submittals of forms DT-1816 and DT-1929 for information required under this special provision. All costs for conforming to this special provision are incidental to the contract.

(5) Firms wishing to export payroll data from their computer system into CRCS should have their payroll coordinator send several sample electronic files to Tess two months before a payroll needs to be submitted. Not every contractor's payroll system is capable of producing export files. For details, see pages 17-22 of the CRCS System Background Information manual available online on the Labor, Wages, and EEO Information page at:

<http://wisconsindot.gov/Documents/doing-bus/civil-rights/labornwage/crcs-payroll-manual.pdf>

REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS

- I. General
- II. Nondiscrimination
- III. Nonsegregated Facilities
- IV. Davis-Bacon and Related Act Provisions
- V. Contract Work Hours and Safety Standards Act Provisions
- VI. Subletting or Assigning the Contract
- VII. Safety: Accident Prevention
- VIII. False Statements Concerning Highway Projects
- IX. Implementation of Clean Air Act and Federal Water Pollution Control Act
- X. Compliance with Governmentwide Suspension and Debarment Requirements
- XI. Certification Regarding Use of Contract Funds for Lobbying

ATTACHMENTS

A. Employment and Materials Preference for Appalachian Development Highway System or Appalachian Local Access Road Contracts (included in Appalachian contracts only)

I. GENERAL

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under Title 23 (excluding emergency contracts solely intended for debris removal). The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services).

The applicable requirements of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The prime contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Form FHWA-1273 must be included in all Federal-aid design-build contracts, in all subcontracts and in lower tier subcontracts (excluding subcontracts for design services, purchase orders, rental agreements and other agreements for supplies or services). The design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Contracting agencies may reference Form FHWA-1273 in bid proposal or request for proposal documents, however, the Form FHWA-1273 must be physically incorporated (not referenced) in all contracts, subcontracts and lower-tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services related to a construction contract).

2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract.

3. A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.

4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by convicts who are on parole, supervised release, or probation. The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors.

II. NONDISCRIMINATION

The provisions of this section related to 23 CFR Part 230 are applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more. The provisions of 23 CFR Part 230 are not applicable to material supply, engineering, or architectural service contracts.

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR 60, 29 CFR 1625-1627, Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The contractor and all subcontractors must comply with: the requirements of the Equal Opportunity Clause in 41 CFR 60-1.4(b) and, for all construction contracts exceeding \$10,000, the Standard Federal Equal Employment Opportunity Construction Contract Specifications in 41 CFR 60-4.3.

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR 60, and 29 CFR 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), and Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The following provision is adopted from 23 CFR 230, Appendix A, with appropriate revisions to conform to the U.S. Department of Labor (US DOL) and FHWA requirements.

1. Equal Employment Opportunity: Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (28 CFR 35, 29 CFR 1630, 29 CFR 1625-1627, 41 CFR 60 and 49 CFR 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140 shall constitute the EEO and specific affirmative action standards for the contractor's project activities under

this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract.

b. The contractor will accept as its operating policy the following statement:

"It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, pre-apprenticeship, and/or on-the-job training."

2. EEO Officer: The contractor will designate and make known to the contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active EEO program and who must be assigned adequate authority and responsibility to do so.

3. Dissemination of Policy: All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:

a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer.

b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.

c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minorities and women.

d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.

e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

4. Recruitment: When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.

a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish with such identified sources procedures whereby minority and women applicants may be referred to the contractor for employment consideration.

b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.

c. The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such applicants will be discussed with employees.

5. Personnel Actions: Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, national origin, age or disability. The following procedures shall be followed:

a. The contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.

b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.

c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.

d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of their avenues of appeal.

6. Training and Promotion:

a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are

applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.

b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).

c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.

d. The contractor will periodically review the training and promotion potential of employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.

7. Unions: If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:

a. The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.

b. The contractor will use good faith efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age or disability.

c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the contracting agency and shall set forth what efforts have been made to obtain such information.

d. In the event the union is unable to provide the contractor with a reasonable flow of referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age or disability; making full efforts to obtain qualified and/or qualifiable minorities and women. The failure of a union to provide sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.

8. Reasonable Accommodation for Applicants / Employees with Disabilities: The contractor must be familiar

with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established there under. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.

9. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment: The contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.

a. The contractor shall notify all potential subcontractors and suppliers and lessors of their EEO obligations under this contract.

b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

10. Assurance Required by 49 CFR 26.13(b):

a. The requirements of 49 CFR Part 26 and the State DOT's U.S. DOT-approved DBE program are incorporated by reference.

b. The contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the contracting agency deems appropriate.

11. Records and Reports: The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.

a. The records kept by the contractor shall document the following:

(1) The number and work hours of minority and non-minority group members and women employed in each work classification on the project;

(2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and

(3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women;

b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on [Form FHWA-1391](#). The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor

will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

III. NONSEGREGATED FACILITIES

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more.

The contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color, religion, sex, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location, under the contractor's control, where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

IV. DAVIS-BACON AND RELATED ACT PROVISIONS

This section is applicable to all Federal-aid construction projects exceeding \$2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size). The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. Contracting agencies may elect to apply these requirements to other projects.

The following provisions are from the U.S. Department of Labor regulations in 29 CFR 5.5 "Contract provisions and related matters" with minor revisions to conform to the FHWA-1273 format and FHWA program requirements.

1. Minimum wages

a. All laborers and mechanics employed or working upon the site of the work, will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions

of paragraph 1.d. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph 1.b. of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

b.(1) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

(i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(ii) The classification is utilized in the area by the construction industry; and

(iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(2) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(3) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. The Wage and Hour Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or

will notify the contracting officer within the 30-day period that additional time is necessary.

(4) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs 1.b.(2) or 1.b.(3) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

c. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

d. If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program. Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

2. Withholding

The contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor under this contract, or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the contracting agency may, after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

3. Payrolls and basic records

a. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-

Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

b. (1) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the contracting agency. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at <http://www.dol.gov/esa/whd/forms/wh347instr.htm> or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the contracting agency for transmission to the State DOT, the FHWA or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the contracting agency..

(2) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(i) That the payroll for the payroll period contains the information required to be provided under §5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under §5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;

(ii) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;

(iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(2) of this section.

(4) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.

c. The contractor or subcontractor shall make the records required under paragraph 3.a. of this section available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the FHWA may, after written notice to the contractor, the contracting agency or the State DOT, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

4. Apprentices and trainees

a. Apprentices (programs of the USDOL).

Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice.

The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly

rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

b. Trainees (programs of the USDOL).

Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration.

The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration.

Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

c. Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.

d. Apprentices and Trainees (programs of the U.S. DOT).

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeymen shall not be greater than permitted by the terms of the particular program.

5. Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.

6. Subcontracts. The contractor or subcontractor shall insert Form FHWA-1273 in any subcontracts and also require the subcontractors to include Form FHWA-1273 in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.

7. Contract termination: debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

8. Compliance with Davis-Bacon and Related Act requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.

9. Disputes concerning labor standards. Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

10. Certification of eligibility.

a. By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

c. The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

The following clauses apply to any Federal-aid construction contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.

1. Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

2. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (1.) of this section, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1.) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1.) of this section.

3. Withholding for unpaid wages and liquidated damages. The FHWA or the 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 any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2.) of this section.

4. Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1.) through (4.) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1.) through (4.) of this section.

VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System.

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).

a. The term "perform work with its own organization" refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions:

(1) the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;

(2) the prime contractor remains responsible for the quality of the work of the leased employees;

(3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and

(4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.

b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract.

2. The contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.

3. The contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.

4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is

evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.

5. The 30% self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements.

VII. SAFETY: ACCIDENT PREVENTION

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract.

2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).

3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C.3704).

VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR 635) in one or more places where it is readily available to all persons concerned with the project:

18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 1, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined under this title or imprisoned not more than 5 years or both."

IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

By submission of this bid/proposal or the execution of this contract, or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

1. That any person who is or will be utilized in the performance of this contract is not prohibited from receiving an award due to a violation of Section 508 of the Clean Water Act or Section 306 of the Clean Air Act.

2. That the contractor agrees to include or cause to be included the requirements of paragraph (1) of this Section X in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements.

X. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost \$25,000 or more – as defined in 2 CFR Parts 180 and 1200.

1. Instructions for Certification – First Tier Participants:

a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.

b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this

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

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

d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

e. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

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

g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.

h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (<https://www.epls.gov/>), which is compiled by the General Services Administration.

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

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

* * * * *

2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:

a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:

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

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

(3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (a)(2) of this certification; and

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

b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

2. Instructions for Certification - Lower Tier Participants:

(Applicable to all subcontracts, purchase orders and other lower tier transactions requiring prior FHWA approval or estimated to cost \$25,000 or more - 2 CFR Parts 180 and 1200)

a. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.

b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which

this transaction originated may pursue available remedies, including suspension and/or debarment.

c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.

d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

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

f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.

g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (<https://www.epls.gov/>), which is compiled by the General Services Administration.

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

i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the

department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

* * * * *

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:

1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency.

2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

* * * * *

XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts which exceed \$100,000 (49 CFR 20).

1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

**ATTACHMENT A - EMPLOYMENT AND MATERIALS
PREFERENCE FOR APPALACHIAN DEVELOPMENT
HIGHWAY SYSTEM OR APPALACHIAN LOCAL ACCESS
ROAD CONTRACTS**

This provision is applicable to all Federal-aid projects funded under the Appalachian Regional Development Act of 1965.

1. During the performance of this contract, the contractor undertaking to do work which is, or reasonably may be, done as on-site work, shall give preference to qualified persons who regularly reside in the labor area as designated by the DOL wherein the contract work is situated, or the subregion, or the Appalachian counties of the State wherein the contract work is situated, except:

a. To the extent that qualified persons regularly residing in the area are not available.

b. For the reasonable needs of the contractor to employ supervisory or specially experienced personnel necessary to assure an efficient execution of the contract work.

c. For the obligation of the contractor to offer employment to present or former employees as the result of a lawful collective bargaining contract, provided that the number of nonresident persons employed under this subparagraph (1c) shall not exceed 20 percent of the total number of employees employed by the contractor on the contract work, except as provided in subparagraph (4) below.

2. The contractor shall place a job order with the State Employment Service indicating (a) the classifications of the laborers, mechanics and other employees required to perform the contract work, (b) the number of employees required in each classification, (c) the date on which the participant estimates such employees will be required, and (d) any other pertinent information required by the State Employment Service to complete the job order form. The job order may be placed with the State Employment Service in writing or by telephone. If during the course of the contract work, the information submitted by the contractor in the original job order is substantially modified, the participant shall promptly notify the State Employment Service.

3. The contractor shall give full consideration to all qualified job applicants referred to him by the State Employment Service. The contractor is not required to grant employment to any job applicants who, in his opinion, are not qualified to perform the classification of work required.

4. If, within one week following the placing of a job order by the contractor with the State Employment Service, the State Employment Service is unable to refer any qualified job applicants to the contractor, or less than the number requested, the State Employment Service will forward a certificate to the contractor indicating the unavailability of applicants. Such certificate shall be made a part of the contractor's permanent project records. Upon receipt of this certificate, the contractor may employ persons who do not normally reside in the labor area to fill positions covered by the certificate, notwithstanding the provisions of subparagraph (1c) above.

5. The provisions of 23 CFR 633.207(e) allow the contracting agency to provide a contractual preference for the use of mineral resource materials native to the Appalachian region.

6. The contractor shall include the provisions of Sections 1 through 4 of this Attachment A in every subcontract for work which is, or reasonably may be, done as on-site work.

SEPTEMBER 2002

**NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE
EQUAL EMPLOYMENT OPPORTUNITY (EXECUTIVE ORDER 11246)**

1. The Offeror's or Bidder's attention is called to the "Employment Practices" and "Equal Opportunity Clause" set forth in the Required Contract Provisions, FHWA 1273.
2. The goals and timetables for minority and female participation expressed in percentage terms for the contractor's aggregate work force in each trade, on all construction work in the covered area, are as follows:

Goals for Minority Participation for Each Trade:

<u>County</u>	<u>%</u>	<u>County</u>	<u>%</u>	<u>County</u>	<u>%</u>
Adams	1.7	Iowa	1.7	Polk	2.2
Ashland	1.2	Iron	1.2	Portage	0.6
Barron	0.6	Jackson	0.6	Price	0.6
Bayfield	1.2	Jefferson	7.0	Racine	8.4
Brown	1.3	Juneau	0.6	Richland	1.7
Buffalo	0.6	Kenosha	3.0	Rock	3.1
Burnett	2.2	Kewaunee	1.0	Rusk	0.6
Calumet	0.9	La Crosse	0.9	St. Croix	2.9
Chippewa	0.5	Lafayette	0.5	Sauk	1.7
Clark	0.6	Langlade	0.6	Sawyer	0.6
Columbia	1.7	Lincoln	0.6	Shawano	1.0
Crawford	0.5	Manitowoc	1.0	Sheboygan	7.0
Dane	2.2	Marathon	0.6	Taylor	0.6
Dodge	7.0	Marinette	1.0	Trempealeau	0.6
Door	1.0	Marquette	1.7	Vernon	0.6
Douglas	1.0	Menominee	1.0	Vilas	0.6
Dunn	0.6	Milwaukee	8.0	Walworth	7.0
Eau Claire	0.5	Monroe	0.6	Washburn	0.6
Florence	1.0	Oconto	1.0	Washington	8.0
Fond du Lac	1.0	Oneida	0.6	Waukesha	8.0
Forest	1.0	Outagamie	0.9	Waupaca	1.0
Grant	0.5	Ozaukee	8.0	Waushara	1.0
Green	1.7	Pepin	0.6	Winnebago	0.9
Green Lake	1.0	Pierce	2.2	Wood	0.6

Goals for female participation for each trade: 6.9%

These goals are applicable to all the contractor's construction work, (whether or not it is federal or federally assisted), performed in the covered area. If the contractor performs construction work in the geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the contractor also is subject to the goals for both its federally involved and nonfederally involved construction.

The contractor's compliance with the Executive Order and the Regulations in 41 CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3(a), and its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from contractor to contractor or from project to project for the sole purpose of meeting the contractor's goals shall be a violation of the contract, the Executive Order and the Regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

3. The contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs within ten (10) working days of award of any construction subcontract in excess of \$10,000.00 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address and telephone number of the subcontractor, employer identification number of the subcontractor; estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the subcontract is to be performed.

As referred to in this section, the Director means:

Director
Office of Federal Contract Compliance Programs
Ruess Federal Plaza
310 W. Wisconsin Ave., Suite 1115
Milwaukee, WI 53202

The "Employer Identification Number" means the Federal Social Security number used on the Employer's Quarterly Federal Tax Return, U.S. Treasury Department Form 941.

4. As used in this notice, and in the contract resulting from solicitation, the "covered area" is the county(ies) in Wisconsin to which this proposal applies.

APRIL 2013

ADDITIONAL FEDERAL-AID PROVISIONS

NOTICE TO ALL BIDDERS

To report bid rigging activities call:

1-800-424-9071

The U.S. Department of Transportation (DOT) operates the above toll-free "hotline" Monday through Friday, 8:00 a.m. to 5:00 p.m., Eastern Time. Anyone with knowledge of possible bid rigging, bidding collusion, or other fraudulent activities should use the "hotline" to report such activities.

The "hotline" is part of the DOT's continuing effort to identify and investigate highway construction contract fraud and abuse and is operated under the direction of the DOT Inspector General. All information will be treated confidentially and caller anonymity will be respected.

Effective August 2015 letting

BUY AMERICA PROVISION

All steel and iron materials permanently incorporated in this project shall be domestic products and all manufacturing and coating processes for these materials from smelting forward in the manufacturing process must have occurred within the United States. Coating includes epoxy coating, galvanizing, painting and any other coating that protects or enhances the value of a material subject to the requirements of Buy America. The exemption of this requirement is the minimal use of foreign materials if the total cost of such material permanently incorporated in the product does not exceed one-tenth of one percent (1/10 of 1%) of the total contract cost or \$2,500.00, whichever is greater. For purposes of this paragraph, the cost is that shown to be the value of the subject products as they are delivered to the project. The contractor shall take actions and provide documentation conforming to CMM 2-28.5 to ensure compliance with this "Buy America" provision.

<http://wisconsindot.gov/rdwy/cmm/cm-02-28.pdf>

Upon completion of the project certify to the engineer, in writing using department form WS4567, that all steel, iron, and coating processes for steel or iron incorporated into the contract work conform to these "Buy America" provisions. Attach a list of exemptions and their associated costs to the certification form. Department form WS4567 is available at:

<http://wisconsindot.gov/rdwy/worksheets/ws4567.doc>

Effective with September 2004 Letting

**WISCONSIN DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS AND TRANSPORTATION FACILITIES**

SUPPLEMENTAL REQUIRED CONTRACT PROVISIONS

- I. Wage Rates, Hours of labor and payment of Wages
- II. Payroll Requirements
- III. Postings at the Site of the Work
- IV. Affidavits
- V. Wage Rate Redistribution
- VI. Additional Classifications

I. WAGE RATES, HOURS OF LABOR AND PAYMENT OF WAGES

The schedule of "Minimum Wage Rates" attached hereto and made a part hereof furnishes the prevailing wage rates that have been determined pursuant to Section 103.50 of the Wisconsin Statutes. These wage rates are the minimum required to be paid to the various laborers, workers, mechanics and truck drivers employed by contractors and subcontractors on the construction work embraced by the contract and subject to prevailing hours and wages under Section 103.50, Stats. If necessary to employ laborers, workers, mechanics or truck drivers whose classification is not listed on the schedule, they shall be paid at rates conformable to those listed for similar classifications. Apprentices shall be paid at rates not less than those prescribed in their state indenture contracts.

While the wage rates shown are the minimum rates required by the contract to be paid during its life, this is not a representation that labor can be obtained at these rates. It is the responsibility of bidders to inform themselves as to the local labor conditions and prospective changes or adjustments of wage rates. No increase in the contract price 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
WASHINGTON COUNTY**

Compiled by the State of Wisconsin - Department of Workforce Development
for the Department of Transportation
Pursuant to s. 103.50, Stats.
Issued on May 1, 2015

CLASSIFICATION: Contractors are required to call the Department of Workforce Development if there are any questions regarding 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.

<u>TRADE OR OCCUPATION</u>	<u>HOURLY BASIC RATE OF PAY</u>	<u>HOURLY FRINGE BENEFITS</u>	<u>TOTAL</u>
	\$	\$	\$
Bricklayer, Blocklayer or Stonemason	35.37	17.99	53.36
Carpenter	34.13	20.61	54.74
Future Increase(s): Add \$1.50/hr on 6/1/2015; Add \$1.65/hr on 6/1/2016. Premium Pay: DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day.			
Cement Finisher	32.75	19.21	51.96
Future Increase(s): Add \$1.87 on 6/1/15; Add \$1.75 on 6/1/16. Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.40/hr when the Wisconsin Department of Transportation or responsible governing agency requires that work be performed at night under artificial illumination with traffic control and the work is completed after sunset and before sunrise.			
Electrician	33.93	22.77	56.70
Premium Pay: DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day.			
Fence Erector	23.73	19.09	42.82
Ironworker	30.77	23.97	54.74
Premium Pay: DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day.			
Line Constructor (Electrical)	39.50	18.39	57.89
Painter	29.22	16.69	45.91
Pavement Marking Operator	30.27	18.79	49.06
Piledriver	30.11	26.51	56.62
Future Increase(s): Add \$1.50/hr on 6/1/2015; Add \$1.60/hr on 6/1/2016. Premium Pay: Add \$.65/hr for Piledriver Loftsman; Add \$.75/hr for Sheet Piling Loftsman. DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day.			

TRADE OR OCCUPATION	HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
	\$	\$	\$
Roofer or Waterproofer	29.40	11.20	40.60
Teledata Technician or Installer	24.89	17.15	42.04
Tuckpointer, Caulker or Cleaner	33.76	17.82	51.58
Underwater Diver (Except on Great Lakes)	35.40	15.90	51.30
Heavy Equipment Operator - ELECTRICAL LINE CONSTRUCTION ONLY	35.55	15.57	51.12
Light Equipment Operator -ELECTRICAL LINE CONSTRUCTION ONLY	31.60	14.64	46.24
Heavy Truck Driver - ELECTRICAL LINE CONSTRUCTION ONLY	27.65	13.44	41.09
Light Truck Driver - ELECTRICAL LINE CONSTRUCTION ONLY	25.68	12.83	38.51
Groundman - ELECTRICAL LINE CONSTRUCTION ONLY	21.75	11.63	33.38

TRUCK DRIVERS

Single Axle or Two Axle	25.18	18.31	43.49
Future Increase(s): Add \$1.15/hr on 6/1/2015. Premium Pay: DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day.			
Three or More Axle	25.28	18.31	43.59
Future Increase(s): Add \$1.15/hr on 6/1/2015. Premium Pay: DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day.			
Articulated, Euclid, Dumptr, Off Road Material Hauler	30.27	21.15	51.42
Future Increase(s): Add \$1.25/hr on 6/1/2015; Add \$1.30/hr on 6/1/2016; Add \$1.25/hr on 6/1/2017. Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.50/hr night work premium. See DOT'S website for details about the applicability of this night work premium at: http://www.dot.wi.gov/business/civilrights/laborwages/pwc.htm .			
Pavement Marking Vehicle	23.16	17.13	40.29
Shadow or Pilot Vehicle	24.37	17.77	42.14
Truck Mechanic	24.52	17.77	42.29

LABORERS

General Laborer	26.31	20.03	46.34
Future Increase(s): Add \$1.05/hr eff. 06/01/2015; Add \$1.00/hr eff. 06/01/2016; Add \$1.00/hr eff. 06/01/2017 Premium Pay: Add \$.10/hr for 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 \$.35/hr for line and grade specialist; Add \$2.79/hr for topman; Add \$3.21/hr for bottomman; Add \$3.98/hr for pipelayer. DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.25/hr for work on projects involving temporary traffic control setup, for lane and shoulder closures, when work under artificial illumination conditions is necessary as required by the project provisions (including prep time prior to and/or cleanup after such time period).			
Asbestos Abatement Worker	22.05	18.41	40.46
Landscaper	26.31	20.03	46.34
Future Increase(s): Add \$1.05/hr eff. 06/01/2015; Add \$1.00/hr eff. 06/01/2016; Add \$1.00/hr eff. 06/01/2017 Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.25/hr for work on projects involving temporary traffic control setup, for lane and shoulder closures, when work under artificial illumination			

TRADE OR OCCUPATION	HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
	\$	\$	\$
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	23.40	20.03	43.43
Future Increase(s): Add \$1.05/hr eff. 06/01/2015; Add \$1.00/hr eff. 06/01/2016; Add \$1.00/hr eff. 06/01/2017			
Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.25/hr 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)	17.71	16.01	33.72
Railroad Track Laborer	17.00	3.28	20.28

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).	37.72	21.15	58.87
Future Increase(s): Add \$1.25/hr on 6/1/2015; Add \$1.30/hr on 6/1/2016; Add \$1.25/hr on 6/1/2017.			
Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.50/hr night work premium. See DOT'S website for details about the applicability of this night work premium at: http://www.dot.wi.gov/business/civilrights/laborwages/pwc.htm .			
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.	37.22	21.15	58.37
Future Increase(s): Add \$1.25/hr on 6/1/2015; Add \$1.30/hr on 6/1/2016; Add \$1.25/hr on 6/1/2017.			
Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.50/hr night work premium. See DOT'S website for details about the applicability of this night work premium at: http://www.dot.wi.gov/business/civilrights/laborwages/pwc.htm .			
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	36.72	21.15	57.87

<u>TRADE OR OCCUPATION</u>	<u>HOURLY BASIC RATE OF PAY</u>	<u>HOURLY FRINGE BENEFITS</u>	<u>TOTAL</u>
	\$	\$	\$
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 \$1.25/hr on 6/1/2015; Add \$1.30/hr on 6/1/2016; Add \$1.25/hr on 6/1/2017. Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.50/hr night work premium. See DOT'S website for details about the applicability of this night work premium at: http://www.dot.wi.gov/business/civilrights/laborwages/pwc.htm .			
Belting, Burlap, Texturing Machine; Broom or Sweeper; Compactor (Self-Propelled or Tractor Mounted, Towed & Light Equipment); Concrete Finishing Machine (Road Type); Environmental Burner; Farm or Industrial Type Tractor; Fireman (Asphalt Plant, Pile Driver & Derrick NOT Performing Work on the Great Lakes); Forklift; Greaser; Hoist (Tugger, Automatic); Jeep Digger; Joint Sawyer (Multiple Blade); Launch (NOT Performing Work on the Great Lakes); Lift Slab Machine; Mechanical Float; Mulcher; Power Subgrader; Robotic Tool Carrier (With or Without Attachments); Roller (Rubber Tire, 5 Ton or Under); Self Propelled Chip Spreader; Shouldering Machine; Skid Steer Loader (With or Without Attachments); Telehandler; Tining or Curing Machine. Future Increase(s): Add \$1.25/hr on 6/1/2015; Add \$1.30/hr on 6/1/2016; Add \$1.25/hr on 6/1/2017. Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.50/hr night work premium. See DOT'S website for details about the applicability of this night work premium at: http://www.dot.wi.gov/business/civilrights/laborwages/pwc.htm .	36.46	21.15	57.61
Air Compressor (&/or 400 CFM or Over); Air, Electric or Hydraulic Jacking System; Augers (Vertical & Horizontal); Automatic Belt Conveyor & Surge Bin; Boiler (Temporary Heat); Concrete Proportioning Plant; Crusher, Screening or Wash Plant; Generator (&/or 150 KW or Over); Heaters (Mechanical); High Pressure Utility Locating Machine (Daylighting Machine); Mudjack; Oiler; Prestress Machine; Pug Mill; Pump (3 Inch or Over) or Well Points; Rock, Stone Breaker; Screed (Milling Machine); Stump Chipper; Tank Car Heaters; Vibratory Hammer or Extractor, Power Pack. Future Increase(s): Add \$1.25/hr on 6/1/2015; Add \$1.30/hr on 6/1/2016; Add \$1.25/hr on 6/1/2017. Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.50/hr night work premium. See DOT'S website for details about the applicability of this night work premium at: http://www.dot.wi.gov/business/civilrights/laborwages/pwc.htm .	36.17	21.15	57.32
Fiber Optic Cable Equipment.	28.89	17.95	46.84

SUPERSEDES DECISION WI20120010
U. S. DEPARTMENT OF LABOR
(DAVIS-BACON ACT, MINIMUM WAGE RATES)

STATE: Wisconsin

GENERAL DECISION NUMBER: WI150010

DESCRIPTION OF WORK: Highways and Airport Runway and Taxiway Construction

DATE: June 26, 2015

LABORERS CLASSIFICATION:	Basic Hourly Rates	Fringe Benefits		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	\$26.76.....	19.35			
Group 2: Air Tool Operator; Joint Sawyer and Filler (Pavement); Vibrator or Tamper Operator (Mechanical Hand Operated);	26.86.....	19.35			
Group 3: Bituminous Worker (Raker and Luteman); Formsetter (Curb, Sidewalk, and Pavement); Strike Off man	26.91.....	19.35			
Group 4: Line and Grade Specialist.....	27.11.....	19.35			
Group 5: Blaster and Powderman.....	26.96.....	19.35			
Group 6: Flagperson and Traffic Control Person	23.85.....	19.35			

Truck Drivers:

1 & 2 Axles	25.18.....	18.31
Three or More Axles; Euclids, Dumptr & Articulated, Truck Mechanic.....	25.38.....	18.31

CLASSES OF LABORER AND MECHANICS

Bricklayer	35.37.....	18.47
Carpenter	30.52.....	14.41
Piledriverman	27.25.....	19.46
Ironworker	30.77.....	23.96
Cement Mason/Concrete Finisher	30.69.....	17.53
Electrician	See Page 3	
Line Construction		
Lineman.....	40.81.....	32% + 5.00
Heavy Equipment Operator	38.77.....	32% + 5.00
Equipment Operator.....	32.65.....	32% + 5.00
Heavy Groundman Driver.....	26.78.....	14.11
Light Groundman Driver	24.86.....	13.45
Groundsman.....	22.45.....	32% + 5.00
Millwrights.....	26.32.....	13.98
Painter, Brush.....	29.52.....	20.04
Painter, Spray and Sandblaster	30.27.....	20.04
Painter, Bridge	29.87.....	20.04
Well Drilling:		
Well Driller.....	16.52.....	3.70

Notes: Welders receive rate prescribed for craft performing operation to which welding is incidental. Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29 CFR, 5.5(a)(1)(ii)). Includes Modification #0 dated January 2, 2015; Modification #1 dated January 16, 2015; Modification #2 dated March 20, 2015; Modification #3 dated April 10, 2015; Modification #4 dated May 22, 2015; Modification #5 dated June 12, 2015; Modification #6 dated June 26, 2015.

SUPERSEDES DECISION WI20120010
U. S. DEPARTMENT OF LABOR
(DAVIS-BACON ACT, MINIMUM WAGE RATES)

STATE: Wisconsin

GENERAL DECISION NUMBER: WI150010

DESCRIPTION OF WORK: Highways and Airport Runway and Taxiway Construction

DATE: June 26, 2015

<u>POWER EQUIPMENT OPERATORS CLASSIFICATION:</u>	<u>Basic Hourly Rates</u>	<u>Fringe Benefits</u>	<u>POWER EQUIPMENT OPERATORS CLASSIFICATION: (Continued)</u>	<u>Basic Hourly Rates</u>	<u>Fringe Benefits</u>
Group 1: Cranes, tower cranes and derricks, with or without attachments, with a lifting capacity of over 100 tons or cranes, tower cranes and derricks with boom, leads and/or jib lengths measuring 176 feet or longer	\$38.27	\$21.55	(scraper, dozer, pusher, loader); scraper - rubber tired (single or twin engine); endloader hydraulic backhoe (tractor-type); trenching machine; skid rigs; tractor, side boom (heavy); drilling or boring machine (mechanical heavy); roller (over 5 tons); percussion or rotary drilling machine; air track; blaster; loading machine (conveyor); tugger; boatmen; winches and A-frames; post driver; material hoist operator.	\$37.27	\$21.55
Group 2: Cranes, tower cranes and derricks, with or without attachments, with a lifting capacity of 100 tons or less or cranes, tower cranes and derricks with boom, leads and/or jib lengths measuring 175 feet or less, and backhoes (excavators) having a manufacturer's rated capacity of 3 cu. yds. and over, caisson rigs, pile driver, dredge operator, dredge engineer.	\$37.77	\$21.55	Group 4: Greaser, roller steel (5 tons or less); roller (pneumatic tired) - self-propelled; tractor (mounted or towed compactors and light equipment); shouldering machine; self-propelled chip spreader; concrete spreader; finishing machine; mechanical float; curing machine; power subgrader; joint saw (multiple blade) belting machine; burlap machine; texturing machine; tractor, endloader (rubber tired) - light; jeep digger; fork lift; mulcher; launch operator; fireman; environmental burner.	\$37.01	\$21.55
Group 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			Group 5: Air compressor; power pack; vibratory hammer and extractor; heavy equipment, leadman; tank car heaters; stump chipper; curb machine operator; concrete proportioning plants generators; mudjack operator; rock breaker; crusher or screening plant; screed (milling machine); automatic belt conveyor and surge bin; pug mill operator; oiler; pump (over 3 inches); drilling machine helper.	\$36.72	\$21.55
			Group 6: Off - road material hauler with or without ejector.....	\$30.82	\$21.55
			Premium Pay: EPA Level "A" protection - \$3.00 per hour EPA Level "B" protection - \$2.00 per hour EPA Level "C" protection - \$1.00 per hours		

SUPERSEDES DECISION WI20120010
U. S. DEPARTMENT OF LABOR
(DAVIS-BACON ACT, MINIMUM WAGE RATES)

STATE: Wisconsin

GENERAL DECISION NUMBER: WI150010

DESCRIPTION OF WORK: Highways and Airport Runway and Taxiway Construction

DATE: June 26, 2015

LABORERS CLASSIFICATION:

Rates

Benefits

			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.
Electricians				
Area 1	\$29.00	26.5%+ 9.15		
Area 2:				
Electricians.....	30.59	18.43	Area 5 -	ADAMS, CLARK (Colby, Freemont, Lynn, Mayville, Sherman, Sherwood, Unity), FOREST, JUNEAU, LANGLADE, LINCOLN, MARATHON, MARINETTE (Area North of the town of Wausauke), 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 3:				
Electrical contracts under \$130,000	26.24	16.85		
Electrical contracts over \$130,000	29.41	16.97		
Area 4:	29.32	28.50% + 9.27		
Area 5	28.96	24.85% + 9.70		
Area 6	35.25	19.30	Area 6 -	KENOSHA COUNTY
Area 8				
Electricians.....	31.30	24.93% + 10.40	Area 8 -	DODGE, (Emmet Township only), GREEN, JEFFERSON, LAFAYETTE, RACINE (Burlington township), ROCK and WALWORTH COUNTIES
Area 9:				
Electricians.....	34.82	19.575		
Area 10	29.64	20.54	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 11	32.54	24.07		
Area 12	32.87	19.23	Area 10 -	CALUMET (Township of New Holstein), DODGE (East of Hwy. 26 including Chester Township), FOND DU LAC, MANITOWOC (Schleswig), and SHEBOYGAN COUNTIES
Area 13	33.93	22.67		
Teledata System Installer				
Area 14			Area 11 -	DOUGLAS COUNTY
Installer/Technician	22.50	12.72		
Sound & Communications			Area 12 -	RACINE (except Burlington township) COUNTY
Area 15				
Installer	16.47	14.84	Area 13 -	MILWAUKEE, OZAUKEE, WASHINGTON and WAUKESHA COUNTIES
Technician	26.00	17.70	Area 14 -	Statewide.
Area 1 -			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.
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, TREMPLEAU, VERNON and WASHBURN COUNTIES				
Area 3 -				
FLORENCE (townships of Aurora, Commonwealth, Fern, Florence and Homestead), MARINETTE (Niagara township)				

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 omission of these classifications concerning prevailing area practices relative to their use. Further, this omission will not, per se, be construed as establishing any governmental liability for increased labor cost if it is subsequently determined that such classifications are required.

There may be omissions and/or errors in the federal wage rates. The bidder is responsible for evaluating and determining the correct applicable rate. The higher of state or federal rate will apply.

SCHEDULE OF ITEMS

REVISED:

CONTRACT:
20150915006PROJECT(S):
2475-00-70FEDERAL ID(S):
WISC 2015488

CONTRACTOR : _____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS

SECTION 0001 Contract Items

0010	201.0105 Clearing	19.000				
		STA	.		.	
0020	201.0120 Clearing	50.000				
		ID	.		.	
0030	201.0205 Grubbing	19.000				
		STA	.		.	
0040	201.0220 Grubbing	50.000				
		ID	.		.	
0050	203.0100 Removing Small Pipe Culverts	13.000				
		EACH	.		.	
0060	204.0100 Removing Pavement	345.000				
		SY	.		.	
0070	204.0150 Removing Curb & Gutter	520.000				
		LF	.		.	
0080	204.0210 Removing Manholes	4.000				
		EACH	.		.	
0090	204.0220 Removing Inlets	9.000				
		EACH	.		.	
0100	204.0245 Removing Storm Sewer (size) 01. 6-Inch	90.000				
		LF	.		.	

SCHEDULE OF ITEMS

REVISED:

CONTRACT:
20150915006PROJECT(S):
2475-00-70FEDERAL ID(S):
WISC 2015488

CONTRACTOR : _____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0110	204.0245 Removing Storm Sewer (size) 02. 8-Inch	65.000 LF	.		.	
0120	204.0245 Removing Storm Sewer (size) 03. 12-Inch	60.000 LF	.		.	
0130	204.0245 Removing Storm Sewer (size) 04. 15-Inch	305.000 LF	.		.	
0140	204.0245 Removing Storm Sewer (size) 05. 18-Inch	410.000 LF	.		.	
0150	204.0245 Removing Storm Sewer (size) 06. 21-Inch	120.000 LF	.		.	
0160	204.0245 Removing Storm Sewer (size) 07. 24-Inch	240.000 LF	.		.	
0170	204.0245 Removing Storm Sewer (size) 08. 30-Inch	720.000 LF	.		.	
0180	204.0291.S Abandoning Sewer	35.000 CY	.		.	
0190	205.0100 Excavation Common	23,700.000 CY	.		.	
0200	208.1100 Select Borrow	3,600.000 CY	.		.	
0210	209.0300.S Backfill Coarse Aggregate (size) 01. No. 1	35.000 CY	.		.	

SCHEDULE OF ITEMS

REVISED:

CONTRACT:
20150915006PROJECT(S):
2475-00-70FEDERAL ID(S):
WISC 2015488

CONTRACTOR : _____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0220	213.0100 Finishing Roadway (project) 01. 2475-00-70	1.000 EACH	.		.	
0230	305.0110 Base Aggregate Dense 3/4-Inch	80.000 TON	.		.	
0240	305.0120 Base Aggregate Dense 1 1/4-Inch	15,840.000 TON	.		.	
0250	311.0110 Breaker Run	19,100.000 TON	.		.	
0260	405.0100 Coloring Concrete Red	300.000 CY	.		.	
0270	415.0080 Concrete Pavement 8-Inch	1,640.000 SY	.		.	
0280	416.0160 Concrete Driveway 6-Inch	736.000 SY	.		.	
0290	416.0260 Concrete Driveway HES 6-Inch	255.000 SY	.		.	
0300	416.0508 Concrete Roundabout Truck Apron 8-Inch	380.000 SY	.		.	
0310	455.0105 Asphaltic Material PG58-28	155.000 TON	.		.	
0320	455.0120 Asphaltic Material PG64-28	76.000 TON	.		.	

SCHEDULE OF ITEMS

REVISED:

CONTRACT:
20150915006PROJECT(S):
2475-00-70FEDERAL ID(S):
WISC 2015488

CONTRACTOR : _____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0330	455.0605 Tack Coat	300.000 GAL	.		.	
0340	460.1103 HMA Pavement Type E-3	3,800.000 TON	.		.	
0350	460.2000 Incentive Density HMA Pavement	2,460.000 DOL	1.00000		2460.00	
0360	465.0120 Asphaltic Surface Driveways and Field Entrances	155.000 TON	.		.	
0370	465.0125 Asphaltic Surface Temporary	1,050.000 TON	.		.	
0380	520.1015 Apron Endwalls for Culvert Pipe 15-Inch	1.000 EACH	.		.	
0390	520.1018 Apron Endwalls for Culvert Pipe 18-Inch	1.000 EACH	.		.	
0400	520.1024 Apron Endwalls for Culvert Pipe 24-Inch	1.000 EACH	.		.	
0410	520.1036 Apron Endwalls for Culvert Pipe 36-Inch	2.000 EACH	.		.	
0420	520.8000 Concrete Collars for Pipe	6.000 EACH	.		.	
0430	601.0409 Concrete Curb & Gutter 30-Inch Type A	2,020.000 LF	.		.	

SCHEDULE OF ITEMS

REVISED:

CONTRACT:
20150915006PROJECT(S):
2475-00-70FEDERAL ID(S):
WISC 2015488

CONTRACTOR : _____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0440	601.0411 Concrete Curb & Gutter 30-Inch Type D	4,130.000 LF	.		.	
0450	601.0557 Concrete Curb & Gutter 6-Inch Sloped 36-Inch Type D	1,125.000 LF	.		.	
0460	601.0580 Concrete Curb & Gutter 4-Inch Sloped 36-Inch Type R	355.000 LF	.		.	
0470	601.0600 Concrete Curb Pedestrian	220.000 LF	.		.	
0480	602.0410 Concrete Sidewalk 5-Inch	32,800.000 SF	.		.	
0490	602.0505 Curb Ramp Detectable Warning Field Yellow	362.000 SF	.		.	
0500	606.0200 Riprap Medium	185.000 CY	.		.	
0510	608.0312 Storm Sewer Pipe Reinforced Concrete Class III 12-Inch	268.000 LF	.		.	
0520	608.0315 Storm Sewer Pipe Reinforced Concrete Class III 15-Inch	464.000 LF	.		.	
0530	608.0318 Storm Sewer Pipe Reinforced Concrete Class III 18-Inch	136.000 LF	.		.	
0540	608.0321 Storm Sewer Pipe Reinforced Concrete Class III 21-Inch	334.000 LF	.		.	

SCHEDULE OF ITEMS

REVISED:

CONTRACT:
20150915006PROJECT(S):
2475-00-70FEDERAL ID(S):
WISC 2015488

CONTRACTOR : _____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0550	608.0324 Storm Sewer Pipe Reinforced Concrete Class III 24-Inch	1,108.000 LF	.		.	
0560	608.0330 Storm Sewer Pipe Reinforced Concrete Class III 30-Inch	384.000 LF	.		.	
0570	608.0336 Storm Sewer Pipe Reinforced Concrete Class III 36-Inch	522.000 LF	.		.	
0580	608.0412 Storm Sewer Pipe Reinforced Concrete Class IV 12-Inch	20.000 LF	.		.	
0590	608.0424 Storm Sewer Pipe Reinforced Concrete Class IV 24-Inch	78.000 LF	.		.	
0600	611.0420 Reconstructing Manholes	1.000 EACH	.		.	
0610	611.0530 Manhole Covers Type J	13.000 EACH	.		.	
0620	611.0624 Inlet Covers Type H	27.000 EACH	.		.	
0630	611.0627 Inlet Covers Type HM	4.000 EACH	.		.	
0640	611.0642 Inlet Covers Type MS	7.000 EACH	.		.	
0650	611.0652 Inlet Covers Type T	4.000 EACH	.		.	

SCHEDULE OF ITEMS

REVISED:

CONTRACT:
20150915006PROJECT(S):
2475-00-70FEDERAL ID(S):
WISC 2015488

CONTRACTOR : _____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0660	611.1005 Catch Basins 5-FT Diameter	1.000 EACH	.		.	
0670	611.2004 Manholes 4-FT Diameter	9.000 EACH	.		.	
0680	611.2005 Manholes 5-FT Diameter	6.000 EACH	.		.	
0690	611.2006 Manholes 6-FT Diameter	1.000 EACH	.		.	
0700	611.2007 Manholes 7-FT Diameter	1.000 EACH	.		.	
0710	611.2008 Manholes 8-FT Diameter	1.000 EACH	.		.	
0720	611.3230 Inlets 2x3-FT	28.000 EACH	.		.	
0730	611.3901 Inlets Median 1 Grate	4.000 EACH	.		.	
0740	611.3903 Inlets Median 3 Grate	1.000 EACH	.		.	
0750	611.8120.S Cover Plates Temporary	10.000 EACH	.		.	
0760	612.0106 Pipe Underdrain 6-Inch	835.000 LF	.		.	

SCHEDULE OF ITEMS

REVISED:

CONTRACT:
20150915006PROJECT(S):
2475-00-70FEDERAL ID(S):
WISC 2015488

CONTRACTOR : _____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0770	612.0902.S Insulation Board Polystyrene (inch) 01. 4-Inch	90.000 SY	.		.	
0780	619.1000 Mobilization	1.000 EACH	.		.	
0790	620.0200 Concrete Median Blunt Nose	190.000 SF	.		.	
0800	620.0300 Concrete Median Sloped Nose	295.000 SF	.		.	
0810	621.1100 Landmark Reference Monuments and Cast Iron Covers	1.000 EACH	.		.	
0820	623.0200 Dust Control Surface Treatment	165,600.000 SY	.		.	
0830	624.0100 Water	570.000 MGAL	.		.	
0840	625.0100 Topsoil	14,800.000 SY	.		.	
0850	627.0200 Mulching	14,400.000 SY	.		.	
0860	628.1104 Erosion Bales	100.000 EACH	.		.	
0870	628.1504 Silt Fence	1,820.000 LF	.		.	

SCHEDULE OF ITEMS

REVISED:

CONTRACT:
20150915006PROJECT(S):
2475-00-70FEDERAL ID(S):
WISC 2015488

CONTRACTOR : _____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0880	628.1520 Silt Fence Maintenance	1,820.000 LF	.		.	
0890	628.1905 Mobilizations Erosion Control	5.000 EACH	.		.	
0900	628.1910 Mobilizations Emergency Erosion Control	5.000 EACH	.		.	
0910	628.2004 Erosion Mat Class I Type B	450.000 SY	.		.	
0920	628.7005 Inlet Protection Type A	36.000 EACH	.		.	
0930	628.7015 Inlet Protection Type C	30.000 EACH	.		.	
0940	628.7504 Temporary Ditch Checks	68.000 LF	.		.	
0950	628.7555 Culvert Pipe Checks	20.000 EACH	.		.	
0960	628.7560 Tracking Pads	4.000 EACH	.		.	
0970	628.7570 Rock Bags	40.000 EACH	.		.	
0980	629.0210 Fertilizer Type B	12.000 CWT	.		.	

SCHEDULE OF ITEMS

REVISED:

CONTRACT:
20150915006PROJECT(S):
2475-00-70FEDERAL ID(S):
WISC 2015488

CONTRACTOR : _____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0990	630.0120 Seeding Mixture No. 20	420.000 LB	.		.	
1000	630.0200 Seeding Temporary	105.000 LB	.		.	
1010	631.0300 Sod Water	100.000 MGAL	.		.	
1020	631.1000 Sod Lawn	4,600.000 SY	.		.	
1030	632.0101 Trees (species) (size) (root) 01. Service Berry Apple, 2" Cal., B&B	3.000 EACH	.		.	
1040	632.0201 Shrubs (species) (size) (root) 01. Rose Rugosa, 2', CG	29.000 EACH	.		.	
1050	632.0201 Shrubs (species) (size) (root) 02. Juniper Maney, 15" SPD, CG	15.000 EACH	.		.	
1060	632.9101 Landscape Planting Surveillance and Care Cycles	12.000 EACH	.		.	
1070	634.0618 Posts Wood 4x6-Inch X 18-FT	46.000 EACH	.		.	
1080	634.0622 Posts Wood 4x6-Inch X 22-FT	6.000 EACH	.		.	

SCHEDULE OF ITEMS

REVISED:

CONTRACT:
20150915006PROJECT(S):
2475-00-70FEDERAL ID(S):
WISC 2015488

CONTRACTOR : _____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
1090	634.0814 Posts Tubular Steel 2x2-Inch X 14-FT	35.000 EACH	.		.	
1100	637.1220 Signs Type I Reflective SH	314.500 SF	.		.	
1110	637.2210 Signs Type II Reflective H	379.290 SF	.		.	
1120	637.2230 Signs Type II Reflective F	216.750 SF	.		.	
1130	638.2102 Moving Signs Type II	3.000 EACH	.		.	
1140	638.2602 Removing Signs Type II	19.000 EACH	.		.	
1150	638.3000 Removing Small Sign Supports	21.000 EACH	.		.	
1160	641.8100 Overhead Sign Support (structure) 01. S-66-608	LUMP	LUMP		.	
1170	642.5201 Field Office Type C	1.000 EACH	.		.	
1180	643.0100 Traffic Control (project) 01. 2475-00-70	1.000 EACH	.		.	
1190	643.0300 Traffic Control Drums	4,470.000 DAY	.		.	

SCHEDULE OF ITEMS

REVISED:

CONTRACT:
20150915006PROJECT(S):
2475-00-70FEDERAL ID(S):
WISC 2015488

CONTRACTOR : _____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
1200	643.0420 Traffic Control Barricades Type III	3,500.000 DAY	.		.	
1210	643.0705 Traffic Control Warning Lights Type A	7,000.000 DAY	.		.	
1220	643.0715 Traffic Control Warning Lights Type C	4,470.000 DAY	.		.	
1230	643.0800 Traffic Control Arrow Boards	106.000 DAY	.		.	
1240	643.0900 Traffic Control Signs	3,710.000 DAY	.		.	
1250	643.1000 Traffic Control Signs Fixed Message	644.000 SF	.		.	
1260	643.1050 Traffic Control Signs PCMS	308.000 DAY	.		.	
1270	643.2000 Traffic Control Detour (project) 01. 2475-00-70	1.000 EACH	.		.	
1280	643.3000 Traffic Control Detour Signs	6,110.000 DAY	.		.	
1290	645.0111 Geotextile Fabric Type DF Schedule A	375.000 SY	.		.	
1300	645.0120 Geotextile Fabric Type HR	326.000 SY	.		.	

SCHEDULE OF ITEMS

REVISED:

CONTRACT:
20150915006PROJECT(S):
2475-00-70FEDERAL ID(S):
WISC 2015488

CONTRACTOR : _____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
1310	646.0106 Pavement Marking Epoxy 4-Inch	5,190.000 LF	.		.	
1320	646.0126 Pavement Marking Epoxy 8-Inch	230.000 LF	.		.	
1330	646.0843.S Pavement Marking Grooved Wet Reflective Contrast Tape 8-Inch	720.000 LF	.		.	
1340	647.0358 Pavement Marking Words Preformed Thermoplastic	1.000 EACH	.		.	
1350	647.0456 Pavement Marking Curb Epoxy	210.000 LF	.		.	
1360	647.0606 Pavement Marking Island Nose Epoxy	4.000 EACH	.		.	
1370	647.0766 Pavement Marking Crosswalk Epoxy 6-Inch	110.000 LF	.		.	
1380	647.0796 Pavement Marking Crosswalk Epoxy 24-Inch	350.000 LF	.		.	
1390	649.0100 Temporary Pavement Marking 4-Inch	11,250.000 LF	.		.	
1400	650.4000 Construction Staking Storm Sewer	59.000 EACH	.		.	
1410	650.4500 Construction Staking Subgrade	2,950.000 LF	.		.	

SCHEDULE OF ITEMS

REVISED:

CONTRACT:
20150915006PROJECT(S):
2475-00-70FEDERAL ID(S):
WISC 2015488

CONTRACTOR : _____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
1420	650.5000 Construction Staking Base	2,950.000 LF	.		.	
1430	650.5500 Construction Staking Curb Gutter and Curb & Gutter	7,950.000 LF	.		.	
1440	650.6500 Construction Staking Structure Layout (structure) 01. S-66-608	LUMP	LUMP		.	
1450	650.8500 Construction Staking Electrical Installations (project) 01. 2475-00-70	LUMP	LUMP		.	
1460	650.9910 Construction Staking Supplemental Control (project) 01. 2475-00-70	LUMP	LUMP		.	
1470	650.9920 Construction Staking Slope Stakes	2,950.000 LF	.		.	
1480	652.0225 Conduit Rigid Nonmetallic Schedule 40 2-Inch	1,514.000 LF	.		.	
1490	653.0140 Pull Boxes Steel 24x42-Inch	7.000 EACH	.		.	
1500	654.0105 Concrete Bases Type 5	13.000 EACH	.		.	
1510	654.0224 Concrete Control Cabinet Bases Type L24	1.000 EACH	.		.	

SCHEDULE OF ITEMS

REVISED:

CONTRACT:
20150915006PROJECT(S):
2475-00-70FEDERAL ID(S):
WISC 2015488

CONTRACTOR : _____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
1520	655.0610 Electrical Wire Lighting 12 AWG	1,885.000 LF	.		.	
1530	655.0620 Electrical Wire Lighting 8 AWG	6,697.000 LF	.		.	
1540	655.0640 Electrical Wire Lighting 1 AWG	18.000 LF	.		.	
1550	656.0200 Electrical Service Meter Breaker Pedestal (location) 01. 2475-00-70	LUMP	LUMP		.	
1560	657.0255 Transformer Bases Breakaway 11 1/2-Inch Bolt Circle	13.000 EACH	.		.	
1570	657.0322 Poles Type 5-Aluminum	13.000 EACH	.		.	
1580	657.0715 Luminaire Arms Truss Type 4 1/2-Inch Clamp 15-FT	13.000 EACH	.		.	
1590	659.0802 Plaques Sequence Identification	5.000 EACH	.		.	
1600	659.1125 Luminaires Utility LED C	13.000 EACH	.		.	
1610	690.0150 Sawing Asphalt	855.000 LF	.		.	
1620	690.0250 Sawing Concrete	360.000 LF	.		.	

SCHEDULE OF ITEMS

REVISED:

CONTRACT:
20150915006PROJECT(S):
2475-00-70FEDERAL ID(S):
WISC 2015488

CONTRACTOR : _____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
1630	715.0415 Incentive Strength Concrete Pavement	640.000 DOL	1.00000		640.00	
1640	SPV.0035 Special 01. Slurry Backfill	1,143.000 CY	.		.	
1650	SPV.0060 Special 01. Lighting Control Cabinet 120/240 24-Inch	1.000 EACH	.		.	
1660	SPV.0060 Special 02. Remove Only Valve Box	1.000 EACH	.		.	
1670	SPV.0060 Special 03. Manhole 9-FT Diameter	1.000 EACH	.		.	
1680	SPV.0060 Special 04. Catch Basin 8-FT Diameter	1.000 EACH	.		.	
1690	SPV.0060 Special 05. Pavement Marking Grooved Preformed Thermoplastic Arrows Type 2	2.000 EACH	.		.	
1700	SPV.0060 Special 06. Pavement Marking Grooved Preformed Thermoplastic Arrows Type 3R	2.000 EACH	.		.	
1710	SPV.0060 Special 07. Pavement Marking Grooved Preformed Thermoplastic Words	6.000 EACH	.		.	
1720	SPV.0060 Special 08. Minor Adjustment	1.000 EACH	.		.	

SCHEDULE OF ITEMS

REVISED:

CONTRACT:
20150915006PROJECT(S):
2475-00-70FEDERAL ID(S):
WISC 2015488

CONTRACTOR : _____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
1730	SPV.0060 Special 09. Replacing Water Boxes Top Section	2.000 EACH	.		.	
1740	SPV.0060 Special 10. Replacing Water Boxes Mid-Section	2.000 EACH	.		.	
1750	SPV.0060 Special 11. Replacing Water Boxes Full Depth	1.000 EACH	.		.	
1760	SPV.0060 Special 12. Remove 12-Inch Gate Valve and Box Water Main Pipe	2.000 EACH	.		.	
1770	SPV.0060 Special 13. Install 12-Inch D.I. Cap	2.000 EACH	.		.	
1780	SPV.0060 Special 14. Abandon 4-Inch PVC Sanitary Service At Main	2.000 EACH	.		.	
1790	SPV.0060 Special 15. Remove Existing Hydrant, Aux. Valve and D.I. Tee	1.000 EACH	.		.	
1800	SPV.0060 Special 16. Relocate Existing Hydrant, Aux. Valve and D.I. Tee	1.000 EACH	.		.	
1810	SPV.0060 Special 17. Remove Existing Hydrant	2.000 EACH	.		.	
1820	SPV.0060 Special 18. Relocate Existing Hydrant	2.000 EACH	.		.	

SCHEDULE OF ITEMS

REVISED:

CONTRACT:
20150915006PROJECT(S):
2475-00-70FEDERAL ID(S):
WISC 2015488

CONTRACTOR : _____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
1830	SPV.0060 Special 19. Install Marker Flag	6.000 EACH	.		.	
1840	SPV.0060 Special 20. Install 12-Inch x 6-Inch Live Tap Tee	1.000 EACH	.		.	
1850	SPV.0060 Special 21. Install R-1661 Bolt Down Casting	5.000 EACH	.		.	
1860	SPV.0060 Special 22. Remove and Salvage Hydrant and Auxillary Valve	3.000 EACH	.		.	
1870	SPV.0060 Special 23. Install 12-Inch D.I. End Pipe Cap	1.000 EACH	.		.	
1880	SPV.0060 Special 24. Verify Exact Location and Elevation of Village Utilities	3.000 EACH	.		.	
1890	SPV.0060 Special 25. Abandon 1-Inch Water Service at Main	7.000 EACH	.		.	
1900	SPV.0060 Special 26. Install 16-Inch Stainless Steel Band	4.000 EACH	.		.	
1910	SPV.0060 Special 27. Install 12-Inch Stainless Steel Band	3.000 EACH	.		.	
1920	SPV.0060 Special 28. Remove Curb Stop Box	7.000 EACH	.		.	

SCHEDULE OF ITEMS

REVISED:

CONTRACT:
20150915006PROJECT(S):
2475-00-70FEDERAL ID(S):
WISC 2015488

CONTRACTOR : _____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
1930	SPV.0060 Special 29. Install 12-Inch Mainline Gate Valve and Box	5.000 EACH	.		.	
1940	SPV.0060 Special 30. Install 8-Inch Mainline Gate Valve and Box	1.000 EACH	.		.	
1950	SPV.0060 Special 31. Install Hydrant Only	1.000 EACH	.		.	
1960	SPV.0060 Special 32. Install Hydrant Assembly	1.000 EACH	.		.	
1970	SPV.0060 Special 33. Install 16-Inch x 8-Inch Water Main Live Tap	1.000 EACH	.		.	
1980	SPV.0060 Special 34. Relocate Existing Water Main Pipe	3.000 EACH	.		.	
1990	SPV.0060 Special 35. Adjusting Sanitary Sewer Manhole Chimneys and Install New Castings	8.000 EACH	.		.	
2000	SPV.0060 Special 36. Adjusting Water Valve Manhole Chimneys and Re-Use Castings	1.000 EACH	.		.	
2010	SPV.0060 Special 37. Salvage Castings	8.000 EACH	.		.	
2020	SPV.0060 Special 38. Install 6-Inch Gate Valve and Box	1.000 EACH	.		.	

SCHEDULE OF ITEMS

REVISED:

CONTRACT:
20150915006PROJECT(S):
2475-00-70FEDERAL ID(S):
WISC 2015488

CONTRACTOR : _____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
2030	SPV.0060 Special 39. 2-Inch Corporation Valve	4.000 EACH	.		.	
2040	SPV.0060 Special 40. 2-Inch Curb Stop Valve	4.000 EACH	.		.	
2050	SPV.0060 Special 41. 2-Inch Curb Stop Box	4.000 EACH	.		.	
2060	SPV.0060 Special 42. Install 6-Inch D.I. End Pipe Cap	3.000 EACH	.		.	
2070	SPV.0090 Special 01. Concrete Curb & Gutter 18-Inch Type A Full Depth Reverse Slope Gutter	275.000 LF	.		.	
2080	SPV.0090 Special 02. Pavement Marking Grooved Preformed Thermoplastic Crosswalk 6-Inch	310.000 LF	.		.	
2090	SPV.0090 Special 03. Pavement Marking Grooved Preformed Thermoplastic Yield Line 18-Inch	100.000 LF	.		.	
2100	SPV.0090 Special 04. Split Rail Fence	360.000 LF	.		.	
2110	SPV.0090 Special 05. Pavement Marking Grooved Preformed Plastic Tape 4-Inch Yellow	5,510.000 LF	.		.	

SCHEDULE OF ITEMS

REVISED:

CONTRACT:
20150915006PROJECT(S):
2475-00-70FEDERAL ID(S):
WISC 2015488

CONTRACTOR : _____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
2120	SPV.0090 Special 06. Pavement Marking Grooved Preformed Plastic Tape 12-Inch Yellow	410.000 LF	.		.	
2130	SPV.0090 Special 07. Slurry Fill 12-Inch PVC Water Main Pipe	486.000 LF	.		.	
2140	SPV.0090 Special 08. Remove 12-Inch PVC Water Main Pipe	59.000 LF	.		.	
2150	SPV.0090 Special 09. Install 6-Inch PVC Lead Pipe	55.000 LF	.		.	
2160	SPV.0090 Special 10. Install Tracer Wire	2,389.000 LF	.		.	
2170	SPV.0090 Special 11. Install 10-Inch PVC Sanitary Sewer Main Pipe	673.000 LF	.		.	
2180	SPV.0090 Special 12. Install 8-Inch PVC Sanitary Sewer Main Pipe	85.000 LF	.		.	
2190	SPV.0090 Special 13. Install 12-Inch C-900 PVC Water Main Pipe	1,405.000 LF	.		.	
2200	SPV.0090 Special 14. Install 8-Inch C-900 PVC Water Main Pipe	105.000 LF	.		.	
2210	SPV.0090 Special 15. Install 6-Inch C-900 PVC Water Main Pipe	38.000 LF	.		.	

SCHEDULE OF ITEMS

REVISED:

CONTRACT:
20150915006PROJECT(S):
2475-00-70FEDERAL ID(S):
WISC 2015488

CONTRACTOR : _____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
2220	SPV.0090 Special 16. Install 16-Inch C-900 PVC Water Main Pipe	25.000 LF	.		.	
2230	SPV.0090 Special 17. Install 6-Inch PVC Service Off Sewer Main	85.000 LF	.		.	
2240	SPV.0090 Special 18. Install 6-Inch PVC Water Service	128.000 LF	.		.	
2250	SPV.0090 Special 19. Extend Existing 6-Inch PVC Service	30.000 LF	.		.	
2260	SPV.0090 Special 20. Install 2-Inch HDPE Water Service Directionally Drilled	396.000 LF	.		.	
2270	SPV.0090 Special 21. BioLogs Delivered	100.000 LF	.		.	
2280	SPV.0090 Special 22. BioLog Installed	100.000 LF	.		.	
2290	SPV.0105 Special 01. Lighting System Integrator	LUMP	LUMP		.	
2300	SPV.0105 Special 02. Lighting System Survey	LUMP	LUMP		.	
2310	SPV.0105 Special 03. Concrete Pavement Joint Layout	LUMP	LUMP		.	
2320	SPV.0165 Special 01. Concrete Sidewalk 8-Inch	120.000 SF	.		.	

SCHEDULE OF ITEMS

REVISED:

CONTRACT:
20150915006PROJECT(S):
2475-00-70FEDERAL ID(S):
WISC 2015488

CONTRACTOR : _____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
2330	SPV.0165 Special 02. Concrete Sidewalk 5-Inch Colored	13,500.000 SF	.		.	
2340	SPV.0165 Special 03. Concrete Sidewalk 8-Inch Colored	1,150.000 SF	.		.	
2350	SPV.0180 Special 01. Concrete Pavement Colored 8-Inch	300.000 SY	.		.	
2360	SPV.0180 Special 02. Geotextile Fabric Type FF	50.000 SY	.		.	
2370	SPV.0200 Special 01. Install 48-Inch I.D. Precast Concrete Sanitary Manhole Structure	45.120 VF	.		.	
2380	SPV.0200 Special 02. Rebuild 48-Inch I.D. Precast Concrete Sanitary Manhole Structure	8.000 VF	.		.	
2390	SPV.0200 Special 03. Install HDPE Adjusting Rings	15.400 VF	.		.	
2400	SPV.0200 Special 04. Install Concrete Adjusting Rings	2.500 VF	.		.	
	SECTION 0001 TOTAL				.	
	TOTAL BID				.	

PLEASE ATTACH SCHEDULE OF ITEMS HERE